

# **Great Salt Lake Accounting Standard**

GSLAS-1:2026 — First Edition — Public Review Draft

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# Great Salt Lake Accounting Standard

## A Technical Standard for Physical and Analytical Water Accounting

**GSLAS-1:2026**

**First Edition**

**Public Review Draft**

August 2026

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### Authors

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### Abstract

The **Great Salt Lake Accounting Standard (GSLAS)** establishes a transparent, reproducible framework for physical and analytical water accounting.

The standard defines terminology, methodology, Accounting Relationships, Accounting Transformations, and analytical principles for evaluating physical water systems and developing transparent Accounting Findings, Analytical Inference, and Policy Considerations.

Although developed through application to the Great Salt Lake system, the framework is intended to provide a consistent methodology for conducting transparent water accounting and supporting evidence-based decision-making.

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# Copyright

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**GSLAS-1:2026 – First Edition – Public Review Draft**  
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## Document Status

| Document Attribute  | Value                                                                               |
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| Superseded By       | None                                                                                |

## Scope of Publication

This document constitutes the Public Review Draft of the First Edition of the Great Salt Lake Accounting Standard (GSLAS).

This Public Review Draft is the current operational standard governing Great Salt Lake Accounting and GSLAA as of August 2026. It is released for independent technical review and has not yet completed an external consensus-standard process or journal-administered peer review.

It establishes the terminology, methodology, analytical framework, and accounting principles governing physical and analytical water accounting presented herein.

The standard is intended to provide a transparent and reproducible framework for conducting water accounting, evaluating Accounting Relationships, developing Accounting Findings, supporting Analytical Inference, and informing Policy Considerations.

Future editions may clarify, expand, or refine the standard while preserving Accounting Continuity where practicable.

## Relationship to Companion Documents

This standard establishes the technical framework implemented by Great Salt Lake Accounting.

Great Salt Lake Accounting serves as the flagship implementation of GSLAS and demonstrates practical application of the standard through documented accounting examples, water ledgers, reconciliations, Accounting Findings, Bankability assessments, Analytical Inference, and Policy Considerations.

The two works are intended to complement one another.

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## Revision History

| Edition                            | Identifier   | Date        | Description                                                                                                          |
|------------------------------------|--------------|-------------|----------------------------------------------------------------------------------------------------------------------|
| First Edition, Public Review Draft | GSLAS-1:2026 | August 2026 | Initial public review release; adopted as the current operational standard for Great Salt Lake Accounting and GSLAA. |

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# AI-Assisted Drafting

## Purpose

The Great Salt Lake Accounting Standard (GSLAS) was developed through an iterative drafting process that incorporated the use of generative artificial intelligence as a research, editorial, organizational, and drafting tool.

The use of artificial intelligence was intended to improve clarity, organization, consistency, and communication.

Artificial intelligence did not establish the analytical framework presented in this standard.

## Role of Artificial Intelligence

Generative artificial intelligence assisted with:

- drafting narrative text;
- improving organization;
- refining technical language;
- identifying opportunities for clarification;
- suggesting alternative structures;
- improving consistency across chapters;
- developing illustrative examples;
- improving readability.

Artificial intelligence also assisted in identifying potential ambiguities, inconsistencies, and opportunities for future development.

## Role of the Principal Authors

The analytical framework, accounting methodology, terminology, governing principles, interpretations, and conclusions contained within this standard were developed, reviewed, revised, and approved by the principal authors.

The principal authors determined:

- the scope of the framework;
- accounting terminology;
- governing principles;
- analytical methodology;
- accounting relationships;
- substantive revisions;
- final editorial decisions.

Responsibility for all technical content rests solely with the principal authors.

## Human Judgment

Artificial intelligence is capable of assisting technical writing.

It does not replace scientific judgment, engineering expertise, accounting reasoning, or professional responsibility.

Throughout development of this standard, human review governed every substantive analytical decision.

The framework should therefore be interpreted as the work of its principal authors rather than as the output of an artificial intelligence system.

---

## Transparency

This disclosure is provided in the interest of transparency.

The authors believe that responsible use of generative artificial intelligence can improve technical communication while preserving human responsibility for analytical content.

Accordingly, artificial intelligence should be regarded as a drafting and editorial tool rather than as an author, reviewer, or technical authority.

---

## Future Editions

Future editions of this standard may continue to incorporate artificial intelligence as a drafting and editorial assistant.

Regardless of the tools employed, responsibility for the analytical framework, technical accuracy, and published content shall remain with the principal authors or their designated successors.

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*“Tools assist.*

*Authors decide.*

*Evidence governs.”*



# Foreword

Great Salt Lake has been studied for generations.

Scientists have advanced our understanding of the lake's hydrology, ecology, chemistry, and geology. Engineers have developed increasingly sophisticated tools for measuring, modeling, and managing water. State agencies, universities, conservation organizations, agricultural producers, industry, and citizens have each contributed important perspectives to one of the most complex water systems in North America.

This standard was not written because that work was insufficient.

It was written because we repeatedly encountered a different problem.

Throughout our study of Great Salt Lake, we found that thoughtful people often used the same words to describe different accounting concepts, or different words to describe the same physical process. Discussions involving conservation, dedicated water, water rights, depletions, streamflow, lake inflow, and restoration frequently became difficult to compare because the underlying accounting relationships were not always explicit.

As a result, conversations that appeared to disagree sometimes reflected differences in accounting rather than differences in science.

Great Salt Lake Accounting grew from a simple question:

**Can the lake be understood more clearly if every discussion begins with a common physical accounting framework?**

The objective was never to replace existing science, engineering, economics, or public policy. Those disciplines remain essential.

Instead, we sought to develop a consistent accounting methodology through which their contributions could be interpreted together.

The framework presented in this standard reflects that effort.

Throughout its development we adopted a simple discipline.

Rather than beginning with preferred policies or desired outcomes, we attempted to begin with the physical accounting of water itself.

Where does water originate?

How does it move through the basin?

Where is it depleted?

What evidence supports those conclusions?

How much incremental water ultimately reaches and remains within Great Salt Lake?

These questions became the organizing structure of the framework.

As the project evolved, another observation emerged.

Many disagreements surrounding Great Salt Lake are not disagreements about values.

They are disagreements about accounting.

When accounting terminology becomes precise, discussions often become more productive because participants can distinguish physical observations from analytical inference, analytical inference from policy, and policy from personal preference.

We do not believe this standard provides the final answer to every question concerning Great Salt Lake.

No accounting framework can eliminate uncertainty.

Climate will continue to vary.

Scientific understanding will continue to improve.

New datasets will become available.

Future investigators will undoubtedly refine portions of this work.

We welcome that process.

Indeed, we believe the strength of any analytical framework lies not in resisting revision, but in providing a disciplined foundation upon which revision can occur transparently.

Accordingly, this standard should be understood as an invitation rather than a conclusion.

An invitation to measure carefully.  
To define terms precisely.  
To distinguish evidence from assumption.  
To communicate uncertainty honestly.  
And to recognize that durable decisions begin with consistent accounting.  
If this standard contributes to clearer conversations, better questions, and more transparent evaluation of  
future restoration efforts, then it will have fulfilled its purpose.

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**Stuart J. Eyring**

**Warren H. Peterson**

August 2026

# Preface

The **Great Salt Lake Accounting Standard (GSLAS)** establishes a consistent analytical framework for evaluating the hydrologic condition of Great Salt Lake and the physical consequences of human water use within its contributing watersheds.

The standard was developed in response to a recurring need observed throughout Great Salt Lake studies, planning efforts, engineering analyses, scientific investigations, and public discussions: the need for a common accounting language capable of distinguishing among physical water movement, legal status, conservation actions, and measurable lake response.

The purpose of this document is not to replace existing scientific disciplines, engineering practice, economic analysis, or public policy.

Rather, it provides an accounting framework through which those disciplines may be interpreted using consistent terminology, explicitly defined accounting relationships, and transparent analytical methodology.

Accordingly, this standard seeks to improve the consistency, reproducibility, and transparency of Great Salt Lake analyses while preserving the important distinctions among observation, accounting, inference, and policy.

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## Nature of the Standard

GSLAS is an analytical standard.

It establishes:

- authoritative terminology;
- governing accounting principles;
- analytical methodology;
- evidentiary requirements;
- standardized reporting practices; and
- procedures for future revision.

The standard does not prescribe restoration strategies, management priorities, or legislative actions.

Instead, it establishes a common analytical framework through which alternative approaches may be evaluated consistently.

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## Intended Use

The standard is intended for application by:

- scientists;
- engineers;
- hydrologists;
- economists;
- water managers;
- policymakers;
- legislators;
- educators;
- journalists;
- researchers;
- and other individuals seeking a disciplined framework for evaluating Great Salt Lake restoration.

It is likewise intended to serve as the principal analytical specification for future computational implementations of the Great Salt Lake Accounting framework, including artificial intelligence systems and other decision-support tools.

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## Structure of the Standard

The document is organized into four principal parts.

**Part I** establishes the philosophical and conceptual foundations of the framework, including its purpose, governing principles, and authoritative terminology.

**Part II** defines the accounting methodology, accounting transformations, evidentiary requirements, and reconciliation procedures used throughout the framework.

**Part III** describes application of the methodology to restoration proposals, scientific investigations, policy analyses, and other analytical questions while establishing a standardized structure for communicating accounting conclusions.

**Part IV** establishes governance principles for maintaining, revising, and extending the standard as scientific understanding and available evidence continue to evolve.

Supporting appendices provide additional explanatory material, implementation guidance, glossary information, document relationships, and revision history.

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## Relationship to the Great Salt Lake Accounting Project

This standard serves as the principal technical specification for the Great Salt Lake Accounting Project.

Supporting publications—including the website, methodology documents, datasets, policy analyses, fact-sheets, and future publications—should be interpreted consistently with the terminology, methodology, and accounting principles established herein.

Where differences in wording occur between supporting publications and this standard, the standard governs interpretation of the Great Salt Lake Accounting framework.

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## Future Development

The Great Salt Lake Accounting Standard is intended to evolve as improved datasets, scientific understanding, and practical experience become available.

Future editions should preserve continuity of terminology and methodology while incorporating evidence-based improvements through transparent revision.

The objective is not to preserve every analytical assumption indefinitely.

The objective is to preserve a disciplined accounting framework capable of improving over time.

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*“Consistent accounting provides a common language through which complex systems may be understood, compared, and improved.”*

## Acknowledgments

The Great Salt Lake Accounting Standard reflects the contributions of many individuals and organizations whose scientific investigations, engineering analyses, public datasets, technical reports, and thoughtful discussions have advanced understanding of the Great Salt Lake system.

The authors gratefully acknowledge the work of the many researchers, engineers, hydrologists, economists, agency personnel, conservation practitioners, agricultural producers, industry representatives, policymakers, and interested citizens whose efforts have contributed to the body of knowledge upon which this framework builds.

The development of this standard also benefited from constructive review, technical discussion, and critical feedback provided throughout the Great Salt Lake Accounting Project. Those conversations helped clarify terminology, identify analytical weaknesses, improve accounting consistency, and strengthen the resulting framework.

The authors are particularly grateful to those who challenged assumptions, questioned methodology, and requested additional evidence. Constructive skepticism played an important role in refining both the accounting framework and the standard itself.

Finally, the authors acknowledge the responsible use of generative artificial intelligence as a drafting, editorial, and organizational tool during preparation of this document. The role of artificial intelligence is described separately in the AI-Assisted Drafting statement.

Responsibility for the framework, the analytical methodology, the conclusions presented herein, and any remaining errors rests solely with the principal authors.

**Stuart J. Eyring**

**Warren H. Peterson**



# Introduction

The Great Salt Lake is one of the most extensively studied terminal lake systems in North America. Over many decades, scientists, engineers, economists, policymakers, conservation organizations, industry, agricultural producers, and public agencies have collectively developed an extraordinary body of knowledge describing the lake and the watersheds that sustain it.

As understanding has grown, so too has recognition of the lake's complexity.

Climate, hydrology, water rights, reservoir operations, agriculture, municipal growth, mineral extraction, wetlands, wildlife habitat, public health, recreation, and economic development all influence the condition of the lake. Each discipline contributes valuable insight. None, by itself, provides a complete accounting of the system.

This standard begins from a simple observation.

Meaningful discussion of Great Salt Lake depends upon a common understanding of how water is accounted for.

Throughout technical reports, public discussions, policy documents, and restoration proposals, terms such as *diversion*, *depletion*, *conservation*, *dedicated water*, *streamflow*, *lake inflow*, and *lake recovery* are frequently used. Although these terms are often familiar, they do not describe equivalent accounting relationships.

Consequently, individuals working from the same observations may reach different conclusions because they are reasoning from different accounting assumptions.

The purpose of the Great Salt Lake Accounting Standard is to make those assumptions explicit.

Rather than introducing a new scientific discipline, the standard establishes a common analytical accounting framework through which existing science, engineering, economics, and public policy may be interpreted consistently.

The framework asks a disciplined sequence of questions.

What physical water is available?

How does that water move through the basin?

Where is it depleted?

What evidence supports those conclusions?

What portion ultimately reaches Great Salt Lake?

How much measurable benefit does a proposed action produce?

These questions form the foundation of the accounting methodology presented throughout this document. An important distinction should be recognized at the outset.

This standard is concerned with accounting rather than advocacy.

Its purpose is not to determine which public policies should be adopted, nor to evaluate competing social priorities. Those decisions properly involve considerations extending beyond physical accounting.

Instead, the framework seeks to provide a consistent analytical basis through which alternative proposals may be evaluated using common terminology, transparent methodology, and reproducible reasoning.

The chapters that follow progressively develop that framework.

The opening chapters establish the philosophical foundations and governing principles of the standard before defining its authoritative terminology.

Subsequent chapters describe the analytical methodology, accounting transformations, evidentiary requirements, reconciliation procedures, and standardized analytical structure used throughout the framework.

The concluding chapters describe governance of the standard itself and the principles through which future revisions should occur.

Readers are encouraged to approach the standard sequentially.

Many concepts introduced in later chapters depend upon terminology and accounting relationships established earlier in the document.

Although individual chapters may be consulted independently for reference purposes, the complete framework is best understood as an integrated system whose components are intended to operate together.

Like the hydrologic system it describes, the accounting framework is interconnected.  
The objective of this standard is not to simplify the Great Salt Lake.  
Its objective is to simplify the accounting used to understand it.  
If that accounting becomes more consistent, discussion becomes more precise.  
If discussion becomes more precise, analysis becomes more transparent.  
And if analysis becomes more transparent, future decisions—regardless of the policies ultimately chosen—  
can proceed from a more clearly understood physical foundation.  
The chapters that follow describe that foundation.



# The Great Salt Lake Accounting Principle

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**The purpose of Great Salt Lake Accounting is not to determine how much water is discussed, diverted, conserved, leased, purchased, transferred, or dedicated.**

**Its purpose is to determine how much incremental water physically reaches and remains in Great Salt Lake.**

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Every analytical method presented in this standard follows from this principle.

The accounting framework recognizes that many quantities associated with Great Salt Lake restoration are important.

Examples include:

- streamflow;
- diversions;
- consumptive use;
- conservation;
- water rights;
- dedicated water;
- infrastructure investments;
- financial expenditures;
- engineering projects;
- restoration programs.

Each may influence the condition of Great Salt Lake.

None, however, should be assumed to represent measurable lake benefit without further accounting.

Accordingly, Great Salt Lake Accounting distinguishes between actions and outcomes.

The framework seeks to identify not merely whether water has been discussed, conserved, protected, or redirected, but whether measurable incremental water physically reaches and remains within Great Salt Lake.

This principle governs every chapter that follows.

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## Guiding Questions

Where did the water originate?

How did it move through the system?

Where was it depleted?

What evidence supports those conclusions?

How much incremental water reached the lake?

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*“Accounting begins where assumptions end.”*



# Relationship Between GSLAS and Great Salt Lake Accounting

The Great Salt Lake Accounting Standard (GSLAS) establishes the analytical framework governing physical accounting and analytical accounting within the Great Salt Lake Basin.

Great Salt Lake Accounting serves as the flagship implementation of that framework.

Where GSLAS defines the terminology, methodology, Accounting Relationships, and analytical principles, Great Salt Lake Accounting demonstrates their application through a comprehensive accounting of the Great Salt Lake system using actual datasets, reconciliations, accounting ledgers, Accounting Findings, Analytical Inference, Bankability assessments, and Policy Considerations.

The two works are intended to complement one another.

GSLAS is designed to function as an independent technical standard and may be applied to future accounting engagements without reference to Great Salt Lake Accounting.

Conversely, Great Salt Lake Accounting demonstrates practical application of the principles established by GSLAS and provides a comprehensive collection of illustrative examples referenced throughout the appendices of this standard.

Readers seeking a detailed implementation of the analytical concepts presented in GSLAS are encouraged to consult Great Salt Lake Accounting as the companion implementation of this standard.

Future applications may extend these principles to other Accounting Questions, accounting boundaries, hydrologic systems, or analytical domains while preserving the methodological framework established herein.



# How to Read This Standard

The Great Salt Lake Accounting Standard (GSLAS) is intended to be read both as a complete analytical framework and as a technical reference.

Readers seeking a general understanding of the framework are encouraged to read the document sequentially. Later chapters build upon terminology, Accounting Relationships, and governing principles established earlier in the standard.

Readers consulting the document for a specific Accounting Question may reference individual chapters independently. However, interpretation of later chapters assumes familiarity with the authoritative definitions and analytical methodology established in the opening chapters.

Accordingly, first-time readers should begin with:

- the Foreword;
- the Preface;
- the Introduction;
- The Great Salt Lake Accounting Principle; and
- Chapters 1 through 7.

These chapters establish the governing principles, authoritative terminology, accounting methodology, evidentiary requirements, and analytical structure used throughout the remainder of the standard.

Subsequent chapters progressively develop the analytical framework by distinguishing among:

- Physical Accounting;
- Accounting Relationships;
- Accounting Findings;
- Analytical Inference; and
- Policy Considerations.

This progression is intentional.

Each analytical quantity depends upon those established before it.

Accordingly, later conclusions should not be interpreted independently of the Accounting Relationships developed throughout the framework.

Throughout this standard, particular significance should be given to the distinction between:

- demonstrated Physical Accounting;
- documented Accounting Findings;
- reasoned Analytical Inference; and
- subsequent Policy Considerations.

These quantities represent progressively different forms of analytical reasoning and should not be regarded as interchangeable.

The appendices provide supporting reference material, implementation guidance, definitions, examples, and other supplementary information.

Unless expressly stated otherwise, the appendices are informative rather than normative.

The objective of this standard is not to prescribe public policy.

Its objective is to establish a consistent accounting framework through which physical observations, analytical reasoning, and policy discussions may be evaluated using a common accounting language.

Readers are encouraged to approach each analytical question with the same discipline that guides the framework itself:

Begin with the accounting.

Follow the Evidence.

Document the reasoning.

Distinguish accounting from inference.

Distinguish inference from policy.

*“Consistent accounting enables consistent understanding.”*

# 1. Purpose, Scope, and Philosophy

## 1.1 Purpose

The Great Salt Lake Accounting Standard (GSLAS) establishes a consistent analytical accounting framework for evaluating the physical movement, accounting, and measurable lake response of water within the Great Salt Lake Basin.

The standard provides a common methodology for distinguishing among hydrologic observations, accounting relationships, analytical conclusions, and policy considerations. By defining authoritative terminology and applying a consistent accounting framework, the standard seeks to improve the transparency, reproducibility, and comparability of analyses concerning Great Salt Lake.

The framework is founded on a single organizing principle:

The purpose of Great Salt Lake Accounting is to determine how much incremental water physically reaches and remains in Great Salt Lake.

Accordingly, the standard emphasizes physical accounting rather than administrative accounting, measurable outcomes rather than reported activities, and explicitly supported conclusions rather than implicit assumptions.

The objectives of the standard are to:

- establish consistent accounting terminology;
- define an analytical accounting methodology applicable across disciplines;
- distinguish among diversions, depletions, conservation actions, dedicated water, bankable water, and incremental lake benefit;
- provide a transparent framework for evaluating restoration proposals and conservation programs;
- improve consistency in communication among scientists, engineers, policymakers, water managers, researchers, and the public; and
- provide an authoritative reference for future applications of the Great Salt Lake Accounting framework.

This standard does not prescribe public policy, establish legal rights, or advocate particular restoration strategies.

Its purpose is to provide a consistent accounting framework through which alternative proposals, scientific findings, engineering analyses, and policy options may be evaluated using common terminology, explicit assumptions, and reproducible reasoning.

## 1.2 Scope

This standard establishes an analytical accounting framework for evaluating the physical accounting of water within the Great Salt Lake Basin and the measurable response of Great Salt Lake to natural and human influences.

The framework applies to analyses involving:

- basin hydrology;
- streamflow;
- water availability;
- diversions;
- consumptive use (depletions);
- conservation actions;
- dedicated water;

- bankable water;
- terminal delivery;
- lake storage;
- lake elevation;
- restoration proposals;
- water management strategies; and
- related accounting questions affecting Great Salt Lake.

The framework is intended to support consistent evaluation of:

- scientific investigations;
- engineering studies;
- water accounting analyses;
- restoration programs;
- conservation initiatives;
- public policy analyses;
- legislative proposals;
- technical reports; and
- computational implementations of the Great Salt Lake Accounting methodology.

The standard is designed to improve analytical consistency across disciplines by providing common terminology, explicit accounting relationships, and a reproducible methodology for evaluating physical water movement and measurable lake response.

The framework applies equally to historical analyses, current conditions, and future scenarios, provided that the assumptions, datasets, and uncertainties associated with each analysis are explicitly identified.

This standard does not establish legal rights, prescribe engineering designs, optimize economic outcomes, determine ecological priorities, or recommend specific public policies.

Rather, it provides a common analytical accounting framework through which those matters may be evaluated using consistent physical accounting principles.

Unless otherwise stated, the accounting principles described in this standard are intended to apply throughout the Great Salt Lake Basin regardless of jurisdictional boundaries or individual water-right administration.

The standard is intended to remain applicable as scientific understanding, available datasets, and analytical methods evolve through future revisions.

### 1.3 Philosophy

The Great Salt Lake Accounting Standard is founded on the principle that consistent accounting improves analytical understanding.

The Great Salt Lake is a complex hydrologic system influenced by climate, geography, human water use, infrastructure, law, economics, ecology, and public policy. Each discipline contributes valuable knowledge. No single discipline, however, is intended to provide a complete description of the system.

Accordingly, this standard adopts an analytical accounting framework that seeks to integrate observations from multiple disciplines through consistent accounting relationships rather than through discipline-specific interpretation alone.

The framework begins with physical evidence.

Observed measurements, reconciled datasets, and explicitly stated assumptions form the foundation of every analysis.

Interpretation follows observation.

Accounting follows measurement.

Inference follows accounting.

Policy considerations follow analytical findings.

Maintaining this sequence is essential to analytical transparency.

The framework further recognizes that similar words may describe different accounting concepts, and different words may describe similar accounting relationships.

Accordingly, this standard emphasizes precise terminology and explicit definitions to improve consistency among analyses prepared by different investigators.



The standard also recognizes that water discussed, diverted, conserved, leased, dedicated, or legally protected does not necessarily produce equivalent physical benefit to Great Salt Lake.

Accounting therefore distinguishes between human actions and measurable physical outcomes.

The objective is not simply to document activity.

The objective is to evaluate measurable incremental lake benefit.

Finally, the framework recognizes that uncertainty is an inherent characteristic of complex natural systems.

Analytical uncertainty should therefore be identified explicitly rather than minimized or ignored.

Uncertainty does not prevent accounting.

Rather, transparent accounting provides a disciplined means of understanding both what is known and what remains uncertain.

The philosophy of this standard may therefore be summarized as follows:

- begin with observed evidence;
- define accounting units explicitly;
- distinguish among accounting relationships;
- separate observation from inference;
- separate inference from policy;
- communicate uncertainty transparently; and
- evaluate measurable incremental lake benefit using consistent accounting principles.

These principles govern every chapter that follows.

## 1.4 Intended Applications

The Great Salt Lake Accounting Standard is intended to provide a consistent analytical accounting framework for evaluating questions involving the physical accounting of water within the Great Salt Lake Basin.

The framework may be applied to a broad range of analytical questions, provided that the accounting units, assumptions, evidence, and methodology remain explicit.

Representative applications include:

- evaluation of conservation proposals;
- assessment of water leasing programs;
- analysis of restoration projects;
- accounting of dedicated water;
- evaluation of infrastructure investments;
- comparison of alternative management strategies;
- interpretation of observed lake response;
- reconciliation of multiple datasets;
- assessment of published technical claims;
- scientific investigations;
- engineering studies;
- policy analyses;
- educational materials; and
- computational implementations of the Great Salt Lake Accounting framework.

The standard is intended to support analyses performed by governmental agencies, academic institutions, consulting organizations, non-governmental organizations, industry, agricultural interests, researchers, educators, and other participants engaged in Great Salt Lake restoration and management.

Application of this standard does not require adoption of particular management objectives or policy preferences.

Rather, it provides a common accounting methodology through which differing viewpoints may evaluate physical water accounting using consistent terminology and analytical principles.

The framework is equally applicable to historical analyses, current conditions, and future scenarios.

Historical applications seek to improve understanding of observed lake response.

Contemporary applications seek to improve interpretation of current conditions.

Future applications seek to evaluate potential outcomes under explicitly stated assumptions regarding climate, hydrology, human water use, and restoration activities.

Although originally developed for Great Salt Lake, many principles contained within this standard—including explicit accounting terminology, analytical transparency, evidence-based reconciliation, and standardized reporting—may prove applicable to other terminal lakes and complex watershed systems.

Any such application should recognize the unique hydrologic, legal, ecological, and institutional characteristics of the system being evaluated.

## 1.5 Relationship to Existing Disciplines

The Great Salt Lake Accounting Standard is intended to complement, rather than replace, the scientific, engineering, economic, legal, and policy disciplines that contribute to understanding and managing the Great Salt Lake system.

Each discipline addresses important questions using its own methods, terminology, and analytical objectives.

Hydrology seeks to understand the movement and distribution of water.

Engineering develops and evaluates physical systems and infrastructure.

Ecology examines the relationships among organisms, habitats, and environmental processes.

Economics evaluates incentives, resource allocation, costs, and benefits.

Law establishes the legal framework governing water rights and resource management.

Public policy balances competing societal objectives through legislative and administrative decision-making.

The Great Salt Lake Accounting Standard does not duplicate these disciplines.

Instead, it provides a common analytical accounting framework through which their respective contributions may be interpreted using consistent accounting terminology and explicitly defined accounting relationships.

Accordingly, the standard is intended to improve communication across disciplines by distinguishing among physical observations, accounting relationships, analytical findings, and policy considerations.

The framework recognizes that different disciplines frequently describe the same physical processes from different perspectives.

Such differences should not be interpreted as analytical conflict unless the underlying accounting relationships differ.

Where multiple disciplines contribute to a single analysis, the accounting framework provides a common structure through which evidence may be organized, compared, and reconciled.

The standard therefore serves as an integrating framework rather than as a substitute for discipline-specific expertise.

Application of this standard should not be interpreted as diminishing the importance of scientific investigation, engineering judgment, economic analysis, legal interpretation, or public policy.

Rather, the standard seeks to improve interdisciplinary understanding by providing a consistent accounting foundation upon which those disciplines may interact more effectively.

The analytical accounting framework established herein is intended to promote clarity, transparency, and comparability while respecting the distinct contributions of each participating discipline.

## 1.6 Organization of the Standard

The Great Salt Lake Accounting Standard is organized as a progressive analytical framework that moves from foundational principles to physical accounting, analytical accounting, and informed decision support.

The organization of the standard reflects the sequence by which accounting knowledge is developed.

Foundational chapters establish the governing principles, terminology, accounting methodology, and analytical framework.

Subsequent chapters progressively develop the analytical accounting process by distinguishing among physical observations, accounting relationships, accounting transformations, accounting findings, analytical inference, and policy considerations.

The standard is organized into the following major components:

- **Front Matter** establishes the purpose, status, authorship, and use of the standard.

- **Chapter 1** establishes the purpose, scope, philosophy, intended applications, relationship to existing disciplines, and organization of the standard.
- **Chapter 2** establishes the governing accounting principles upon which every subsequent chapter is based.
- **Chapters 3 through 7** establish the analytical accounting framework, including accounting terminology, accounting methodology, analytical processes, physical accounting, and accounting actions.
- **Chapters 8 through 17** establish the standardized methodology for evaluating the principal physical accounting quantities used throughout Great Salt Lake Accounting.
- **Chapters 18 through 20** establish the standardized methodology for developing Accounting Findings, Analytical Inference, and Policy Considerations.
- **Appendices** provide informative reference material, implementation guidance, examples, revision history, and other supporting documentation.

Although individual chapters may be consulted independently, the standard is intended to be read sequentially when first encountered.

Concepts introduced in the early chapters establish the terminology, accounting relationships, and analytical methodology upon which later chapters depend.

Accordingly, readers unfamiliar with the framework are encouraged to begin with the foundational chapters before consulting later technical chapters.

The organization of this document reflects the philosophy of the framework itself:

begin with governing principles;

establish consistent accounting methodology;

develop physical accounting;

derive analytical understanding through transparent accounting relationships;

and distinguish demonstrated accounting from analytical inference and subsequent policy considerations.

Each chapter therefore builds upon the analytical foundation established by those preceding it, preserving Accounting Continuity throughout the Great Salt Lake Accounting Standard.



## 2. Governing Principles

### 2.1 Purpose

The purpose of this chapter is to establish the governing principles upon which the Great Salt Lake Accounting Standard is founded.

These principles define the analytical characteristics expected of every application of the Great Salt Lake Accounting framework, regardless of the specific dataset, analytical method, restoration proposal, or policy question under consideration.

The governing principles are normative.

They establish the standards by which analyses should be prepared, interpreted, communicated, and evaluated.

Subsequent chapters derive their methodology, terminology, evidentiary requirements, and reporting structure from these principles.

Accordingly, any application of the Great Salt Lake Accounting Standard should remain consistent with the principles established herein.

The governing principles are intended to:

- establish analytical consistency;
- promote transparency and reproducibility;
- distinguish physical accounting from policy advocacy;
- improve comparability among independent analyses;
- provide a common basis for evaluating evidence; and
- support continual refinement of the accounting framework as new information becomes available.

Collectively, these principles define the character of the Great Salt Lake Accounting Standard.

They are intended to guide both human judgment and computational implementation while preserving the central objective of the framework: transparent evaluation of measurable incremental lake benefit through consistent analytical accounting.

The principles presented in this chapter are interdependent.

No single principle should be interpreted independently of the others.

Together they establish the analytical foundation upon which the remainder of this standard is built.

### 2.2 Principle of Physical Accounting

#### 2.2.1 Principle

The Great Salt Lake Accounting Standard shall be founded upon the principle of physical accounting.

All analyses performed under this standard shall evaluate water according to its measurable physical movement, storage, depletion, and contribution to Great Salt Lake rather than solely according to administrative, legal, financial, or reported accounting.

Physical accounting constitutes the primary analytical framework of this standard.

Legal status, financial investment, conservation activity, engineering implementation, and policy objectives may influence physical outcomes, but they shall not be interpreted as equivalent to measurable lake benefit without explicit accounting.

#### 2.2.2 Purpose

The purpose of physical accounting is to establish a common analytical basis for evaluating the condition of Great Salt Lake.

Accordingly, the framework begins with measurable physical evidence and proceeds through explicitly defined accounting relationships before drawing analytical conclusions.

Physical accounting therefore seeks to answer questions such as:

- How much water is physically available?
- Where does that water originate?
- How does it move through the basin?
- Where is it depleted?
- What evidence supports these accounting relationships?
- How much incremental water physically reaches and remains within Great Salt Lake?

These questions define the primary accounting sequence used throughout this standard.

### 2.2.3 Implications

Application of this principle requires recognition that quantities describing human activity are not necessarily equivalent to quantities describing physical lake response.

Examples include, but are not limited to:

- conserved water;
- dedicated water;
- leased water;
- purchased water;
- diverted water;
- protected water; and
- reported water savings.

Each may represent an important accounting event.

None shall be presumed to produce measurable lake benefit without subsequent physical accounting.

Accordingly, analyses performed under this standard shall distinguish clearly between accounting actions and physical outcomes.

---

### 2.2.4 Analytical Sequence

Physical accounting proceeds through the following sequence:

1. Observation.
2. Measurement.
3. Accounting.
4. Reconciliation.
5. Analysis.
6. Interpretation.
7. Policy Consideration.

Each step shall remain distinguishable from the others.

Analytical conclusions shall not be presented as observed measurements, and policy preferences shall not be presented as accounting findings.

---

### 2.2.5 Relationship to Other Principles

The Principle of Physical Accounting establishes the primary analytical perspective of this standard.

The remaining governing principles expand upon this foundation by defining how accounting shall be performed, documented, evaluated, communicated, and improved.

## 2.3 Principle of Analytical Transparency

### 2.3.1 Principle

The Great Salt Lake Accounting Standard shall be applied in a manner that makes analytical reasoning transparent.

Every significant accounting conclusion shall be traceable to observed evidence, explicitly stated assumptions, defined accounting relationships, and reproducible analytical methods.

Analytical transparency is essential to the credibility, reproducibility, and continual improvement of the accounting framework.

---

### 2.3.2 Purpose

The purpose of analytical transparency is to ensure that independent investigators can understand, evaluate, reproduce, and, where appropriate, challenge an accounting analysis.

Transparent accounting does not require agreement.

It requires that reasonable investigators can determine:

- what evidence was used;
- what assumptions were made;
- what accounting methodology was applied;
- how analytical conclusions were reached; and
- where uncertainty remains.

Accordingly, analytical transparency supports constructive technical dialogue rather than reliance upon authority or opinion.

---

### 2.3.3 Requirements

Analyses performed under this standard shall distinguish clearly between:

- observed measurements;
- reconciled datasets;
- accounting transformations;
- analytical findings;
- analytical inferences;
- modeled scenarios; and
- policy considerations.

These categories shall not be presented interchangeably.

Each represents a distinct stage of analytical reasoning.

---

### 2.3.4 Explicit Assumptions

Assumptions are an unavoidable component of analytical accounting.

Accordingly, assumptions shall be identified explicitly rather than incorporated implicitly into analytical conclusions.

Where assumptions materially influence an accounting result, the assumptions themselves shall be documented and available for independent review.

Changes in assumptions should be expected to produce corresponding changes in analytical conclusions.

Such changes do not necessarily invalidate the framework.

Rather, they represent normal refinement within a transparent analytical process.

### 2.3.5 Communication

Analytical transparency requires that accounting conclusions be communicated in a manner that permits independent evaluation.

Accordingly, analyses should identify:

- the accounting question being addressed;
- the evidence supporting the analysis;
- the accounting methodology employed;
- the principal assumptions;
- the resulting accounting findings;
- the degree of uncertainty; and
- the distinction between accounting conclusions and policy implications.

This reporting structure promotes consistency across independent analyses.

---

### 2.3.6 Relationship to Other Principles

The Principle of Analytical Transparency supports the Principle of Physical Accounting by making the accounting process visible to independent review.

It likewise provides the foundation for reproducibility, peer evaluation, computational implementation, and future refinement of the Great Salt Lake Accounting Standard.

## 2.4 Principle of Incremental Lake Accretion

### 2.4.1 Principle

The Great Salt Lake Accounting Standard shall evaluate actions, programs, investments, and management decisions according to their measurable incremental accretion to Great Salt Lake.

Incremental Lake Accretion constitutes the principal physical accounting outcome of this standard.

Accordingly, analytical conclusions shall distinguish between actions that influence water management and actions that produce measurable physical accretion within Great Salt Lake.

---

### 2.4.2 Purpose

The purpose of this principle is to distinguish accounting activity from accounting outcome.

Numerous actions may influence the movement, management, protection, or allocation of water within the Great Salt Lake Basin.

Such actions include conservation, infrastructure improvements, water leasing, dedicated water, engineering projects, operational changes, legal protections, and financial investments.

Each may contribute to future Lake Accretion.

However, under this standard, their accounting significance is evaluated according to measurable physical accretion rather than administrative activity alone.

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### 2.4.3 Requirement

Analyses performed under this standard shall identify, where practicable, the measurable Incremental Lake Accretion resulting from the action under evaluation.

Incremental Lake Accretion should be expressed using appropriate physical accounting measures, including but not limited to:

- incremental water delivered to Great Salt Lake;
- incremental water retained within Great Salt Lake;
- measurable changes in lake storage;
- measurable changes in lake elevation; or
- other physically observable accounting outcomes.



Where direct measurement is not possible, the assumptions, accounting transformations, and uncertainties supporting the estimated Incremental Lake Accretion shall be explicitly identified.

#### 2.4.4 Application

Application of this principle requires recognition that many reported accomplishments do not necessarily produce equivalent physical accretion.

Examples include:

- reported water conservation;
- reduced diversions;
- improved irrigation efficiency;
- purchased water rights;
- dedicated water;
- restoration expenditures;
- infrastructure construction; and
- legal or administrative actions.

Each represents an accounting event.

None should be interpreted as equivalent to Incremental Lake Accretion without subsequent physical accounting.

Accordingly, this standard distinguishes between:

- reported activity;
- accounting consequence; and
- measurable lake response.

Maintaining these distinctions improves analytical clarity and comparability.

#### 2.4.5 Relationship to Other Principles

The Principle of Incremental Lake Accretion builds directly upon the Principle of Physical Accounting.

Physical accounting establishes the movement and accounting of water throughout the basin.

Incremental Lake Accretion evaluates the measurable physical contribution of that accounting to Great Salt Lake.

Analytical Transparency ensures that the accounting supporting such conclusions remains available for independent evaluation and future refinement.

### 2.5 Principle of Analytical Independence

#### 2.5.1 Principle

The Great Salt Lake Accounting Standard shall be applied independently of policy preference, institutional affiliation, funding source, or desired management outcome.

Analytical conclusions shall be determined by the available evidence, the accounting methodology established by this standard, and explicitly stated assumptions.

The accounting framework shall not be used to advocate predetermined conclusions.

#### 2.5.2 Purpose

The purpose of analytical independence is to preserve the credibility and objectivity of the accounting framework.

Great Salt Lake restoration involves numerous stakeholders with differing objectives, priorities, and responsibilities.

These differences are both expected and appropriate.

The role of the accounting framework is not to resolve those differences.

Its role is to provide a common analytical basis through which differing perspectives may evaluate physical accounting using consistent methodology.

---

### 2.5.3 Requirement

Analyses performed under this standard shall distinguish clearly between:

- accounting findings;
- scientific interpretation;
- engineering judgment;
- economic evaluation;
- legal interpretation; and
- policy preference.

These components may inform one another but shall not be represented as equivalent.

Accounting conclusions shall remain independent of preferred policy outcomes.

---

### 2.5.4 Application

Application of this principle requires that analyses begin with the accounting question rather than the preferred solution.

Accordingly, investigators should first establish:

- the accounting objective;
- the relevant accounting units;
- the available evidence;
- the accounting methodology; and
- the resulting accounting findings.

Only after these elements have been established should broader policy implications or management alternatives be considered.

This sequence promotes analytical consistency while reducing the influence of confirmation bias.

### 2.5.5 Professional Judgment

Analytical independence does not imply the absence of professional judgment.

Judgment remains necessary when evaluating evidence, selecting appropriate methodologies, interpreting accounting relationships, and communicating uncertainty.

The standard requires that such judgment be exercised transparently and be supported by clearly stated reasoning.

Reasonable investigators may differ in their interpretations while remaining consistent with the principles established by this standard.

---

### 2.5.6 Relationship to Other Principles

The Principle of Analytical Independence reinforces the Principle of Physical Accounting by ensuring that accounting conclusions remain grounded in physical evidence rather than desired outcomes.

It also depends upon the Principle of Analytical Transparency, through which assumptions, evidence, and reasoning remain available for independent review.

Analytical independence strengthens confidence that Lake Accretion is evaluated according to consistent accounting principles rather than institutional or policy preference.

## 2.6 Principle of Explicit Assumptions

### 2.6.1 Principle

The Great Salt Lake Accounting Standard shall require that assumptions materially influencing an analysis be explicitly identified, documented, and distinguished from observed measurements and accounting findings.

Assumptions are an essential component of analytical accounting.

Their explicit identification improves transparency, facilitates independent review, and permits analytical conclusions to be evaluated within their proper context.

---

### 2.6.2 Purpose

The purpose of this principle is to ensure that analytical conclusions can be understood in light of the assumptions upon which they depend.

Hydrologic systems are inherently complex.

Analyses frequently require assumptions regarding climate, measurement uncertainty, routing, depletion, accounting relationships, future conditions, or other variables that cannot be observed directly.

The credibility of an analysis depends not upon eliminating assumptions, but upon making them visible.

---

### 2.6.3 Requirement

Analyses performed under this standard shall identify assumptions that materially influence accounting conclusions.

Where practicable, assumptions should include:

- a clear statement of the assumption;
- the basis supporting the assumption;
- the accounting relationship affected;
- the anticipated influence on the analysis; and
- significant uncertainties associated with the assumption.

Assumptions shall be presented separately from observed measurements and accounting findings.

---

### 2.6.4 Application

Application of this principle requires recognition that assumptions are neither evidence nor conclusions.

Rather, assumptions provide the analytical context within which evidence is interpreted.

Accordingly, investigators should distinguish among:

- observed measurements;
- reconciled datasets;
- accounting assumptions;
- analytical findings; and
- analytical inferences.

Reasonable investigators may adopt different assumptions while applying the same analytical accounting framework.

Differences in assumptions should be expected to produce corresponding differences in analytical conclusions.

Such differences do not necessarily represent disagreement regarding the accounting methodology itself.

---

### 2.6.5 Documentation

Where assumptions materially affect analytical outcomes, their source should be identified whenever practicable.

Sources may include:

- published scientific literature;
- engineering analyses;
- administrative records;
- observational datasets;
- accepted professional practice; or
- explicitly stated professional judgment.

Assumptions adopted solely for illustrative or scenario purposes should be clearly identified as such.

### 2.6.6 Relationship to Other Principles

The Principle of Explicit Assumptions strengthens the Principle of Analytical Transparency by making the reasoning underlying an analysis available for independent evaluation.

It also supports Analytical Independence by ensuring that assumptions are stated openly rather than incorporated implicitly into accounting conclusions.

Explicit assumptions improve reproducibility, facilitate constructive technical dialogue, and support continual refinement of the Great Salt Lake Accounting framework.

## 2.7 Principle of Reproducibility

### 2.7.1 Principle

The Great Salt Lake Accounting Standard shall be applied in a manner that permits independent reproduction of its analytical methods and conclusions.

Analyses performed under this standard shall provide sufficient documentation of evidence, accounting methodology, assumptions, and reasoning to enable competent investigators to understand and, where practicable, reproduce the analysis.

Reproducibility strengthens confidence in accounting findings and supports continual refinement of the framework.

### 2.7.2 Purpose

The purpose of this principle is to promote analytical consistency through independent verification.

Reproducibility allows investigators to evaluate whether accounting conclusions result from the evidence presented and the methodology applied, rather than from undocumented assumptions or subjective interpretation.

Independent reproduction of an analysis does not require identical conclusions.

Reasonable investigators may reach different conclusions where assumptions, evidence, or analytical judgment differ.

However, the accounting process itself should remain transparent and reproducible.

### 2.7.3 Requirement

Analyses performed under this standard shall document, where practicable:

- the accounting question;
- the accounting units evaluated;
- the evidence and datasets employed;
- the accounting methodology;
- the assumptions adopted;
- the accounting transformations performed;
- the resulting accounting findings; and
- significant uncertainties affecting the analysis.

Sufficient documentation shall be provided to permit informed technical review.

### 2.7.4 Application

Application of this principle requires that analytical reasoning be communicated in a manner that another investigator can follow from beginning to end.

Accordingly, analyses should avoid conclusions that depend upon undocumented calculations, undefined terminology, unpublished assumptions, or unexplained analytical steps.

Where computational tools, statistical methods, numerical models, or artificial intelligence systems contribute materially to an analysis, their role should be described sufficiently to permit independent understanding of the accounting process.

The objective is transparency of reasoning rather than duplication of software or computational environment.

---

### 2.7.5 Verification

Reproducibility should be regarded as an opportunity for continual improvement rather than confirmation of correctness.

Independent reproduction may:

- confirm accounting findings;
- identify computational or methodological errors;
- reveal previously unrecognized assumptions;
- improve accounting relationships; or
- suggest opportunities for refinement.

Such outcomes strengthen the analytical accounting framework.

---

### 2.7.6 Relationship to Other Principles

The Principle of Reproducibility depends upon the Principles of Physical Accounting, Analytical Transparency, and Explicit Assumptions.

Together these principles provide the information necessary for independent evaluation of an analysis.

Reproducibility also supports Continuous Improvement by enabling future investigators to refine methods while preserving analytical consistency.

## 2.8 Principle of Continuous Improvement

### 2.8.1 Principle

The Great Salt Lake Accounting Standard shall be maintained as a living analytical accounting framework that evolves through evidence, experience, scientific advancement, and constructive technical review.

Revisions to the framework shall strengthen analytical consistency while preserving continuity of terminology, governing principles, and accounting methodology.

Continuous improvement is an essential characteristic of the standard.

---

### 2.8.2 Purpose

The purpose of this principle is to ensure that the Great Salt Lake Accounting Standard remains scientifically relevant, analytically rigorous, and responsive to improved understanding of the Great Salt Lake system.

Hydrologic science, observational datasets, measurement technologies, computational methods, and practical experience will continue to evolve.

The analytical accounting framework should evolve accordingly.

Improvement should occur through disciplined refinement rather than continual reinvention.

---

### 2.8.3 Requirement

Proposed revisions to the standard should be supported by one or more of the following:

- improved observational evidence;
- enhanced datasets;
- improved accounting relationships;
- advances in scientific understanding;
- demonstrated analytical deficiencies;
- constructive peer review; or
- improved clarity, consistency, or reproducibility.

Substantive revisions shall be documented through formal version control.

Editorial revisions that do not alter analytical meaning need not constitute a new edition of the standard.

### 2.8.4 Application

Application of this principle recognizes that refinement is a normal characteristic of mature analytical frameworks.

Accordingly, investigators should welcome constructive review that:

- identifies ambiguity;
- challenges unsupported assumptions;
- improves accounting terminology;
- strengthens analytical methodology;
- enhances reproducibility;
- or increases analytical transparency.

Constructive criticism should be evaluated according to the evidence presented rather than the source from which it originates.

Disagreement, when supported by transparent reasoning and evidence, contributes to the continued improvement of the framework.

---

### 2.8.5 Stewardship

Future editions of this standard should preserve continuity with previous editions whenever practicable.

Changes affecting terminology, accounting methodology, governing principles, or analytical interpretation should be explicitly documented.

Historical analyses should remain understandable within the context of the version under which they were prepared.

Maintaining a transparent revision history supports both analytical continuity and institutional learning.

### 2.8.6 Relationship to Other Principles

The Principle of Continuous Improvement depends upon the Principles of Analytical Transparency, Explicit Assumptions, and Reproducibility.

Transparent analytical methods permit constructive review.

Explicit assumptions identify opportunities for refinement.

Reproducibility enables independent evaluation.

Together, these principles ensure that the Great Salt Lake Accounting Standard remains a stable yet evolving analytical accounting framework capable of incorporating improved knowledge while preserving methodological consistency.

## 2.9 Principle of Climate Bounds

### 2.9.1 Principle

The Great Salt Lake Accounting Standard shall recognize that climate establishes the outer physical boundary of Great Salt Lake's long-term operating range, while human management determines where within that boundary the lake actually operates.

Climate sets the ceiling. Management sets the floor.

Accordingly, analyses performed under this standard shall not attribute to management actions an outcome that is properly attributable to climate, and shall not attribute to climate an outcome that is properly attributable to management.

---

### 2.9.2 Purpose

The purpose of this principle is to prevent two symmetrical analytical errors that this standard has observed in public discussion of Great Salt Lake restoration: crediting conservation and management actions with lake recovery that in fact required favorable climate, and, conversely, dismissing conservation and management actions as ineffective because they cannot by themselves reach an elevation that requires favorable climate.

Both errors share a common cause: failure to distinguish the portion of lake behavior governed by climate from the portion governed by management.

---

### 2.9.3 Requirement

Analyses evaluating a target lake elevation or a target timeframe shall distinguish, where practicable:

- the range of lake elevations attainable through management action (Accounting Actions, Bankable mechanisms) under climate conditions consistent with the current or a specified accounting regime; and
- the range of lake elevations attainable only through a combination of management action and climate conditions materially more favorable than the current or specified accounting regime.

Where an Accounting Question specifies a target elevation, the Analytical Inference addressing that question shall identify which of these two ranges the target falls within, and shall not represent a target falling in the second range as achievable through management action alone.

---

### 2.9.4 Application

Application of this principle requires evaluating a stated target against both the Bankable ceiling established under Chapter 17 and the climate conditions embedded in the applicable accounting regime, rather than against either alone.

For example, under documented Great Salt Lake Accounting reconstructions, reductions in human depletion can reasonably sustain the lake within a lower operating band consistent with reduced but non-zero climate-driven inflow. Returning the lake to a materially higher operating band consistent with 30-year average climate conditions requires both sustained reductions in human depletion and reversion of climate conditions toward that 30-year average. A target elevation situated within the higher band cannot be represented as achievable through management action alone; a target elevation situated within the lower band may be.

This distinction does not diminish the accounting significance of Bankable management action. Consistent with §2.4 (Principle of Incremental Lake Accretion), durable reductions in depletion raise the floor within whatever ceiling climate allows, and that floor is higher, and more resistant to future shock periods, than it would be in the absence of those actions.

---

### 2.9.5 Relationship to Other Principles

The Principle of Climate Bounds depends upon the Principle of Physical Accounting (§2.2), which establishes that analyses shall evaluate water according to its measurable physical movement rather than administrative

or reported accounting, and upon the Principle of Incremental Lake Accretion (§2.4), which establishes that management actions shall be evaluated by their measurable physical contribution to the lake.

Together, these principles require that any Analytical Inference regarding a target lake elevation or restoration timeframe identify separately the contribution of demonstrated or reasonably projected climate conditions and the contribution of Bankable management action, consistent with the Principle of Explicit Assumptions (§2.6).



## 3. Authoritative Definitions

### 3.1 Purpose

The purpose of this chapter is to establish the authoritative terminology used throughout the Great Salt Lake Accounting Standard.

Consistent terminology is fundamental to consistent analytical accounting.

Many words commonly used in hydrology, engineering, ecology, economics, law, and public policy possess discipline-specific meanings that differ according to context. While such differences are often appropriate within their respective disciplines, they may introduce ambiguity when applied to interdisciplinary analyses concerning Great Salt Lake.

Accordingly, this chapter establishes standardized definitions for the technical terms used throughout the Great Salt Lake Accounting Standard.

These definitions provide the common analytical vocabulary upon which the accounting framework is built.

Unless otherwise stated, terms defined in this chapter shall be interpreted according to the meanings established herein whenever they appear within this standard.

The definitions contained in this chapter are intended to improve analytical consistency rather than replace discipline-specific terminology.

Where a defined term differs from common usage or from terminology employed by another discipline, the definition established by this standard governs interpretation within the context of the Great Salt Lake Accounting framework.

The purpose of authoritative definitions is to ensure that investigators applying this standard attach the same meaning to the same term, regardless of institutional affiliation, professional background, or analytical objective.

Consistent definitions support:

- analytical transparency;
- reproducibility;
- interdisciplinary communication;
- computational implementation;
- peer review; and
- continual improvement of the accounting framework.

Definitions should be interpreted as components of an integrated analytical system rather than as isolated descriptions.

Many defined terms possess explicit accounting relationships to one another.

Accordingly, individual definitions should be understood within the broader structure of the analytical accounting framework established by this standard.

Subsequent sections present the authoritative definitions upon which all later chapters depend.

### 3.2 Accounting

#### 3.2.1 Definition

**Accounting** is the disciplined process of identifying, measuring, organizing, reconciling, evaluating, interpreting, and communicating information to develop consistent analytical understanding.

Within the Great Salt Lake Accounting Standard, Accounting refers to the systematic evaluation of physical water, measurable quantities, and documented Accounting Relationships rather than financial transactions.

Accounting provides the structured process through which observations become evidence, evidence becomes Accounting Findings, and Accounting Findings support Analytical Inference and subsequent Policy Considerations.

---

### 3.2.2 Purpose

The purpose of Accounting is to organize complex information into a transparent analytical structure capable of supporting consistent evaluation and comparison.

Accounting does not create Evidence.

Rather, it organizes Evidence using explicitly defined Accounting Relationships that permit meaningful analysis, reconciliation, and communication.

---

### 3.2.3 Characteristics

Accounting, as used in this standard, is characterized by:

- explicit terminology;
- defined Accounting Units;
- documented Accounting Relationships;
- transparent assumptions;
- reproducible methodology;
- documented Evidence; and
- clearly communicated Accounting Findings.

These characteristics distinguish Analytical Accounting from informal description, narrative interpretation, or unsupported assertion.

---

### 3.2.4 Accounting Relationships

Within this standard, Accounting provides the foundation for:

- Physical Accounting;
- Analytical Accounting;
- Reconciliation;
- Accounting Transformations;
- Accounting Findings;
- Analytical Inference;
- Policy Considerations; and
- the Analytical Accounting Framework as a whole.

All subsequent accounting concepts derive from this definition.

---

### 3.2.5 Related Terms

- Analytical Accounting
  - Physical Accounting
  - Accounting Unit
  - Accounting Relationship
  - Accounting Transformation
  - Accounting Finding
- 

### 3.2.6 Notes

The term *Accounting* should not be interpreted as referring exclusively to financial accounting.

The principles of Accounting described in this standard are applied to physical water, measurable Accounting Units, documented Accounting Relationships, and analytical reasoning.

The objective is not financial reporting.

The objective is consistent analytical understanding through disciplined accounting.

## 3.3 Analytical Accounting

### 3.3.1 Definition

**Analytical Accounting** is the disciplined application of accounting principles to organize, evaluate, reconcile, and communicate evidence for the purpose of developing consistent analytical understanding.

Within the Great Salt Lake Accounting Standard, Analytical Accounting provides the structured reasoning process through which observed measurements, accounting relationships, assumptions, and evidence are transformed into transparent accounting findings and analytical inferences.

Analytical Accounting is the governing discipline of this standard.

---

### 3.3.2 Purpose

The purpose of Analytical Accounting is to improve the consistency, transparency, and reproducibility of complex analyses by applying explicitly defined accounting principles.

Analytical Accounting provides a common analytical language through which evidence originating from multiple disciplines may be evaluated within a consistent accounting framework.

Rather than replacing discipline-specific expertise, Analytical Accounting integrates that expertise through common accounting relationships.

---

### 3.3.3 Characteristics

Analytical Accounting is characterized by:

- systematic reasoning;
- explicit terminology;
- transparent assumptions;
- defined accounting relationships;
- evidence-based analysis;
- reproducible methodology;
- documented uncertainty; and
- consistent communication.

Application of these characteristics promotes analytical consistency among independent investigators.

---

### 3.3.4 Accounting Relationships

Within this standard, Analytical Accounting:

- applies the principles of Accounting;
- incorporates Physical Accounting;
- organizes Observed Measurements;
- evaluates Accounting Relationships;
- performs Accounting Transformations;
- develops Accounting Findings;
- supports Analytical Inferences; and
- evaluates Lake Accretion.

Accordingly, Analytical Accounting serves as the integrating discipline of the Great Salt Lake Accounting Standard.

---

### 3.3.5 Related Terms

- Accounting
  - Physical Accounting
  - Analytical Accounting Framework
  - Accounting Relationship
  - Accounting Transformation
  - Accounting Finding
  - Analytical Inference
- 

### 3.3.6 Notes

Analytical Accounting should not be interpreted as synonymous with scientific research, engineering analysis, economic evaluation, legal interpretation, or policy analysis.

Instead, it provides the accounting structure through which evidence from those disciplines may be organized, reconciled, evaluated, and communicated using consistent analytical principles.

The objective of Analytical Accounting is not to replace existing disciplines.

Its objective is to improve interdisciplinary understanding through disciplined accounting.

## 3.4 Physical Accounting

### 3.4.1 Definition

**Physical Accounting** is the systematic identification, measurement, reconciliation, and evaluation of the physical movement, storage, depletion, and disposition of water within the Great Salt Lake Basin.

Within the Great Salt Lake Accounting Standard, Physical Accounting applies the principles of Analytical Accounting to measurable hydrologic processes in order to determine the quantity, location, timing, and disposition of water and its resulting contribution to Great Salt Lake.

Physical Accounting constitutes the primary analytical method of this standard.

### 3.4.2 Purpose

The purpose of Physical Accounting is to establish a transparent, evidence-based understanding of how water physically moves through the Great Salt Lake Basin.

Physical Accounting seeks to distinguish measurable hydrologic behavior from administrative records, legal status, reported activities, financial investments, or policy objectives.

Accordingly, Physical Accounting provides the analytical foundation upon which all subsequent accounting findings are developed.

---

### 3.4.3 Characteristics

Physical Accounting is characterized by:

- reliance upon observed physical evidence;
- explicit accounting units;
- reconciliation of multiple data sources;
- distinction between measured and inferred quantities;
- transparent accounting relationships;
- documented assumptions; and
- evaluation of measurable physical outcomes.

Application of these characteristics promotes analytical consistency and reproducibility.

### 3.4.4 Accounting Relationships

Within this standard, Physical Accounting:

- applies the discipline of Analytical Accounting;
- organizes Observed Measurements;
- evaluates Accounting Relationships;
- performs Accounting Transformations;
- supports Reconciliation;
- develops Accounting Findings; and
- quantifies Incremental Lake Accretion.

Physical Accounting therefore provides the analytical bridge between hydrologic observation and accounting conclusion.

---

### 3.4.5 Related Terms

- Accounting
  - Analytical Accounting
  - Analytical Accounting Framework
  - Observed Measurement
  - Accounting Relationship
  - Accounting Transformation
  - Reconciliation
  - Incremental Lake Accretion
- 

### 3.4.6 Notes

Physical Accounting should not be interpreted as a substitute for hydrology.

Hydrology explains the behavior of water within natural systems.

Physical Accounting provides a disciplined analytical method for organizing, reconciling, evaluating, and communicating that behavior through consistent accounting principles.

Accordingly, Physical Accounting complements hydrologic science by improving the transparency, consistency, and comparability of analytical conclusions.

## 3.5 Accounting Framework

### 3.5.1 Definition

**The Analytical Accounting Framework** is the integrated system of governing principles, authoritative terminology, accounting methodology, analytical relationships, evidentiary requirements, and reporting practices established by the Great Salt Lake Accounting Standard.

The Analytical Accounting Framework provides the structured environment within which Analytical Accounting is performed and Physical Accounting is applied.

It defines not only how analyses are conducted, but also how they are documented, communicated, evaluated, and refined.

---

### 3.5.2 Purpose

The purpose of the Analytical Accounting Framework is to establish a consistent and reproducible system for evaluating physical water accounting within the Great Salt Lake Basin.

The framework integrates observations, evidence, accounting relationships, assumptions, analytical findings, and uncertainty into a single coherent analytical structure.

Application of the framework promotes consistency across independent analyses while improving interdisciplinary communication.

### 3.5.3 Components

The Analytical Accounting Framework consists of:

- governing principles;
- authoritative definitions;
- accounting methodology;
- accounting relationships;
- accounting transformations;
- evidentiary requirements;
- reconciliation procedures;
- standardized analytical reporting; and
- governance and version control.

These components operate collectively rather than independently.

---

### 3.5.4 Accounting Relationships

Within this standard, the Analytical Accounting Framework:

- is founded upon Accounting;
- establishes the discipline of Analytical Accounting;
- applies Physical Accounting;
- governs Accounting Relationships;
- governs Accounting Transformations;
- organizes Reconciliation;
- supports Accounting Findings;
- supports Analytical Inferences; and
- evaluates Lake Accretion.

Accordingly, the framework provides the operational structure through which all applications of the Great Salt Lake Accounting Standard are performed.

---

### 3.5.5 Related Terms

- Accounting
  - Analytical Accounting
  - Physical Accounting
  - Accounting Relationship
  - Accounting Transformation
  - Accounting Finding
  - Analytical Inference
  - Lake Accretion
- 

### 3.5.6 Notes

The Analytical Accounting Framework should not be interpreted as a numerical model, hydrologic simulation, or decision-support system.

Rather, it is a standardized analytical structure through which evidence from multiple disciplines may be evaluated using consistent accounting principles.

Individual analytical methods, computational tools, datasets, or models may evolve over time.

The framework provides the stable analytical architecture within which those evolving methods may be applied consistently.

## 3.6 Observation

### 3.6.1 Definition

**Observation** is the direct recognition, recording, or documentation of a physical condition, event, process, or characteristic relevant to the Great Salt Lake system.

An observation establishes that something has been perceived or documented.

An observation does not, by itself, constitute measurement, accounting, or analytical interpretation.

### 3.6.2 Purpose

The purpose of an observation is to establish the factual basis from which measurement and subsequent accounting may proceed.

Observations provide the initial evidentiary foundation of the Analytical Accounting Framework.

They identify what has been seen, detected, recorded, or otherwise documented before quantitative evaluation occurs.

### 3.6.3 Characteristics

Observations may be:

- qualitative or quantitative;
- direct or instrument-assisted;
- instantaneous or continuous;
- historical or contemporary; or
- recorded through field investigation, remote sensing, administrative records, or other documented means.

Regardless of source, observations should be documented sufficiently to permit subsequent evaluation.

### 3.6.4 Accounting Relationships

Within this standard, Observation:

- precedes Observed Measurement;
- contributes to Evidence;
- supports Reconciliation;
- informs Accounting Relationships; and
- provides the factual basis from which Accounting Findings may ultimately be developed.

Observation alone does not establish an Accounting Finding.

### 3.6.5 Related Terms

- Observed Measurement
- Evidence
- Accounting Relationship
- Accounting Finding
- Analytical Inference

### 3.6.6 Notes

An observation documents that something exists or has occurred.

It does not necessarily establish magnitude, causation, significance, or analytical interpretation.

Those determinations require additional measurement, accounting, and analysis consistent with the principles established by this standard.

## 3.7 Measurement

### 3.7.1 Definition

**Measurement** is the quantitative determination of a physical property, condition, or process using documented methods, instruments, or accepted analytical procedures.

Within the Great Salt Lake Accounting Standard, a Measurement provides numerical information describing the physical characteristics of the Great Salt Lake system.

Measurements constitute primary quantitative evidence used throughout the Analytical Accounting Framework.

---

### 3.7.2 Purpose

The purpose of Measurement is to quantify physical observations in a manner that permits consistent accounting, comparison, reconciliation, and analysis.

Measurements transform qualitative observations into quantitative information suitable for analytical accounting.

---

### 3.7.3 Characteristics

Measurements should, where practicable, be:

- objective;
- repeatable;
- documented;
- traceable to an identified source;
- expressed using defined accounting units; and
- accompanied by an appropriate description of uncertainty.

Measurements may originate from:

- field instrumentation;
  - stream gages;
  - lake gages;
  - meteorological observations;
  - remote sensing;
  - laboratory analysis;
  - published datasets; or
  - other documented sources.
- 

### 3.7.4 Accounting Relationships

Within this standard, Measurements:

- quantify Observations;
- contribute to Evidence;
- support Reconciliation;
- establish Accounting Units;
- support Accounting Relationships; and
- provide the quantitative basis for Accounting Findings.

Measurements alone do not establish Analytical Inferences.

---

### 3.7.5 Related Terms

- Observation



- Evidence
  - Accounting Unit
  - Accounting Relationship
  - Reconciliation
  - Accounting Finding
- 

### 3.7.6 Notes

A Measurement describes the numerical magnitude of an observed condition.

Measurement should not be interpreted as equivalent to accounting.

Measurements become meaningful within the Analytical Accounting Framework only after they have been evaluated in relation to other evidence, accounting relationships, assumptions, and documented methodology.

All Measurements possess some degree of uncertainty.

Accordingly, uncertainty should be acknowledged and communicated where it materially affects accounting conclusions.

## 3.8 Evidence

### 3.8.1 Definition

**Evidence** is documented information that supports, informs, or evaluates an accounting analysis conducted under the Great Salt Lake Accounting Standard.

Evidence consists of observations, measurements, datasets, records, analyses, or other documented information that can be examined independently and used to support Accounting Relationships, Accounting Findings, or Analytical Inferences.

Evidence constitutes the factual foundation of the Analytical Accounting Framework.

### 3.8.2 Purpose

The purpose of Evidence is to provide the objective basis upon which accounting conclusions are developed.

Evidence enables accounting analyses to be evaluated according to documented information rather than opinion, authority, or preference.

Within this standard, analytical credibility depends upon the quality, relevance, and transparency of the evidence employed.

---

### 3.8.3 Characteristics

Evidence should, where practicable, be:

- documented;
- traceable to an identifiable source;
- relevant to the accounting question;
- reproducible by independent investigators;
- evaluated within its appropriate context; and
- accompanied by an appropriate description of uncertainty where material.

Evidence may vary in completeness, precision, reliability, and analytical significance.

These characteristics should be recognized explicitly during accounting evaluation.

### 3.8.4 Classification

For purposes of this standard, Evidence may be classified into two broad categories.

### 3.8.4.1 Primary Evidence

Primary Evidence consists of direct observations and measurements of the physical system.

Examples include:

- lake elevation measurements;
- streamflow measurements;
- precipitation records;
- meteorological observations;
- remote sensing observations;
- field measurements; and
- documented operational records.

Primary Evidence represents direct observation of the physical system.

### 3.8.4.2 Derived Evidence

Derived Evidence consists of information produced through analysis, reconciliation, accounting transformation, statistical evaluation, or modeling based upon Primary Evidence.

Examples include:

- reconciled datasets;
- accounting transformations;
- water balances;
- statistical summaries;
- model outputs;
- analytical estimates; and
- synthesized datasets.

Derived Evidence should identify the Primary Evidence upon which it depends.

## 3.8.5 Accounting Relationships

Within this standard, Evidence:

- originates from Observations and Measurements;
- supports Reconciliation;
- establishes Accounting Relationships;
- supports Accounting Findings;
- informs Analytical Inferences; and
- contributes to evaluation of Lake Accretion.

Evidence itself does not constitute an Accounting Finding.

---

## 3.8.6 Related Terms

- Observation
  - Measurement
  - Reconciliation
  - Accounting Relationship
  - Accounting Finding
  - Analytical Inference
- 

## 3.8.7 Notes

Evidence should be evaluated according to its relevance, quality, transparency, and relationship to the accounting question being addressed.

The existence of evidence does not, by itself, establish the validity of an analytical conclusion.

Rather, accounting conclusions depend upon the transparent evaluation of available evidence through the Analytical Accounting Framework.

When multiple sources of evidence differ, the objective of accounting is not to select a preferred source arbitrarily, but to reconcile the available evidence using documented accounting methodology and explicitly stated assumptions.

## 3.9 Accounting Unit

### 3.9.1 Definition

**Accounting Unit** is the defined quantity, measure, or entity upon which analytical accounting is performed.

Within the Great Salt Lake Accounting Standard, an Accounting Unit provides the common basis for identifying, measuring, comparing, reconciling, and communicating physical water and its associated accounting relationships.

Accounting Units establish the scale at which analytical conclusions are developed.

### 3.9.2 Purpose

The purpose of an Accounting Unit is to ensure that analytical comparisons are performed using clearly defined and consistent measures.

Well-defined Accounting Units improve transparency, reproducibility, and comparability by ensuring that investigators evaluate equivalent quantities when conducting analytical accounting.

### 3.9.3 Characteristics

Accounting Units should be:

- explicitly defined;
- consistently applied;
- measurable;
- appropriate to the accounting question;
- traceable to documented evidence; and
- compatible with reconciliation.

Changes in Accounting Units should be identified explicitly and justified when they materially influence analytical conclusions.

### 3.9.4 Types of Accounting Units

Depending upon the accounting question, Accounting Units may include, but are not limited to:

- volume (e.g., acre-feet);
- flow (e.g., cubic feet per second);
- elevation (e.g., feet above mean sea level);
- surface area;
- storage;
- time;
- depletion;
- diversion; or
- other measurable physical quantities relevant to Great Salt Lake.

The appropriate Accounting Unit shall be determined by the analytical objective under consideration.

### 3.9.5 Accounting Relationships

Within this standard, Accounting Units:

- quantify Measurements;
- support Accounting Relationships;
- support Reconciliation;
- provide the basis for Accounting Transformations; and
- contribute to Accounting Findings.

Consistent Accounting Units are essential to meaningful comparison among independent analyses.

---

### 3.9.6 Related Terms

- Measurement
  - Evidence
  - Accounting Relationship
  - Accounting Transformation
  - Reconciliation
  - Accounting Finding
- 

### 3.9.7 Notes

Selection of an Accounting Unit does not determine the analytical conclusion.

Rather, it establishes the common measurement basis upon which analytical accounting is performed.

Analyses employing incompatible or undefined Accounting Units may produce misleading comparisons even when based upon accurate measurements.

Accordingly, explicit identification of Accounting Units is a fundamental requirement of the Analytical Accounting Framework.

## 3.10 Accounting Relationship

### 3.10.1 Definition

**Accounting Relationship** is the explicitly defined connection between two or more Accounting Units established through observed evidence, physical processes, or documented analytical methodology.

Within the Great Salt Lake Accounting Standard, an Accounting Relationship describes how Accounting Units interact, influence one another, or are reconciled within the Analytical Accounting Framework.

Accounting Relationships provide the logical structure through which individual measurements become meaningful analytical information.

---

### 3.10.2 Purpose

The purpose of an Accounting Relationship is to organize individual observations and measurements into a coherent analytical structure.

Accounting Relationships permit investigators to evaluate how physical quantities interact within the Great Salt Lake system while maintaining consistency, transparency, and reproducibility.

Without explicitly defined Accounting Relationships, individual measurements remain isolated observations rather than components of a complete accounting analysis.

---

### 3.10.3 Characteristics

Accounting Relationships should be:

- explicitly defined;
- physically defensible;
- supported by documented evidence;
- consistent with the governing principles of this standard;

- reproducible by independent investigators; and
- transparent with respect to assumptions and uncertainty.

Where multiple Accounting Relationships are possible, the basis for selecting a particular relationship shall be documented.

---

### 3.10.4 Types of Accounting Relationships

Accounting Relationships may describe:

- physical relationships;
- temporal relationships;
- spatial relationships;
- mathematical relationships;
- accounting relationships established through reconciliation; or
- analytical relationships developed through documented methodology.

The existence of an Accounting Relationship does not necessarily imply causation.

Where causal interpretation is proposed, the supporting evidence and reasoning shall be explicitly documented.

---

### 3.10.5 Accounting Relationships Within GSLAS

Examples include, but are not limited to:

- the relationship between streamflow and terminal delivery;
- the relationship between depletion and available supply;
- the relationship between lake elevation and storage volume;
- the relationship between lake elevation and evaporative surface area;
- the relationship between dedicated water and Incremental Lake Accretion;
- the relationship between conservation actions and measurable lake response.

Each Accounting Relationship should be evaluated according to the accounting question under consideration.

---

### 3.10.6 Related Terms

- Accounting Unit
  - Evidence
  - Accounting Transformation
  - Reconciliation
  - Accounting Finding
  - Incremental Lake Accretion
- 

### 3.10.7 Notes

Accounting Relationships constitute one of the fundamental building blocks of the Analytical Accounting Framework.

The objective of an Accounting Relationship is not to advocate a particular interpretation, but to describe a transparent and reproducible connection among Accounting Units.

Accounting Relationships may evolve as improved evidence, refined methodology, or enhanced scientific understanding becomes available.

Such refinement represents normal development of the Analytical Accounting Framework and should occur through the principles established in this standard.

## 3.11 Accounting Transformation

### 3.11.1 Definition

**Accounting Transformation** is the documented analytical process by which one or more Accounting Units, Accounting Relationships, or Evidence are systematically converted into an Accounting Finding through application of the Analytical Accounting Framework.

An Accounting Transformation does not create new physical water.

Rather, it organizes, reconciles, or interprets existing information using transparent accounting methodology.

Accounting Transformations constitute the principal analytical processes of the Great Salt Lake Accounting Standard.

---

### 3.11.2 Purpose

The purpose of an Accounting Transformation is to convert documented evidence into meaningful accounting information while preserving transparency, reproducibility, and analytical consistency.

Accounting Transformations permit investigators to move from observations and measurements toward accounting findings through explicitly defined reasoning rather than implicit judgment.

---

### 3.11.3 Characteristics

Accounting Transformations shall be:

- explicitly documented;
- supported by evidence;
- based upon defined Accounting Relationships;
- reproducible by independent investigators;
- transparent with respect to assumptions; and
- appropriate to the accounting question under consideration.

Where multiple Accounting Transformations are possible, the selected transformation shall be identified and justified.

---

### 3.11.4 Examples

Examples of Accounting Transformations include, but are not limited to:

- reconciliation of multiple datasets;
- conversion of streamflow measurements into estimated lake delivery;
- conversion of lake elevation into lake storage;
- estimation of depletion from observed water use;
- calculation of Lake Accretion;
- comparison of alternative restoration scenarios; and
- evaluation of changes in measurable lake response.

These examples illustrate analytical processes rather than prescribed methodologies.

---

### 3.11.5 Accounting Relationships

Within this standard, Accounting Transformations:

- utilize Evidence;
- apply Accounting Relationships;
- incorporate documented assumptions;
- support Reconciliation;

- produce Accounting Findings; and
- provide the analytical basis for subsequent Analytical Inferences.

Accounting Transformations therefore represent the operational processes through which analytical accounting is performed.

---

### 3.11.6 Related Terms

- Evidence
  - Accounting Unit
  - Accounting Relationship
  - Reconciliation
  - Accounting Finding
  - Analytical Inference
- 

### 3.11.7 Notes

Accounting Transformations should remain distinguishable from both Evidence and Accounting Findings.

Evidence describes what is available.

Accounting Transformations describe how that information is analyzed.

Accounting Findings describe the resulting accounting conclusions.

Maintaining these distinctions promotes transparency, reproducibility, and independent technical review.

The validity of an Accounting Transformation depends upon the quality of the supporting evidence, the appropriateness of the accounting relationships employed, and the transparency with which the transformation is documented.

## 3.12 Accounting Finding

### 3.12.1 Definition

**Accounting Finding** is the documented conclusion produced through application of the Analytical Accounting Framework to available Evidence using explicitly defined Accounting Relationships and Accounting Transformations.

An Accounting Finding represents the outcome of analytical accounting.

It describes what the accounting demonstrates based upon the available evidence, assumptions, and methodology.

An Accounting Finding is distinct from an Analytical Inference or a Policy Consideration.

---

### 3.12.2 Purpose

The purpose of an Accounting Finding is to communicate the results of analytical accounting in a manner that is transparent, reproducible, and directly supported by documented evidence.

Accounting Findings provide the formal conclusions of the accounting process before broader interpretation or policy discussion occurs.

---

### 3.12.3 Characteristics

Accounting Findings shall be:

- supported by documented Evidence;
- derived through transparent Accounting Transformations;
- consistent with established Accounting Relationships;
- expressed using clearly defined Accounting Units;
- reproducible by independent investigators; and

- accompanied by appropriate discussion of uncertainty where material.

Accounting Findings should describe what the accounting demonstrates rather than what investigators believe should occur.

---

### 3.12.4 Scope

Accounting Findings may include conclusions regarding:

- physical water movement;
- water availability;
- depletion;
- terminal delivery;
- lake storage;
- lake elevation;
- Lake Accretion;
- accounting reconciliation; or
- other matters addressed through the Analytical Accounting Framework.

The scope of an Accounting Finding shall remain consistent with the accounting question being addressed.

---

### 3.12.5 Accounting Relationships

Within this standard, an Accounting Finding:

- is supported by Evidence;
- results from Accounting Transformations;
- depends upon documented Accounting Relationships;
- provides the basis for Analytical Inference; and
- informs subsequent Policy Considerations where appropriate.

Accounting Findings do not establish policy recommendations.

---

### 3.12.6 Related Terms

- Evidence
  - Accounting Relationship
  - Accounting Transformation
  - Analytical Inference
  - Lake Accretion
  - Policy Consideration
- 

### 3.12.7 Notes

Accounting Findings should remain distinguishable from observations, measurements, assumptions, analytical inferences, and policy preferences.

An Accounting Finding answers the question:

**“What does the accounting demonstrate?”**

It does not answer:

**“Why did it occur?”**



nor

**“What should be done?”**

Those questions belong respectively to Analytical Inference and Policy Consideration.

Maintaining these distinctions preserves analytical transparency and supports constructive technical dialogue.

## **3.13 Analytical Inference**

### **3.13.1 Definition**

**Analytical Inference** is a reasoned interpretation derived from one or more Accounting Findings through application of professional judgment, documented assumptions, and transparent analytical reasoning.

An Analytical Inference extends beyond the direct results of accounting while remaining supported by the available Evidence and Accounting Findings.

Analytical Inferences provide understanding of what Accounting Findings may reasonably imply.

### **3.13.2 Purpose**

The purpose of an Analytical Inference is to interpret Accounting Findings within the broader context of the accounting question under consideration.

Analytical Inferences assist investigators in understanding patterns, relationships, trends, implications, and potential consequences that are not directly observable through accounting alone.

### **3.13.3 Characteristics**

Analytical Inferences shall be:

- supported by one or more Accounting Findings;
- consistent with the available Evidence;
- transparent with respect to underlying assumptions;
- logically reasoned;
- distinguishable from Accounting Findings; and
- communicated with appropriate recognition of uncertainty.

Analytical Inferences should not be presented as Observations, Measurements, or Accounting Findings.

### **3.13.4 Scope**

Analytical Inferences may address:

- interpretation of observed accounting patterns;
- identification of probable causal relationships;
- evaluation of competing explanations;
- anticipated system behavior;
- interpretation of uncertainty;
- comparison of analytical scenarios; or
- other conclusions reasonably supported by the available accounting.

The strength of an Analytical Inference depends upon the strength of the supporting Accounting Findings and the transparency of the reasoning employed.

### 3.13.5 Accounting Relationships

Within this standard, an Analytical Inference:

- depends upon Accounting Findings;
- incorporates documented assumptions where appropriate;
- may support additional analytical investigation;
- may inform Policy Considerations; and
- should remain distinguishable from both Accounting Findings and Policy Considerations.

Analytical Inferences do not constitute accounting evidence.

---

### 3.13.6 Related Terms

- Accounting Finding
  - Evidence
  - Explicit Assumptions
  - Policy Consideration
  - Lake Accretion
- 

### 3.13.7 Notes

An Analytical Inference answers the question:

**“What do the Accounting Findings reasonably suggest?”**

It does not answer:

**“What policy should be adopted?”**

Different investigators may reasonably reach different Analytical Inferences from the same Accounting Findings, provided that their reasoning, assumptions, and supporting evidence are transparent.

Such differences represent legitimate technical discussion rather than disagreement regarding the accounting itself.

## 3.14 Policy Consideration

### 3.14.1 Definition

**Policy Consideration** is the evaluation of potential management actions, regulatory approaches, investment strategies, or other decision alternatives informed by Accounting Findings and Analytical Inferences.

Policy Considerations occur after analytical accounting has been completed.

They represent discussion of possible actions rather than results of the accounting process itself.

---

### 3.14.2 Purpose

The purpose of a Policy Consideration is to assist decision-makers in understanding how Accounting Findings and Analytical Inferences may inform future actions.

The Great Salt Lake Accounting Standard does not prescribe policy.

Rather, it provides an analytical foundation upon which policy discussions may proceed.

### 3.14.3 Characteristics

Policy Considerations should:

- be clearly distinguished from Accounting Findings;
- identify the Accounting Findings upon which they rely;
- acknowledge significant uncertainties;
- recognize competing objectives where appropriate;
- avoid presenting policy preferences as accounting conclusions; and
- remain consistent with the governing principles of this standard.

Policy Considerations may reasonably differ among investigators who share identical Accounting Findings.

### 3.14.4 Scope

Policy Considerations may address topics including:

- conservation strategies;
- restoration priorities;
- infrastructure investments;
- water leasing programs;
- operational alternatives;
- regulatory approaches;
- research priorities; or
- other management considerations.

The selection among alternative policies lies outside the scope of analytical accounting.

### 3.14.5 Accounting Relationships

Within this standard, Policy Considerations:

- are informed by Accounting Findings;
- are supported by Analytical Inferences;
- may identify future accounting questions;
- do not modify Accounting Findings; and
- do not constitute analytical evidence.

Policy Considerations represent the final stage of analytical communication under the Great Salt Lake Accounting Standard.

### 3.14.6 Related Terms

- Accounting Finding
- Analytical Inference
- Evidence
- Analytical Accounting Framework

### 3.14.7 Notes

A Policy Consideration answers the question:

**“Given the accounting, what actions might reasonably be considered?”**

It does not answer:

**“What does the accounting demonstrate?”**

nor

**“What do the findings reasonably suggest?”**

Those questions are addressed respectively through Accounting Findings and Analytical Inferences.

The separation of Accounting Findings, Analytical Inferences, and Policy Considerations is a defining characteristic of the Great Salt Lake Accounting Standard.

Maintaining these distinctions promotes analytical transparency while allowing informed policy discussion among individuals with differing values, priorities, and management objectives.

## 3.15 Accounting Action

### 3.15.1 Definition

**Accounting Action** is an action that directly modifies, or is intended to directly modify, one or more Accounting Units within the Analytical Accounting Framework.

Within the Great Salt Lake Accounting Standard, an Accounting Action represents an event whose physical consequences may be evaluated through Physical Accounting.

An Accounting Action initiates the accounting process.

It is not, by itself, an Accounting Finding, an Accounting Outcome, or evidence of Lake Accretion.

---

### 3.15.2 Purpose

The purpose of defining an Accounting Action is to distinguish actions that directly influence the physical accounting of water from actions that establish the legal, institutional, financial, or administrative environment within which physical accounting occurs.

This distinction preserves the separation between accounting and policy established throughout this standard.

---

### 3.15.3 Characteristics

Accounting Actions:

- directly affect one or more Accounting Units;
- may influence Diversion, Depletion, Terminal Delivery, or Lake Accretion;
- are subject to Physical Accounting;
- may be evaluated through Reconciliation; and
- may ultimately contribute to Accounting Findings.

The accounting significance of an Accounting Action depends upon its measurable physical consequences rather than its stated objectives.

---

### 3.15.4 Examples

Examples of Accounting Actions include:

- reducing consumptive use;
- changing irrigation operations;
- dedicating water;
- releasing stored water;
- modifying reservoir operations;
- implementing a conservation practice;
- routing water toward Great Salt Lake; or

- installing measurement infrastructure that materially improves Physical Accounting.
- 

### 3.15.5 Distinction from Policy Actions

Accounting Actions are distinct from Policy Actions.

A **Policy Action** establishes, modifies, or administers the legal, institutional, financial, or regulatory environment within which Accounting Actions occur.

Examples of Policy Actions include:

- enacting legislation;
- adopting regulations;
- appropriating funding;
- establishing water trusts;
- approving management plans; or
- modifying administrative procedures.

Policy Actions may enable, constrain, encourage, or discourage Accounting Actions.

However, they are not themselves Accounting Actions unless they directly modify one or more Accounting Units.

---

### 3.15.6 Accounting Relationships

Within this standard, an Accounting Action may:

- influence Diversion;
- influence Depletion;
- establish Dedicated Water;
- affect Bankability;
- contribute to Terminal Delivery; and
- ultimately contribute to Lake Accretion.

These relationships shall be demonstrated through Physical Accounting rather than presumed from the action itself.

---

### 3.15.7 Related Terms

- Diversion
  - Depletion
  - Conservation
  - Dedicated Water
  - Bankability
  - Terminal Delivery
  - Lake Accretion
- 

### 3.15.8 Notes

An Accounting Action answers the question:

**“What physical action was taken that can be evaluated through accounting?”**

It does not answer:

**“What policy was adopted?”**

nor

**“What did the accounting demonstrate?”**

nor

**“What should be done next?”**

Those questions belong respectively to Policy Actions, Accounting Findings, and Policy Considerations.

### 3.15.9 Common Accounting Error

Treating a Policy Action as evidence of physical accounting success.

Legislation, funding, administrative decisions, and management plans may enable future Accounting Actions, but they do not themselves establish reductions in Depletion, Terminal Delivery, or Lake Accretion.

The effectiveness of a Policy Action can be evaluated only through the subsequent Accounting Actions and measurable physical outcomes it produces.

## 3.16 Water Provenance

### 3.16.1 Definition

**Water Provenance** is the documented origin, source composition, location, legal status, use history, and hydrologic pathway of water represented within the Analytical Accounting Framework.

Water Provenance identifies which water is being accounted for and how that water entered, moved through, and remained within the Great Salt Lake Basin.

Within the Great Salt Lake Accounting Standard, volume alone is insufficient to establish accounting equivalence when differences in source or pathway materially affect Depletion, Return Flow, Dedicated Water, Bankability, Terminal Delivery, or Lake Accretion.

### 3.16.2 Purpose

The purpose of Water Provenance is to preserve the identity and relevant accounting characteristics of water as it moves through the hydrologic and administrative system.

Water originating from different sources may possess materially different accounting consequences even when the reported volumes and uses are identical.

For example, outdoor municipal and industrial water use may be supplied by:

- tributary streamflow;
- Jordan River water;
- imported water;
- groundwater;
- secondary irrigation systems;
- treated wastewater;
- reservoir storage; or
- a blended supply portfolio.

A reduction in outdoor use cannot be assigned a reliable pathway to Great Salt Lake unless the provenance of the conserved water is sufficiently understood.

### 3.16.3 Characteristics

Water Provenance should identify, where material and practicable:

- source basin;
- physical source;
- source composition;
- point of diversion or withdrawal;
- storage history;
- conveyance pathway;
- place and type of use;
- legal or administrative status;
- historical Depletion;
- historical Return Flow;
- hydrologic connectivity;
- timing;
- subsequent routing; and
- potential pathway to Great Salt Lake.

Where water is supplied through a blended portfolio, the basis for allocating source composition should be documented.

---

### 3.16.4 Accounting Relationships

Within this standard, Water Provenance:

- characterizes an Accounting Unit;
- informs Accounting Relationships;
- supports source-specific estimation of Depletion;
- supports evaluation of Return Flow;
- informs the legal and physical pathway of Dedicated Water;
- materially affects Bankability;
- supports estimation or verification of Terminal Delivery; and
- improves attribution of Lake Accretion.

Water Provenance should be retained through successive Accounting Transformations whenever its loss would materially affect the analysis.

---

### 3.16.5 Application to M&I Outdoor Conservation

Application of Water Provenance is particularly important when evaluating municipal and industrial outdoor conservation within the Jordan River Basin.

A reduction in outdoor water use establishes neither the source of the conserved water nor its legal pathway to Great Salt Lake.

The analysis should determine, where practicable:

1. which source or combination of sources would have supplied the avoided use;
2. whether the action reduced Diversion, groundwater withdrawal, imported-water use, or another Accounting Unit;
3. how much Depletion was avoided;
4. what Return Flow would otherwise have occurred;
5. where the conserved water physically remains;
6. whether that water can be legally identified or dedicated for Great Salt Lake;
7. whether it remains vulnerable to subsequent use or interception;
8. whether a measurable pathway to Terminal Delivery exists; and
9. whether resulting Lake Accretion can be estimated or verified.

Where these questions cannot be resolved, the conservation action should be reported as a reduction in outdoor use or estimated Depletion rather than as demonstrated Terminal Delivery or Lake Accretion.

---

### 3.16.6 Source Attribution

**Source Attribution** is the analytical process through which Water Provenance is assigned to a defined Accounting Unit or Accounting Action.

Source Attribution may rely upon:

- utility supply records;
- diversion records;
- groundwater pumping records;
- reservoir operations;
- service-area data;
- seasonal source portfolios;
- water-right records;
- system modeling; or
- other documented Evidence.

Where precise attribution is not possible, the analysis should identify the allocation method, uncertainty, and potential range of accounting outcomes.

---

### 3.16.7 Related Terms

- Accounting Unit
  - Accounting Action
  - Diversion
  - Depletion
  - Return Flow
  - Available Supply
  - Dedicated Water
  - Bankability
  - Terminal Delivery
  - Lake Accretion
  - Source Attribution
- 

### 3.16.8 Notes

Water Provenance is an accounting characteristic, not a determination of ownership or economic value.

It should not be interpreted as establishing a water right, legal entitlement, or exclusive claim to a physical molecule of water.

Its purpose is to preserve the source and pathway information necessary to evaluate physical and legal accounting consequences.

Water may lose practical traceability through blending, storage, groundwater interaction, reuse, or system operations. In such cases, Water Provenance may be represented probabilistically or through documented allocation rather than direct physical identification.

---

### 3.16.9 Common Accounting Error

Treating equal volumes of conserved water as equivalent without considering source.

One acre-foot of reduced outdoor use supplied by imported water may have a different accounting pathway than one acre-foot supplied by tributary streamflow, groundwater, or secondary irrigation water.

Accordingly, volume should not be converted into Dedicated Water, Bankability, Terminal Delivery, or Lake Accretion without evaluating material differences in Water Provenance.



## 3.17 Source Attribution

### 3.17.1 Definition

**Source Attribution** is the analytical process of determining the physical origin, source composition, and hydrologic provenance of water represented within the Analytical Accounting Framework.

Source Attribution assigns Water Provenance to an Accounting Unit or Accounting Action using documented Evidence, Accounting Relationships, and transparent analytical methodology.

Source Attribution is an Accounting Transformation.

---

### 3.17.2 Purpose

The purpose of Source Attribution is to preserve the accounting identity of water throughout an analysis.

Because physically equivalent volumes of water may possess materially different hydrologic pathways, legal characteristics, depletion behavior, and Bankability, accurate Source Attribution is essential for reliable Physical Accounting.

Source Attribution enables accounting analyses to evaluate not merely how much water exists, but which water is being evaluated.

---

### 3.17.3 Characteristics

Source Attribution should be:

- evidence-based;
- transparent;
- reproducible;
- appropriately scaled to the accounting question;
- accompanied by documented assumptions where direct attribution is not possible; and
- revised when improved evidence becomes available.

Source Attribution may be deterministic or probabilistic depending upon the available Evidence.

### 3.17.4 Methods

Source Attribution may utilize:

- utility source portfolios;
- stream diversion records;
- groundwater pumping records;
- reservoir operations;
- water-right records;
- delivery system records;
- wastewater accounting;
- remote sensing;
- hydrologic models;
- accounting reconciliation; or
- other documented sources of Evidence.

The analytical basis for Source Attribution should be explicitly documented.

---

### 3.17.5 Accounting Relationships

Within this standard, Source Attribution:

- establishes Water Provenance;
- supports estimation of Depletion;

- informs Return Flow analysis;
- supports evaluation of Available Supply;
- affects Dedicated Water;
- materially influences Bankability;
- informs Terminal Delivery; and
- supports attribution of Lake Accretion.

Loss of Source Attribution should be explicitly acknowledged where it materially affects Accounting Findings.

### 3.17.6 Related Terms

- Water Provenance
- Accounting Transformation
- Evidence
- Depletion
- Return Flow
- Dedicated Water
- Bankability
- Terminal Delivery
- Lake Accretion

### 3.17.7 Notes

Perfect Source Attribution is not always achievable.

Municipal systems frequently blend water from multiple sources, groundwater systems may exhibit delayed responses, and imported water may become physically indistinguishable after storage, reuse, or conveyance.

Where direct attribution is not practicable, the accounting should employ the best available methodology, document the assumptions used, and characterize the resulting uncertainty.

The objective of Source Attribution is analytical transparency rather than artificial precision.

### 3.17.8 Common Accounting Error

Assuming that conserved water inherits an obvious pathway to Great Salt Lake.

A reduction in municipal outdoor demand does not, by itself, establish which water was conserved or whether that water possesses a demonstrable physical and legal pathway to Great Salt Lake.

Accordingly, Source Attribution should precede evaluation of Dedicated Water, Bankability, Terminal Delivery, and Lake Accretion.

## 3.18 Diversion

### 3.18.1 Definition

**Diversion** is the intentional withdrawal, redirection, capture, or conveyance of water from its natural course for human use or management.

Within the Great Salt Lake Accounting Standard, Diversion represents a change in the location or routing of water rather than a change in its physical availability within the hydrologic system.

Diversion is an Accounting Action.

By itself, it does not constitute Depletion, Terminal Delivery, or Lake Accretion.

### 3.18.2 Purpose

The purpose of identifying Diversions within the Analytical Accounting Framework is to account for the movement of water throughout the Great Salt Lake Basin.

Diversions describe where water is directed.

They do not, by themselves, determine the ultimate physical disposition of that water.

---

### 3.18.3 Characteristics

Diversions may:

- be temporary or permanent;
- occur through natural or constructed conveyance systems;
- serve agricultural, municipal, industrial, environmental, or other purposes;
- return water to the hydrologic system; or
- ultimately contribute to depletion or terminal delivery.

The accounting significance of a Diversion depends upon the subsequent disposition of the diverted water.

---

### 3.18.4 Accounting Relationships

Within this standard, Diversion:

- changes the location of water;
- may precede Depletion;
- may contribute to Return Flow;
- may contribute to Terminal Delivery;
- may influence Available Supply; and
- should be distinguished from Consumptive Use.

Diversion alone does not determine Lake Accretion.

---

### 3.18.5 Related Terms

- Depletion
  - Return Flow
  - Available Supply
  - Terminal Delivery
  - Lake Accretion
- 

### 3.18.6 Notes

Diversion is an accounting event.

It should not be interpreted as an accounting outcome.

Water may be diverted without being depleted.

Likewise, reducing Diversion does not necessarily increase water reaching Great Salt Lake.

Analyses performed under this standard shall distinguish clearly between Diversion and Depletion.

Failure to maintain this distinction may result in incorrect accounting of physical water movement and erroneous conclusions regarding measurable lake benefit.

## 3.19 Return Flow

### 3.19.1 Definition

**Return Flow** is water that re-enters the hydrologic system following a Diversion and remains physically available for subsequent downstream movement or use.

Within the Great Salt Lake Accounting Standard, Return Flow represents water that has not been depleted and therefore continues to participate in the physical accounting of the Great Salt Lake Basin.

Return Flow is an Accounting Outcome rather than an Accounting Action.

---

### 3.19.2 Purpose

The purpose of accounting for Return Flow is to distinguish water that remains available within the hydrologic system from water that has been depleted through consumptive use or other permanent losses.

Recognition of Return Flow is essential to accurate Physical Accounting because a Diversion alone does not determine the ultimate disposition of water.

---

### 3.19.3 Characteristics

Return Flow may originate from:

- agricultural irrigation;
- municipal water use;
- industrial operations;
- groundwater discharge;
- wastewater treatment;
- reservoir operations; or
- other documented hydrologic processes.

Return Flow may occur immediately or after significant temporal delay.

The accounting significance of Return Flow depends upon its quantity, timing, location, and subsequent physical movement.

---

### 3.19.4 Accounting Relationships

Within this standard, Return Flow:

- follows Diversion;
- offsets Depletion;
- contributes to Available Supply;
- may contribute to Terminal Delivery;
- may contribute to Lake Accretion; and
- shall be evaluated through Physical Accounting and Reconciliation.

Return Flow remains subject to subsequent depletion before reaching Great Salt Lake.

---

### 3.19.5 Related Terms

- Diversion
  - Depletion
  - Available Supply
  - Terminal Delivery
  - Lake Accretion
  - Physical Accounting
- 

### 3.19.6 Notes

Return Flow should not be interpreted as guaranteed delivery to Great Salt Lake.

Water returning to the hydrologic system remains subject to:

- additional diversions;
- subsequent depletion;
- reservoir storage;
- groundwater exchange;
- evaporation;
- operational management; and

- other hydrologic processes.

Accordingly, Return Flow represents continued hydrologic availability rather than demonstrated Lake Accretion.

---

### 3.19.7 Common Accounting Error

Treating Return Flow as equivalent to Lake Accretion.

Return Flow indicates that water remains within the hydrologic system following a Diversion.

It does not demonstrate that the water ultimately reaches Great Salt Lake or produces measurable Lake Accretion.

Those outcomes require subsequent Physical Accounting, Reconciliation, and Accounting Findings.

## 3.20 Depletion

### 3.20.1 Definition

**Depletion** is the reduction in water that remains available for subsequent use within the Great Salt Lake hydrologic system as a result of consumptive use, evaporation, transpiration, incorporation into products, export from the basin, or other processes that permanently remove water from further hydrologic availability.

Within the Great Salt Lake Accounting Standard, Depletion represents the principal accounting measure of human influence on the physical availability of water to Great Salt Lake.

Unlike Diversion, Depletion reduces the quantity of water potentially available for downstream use and Terminal Delivery.

---

### 3.20.2 Purpose

The purpose of accounting for Depletion is to identify the physical reduction in water available within the hydrologic system.

Because Great Salt Lake is a terminal lake, long-term lake response depends upon changes in Depletion rather than Diversion alone.

Accordingly, Depletion constitutes one of the primary Accounting Units evaluated throughout this standard.

---

### 3.20.3 Characteristics

Depletion may result from:

- crop evapotranspiration;
- landscape evapotranspiration;
- open-water evaporation;
- industrial consumption;
- incorporation of water into products;
- interbasin export;
- permanent storage outside the hydrologic system; or
- other processes that prevent water from remaining available for subsequent downstream use.

Not all Diversions result in Depletion.

Likewise, reductions in Diversion do not necessarily reduce Depletion.

---

### 3.20.4 Accounting Relationships

Within this standard, Depletion:

- reduces Available Supply;
- influences Terminal Delivery;

- affects Lake Accretion;
- may result from Diversion;
- is distinguished from Return Flow; and
- constitutes the principal measure of consumptive human water use.

Changes in Depletion represent changes in the physical accounting of water.

### 3.20.5 Related Terms

- Diversion
  - Return Flow
  - Available Supply
  - Terminal Delivery
  - Lake Accretion
  - Conservation
- 

### 3.20.6 Notes

The distinction between Diversion and Depletion is fundamental to the Great Salt Lake Accounting Standard.

Diversion describes where water is moved.

Depletion describes whether water remains available within the hydrologic system.

Accordingly, analyses performed under this standard should evaluate reductions in Depletion rather than reductions in Diversion when assessing potential benefits to Great Salt Lake.

Failure to distinguish these concepts may substantially overstate or understate measurable lake benefit.

### 3.20.7 Common Accounting Error

Treating Diversion and Depletion as interchangeable quantities.

A reduction in Diversion should not be interpreted as equivalent to a reduction in Depletion unless the physical disposition of the diverted water has also changed.

The accounting significance of a management action depends upon its effect on Depletion, not solely upon its effect on Diversion.

## 3.21 Available Supply

### 3.21.1 Definition

**Available Supply** is the quantity of water remaining within the hydrologic system that is physically available for subsequent Diversion, storage, Return Flow, Terminal Delivery, or other documented Accounting Actions after accounting for prior Depletion and other documented accounting adjustments.

Within the Great Salt Lake Accounting Standard, Available Supply represents an intermediate Physical Accounting quantity rather than a final Accounting Finding.

Available Supply may change continuously as water moves through the hydrologic system.

### 3.21.2 Purpose

The purpose of Available Supply is to identify the quantity of water that remains physically available for subsequent accounting.

Available Supply provides the accounting basis from which future Diversions, Return Flows, Dedicated Water, Terminal Delivery, and Lake Accretion may ultimately occur.

---

### 3.21.3 Characteristics

Available Supply:

- varies spatially and temporally;
- depends upon antecedent hydrologic conditions;
- reflects prior Depletion;
- may increase through Return Flow;
- may decrease through subsequent Diversion or Depletion; and
- should be evaluated through Physical Accounting.

Available Supply is a dynamic accounting quantity rather than a fixed water resource.

### 3.21.4 Accounting Relationships

Within this standard, Available Supply:

- is reduced by Depletion;
- may be increased by Return Flow;
- may support future Diversions;
- may support Dedicated Water;
- influences Bankability;
- contributes to Terminal Delivery; and
- ultimately influences Lake Accretion.

Changes in Available Supply should be demonstrated through transparent Physical Accounting rather than inferred from reported activities.

---

### 3.21.5 Related Terms

- Diversion
  - Return Flow
  - Depletion
  - Dedicated Water
  - Bankability
  - Terminal Delivery
  - Lake Accretion
- 

### 3.21.6 Notes

Available Supply should not be interpreted as legally available water, administratively available water, or water that is expected to reach Great Salt Lake.

Within the Great Salt Lake Accounting Standard, Available Supply refers exclusively to the quantity of physical water remaining within the hydrologic system following application of documented Accounting Relationships.

Legal availability, contractual availability, operational availability, and policy availability are separate concepts that may influence Accounting Actions but do not alter the physical accounting definition established herein.

---

### 3.21.7 Common Accounting Error

Treating Available Supply as equivalent to water that will reach Great Salt Lake.

Water remaining physically available within the hydrologic system may subsequently be diverted, depleted, stored, delayed, intercepted, or otherwise prevented from producing Terminal Delivery or Lake Accretion.

Accordingly, Available Supply represents accounting potential rather than demonstrated accounting outcome.

## 3.22 Conservation

### 3.22.1 Definition

**Conservation** is a management, operational, or infrastructure action undertaken to reduce human Depletion or improve the efficiency of water use within the Great Salt Lake Basin.

Within the Great Salt Lake Accounting Standard, Conservation represents an intended change in water management practice rather than a demonstrated physical outcome.

Conservation is an Accounting Action.

By itself, it does not constitute reduced Depletion, increased Available Supply, Terminal Delivery, or Lake Accretion.

---

### 3.22.2 Purpose

The purpose of Conservation is to reduce human Depletion or improve management of available water resources.

Conservation may increase the quantity of water available for downstream use, improve operational flexibility, or enhance the opportunity for additional Terminal Delivery.

The accounting significance of Conservation depends upon its measurable physical effect rather than the activity itself.

---

### 3.22.3 Characteristics

Conservation may include, but is not limited to:

- improvements in irrigation practices;
- changes in crop management;
- municipal water-use reductions;
- industrial efficiency improvements;
- operational changes;
- infrastructure improvements;
- voluntary water leasing;
- demand management; or
- other actions intended to reduce human Depletion.

The implementation of a Conservation action does not necessarily establish measurable Lake Accretion.

### 3.22.4 Accounting Relationships

Within this standard, Conservation:

- is intended to reduce Depletion;
- may reduce Diversion;
- may increase Available Supply;
- may support Dedicated Water;
- may improve Bankability; and
- may contribute to Lake Accretion.

The accounting significance of Conservation depends upon the measurable physical disposition of the conserved water.

---

### 3.22.5 Related Terms

- Depletion
- Diversion
- Dedicated Water



- Bankability
  - Terminal Delivery
  - Lake Accretion
- 

### 3.22.6 Notes

Conservation should be evaluated according to measurable accounting outcomes rather than reported activity.

The implementation of a Conservation program does not establish the quantity of water ultimately reaching Great Salt Lake.

Accordingly, analyses performed under this standard should distinguish between:

- Conservation Action;
- Reduction in Depletion;
- Increased Available Supply;
- Terminal Delivery; and
- Lake Accretion.

These accounting stages should not be treated as equivalent.

---

### 3.22.7 Common Accounting Error

Equating Conservation with Lake Accretion.

Conservation represents an action undertaken to influence the hydrologic system.

Lake Accretion represents the measurable physical outcome of that action.

The relationship between the two depends upon subsequent Accounting Relationships, routing, Return Flow, Terminal Delivery, and other physical processes.

Accordingly, Conservation should not be credited as lake benefit unless the resulting Lake Accretion has been demonstrated through transparent analytical accounting.

## 3.23 Dedicated Water

### 3.23.1 Definition

**Dedicated Water** is water that has been intentionally designated through legal, administrative, contractual, or operational action for the purpose of increasing water available to Great Salt Lake.

Within the Great Salt Lake Accounting Standard, Dedicated Water represents an Accounting Action establishing intended destination rather than demonstrated physical outcome.

Dedicated Water does not, by itself, establish Terminal Delivery or Lake Accretion.

---

### 3.23.2 Purpose

The purpose of Dedicated Water is to distinguish water that has been formally identified for Great Salt Lake from water that merely remains within the general hydrologic system.

Dedicated Water establishes accounting intent.

Subsequent accounting determines whether that intent results in measurable physical benefit.

### 3.23.3 Characteristics

Dedicated Water may originate from:

- voluntary water leasing;
- permanent water-right acquisitions;
- regulatory dedication;
- operational releases;
- conservation programs;

- administrative agreements; or
- other legally or operationally recognized mechanisms.

The method by which water is dedicated does not determine whether measurable lake benefit ultimately occurs.

---

### 3.23.4 Accounting Relationships

Within this standard, Dedicated Water:

- may result from Conservation;
- may reduce Depletion;
- may require legal protection;
- may support Bankability;
- may contribute to Terminal Delivery; and
- may contribute to Lake Accretion.

Each subsequent accounting relationship should be evaluated independently.

---

### 3.23.5 Related Terms

- Conservation
  - Depletion
  - Bankability
  - Terminal Delivery
  - Lake Accretion
  - Reconciliation
- 

### 3.23.6 Notes

Dedicated Water represents a documented commitment regarding the intended disposition of water.

It should not be interpreted as evidence that the water has physically reached Great Salt Lake.

Accordingly, Dedicated Water should be evaluated through subsequent accounting of physical movement, reconciliation, and measurable lake response.

Within the Analytical Accounting Framework, dedication establishes accounting intent; Physical Accounting establishes accounting outcome.

---

### 3.23.7 Common Accounting Error

Treating Dedicated Water as equivalent to delivered water.

Water may be legally dedicated yet subsequently:

- intercepted;
- depleted;
- delayed;
- stored;
- rerouted; or
- otherwise prevented from producing measurable Lake Accretion.

Accordingly, the quantity of Dedicated Water should not be reported as lake benefit unless supported by subsequent Physical Accounting demonstrating Terminal Delivery and measurable Lake Accretion.

## 3.24 Bankability

### 3.24.1 Definition

**Bankability** is the degree to which water associated with a proposed or completed Accounting Action is expected, or demonstrated, to produce measurable Lake Accretion through the Analytical Accounting Framework.

Within the Great Salt Lake Accounting Standard, Bankability expresses accounting confidence that water identified for Great Salt Lake will remain physically available, avoid subsequent depletion or interception, achieve Terminal Delivery, and contribute to measurable Lake Accretion.

Bankability is an accounting characteristic rather than an Accounting Action or an Accounting Finding.

### 3.24.2 Purpose

The purpose of Bankability is to evaluate the accounting reliability of proposed or completed water management actions.

Bankability distinguishes between water that is merely intended for Great Salt Lake and water that is reasonably expected, or demonstrated, to produce measurable physical accumulation within the lake.

Accordingly, Bankability serves as an accounting evaluation of delivery confidence rather than legal intent alone.

### 3.24.3 Characteristics

Bankability may be influenced by:

- reduction in Depletion;
- hydrologic routing;
- Return Flow characteristics;
- legal protection;
- operational management;
- measurement capability;
- Accounting Relationships;
- Reconciliation; and
- documented Physical Accounting.

Bankability exists along a continuum rather than as a binary condition.

Different Accounting Actions may exhibit different degrees of Bankability.

### 3.24.4 Accounting Relationships

Within this standard, Bankability:

- evaluates Dedicated Water;
- considers reductions in Depletion;
- considers the likelihood of Terminal Delivery;
- supports estimation of Lake Accretion;
- is evaluated through Physical Accounting; and
- may be refined through Reconciliation and subsequent Accounting Findings.

Bankability itself does not constitute Lake Accretion.

### 3.24.5 Related Terms

- Dedicated Water
- Depletion
- Terminal Delivery

- Lake Accretion
  - Reconciliation
  - Physical Accounting
- 

### 3.24.6 Notes

Bankability is a predictive accounting characteristic.

It expresses the accounting expectation that water associated with a management action will ultimately produce measurable Lake Accretion.

Observed Lake Accretion represents confirmation of accounting performance.

Accordingly, high Bankability should increase confidence in expected accounting outcomes, while measured Lake Accretion provides retrospective validation of those expectations.

---

### 3.24.7 Common Accounting Error

Assuming that legal dedication alone establishes Bankability.

Water may be legally dedicated to Great Salt Lake while remaining vulnerable to:

- subsequent depletion;
- interception;
- operational loss;
- hydrologic uncertainty; or
- other processes that reduce Terminal Delivery.

Accordingly, Bankability should be evaluated through the complete Analytical Accounting Framework rather than through legal designation or project intent alone.

## 3.25 Terminal Delivery

### 3.25.1 Definition

**Terminal Delivery** is the measurable arrival of water to Great Salt Lake following movement through the hydrologic system.

Within the Great Salt Lake Accounting Standard, Terminal Delivery represents the successful physical completion of water movement from its origin or accounting action to the terminal lake.

Terminal Delivery is a Physical Accounting outcome demonstrated through documented Evidence and Reconciliation.

---

### 3.25.2 Purpose

The purpose of Terminal Delivery is to distinguish water that physically reaches Great Salt Lake from water that is merely conserved, dedicated, protected, or routed toward the lake.

Terminal Delivery provides the accounting confirmation that water has successfully completed its intended physical pathway.

---

### 3.25.3 Characteristics

Terminal Delivery should be:

- supported by documented Evidence;
- consistent with Physical Accounting;
- measurable directly or through transparent analytical estimation;
- traceable through Accounting Relationships;
- reconciled with other available evidence; and
- expressed using defined Accounting Units.

Terminal Delivery may occur through natural streamflow, managed releases, return flows, groundwater discharge, or other documented hydrologic pathways.

---

### 3.25.4 Accounting Relationships

Within this standard, Terminal Delivery:

- may result from Dedicated Water;
- reflects the realized performance of Bankability;
- contributes to Lake Accretion;
- supports Accounting Findings;
- is confirmed through Reconciliation; and
- may be influenced by subsequent hydrologic conditions.

Terminal Delivery represents physical arrival at the terminal lake rather than subsequent storage response.

### 3.25.5 Related Terms

- Dedicated Water
  - Bankability
  - Lake Accretion
  - Reconciliation
  - Physical Accounting
- 

### 3.25.6 Notes

Terminal Delivery should not be interpreted as synonymous with Lake Accretion.

Water may reach Great Salt Lake without producing an equivalent increase in lake storage.

Subsequent evaporation, internal redistribution, groundwater exchange, causeway dynamics, measurement uncertainty, or other hydrologic processes may influence the quantity of resulting Lake Accretion.

Accordingly, Terminal Delivery and Lake Accretion represent distinct Accounting Findings within the Analytical Accounting Framework.

A claim of Terminal Delivery must identify the specific physical point at which arrival was demonstrated. Documented arrival at an upstream accounting boundary should not be described as Terminal Delivery to a downstream accounting boundary without evaluating the intervening Accounting Relationships.

At Great Salt Lake, for example, water measured at the four Zone 1 terminal gages has reached the lake-margin wetland system, not necessarily the open lake itself. Particularly during dry regimes, when Bear River Bay and Farmington Bay are substantially drawn down, a material share of Zone 1 outflow may be retained within wetland and substrate recharge rather than reaching the open lake. Terminal Delivery to Great Salt Lake should therefore be evaluated using estimated or observed delivery to the open lake system, not Zone 1 terminal gage flow alone (see Appendix E).

---

### 3.25.7 Common Accounting Error

Assuming that Terminal Delivery and Lake Accretion are identical.

Terminal Delivery confirms that water reached Great Salt Lake.

Lake Accretion evaluates the measurable increase in water stored within the lake attributable to that delivery.

Although closely related, these accounting concepts answer different analytical questions and should not be reported interchangeably.

## 3.26 Lake Accretion

### 3.26.1 Definition

**Lake Accretion** is the measurable increase in the quantity of water stored within Great Salt Lake that is attributable to a specific accounting event, management action, or hydrologic process.

Within the Great Salt Lake Accounting Standard, Lake Accretion represents a physical accounting outcome demonstrated through evidence, reconciliation, and accounting analysis.

Lake Accretion is an Accounting Finding rather than an Accounting Action.

---

### 3.26.2 Purpose

The purpose of Lake Accretion is to provide a consistent accounting measure for evaluating the physical response of Great Salt Lake to changes in water management, hydrologic conditions, conservation actions, or other accounting events.

Lake Accretion describes measurable physical increase in lake storage.

It does not, by itself, imply ecological, economic, legal, or policy value.

---

### 3.26.3 Characteristics

Lake Accretion should be:

- physically measurable or transparently estimated;
- supported by documented Evidence;
- traceable through the Analytical Accounting Framework;
- distinguished from intended outcomes or reported activities;
- expressed using defined Accounting Units; and
- accompanied by appropriate discussion of uncertainty where material.

Lake Accretion may be temporary or persistent depending upon subsequent hydrologic conditions.

---

### 3.26.4 Accounting Relationships

Within this standard, Lake Accretion:

- may result from reduced Depletion;
- may result from increased Terminal Delivery;
- may result from favorable hydrologic conditions;
- may result from combinations of natural and anthropogenic influences;
- contributes to changes in lake storage; and
- may contribute to changes in lake elevation.

Lake Accretion should be evaluated through Physical Accounting rather than inferred from management activity alone.

---

### 3.26.5 Related Terms

- Conservation
  - Dedicated Water
  - Terminal Delivery
  - Depletion
  - Physical Accounting
  - Accounting Finding
-

### 3.26.6 Notes

Lake Accretion is a physical accounting concept.

It describes the measurable accumulation of water within Great Salt Lake resulting from identifiable accounting processes.

Lake Accretion should not be interpreted as synonymous with:

- Conservation;
- Dedicated Water;
- financial investment;
- restoration activity; or
- policy success.

Those concepts may contribute to Lake Accretion, but they are analytically distinct.

### 3.26.7 Common Accounting Error

Equating management actions with Lake Accretion.

The implementation of a conservation project, water lease, infrastructure improvement, or regulatory action does not demonstrate Lake Accretion unless the resulting increase in lake storage is supported through transparent Physical Accounting.

Lake Accretion should therefore be reported only when supported by documented Evidence, Accounting Relationships, and Accounting Findings.

## 3.27 Reconciliation

### 3.27.1 Definition

**Reconciliation** is the systematic comparison, evaluation, and resolution of differences among observations, measurements, datasets, accounting relationships, or accounting findings in order to produce the most analytically consistent representation of the Great Salt Lake system.

Within the Great Salt Lake Accounting Standard, Reconciliation is the process through which multiple sources of Evidence are integrated into a coherent and transparent accounting of physical water movement, storage, and Lake Accretion.

Reconciliation is a core analytical process of the Analytical Accounting Framework.

### 3.27.2 Purpose

The purpose of Reconciliation is to improve analytical confidence by ensuring that accounting conclusions are supported by the totality of available Evidence rather than by any single dataset, observation, or analytical method.

Reconciliation recognizes that differences among measurements, datasets, and analytical estimates are expected within complex hydrologic systems.

The objective of Reconciliation is not to eliminate differences, but to understand, document, and account for them transparently.

### 3.27.3 Characteristics

Reconciliation shall be:

- evidence-based;
- transparent;
- reproducible;
- documented;
- consistent with the governing principles of this standard; and
- appropriate to the accounting question under consideration.

Where differences remain unresolved, the nature and significance of those differences should be explicitly documented.

---

### 3.27.4 Accounting Relationships

Within this standard, Reconciliation:

- integrates Observations and Measurements;
- evaluates Evidence;
- applies Accounting Relationships;
- incorporates Accounting Transformations;
- supports Accounting Findings;
- strengthens Analytical Inferences;
- confirms Terminal Delivery where practicable; and
- improves confidence in measured Lake Accretion.

Reconciliation is therefore the principal quality-assurance process of the Analytical Accounting Framework.

### 3.27.5 Related Terms

- Evidence
  - Accounting Relationship
  - Accounting Transformation
  - Accounting Finding
  - Terminal Delivery
  - Lake Accretion
- 

### 3.27.6 Notes

Reconciliation should not be interpreted as selecting a preferred dataset or forcing agreement among differing sources of information.

Rather, Reconciliation seeks to explain differences through transparent analytical accounting.

The outcome of Reconciliation may include:

- confirmation of existing accounting;
- refinement of accounting relationships;
- identification of previously unrecognized assumptions;
- improved analytical precision; or
- recognition of unresolved uncertainty.

Each outcome contributes to the continual improvement of the Analytical Accounting Framework.

### 3.27.7 Common Accounting Error

Assuming that disagreement among datasets represents analytical failure.

Differences among independent observations and measurements are common within complex hydrologic systems.

The objective of Reconciliation is not to eliminate disagreement but to account for it transparently, document remaining uncertainty, and develop Accounting Findings that are consistent with the available Evidence.



## 4. Analytical Methodology

### 4.1 Purpose

The purpose of this chapter is to establish the standardized analytical methodology through which the Great Salt Lake Accounting Standard (GSLAS) is applied.

Where Chapter 3 establishes the authoritative terminology of analytical accounting, this chapter establishes the analytical process used to evaluate physical water movement, develop Accounting Findings, and communicate analytical conclusions.

The methodology presented herein provides a consistent sequence of analytical activities intended to improve transparency, reproducibility, and comparability among independent accounting analyses.

Although examples throughout this standard focus on Great Salt Lake, the methodology is intended to provide a generally applicable framework for physical resource accounting whenever transparent accounting relationships and reproducible analytical methods are required.

Unless otherwise stated, analyses performed under this standard should follow the methodology established in this chapter.

### 4.2 The Analytical Accounting Process

The Great Salt Lake Accounting Standard applies a structured analytical process designed to produce transparent, reproducible, and evidence-based Accounting Findings.

Although individual analyses may differ in scope, complexity, available Evidence, and analytical objectives, they should generally follow the sequence established in this chapter.

The analytical process proceeds by:

1. defining the Accounting Question;
2. establishing the analytical scope;
3. identifying the required Accounting Units;
4. establishing Water Provenance where material;
5. performing Source Attribution where appropriate;
6. assembling and evaluating available Evidence;
7. evaluating the Accounting Relationships applicable to the Accounting Question;
8. performing the necessary Accounting Transformations;
9. reconciling the resulting accounting;
10. developing documented Accounting Findings;
11. deriving Analytical Inference where supported; and
12. developing Policy Considerations where appropriate.

Each step builds upon those preceding it.

Accordingly, later analytical conclusions should not bypass or replace earlier accounting steps.

Accounting Findings should arise from transparent Physical Accounting and documented Accounting Relationships.

Analytical Inference should arise from documented Accounting Findings.

Policy Considerations should arise from demonstrated Accounting Findings and supported Analytical Inference.

Throughout the analytical process, Accounting Findings, Analytical Inference, and Policy Considerations shall remain analytically distinct.

The objective of this methodology is not analytical complexity.

Its objective is to ensure that independent investigators applying the same Accounting Question, Evidence, Accounting Relationships, assumptions, and analytical methodology can reasonably reproduce comparable Accounting Findings.

### 4.3 Define the Accounting Question

Every analysis performed under the Great Salt Lake Accounting Standard shall begin with a clearly defined Accounting Question.

The Accounting Question establishes the analytical objective, determines the appropriate scope of the investigation, and guides the selection of Accounting Units, Evidence, Accounting Relationships, and analytical methodology.

A well-defined Accounting Question should be specific, measurable, and capable of being addressed through Physical Accounting.

Examples include:

- What quantity of additional water physically reached Great Salt Lake following a specified Accounting Action?
- How did changes in Depletion influence Terminal Delivery during a defined period?
- What Accounting Findings are supported by the available Evidence regarding a proposed conservation program?
- To what extent can observed Lake Accretion be attributed to a specific management action?

Questions that cannot be evaluated through analytical accounting should be reformulated or clearly identified as being outside the scope of this standard.

An Accounting Question should distinguish between physical accounting, analytical interpretation, and policy evaluation. Questions concerning policy preference, economic value, or social benefit should not be presented as accounting questions unless they can be addressed through the analytical methodology established by this standard.

A clearly defined Accounting Question provides the foundation for every subsequent stage of the analytical process.

### 4.4 Establish Scope

Following definition of the Accounting Question, the scope of the analysis shall be established.

Scope defines the physical, temporal, geographic, and analytical boundaries within which the Accounting Question will be evaluated. Clearly defined scope promotes analytical consistency by identifying what is included within the analysis and, equally important, what is excluded.

The scope of an analysis should identify, where applicable:

- the geographic area under consideration;
- the period of analysis;
- the hydrologic system or systems included;
- the Accounting Actions being evaluated;
- the Accounting Units to be analyzed;
- the principal sources of Evidence;
- material assumptions; and
- known analytical limitations.

Where an analysis extends across multiple jurisdictions, watersheds, or water management systems, the scope should clearly describe how those boundaries are represented within the accounting framework.

Similarly, where imported water, groundwater, return flows, reservoir operations, or blended municipal water supplies materially influence the Accounting Question, the scope should identify whether these components are included in the analysis and describe the basis for their treatment.

The scope should be sufficiently comprehensive to answer the Accounting Question while remaining appropriately limited to avoid unnecessary analytical complexity.

Any subsequent changes to the scope of the analysis should be documented together with the reasons for those changes.

## 4.5 Identify Accounting Units

Following establishment of the analytical scope, the Accounting Units required to answer the Accounting Question shall be identified.

Accounting Units define the measurable quantities upon which analytical accounting is performed. Selection of appropriate Accounting Units ensures that subsequent observations, measurements, Evidence, Accounting Relationships, and Accounting Findings are evaluated using consistent and explicitly defined measures.

The Accounting Units selected should be appropriate to the Accounting Question and consistent with the scope of the analysis.

Depending upon the nature of the investigation, Accounting Units may include, but are not limited to:

- volume;
- flow;
- elevation;
- storage;
- surface area;
- depletion;
- diversion;
- return flow;
- time; or
- other measurable physical quantities relevant to the analysis.

Where multiple Accounting Units are employed, their relationships should be explicitly documented.

For example, analyses evaluating changes in lake condition may require the simultaneous use of volume, elevation, surface area, and time. Similarly, analyses evaluating conservation actions may require Accounting Units describing diversion, depletion, return flow, terminal delivery, and lake accretion.

Selection of an Accounting Unit does not determine the analytical outcome. Rather, it establishes the common measurement basis upon which subsequent Physical Accounting is performed.

Changes in Accounting Units during the course of an analysis should be documented together with the reason for the change and its potential influence on the resulting Accounting Findings.

## 4.6 Establish Water Provenance

Following identification of the required Accounting Units, the provenance of water relevant to the Accounting Question shall be established wherever materially practicable.

Water Provenance preserves the accounting identity of water by documenting its origin, source composition, and hydrologic pathway. This step recognizes that physically equivalent volumes of water may possess materially different accounting characteristics depending upon their source, routing, legal status, hydrologic connectivity, and prior accounting history.

Accordingly, analytical accounting should determine not only how much water is being evaluated, but also which water is being evaluated.

Where material to the Accounting Question, the analysis should identify:

- the physical source or sources of water;
- source composition where multiple sources contribute to a blended supply;
- the principal hydrologic pathway;
- relevant storage or conveyance history;
- jurisdictional transitions;
- known or anticipated changes in water composition during movement through the system; and
- other provenance characteristics necessary to support subsequent Physical Accounting.

Preservation of Water Provenance is particularly important where accounting involves imported water, groundwater, interstate river systems, municipal supply portfolios, reservoir operations, return flows, or blended water supplies.

The degree of detail required should remain proportional to the Accounting Question.

Where Water Provenance does not materially influence the resulting Accounting Findings, simplified representation may be appropriate. Conversely, where provenance materially affects Depletion, Return Flow, Dedicated Water, Bankability, Terminal Delivery, or Lake Accretion, sufficient detail should be maintained to support transparent analytical accounting.

Where provenance cannot be determined with reasonable confidence, the analysis should explicitly identify the limitation and characterize the resulting uncertainty rather than assume accounting equivalence among different sources of water.

## 4.7 Perform Source Attribution

Following establishment of Water Provenance, Source Attribution shall be performed wherever the Accounting Question requires identification of the physical origin or source composition of water.

Source Attribution is the analytical process through which Water Provenance is assigned to one or more Accounting Units using documented Evidence, Accounting Relationships, and transparent analytical methodology.

The objective of Source Attribution is to preserve the accounting identity of water throughout the analytical process. This enables subsequent evaluation of Depletion, Return Flow, Dedicated Water, Bankability, Terminal Delivery, and Lake Accretion using water whose physical origin and hydrologic history are understood to the degree necessary for the analysis.

Source Attribution should be based upon the best available Evidence, which may include:

- stream diversion records;
- reservoir operations;
- groundwater withdrawal records;
- municipal supply portfolios;
- water-right administration;
- utility operating records;
- return-flow accounting;
- hydrologic modeling;
- remote sensing; or
- other documented sources of Evidence.

Where water is supplied from multiple sources, the analytical methodology used to allocate source composition should be explicitly documented.

The level of attribution required should remain proportional to the Accounting Question. In some analyses, identification of a single source may be sufficient. In others, particularly those involving blended municipal supplies, imported water, groundwater interaction, or interstate river systems, source composition may materially influence the resulting Accounting Findings.

Perfect Source Attribution should not be presumed.

Water may become physically indistinguishable through blending, storage, groundwater exchange, reuse, or other hydrologic processes. Where direct attribution is not practicable, the analysis should employ the most appropriate available methodology, document all material assumptions, characterize resulting uncertainty, and avoid assigning unwarranted analytical precision.

Failure to perform Source Attribution where it materially affects Accounting Findings may reduce the reliability of subsequent evaluations of Dedicated Water, Bankability, Terminal Delivery, and Lake Accretion.

## 4.8 Assemble Evidence

Following completion of Source Attribution, the Evidence required to answer the Accounting Question shall be assembled and evaluated.

Evidence forms the factual basis upon which all subsequent Accounting Relationships, Accounting Transformations, Accounting Findings, and Analytical Inferences are developed. The objective of this step is not merely to collect information, but to assemble the body of Evidence necessary to support transparent and reproducible analytical accounting.

Evidence should be relevant to the Accounting Question and appropriate to the scope of the analysis.

Depending upon the nature of the investigation, Evidence may include:

- direct observations;
- physical measurements;
- hydrologic records;
- meteorological data;
- administrative records;
- water-right information;
- reservoir operations;
- utility operating records;
- remote sensing;
- published datasets;
- technical reports;
- peer-reviewed literature; or
- other documented sources relevant to the Accounting Question.

Evidence should be evaluated with respect to:

- relevance;
- reliability;
- completeness;
- temporal consistency;
- spatial applicability;
- measurement uncertainty; and
- analytical limitations.

No single source of Evidence should be presumed authoritative solely because of institutional origin, historical use, or widespread acceptance. Where multiple sources of Evidence differ, the objective is not to select a preferred source arbitrarily, but to assemble the available Evidence for subsequent evaluation through Accounting Relationships and Reconciliation.

Where significant gaps in Evidence exist, those limitations should be explicitly documented together with their potential influence on the resulting Accounting Findings.

The quality of an Accounting Finding depends not upon the quantity of Evidence assembled, but upon the transparency with which the available Evidence is documented, evaluated, and incorporated into the analytical accounting process.

This standard establishes the analytical use of Evidence but does not prescribe how Evidence shall be stored, indexed, retrieved, or managed. Implementations of GSLAS may employ document repositories, relational databases, knowledge graphs, retrieval systems, artificial intelligence, or other information-management approaches appropriate to the Accounting Question, provided they preserve traceability of supporting Evidence, transparency of Accounting Relationships, reproducibility of Accounting Transformations, documentation of Reconciliation, preservation of Accounting Continuity, and independent verification of resulting Accounting Findings.

Regardless of the technology employed, supporting Evidence should remain sufficiently organized and documented to permit independent review, reproduction of the accounting, and transparent development of Accounting Findings, Analytical Inference, and Policy Considerations.

## 4.9 Evaluate Accounting Relationships

Following assembly of the available Evidence, the Accounting Relationships necessary to answer the Accounting Question shall be identified and evaluated.

Accounting Relationships provide the analytical structure through which individual observations, measurements, and Accounting Units are organized into a coherent accounting analysis. They define how Accounting Units interact within the physical system and establish the basis for subsequent Accounting Transformations.

Each Accounting Relationship should be supported by documented Evidence and be appropriate to the Accounting Question under consideration.

Depending upon the nature of the analysis, Accounting Relationships may describe:

- physical relationships;
- hydrologic relationships;
- temporal relationships;
- spatial relationships;
- mathematical relationships;
- accounting relationships established through Reconciliation; or
- other documented analytical relationships.

The analytical basis for each material Accounting Relationship should be explicitly documented.

Where multiple Accounting Relationships are available, the analysis should identify the relationship selected, the rationale for its selection, and any material assumptions influencing its application.

The existence of an Accounting Relationship should not be interpreted as evidence of causation.

Accounting Relationships describe how Accounting Units are analytically related within the accounting framework. Where causal interpretation is proposed, the supporting Evidence and analytical reasoning should be presented separately.

Accounting Relationships should remain transparent throughout the analytical process.

Any modification to an established Accounting Relationship should be documented together with the reason for the modification and its potential influence on subsequent Accounting Findings.

Transparent evaluation of Accounting Relationships improves reproducibility, facilitates independent technical review, and strengthens confidence in the resulting analytical conclusions.

## 4.10 Perform Accounting Transformations

Following evaluation of the required Accounting Relationships, the Accounting Transformations necessary to answer the Accounting Question shall be performed.

Accounting Transformations convert observations, measurements, Accounting Units, and Evidence into analytically meaningful Accounting Findings through the transparent application of the Analytical Accounting Framework.

The purpose of an Accounting Transformation is not to create new Evidence, but to organize, reconcile, interpret, and quantify existing Evidence using documented accounting methodology.

Each Accounting Transformation should be explicitly documented and reproducible by an independent investigator possessing access to the same Evidence, Accounting Relationships, assumptions, and analytical procedures.

Depending upon the Accounting Question, Accounting Transformations may include:

- conversion of measured quantities between Accounting Units;
- estimation of Depletion;
- calculation of Return Flow;
- evaluation of Available Supply;
- attribution of Dedicated Water;
- assessment of Bankability;
- estimation of Terminal Delivery;
- estimation or verification of Lake Accretion;
- comparison of alternative accounting scenarios; or
- other documented analytical procedures.

The analytical methodology employed for each Accounting Transformation should be appropriate to the Accounting Question and consistent with the governing principles established by this standard.

Material assumptions, estimation methods, computational procedures, and analytical limitations should be documented together with their potential influence on subsequent Accounting Findings.

Where multiple analytical methods are available, the selected methodology should be identified together with the rationale for its selection.

The objective of an Accounting Transformation is not analytical complexity, but analytical transparency.

Accordingly, Accounting Transformations should be no more complex than necessary to answer the Accounting Question while maintaining reproducibility, consistency, and technical credibility.



## 4.11 Reconciliation

Following completion of the required Accounting Transformations, the results shall be reconciled using the best available Evidence.

Reconciliation is the systematic evaluation and resolution of differences among observations, measurements, datasets, Accounting Relationships, and Accounting Findings in order to produce the most analytically consistent representation of the physical system.

The objective of Reconciliation is not to eliminate disagreement among sources of Evidence, but to understand, document, and account for those differences in a transparent and reproducible manner.

Reconciliation should evaluate all material Evidence relevant to the Accounting Question.

Where multiple datasets or independent analytical methods are available, the analysis should identify:

- areas of agreement;
- areas of disagreement;
- probable causes of material differences;
- the accounting significance of unresolved discrepancies; and
- the resulting influence on Accounting Findings.

Reconciliation should preserve analytical transparency throughout the accounting process.

Differences among observations, measurements, or analytical results should not be resolved by arbitrary selection of a preferred source. Rather, each source should be evaluated according to its relevance, quality, uncertainty, and consistency with the broader body of available Evidence.

Where reconciliation results in modification of an Accounting Relationship, Accounting Transformation, or intermediate accounting result, the basis for that modification should be explicitly documented.

Where material uncertainty remains following Reconciliation, that uncertainty should be communicated together with its potential influence on the resulting Accounting Findings.

Successful Reconciliation increases analytical confidence by demonstrating that Accounting Findings are supported by the totality of the available Evidence rather than by any individual dataset, analytical method, or institutional source.

Reconciliation constitutes the principal quality assurance process of the Great Salt Lake Accounting Standard and should be performed for every analysis where multiple sources of material Evidence are available.

## 4.12 Develop Accounting Findings

Following Reconciliation, the analytical results shall be evaluated and communicated as Accounting Findings.

Accounting Findings represent the formal conclusions produced through application of the Analytical Accounting Framework to the available Evidence using documented Accounting Relationships and Accounting Transformations.

Each Accounting Finding shall be directly supported by the analytical work performed throughout the preceding stages of the methodology.

Accounting Findings should answer the Accounting Question established at the beginning of the analysis.

Accordingly, each Accounting Finding should:

- be supported by documented Evidence;
- be traceable through the Analytical Accounting Framework;
- identify the Accounting Relationships upon which it depends;
- acknowledge material assumptions;
- characterize significant uncertainty where applicable; and
- remain consistent with the defined scope of the analysis.

Accounting Findings should describe what the accounting demonstrates.

They should not incorporate analytical interpretation, policy preference, management recommendation, or conclusions that extend beyond the available Evidence.

Where multiple Accounting Findings are developed, they should be presented in a logical sequence that reflects the progression of the analytical accounting process.

Each Accounting Finding should be stated clearly and independently so that subsequent Analytical Inferences may be evaluated on their own merits.

Where the available Evidence does not support a definitive Accounting Finding, the analysis should explicitly acknowledge the limitation rather than infer a conclusion not supported by the accounting.

The strength of an Accounting Finding depends upon the quality of the available Evidence, the appropriateness of the Accounting Relationships employed, the transparency of the Accounting Transformations performed, and the completeness of the Reconciliation process.

Accordingly, Accounting Findings represent the formal analytical conclusions of the Great Salt Lake Accounting Standard and provide the foundation for all subsequent Analytical Inferences and Policy Considerations.

### 4.13 Develop Analytical Inferences

Following development of the Accounting Findings, Analytical Inferences may be developed where appropriate to assist interpretation of the accounting results.

Analytical Inferences are reasoned interpretations derived from one or more Accounting Findings through application of documented assumptions, professional judgment, and transparent analytical reasoning.

The purpose of an Analytical Inference is to explain what the Accounting Findings reasonably suggest within the context of the Accounting Question.

Analytical Inferences shall remain clearly distinguishable from Accounting Findings.

Accounting Findings describe what the accounting demonstrates.

Analytical Inferences describe what those findings reasonably imply.

Each Analytical Inference should:

- be supported by one or more Accounting Findings;
- remain consistent with the available Evidence;
- identify material assumptions;
- acknowledge significant uncertainty;
- distinguish observed relationships from inferred relationships; and
- avoid extending beyond the support provided by the accounting.

Where multiple interpretations of the Accounting Findings are reasonably supported by the available Evidence, those alternative interpretations should be identified together with the reasons for preferring one interpretation over another, where appropriate.

Analytical Inferences should not be presented as established accounting facts.

Rather, they represent reasoned analytical interpretations that assist understanding of complex hydrologic systems while remaining subject to revision as additional Evidence becomes available.

The quality of an Analytical Inference depends upon the quality of the supporting Accounting Findings, the transparency of the analytical reasoning employed, and the explicit recognition of material assumptions and uncertainty.

Accordingly, Analytical Inferences provide the interpretive bridge between analytical accounting and informed decision-making while preserving the distinction between accounting conclusions and subsequent policy evaluation.

### 4.14 Develop Policy Considerations

Where appropriate, the results of the analytical accounting process may be used to inform Policy Considerations.

Policy Considerations represent evaluations of potential management actions, regulatory approaches, investment strategies, operational alternatives, or other decision options that may be informed by the Accounting Findings and Analytical Inferences developed through this standard.

Policy Considerations occur after completion of the analytical accounting process.

They are not Accounting Findings and should not be presented as accounting conclusions.

Each Policy Consideration should:

- identify the Accounting Findings upon which it is based;
- distinguish established accounting from analytical interpretation;
- acknowledge material uncertainty;



- recognize reasonable alternative approaches where appropriate; and
- remain consistent with the scope and limitations of the completed analysis.

The purpose of a Policy Consideration is to inform decision-making rather than prescribe a preferred course of action.

Different investigators applying identical Accounting Findings may reasonably develop different Policy Considerations based upon differing management objectives, institutional responsibilities, legal authorities, economic considerations, environmental priorities, or social values.

Such differences do not constitute disagreement regarding the accounting itself.

Analytical accounting provides an objective basis for policy discussion by establishing a transparent understanding of the physical accounting system. Decisions regarding policy, governance, funding, legal administration, or management remain the responsibility of the appropriate decision-makers.

Accordingly, Policy Considerations should always remain analytically distinguishable from Accounting Findings and Analytical Inferences so that readers can clearly identify what the accounting demonstrates, what the findings reasonably suggest, and what actions may subsequently be considered.

## 4.15 Documentation

The final stage of the analytical methodology is preparation of documentation sufficient to permit independent review, reproduction, evaluation, and future application of the completed analysis.

Analytical accounting performed under the Great Salt Lake Accounting Standard should be documented in a manner that enables another qualified investigator to understand the Accounting Question, evaluate the supporting Evidence, reproduce the principal Accounting Transformations, and independently assess the resulting Accounting Findings.

Documentation should be complete, transparent, and proportional to the scope and complexity of the analysis.

At a minimum, analytical documentation should identify:

- the Accounting Question;
- the analytical scope;
- the Accounting Units employed;
- Water Provenance, where material;
- Source Attribution methodology, where applicable;
- the principal sources of Evidence;
- material assumptions;
- Accounting Relationships;
- Accounting Transformations performed;
- Reconciliation procedures;
- Accounting Findings;
- Analytical Inferences; and
- any resulting Policy Considerations.

Documentation should distinguish clearly between:

- observed information;
- analytical assumptions;
- accounting methodology;
- Accounting Findings;
- Analytical Inference; and
- Policy Considerations.

Where data limitations, analytical uncertainty, or unresolved questions materially influence the Accounting Findings, those limitations should be explicitly identified together with their potential influence on the completed analysis.

Documentation prepared under this standard should be sufficiently complete to support independent technical review while remaining appropriately scaled to the Accounting Question.

The objective of documentation is not to maximize report length.

The objective is to maximize analytical transparency, reproducibility, and long-term usability.

Accordingly, analyses performed under the Great Salt Lake Accounting Standard should document not only their conclusions, but also the Evidence, assumptions, analytical methodology, Accounting Relationships, and reasoning upon which those conclusions depend.

## 5. Analytical Accounting Framework

### 5.1 Purpose

The purpose of this chapter is to establish the Analytical Accounting Framework used by the Great Salt Lake Accounting Standard (GSLAS).

Where Chapter 4 describes the analytical methodology, this chapter describes the structure through which Accounting Units, Evidence, Accounting Relationships, and Accounting Findings are organized into a coherent system of physical accounting.

The Analytical Accounting Framework provides the conceptual architecture necessary to ensure that independent analyses remain consistent, transparent, and reproducible while permitting flexibility in the selection of appropriate analytical methods.

The framework is intended to accommodate a wide range of accounting questions, including evaluation of historical hydrologic conditions, conservation programs, water management actions, restoration proposals, infrastructure investments, and policy alternatives affecting Great Salt Lake.

Although analytical methods, datasets, and computational approaches may evolve over time, the Analytical Accounting Framework provides a consistent structure for organizing evidence, documenting assumptions, developing Accounting Findings, and communicating analytical conclusions.

Unless otherwise stated, analyses performed under this standard should remain consistent with the framework established in this chapter.

### 5.2 Framework Overview

The Analytical Accounting Framework provides the conceptual architecture through which physical accounting is performed under the Great Salt Lake Accounting Standard.

Rather than prescribing a single computational methodology, the framework establishes a consistent analytical structure within which multiple analytical methods may be applied, evaluated, compared, and reproduced.

The framework organizes analytical accounting into four integrated components:

#### 5.2.1 Evidence

Evidence establishes the factual basis for analytical accounting.

It consists of:

- Observation;
  - Measurement; and
  - Evidence.
- 

#### 5.2.2 Analytical Structure

Analytical Structure organizes Evidence into a transparent accounting methodology.

It consists of:

- Accounting Units;
  - Accounting Relationships; and
  - Accounting Transformations.
-

### 5.2.3 Accounting Objects

Accounting Objects represent the physical quantities, actions, characteristics, and outcomes evaluated throughout the accounting process.

They include:

- Accounting Actions;
  - Water Provenance;
  - Source Attribution;
  - Diversion;
  - Return Flow;
  - Depletion;
  - Available Supply;
  - Conservation;
  - Dedicated Water;
  - Bankability;
  - Terminal Delivery; and
  - Lake Accretion.
- 

### 5.2.4 Analytical Results

Analytical Results communicate the conclusions produced through application of the Analytical Accounting Framework.

They consist of:

- Accounting Findings;
  - Analytical Inferences; and
  - Policy Considerations.
- 

These four components operate together as a single integrated analytical system.

Evidence establishes the factual basis for analysis.

Analytical Structure organizes that Evidence into a reproducible accounting methodology.

Accounting Objects represent the physical system being evaluated.

Analytical Results communicate what the accounting demonstrates, what those findings reasonably imply, and what Policy Considerations may subsequently be informed by those conclusions.

Although presented as distinct conceptual components, the Analytical Accounting Framework should always be applied as an integrated system in which every component supports and informs the others.

## 5.3 Evidence

Evidence constitutes the factual foundation of the Analytical Accounting Framework.

All Accounting Findings developed under the Great Salt Lake Accounting Standard shall be supported by documented Evidence appropriate to the Accounting Question under consideration.

Within the framework, Evidence consists of three progressively related components:

- Observation;
- Measurement; and
- Evidence.

Observations describe physical phenomena or conditions identified through direct observation or documented record.

Measurements quantify those observations using defined Accounting Units and appropriate methods of observation or calculation.

Evidence consists of the documented observations, measurements, datasets, records, or other information assembled to support analytical accounting.

Evidence may originate from multiple independent sources.

Depending upon the Accounting Question, Evidence may include field observations, streamflow records, reservoir operations, meteorological information, utility records, remote sensing, published datasets, technical reports, peer-reviewed literature, administrative records, or other documented information relevant to the analysis.

Evidence should be evaluated with respect to its relevance, reliability, completeness, temporal consistency, spatial applicability, and documented uncertainty.

The existence of multiple sources of Evidence should not be interpreted as analytical conflict.

Rather, multiple sources provide the basis for subsequent Reconciliation and may strengthen confidence in the resulting Accounting Findings.

Within the Analytical Accounting Framework, Evidence establishes the factual basis upon which Accounting Relationships are evaluated, Accounting Transformations are performed, and Accounting Findings are developed.

Accordingly, the quality of an analytical accounting process depends fundamentally upon the quality, transparency, and appropriate use of the supporting Evidence.

## 5.4 Analytical Structure

Analytical Structure provides the organizational framework through which Evidence is converted into transparent, reproducible, and evidence-based Accounting Findings.

Within the Great Salt Lake Accounting Standard, Analytical Structure consists of three integrated components:

- Accounting Units;
- Accounting Relationships; and
- Accounting Transformations.

These components organize Evidence into a coherent analytical process while preserving transparency throughout each stage of the accounting methodology.

Accounting Units establish the measurable quantities upon which analysis is performed.

Accounting Relationships define how Accounting Units interact within the physical accounting system.

Accounting Transformations apply documented analytical methods to convert Evidence and Accounting Relationships into Accounting Findings.

Each component performs a distinct function within the Analytical Accounting Framework.

Accounting Units establish what is measured.

Accounting Relationships establish how measured quantities are analytically related.

Accounting Transformations establish how those relationships are applied to answer the Accounting Question.

The Analytical Structure should remain explicitly documented throughout every analysis performed under this standard.

Changes to Accounting Units, Accounting Relationships, or Accounting Transformations should be identified together with the analytical basis for those changes and their potential influence on the resulting Accounting Findings.

Transparent documentation of the Analytical Structure enables independent investigators to reproduce the analytical process, evaluate methodological decisions, and assess the validity of the resulting Accounting Findings.

Accordingly, Analytical Structure represents the principal organizational component through which analytical accounting is performed under the Great Salt Lake Accounting Standard.

## 5.5 Analytical Results

Analytical Results represent the formal conclusions and interpretations produced through application of the Analytical Accounting Framework.

Within the Great Salt Lake Accounting Standard, Analytical Results consist of three progressively related components:

- Accounting Findings;

- Analytical Inferences; and
- Policy Considerations.

These components communicate the outcome of analytical accounting while preserving the distinction between accounting, interpretation, and decision-making.

Accounting Findings describe what the accounting demonstrates based upon the available Evidence, documented Accounting Relationships, and completed Accounting Transformations.

Analytical Inferences describe what those Accounting Findings reasonably suggest within the context of the Accounting Question.

Policy Considerations evaluate potential management actions, regulatory approaches, operational alternatives, or other decisions that may be informed by the Accounting Findings and Analytical Inferences.

Each component serves a distinct purpose within the Analytical Accounting Framework.

Accounting Findings establish the analytical conclusions supported by the accounting.

Analytical Inferences interpret those conclusions through transparent analytical reasoning.

Policy Considerations evaluate how those conclusions may inform future decision-making.

These components should remain analytically distinguishable throughout every analysis performed under this standard.

Accounting Findings shall not be presented as Analytical Inferences.

Analytical Inferences shall not be presented as Policy Considerations.

Similarly, Policy Considerations shall not be represented as Accounting Findings.

Maintaining these distinctions promotes analytical transparency, facilitates independent technical review, and allows investigators with differing policy perspectives to rely upon a common foundation of objective analytical accounting.

Accordingly, Analytical Results constitute the formal communication of analytical accounting under the Great Salt Lake Accounting Standard.

## 5.6 Accounting Objects

Accounting Objects represent the physical quantities, actions, conditions, and outcomes evaluated throughout the Analytical Accounting Framework.

Unlike Evidence, which describes what is observed, or Analytical Structure, which describes how accounting is performed, Accounting Objects represent the elements of the physical system that are analyzed.

Accounting Objects provide the subject matter of analytical accounting.

Within the Great Salt Lake Accounting Standard, Accounting Objects include, but are not limited to:

- Accounting Actions;
- Diversion;
- Return Flow;
- Depletion;
- Available Supply;
- Conservation;
- Dedicated Water;
- Water Provenance;
- Source Attribution;
- Bankability;
- Terminal Delivery; and
- Lake Accretion.

Accounting Objects may describe physical water movement, hydrologic conditions, management actions, accounting characteristics, or measurable accounting outcomes.

Each Accounting Object possesses defined relationships to other Accounting Objects through the Analytical Accounting Framework.

For example, an Accounting Action may influence Diversion or Depletion.

Changes in Depletion may affect Available Supply.

Available Supply may contribute to Dedicated Water.

Dedicated Water may influence Bankability.

Bankability may affect the probability of Terminal Delivery.

Terminal Delivery may contribute to measurable Lake Accretion.

These relationships should be demonstrated through documented Evidence, Accounting Relationships, and Accounting Transformations rather than assumed.

Not every Accounting Object is applicable to every Accounting Question.

The Accounting Objects included within a particular analysis should remain proportional to the scope of the investigation and appropriate to the Accounting Question being addressed.

Accordingly, Accounting Objects provide the common accounting language through which the physical behavior of the Great Salt Lake system is represented, evaluated, and communicated within the Analytical Accounting Framework.

## 5.7 Framework Integration

The Analytical Accounting Framework shall be applied as an integrated system.

Evidence, Analytical Structure, Analytical Results, and Accounting Objects are presented as distinct components to facilitate understanding of the framework. In practice, however, these components operate together throughout the analytical accounting process.

Evidence establishes the factual basis for analysis.

Analytical Structure organizes that Evidence into a transparent and reproducible accounting methodology.

Accounting Objects represent the physical quantities, actions, characteristics, and outcomes being evaluated.

Analytical Results communicate what the completed accounting demonstrates and what those findings reasonably imply.

No individual component of the framework is sufficient to produce reliable Accounting Findings independently.

Evidence without Analytical Structure cannot produce reproducible accounting.

Analytical Structure without Evidence cannot support Accounting Findings.

Accounting Objects without documented Evidence cannot be reliably evaluated.

Analytical Results developed without application of the complete framework should not be represented as findings produced under the Great Salt Lake Accounting Standard.

Accordingly, each component of the Analytical Accounting Framework depends upon and supports the others.

The integrity of analytical accounting is achieved not through any individual component, but through the consistent application of the complete framework established by this standard.

The relationship among the principal components of the Analytical Accounting Framework is summarized below.

### **Analytical Accounting Framework**

1. Evidence
  - Observation
  - Measurement
  - Evidence
2. Analytical Structure
  - Accounting Units
  - Accounting Relationships
  - Accounting Transformations
3. Accounting Objects
  - Accounting Actions
  - Diversion
  - Return Flow
  - Depletion
  - Available Supply
  - Conservation
  - Dedicated Water
  - Water Provenance

- Source Attribution
  - Bankability
  - Terminal Delivery
  - Lake Accretion
4. Analytical Results
- Accounting Findings
  - Analytical Inferences
  - Policy Considerations

This framework provides the conceptual foundation upon which all analytical accounting performed under the Great Salt Lake Accounting Standard is based.

## 5.8 Chapter Summary

This chapter establishes the Analytical Accounting Framework that underlies the Great Salt Lake Accounting Standard.

The framework organizes analytical accounting into four integrated components:

- Evidence;
- Analytical Structure;
- Accounting Objects; and
- Analytical Results.

Together, these components provide a consistent conceptual architecture for evaluating physical water movement, documenting analytical methodology, and communicating Accounting Findings.

The framework is intended to ensure that analytical accounting remains transparent, reproducible, and evidence-based while remaining adaptable to diverse accounting questions, analytical methods, and hydrologic settings.

Subsequent chapters apply this framework to the principal analytical components of the Great Salt Lake Accounting Standard and demonstrate its application through standardized accounting practices and examples.



## 6. Physical Accounting

### 6.1 Purpose

The purpose of this chapter is to establish the application of Physical Accounting under the Great Salt Lake Accounting Standard (GSLAS).

Where the preceding chapters establish the principles, terminology, methodology, and Analytical Accounting Framework, this chapter establishes the standardized approach for accounting for the physical movement, storage, depletion, and delivery of water within the Great Salt Lake Basin.

Physical Accounting provides the analytical foundation upon which Accounting Findings are developed. It seeks to describe the physical behavior of water using transparent Accounting Units, documented Accounting Relationships, and reproducible Accounting Transformations independent of policy preference or management objective.

The procedures established in this chapter are intended to improve consistency among analytical investigations by providing a common framework for evaluating water movement, conservation actions, hydrologic change, and measurable outcomes affecting Great Salt Lake.

Unless otherwise stated, Physical Accounting performed under this standard should be conducted in accordance with the methodology and Analytical Accounting Framework established in Chapters 4 and 5.

### 6.2 Physical Accounting Model

Physical Accounting describes the movement, storage, transformation, and disposition of water within the Great Salt Lake Basin using the Analytical Accounting Framework established by this standard.

The objective of Physical Accounting is to develop a transparent, reproducible representation of the physical water system independent of legal ownership, economic valuation, institutional responsibility, or policy preference.

Physical Accounting seeks to answer questions concerning what physically occurs within the hydrologic system.

Examples include:

- Where did the water originate?
- Where did the water move?
- How much water was diverted?
- How much water was depleted?
- How much water remained within the system?
- How much water reached Great Salt Lake?
- How much measurable Lake Accretion occurred?

Physical Accounting evaluates these questions using documented Evidence, Accounting Units, Accounting Relationships, and Accounting Transformations.

The Physical Accounting Model recognizes that water continuously changes location, condition, and accounting status as it moves through the hydrologic system.

Accordingly, Physical Accounting follows water through successive Accounting Objects while preserving analytical transparency throughout the accounting process.

Where appropriate, the Physical Accounting Model should identify:

- Water Provenance;
- Source Attribution;
- physical movement;
- storage;
- Diversion;

- Return Flow;
- Depletion;
- Available Supply;
- Conservation, where applicable;
- Dedicated Water;
- Bankability;
- Terminal Delivery; and
- Lake Accretion.

Not every Accounting Object will be relevant to every Accounting Question.

The Physical Accounting Model should remain proportional to the analytical objective while preserving those accounting relationships necessary to support transparent and reproducible Accounting Findings.

Physical Accounting represents the analytical core of the Great Salt Lake Accounting Standard and provides the foundation upon which all subsequent analytical accounting is performed.

### 6.3 The Physical Water System

The Great Salt Lake Accounting Standard represents the Great Salt Lake Basin as a physical water system through which water is continuously introduced, stored, transported, depleted, returned, and ultimately discharged to Great Salt Lake.

The purpose of Physical Accounting is not to describe every hydrologic process within the basin, but to account for those physical processes that materially influence the Accounting Question under consideration.

Within the Physical Accounting Model, water is evaluated as it progresses through a series of measurable physical states and Accounting Actions.

Although individual analyses may differ in complexity, the physical accounting process generally considers:

- water entering the accounting system;
- movement through the hydrologic system;
- storage within natural or constructed features;
- Diversion for human or environmental use;
- Return Flow;
- Depletion;
- Available Supply;
- Dedicated Water, where applicable;
- Terminal Delivery; and
- resulting Lake Accretion.

The sequence and relative importance of these components may vary according to the Accounting Question.

Not every analysis will require evaluation of every component.

Rather, the Physical Accounting Model should include those physical processes necessary to produce transparent, reproducible, and evidence-based Accounting Findings.

Throughout the accounting process, each material movement or change in water should be supported by documented Evidence, represented by appropriate Accounting Units, and evaluated through documented Accounting Relationships and Accounting Transformations.

The Physical Water System serves as the analytical domain within which Physical Accounting is performed.

Subsequent sections of this chapter describe the principal physical processes represented within the Great Salt Lake Accounting Standard and their relationships to one another.

### 6.4 Physical Accounting Boundaries

Every Physical Accounting analysis shall establish explicit physical boundaries before Accounting Relationships or Accounting Transformations are performed.

Physical boundaries define the portion of the hydrologic system represented within the Accounting Question and establish where water enters, remains within, exits, or is excluded from the accounting system.

Clearly defined boundaries are fundamental to transparent and reproducible Physical Accounting.

Depending upon the Accounting Question, physical boundaries may include:

- watershed boundaries;
- river basin boundaries;
- subbasin boundaries;
- administrative boundaries;
- reservoir systems;
- groundwater systems;
- irrigation districts;
- municipal service areas;
- wetlands; or
- other physical or operational accounting domains.

Physical Accounting boundaries should be selected according to the Accounting Question rather than administrative convenience.

Where physical and administrative boundaries differ, the analysis should explicitly identify those differences and describe their potential influence on the Accounting Findings.

Water crossing an accounting boundary should be explicitly identified whenever practicable.

Boundary crossings may include:

- natural inflows;
- imported water;
- interbasin transfers;
- groundwater movement;
- reservoir releases;
- return flows;
- exports; or
- Terminal Delivery.

The establishment of an accounting boundary does not imply that processes occurring outside that boundary are unimportant.

Rather, it defines the limits within which Physical Accounting is performed while identifying external influences that materially affect the accounting system.

Where Accounting Findings depend upon conditions occurring outside the selected boundary, those dependencies should be explicitly documented together with the analytical basis for their inclusion.

Consistent definition of Physical Accounting boundaries improves analytical transparency, facilitates comparison among independent investigations, and reduces ambiguity regarding the scope of the accounting analysis.

## 6.5 Physical Water Movement

Physical Accounting shall account for the movement of water through the hydrologic system using documented Evidence and transparent Accounting Relationships.

Water movement represents the transfer of water among physical locations within the defined accounting boundary. Such movement may occur through natural hydrologic processes, human intervention, or a combination of both.

The purpose of Physical Accounting is to account for the measurable movement of water rather than to infer hydrologic processes not supported by the available Evidence.

Depending upon the Accounting Question, Physical Water Movement may include:

- precipitation;
- streamflow;
- groundwater movement;
- reservoir storage and release;
- imported water;
- interbasin transfers;
- diversions;
- conveyance systems;
- return flows;

- evaporation;
- transpiration;
- consumptive use; or
- Terminal Delivery.

Each material movement of water should be represented by appropriate Accounting Units and supported by documented Evidence.

Where water changes location, storage, or accounting status, the corresponding Accounting Relationship should be explicitly identified.

Physical Accounting should preserve continuity throughout the movement of water.

Water entering the accounting system should be traceable, to the extent practicable, through successive Accounting Actions until it is depleted, exported, stored, or delivered to Great Salt Lake.

Where complete continuity cannot be established because of blending, groundwater interaction, measurement limitations, or other physical constraints, the analysis should document the resulting uncertainty together with the methodology used to represent that movement.

The objective of Physical Water Movement is not to model every hydrologic process, but to establish a transparent and reproducible accounting representation of those movements material to the Accounting Question.

Accordingly, Physical Water Movement provides the foundation upon which Diversion, Return Flow, Depletion, Available Supply, Terminal Delivery, and Lake Accretion are subsequently evaluated.

## 6.6 Physical Water Storage

Physical Accounting shall account for the storage of water wherever storage materially influences the Accounting Question.

Water Storage represents the temporary or long-term retention of water within natural or constructed components of the hydrologic system.

Storage modifies the timing, location, availability, and subsequent movement of water and therefore constitutes a fundamental component of Physical Accounting.

Depending upon the Accounting Question, Physical Water Storage may include:

- lakes;
- reservoirs;
- wetlands;
- aquifers;
- rivers and channels;
- snowpack;
- soil moisture; or
- other identifiable storage components within the accounting boundary.

Storage should be represented using appropriate Accounting Units and supported by documented Evidence.

Where changes in storage materially affect Accounting Findings, both the magnitude and timing of those changes should be explicitly documented.

Physical Accounting should distinguish between the existence of stored water and its subsequent availability for movement within the accounting system.

The presence of water in storage does not necessarily imply that the water is Available Supply, Dedicated Water, or capable of producing Terminal Delivery or Lake Accretion.

Such determinations require subsequent evaluation through the Analytical Accounting Framework.

Where storage receives water from multiple sources, Water Provenance and Source Attribution should be preserved to the extent practicable whenever source composition materially influences subsequent Accounting Findings.

Changes in storage should be reconciled with observed inflows, outflows, Diversion, Return Flow, Depletion, precipitation, evaporation, and other material Accounting Objects whenever sufficient Evidence is available.

The objective of Physical Water Storage is to represent the role of storage within the physical accounting system rather than to model reservoir operations or hydrologic processes in detail.

Accordingly, Physical Water Storage provides the accounting foundation for evaluating changes in Available Supply, system behavior, and the subsequent movement of water throughout the Great Salt Lake Basin.

## 6.7 Physical Water Balance

Physical Accounting shall maintain a balanced representation of the movement and storage of water within the defined accounting boundary.

A Physical Water Balance accounts for the measurable inflows, outflows, changes in storage, and Depletion affecting the accounting system during a defined period of analysis.

The objective of a Physical Water Balance is to demonstrate that the principal components of the accounting system have been identified, measured where practicable, and represented consistently within the Analytical Accounting Framework.

Depending upon the Accounting Question, a Physical Water Balance may include:

- precipitation;
- tributary inflow;
- imported water;
- groundwater inflow;
- reservoir releases;
- changes in storage;
- Diversion;
- Return Flow;
- Depletion;
- evaporation;
- exports;
- Terminal Delivery; and
- other material Accounting Objects.

The components included within a Physical Water Balance shall remain proportional to the Accounting Question and appropriate to the defined accounting boundary.

Not every accounting analysis requires representation of every component.

Where complete accounting of all physical components is not practicable, the analysis should identify the omitted components together with their potential influence on the Accounting Findings.

Physical Water Balance should distinguish between measured quantities and estimated quantities.

Estimated components should be identified together with the methodology, assumptions, and supporting Evidence used in their determination.

Material imbalances identified during Physical Accounting should not be disregarded.

Rather, such imbalances should be investigated through Reconciliation to determine whether they arise from measurement uncertainty, incomplete Evidence, analytical assumptions, or previously unidentified physical processes.

The objective of Physical Water Balance is not to eliminate all residual differences, but to account for those differences transparently and evaluate their significance within the context of the Accounting Question.

Accordingly, Physical Water Balance provides the principal accounting mechanism for evaluating the completeness, consistency, and internal integrity of Physical Accounting performed under this standard.

## 6.8 Hydrologic Regimes

Physical Accounting should recognize that hydrologic systems operate under differing hydrologic regimes and that Accounting Relationships may vary among those regimes.

A hydrologic regime represents a period characterized by relatively consistent climatic, hydrologic, and system conditions that materially influence the movement, storage, diversion, return flow, depletion, and delivery of water.

The purpose of identifying hydrologic regimes is to ensure that Physical Accounting appropriately represents the conditions under which Accounting Relationships are evaluated.

Hydrologic regimes may differ with respect to:

- precipitation;
- streamflow;
- groundwater conditions;
- reservoir operations;
- evapotranspiration;
- soil moisture;
- snowpack;
- available supply; or
- other physical characteristics relevant to the Accounting Question.

Hydrologic regimes establish the physical context within which Accounting Relationships operate.

Accordingly, Accounting Relationships developed under one hydrologic regime should not be presumed applicable under materially different hydrologic regimes without supporting Evidence.

Similarly, identical Accounting Actions or Diversions should not be presumed to produce identical Return Flow, Depletion, Available Supply, or subsequent Accounting Objects under differing hydrologic regimes.

Hydrologic regimes should not be inferred solely from short-term variation in precipitation or streamflow.

A single wet year does not necessarily establish a sustained wet regime.

Likewise, a single dry year does not necessarily establish a sustained dry regime.

Hydrologic regimes should be identified using the best available Evidence and should reflect persistent characteristics of the physical accounting system rather than isolated hydrologic events.

Where identification of the applicable hydrologic regime materially influences the Accounting Findings, the analytical basis for selecting that regime should be explicitly documented together with any material assumptions and resulting uncertainty.

Recognition of hydrologic regimes strengthens Physical Accounting by ensuring that Accounting Relationships are evaluated within the physical conditions under which they operate rather than assuming analytical relationships remain constant across materially different hydrologic conditions.

## 6.9 System Evolution

Physical Accounting should recognize that the physical accounting system may evolve over time.

System Evolution refers to material changes in the physical, operational, or developed characteristics of a water system that may alter Accounting Relationships independent of short-term hydrologic variation.

The purpose of recognizing System Evolution is to ensure that Physical Accounting remains representative of the system being evaluated rather than assuming historical accounting relationships remain unchanged through time.

System Evolution may result from:

- agricultural conversion;
- urban development;
- changes in land use;
- construction of reservoirs or conveyance systems;
- canal modifications;
- stormwater infrastructure;
- groundwater development;
- managed aquifer recharge;
- wetland restoration;
- operational changes;
- long-term vegetation change; or
- other physical changes affecting the movement, storage, depletion, or delivery of water.

Accordingly, Accounting Relationships developed during one period should not be presumed applicable to substantially different periods without supporting Evidence.

Particular caution should be exercised when comparing accounting periods separated by substantial intervals of time.

Changes in infrastructure, land use, water management, or basin characteristics may alter the physical behavior of the accounting system independently of climatic variation.

Where System Evolution may materially influence the Accounting Findings, the analysis should evaluate whether previously established Accounting Relationships remain applicable or require modification.

Recognition of System Evolution does not require that every accounting analysis quantify all historical changes within the physical system.

Rather, it requires that investigators acknowledge the possibility of material change and evaluate its significance where appropriate to the Accounting Question.

Recognition of System Evolution strengthens Physical Accounting by ensuring that Accounting Findings are based upon the physical system that exists during the period of analysis rather than upon historical assumptions that may no longer accurately represent current conditions.

## 6.10 Physical Accounting Continuity

Physical Accounting should preserve continuity throughout the movement of water within the defined accounting boundary.

Accounting Continuity is the principle that material movements, transformations, storage, and disposition of water should remain traceable, to the extent practicable, throughout the analytical accounting process.

The objective of Accounting Continuity is to ensure that Accounting Findings are supported by a transparent and logically consistent representation of the physical water system.

Physical Accounting should account for water as it progresses through successive Accounting Objects, including, where applicable:

- Water Provenance;
- Source Attribution;
- Diversion;
- Return Flow;
- Depletion;
- Available Supply;
- Conservation;
- Dedicated Water;
- Bankability;
- Terminal Delivery; and
- Lake Accretion.

Not every Accounting Object will be applicable to every Accounting Question.

However, where an Accounting Object materially influences the analysis, its relationship to preceding and subsequent Accounting Objects should be explicitly documented.

Accounting Continuity does not require uninterrupted physical observation of every movement of water.

Rather, it requires that material changes in accounting status be supported by documented Evidence, transparent Accounting Relationships, and reproducible Accounting Transformations.

Where continuity cannot be maintained because of blending, groundwater interaction, measurement limitations, uncertainty, or other physical constraints, the analysis should identify the point at which continuity becomes uncertain and characterize the resulting analytical limitations.

Maintenance of Accounting Continuity strengthens Reconciliation, improves reproducibility, and increases confidence in the resulting Accounting Findings.

Accordingly, Accounting Continuity provides the analytical linkage through which Physical Accounting represents the movement of water from its origin to its ultimate accounting disposition within the Great Salt Lake Basin.

## 6.11 Physical Accounting Integrity

Physical Accounting shall be performed in a manner that preserves the integrity of the analytical accounting process.

Physical Accounting Integrity is achieved when Accounting Findings are supported by documented Evidence, transparent methodology, reproducible Accounting Transformations, and consistent application of the Analytical Accounting Framework.



The objective of Physical Accounting Integrity is to ensure that Accounting Findings faithfully represent the physical water system being evaluated rather than the expectations, preferences, or objectives of the investigator.

Accordingly, Physical Accounting should:

- represent the physical system objectively;
- distinguish observed conditions from estimated conditions;
- identify material assumptions;
- preserve Water Provenance where appropriate;
- maintain Accounting Continuity;
- reconcile material differences among available Evidence;
- acknowledge uncertainty where it materially influences the analysis; and
- remain reproducible by independent investigators using the same Evidence and methodology.

Physical Accounting Integrity does not require complete certainty.

Rather, it requires that uncertainty, analytical limitations, and unresolved questions be communicated transparently so that users of the accounting can evaluate the reliability of the resulting Accounting Findings.

The integrity of Physical Accounting depends upon the consistent application of the principles established throughout this standard rather than upon any individual dataset, analytical model, or computational method.

Accordingly, Physical Accounting Integrity represents the governing principle through which the Great Salt Lake Accounting Standard maintains analytical credibility, technical independence, and long-term reproducibility.

## 6.12 Chapter Summary

This chapter establishes the Physical Accounting Model used by the Great Salt Lake Accounting Standard.

Physical Accounting provides the analytical foundation through which the physical movement, storage, depletion, and disposition of water are represented within the Analytical Accounting Framework.

The chapter establishes the principal physical components of the accounting system, including:

- Physical Accounting Boundaries;
- Physical Water Movement;
- Physical Water Storage;
- Physical Water Balance;
- Accounting Continuity; and
- Physical Accounting Integrity.

Together, these components provide a consistent framework for representing the physical behavior of water while maintaining transparency, reproducibility, and analytical independence.

Physical Accounting serves as the factual and analytical basis upon which Diversion, Return Flow, Depletion, Available Supply, Dedicated Water, Bankability, Terminal Delivery, and Lake Accretion are subsequently evaluated.

The chapters that follow apply the Physical Accounting Model to the principal accounting components of the Great Salt Lake Basin and establish the standardized procedures for evaluating Accounting Actions and their measurable outcomes under the Great Salt Lake Accounting Standard.



## 7. Accounting Actions

### 7.1 Purpose

The purpose of this chapter is to establish the standardized approach for evaluating Accounting Actions under the Great Salt Lake Accounting Standard (GSLAS).

Accounting Actions represent the point at which human activities, operational decisions, or natural management interventions enter the Analytical Accounting Framework.

The objective of this chapter is to provide a consistent methodology for determining how Accounting Actions influence the physical accounting system and how those influences may subsequently contribute to Accounting Findings.

Accounting Actions should be evaluated according to their measurable physical consequences rather than their stated objectives, legal authority, institutional origin, or policy intent.

Accordingly, this chapter establishes the analytical principles by which Accounting Actions are represented, evaluated, and incorporated into Physical Accounting.

Unless otherwise stated, evaluation of Accounting Actions should be performed in accordance with the methodology established in Chapters 1 through 6.

### 7.2 Accounting Actions

Accounting Actions represent the point at which measurable changes enter the Physical Accounting system.

An Accounting Action is any action that directly modifies, or is intended to directly modify, one or more Accounting Objects within the Analytical Accounting Framework.

Accounting Actions may arise from human activity, operational decisions, management practices, infrastructure, natural system management, or other identifiable events capable of influencing the physical accounting of water.

The purpose of evaluating Accounting Actions is to determine their measurable physical consequences rather than their stated intent or anticipated outcome.

Accordingly, Physical Accounting evaluates what an Accounting Action changes within the accounting system rather than why the action was undertaken.

Accounting Actions may influence one or more Accounting Objects, including:

- Diversion;
- Return Flow;
- Depletion;
- Available Supply;
- Dedicated Water;
- Bankability;
- Terminal Delivery; or
- Lake Accretion.

Not every Accounting Action produces measurable changes in every Accounting Object.

Similarly, an Accounting Action should not be presumed to produce Lake Accretion solely because it reduces Diversion, reduces Depletion, or is intended to benefit Great Salt Lake.

Each Accounting Action should be evaluated independently using documented Evidence, Accounting Relationships, and Accounting Transformations consistent with the Analytical Accounting Framework.

Where multiple Accounting Actions occur simultaneously, each action should be represented separately whenever practicable so that its individual contribution to the Accounting Findings may be evaluated.

Accounting Actions constitute the initiating events of analytical accounting.

Their significance is determined not by the action itself, but by the measurable physical changes they produce within the accounting system.

### 7.3 Classification of Accounting Actions

Accounting Actions should be classified according to the manner in which they influence the Physical Accounting system.

The purpose of classification is to distinguish among different types of Accounting Actions while preserving a consistent analytical methodology for evaluating their measurable physical consequences.

Classification should be based upon the primary accounting function of the action rather than its institutional origin, funding source, or stated objective.

Depending upon the Accounting Question, Accounting Actions may be classified as:

- Diversion Actions;
- Depletion Actions;
- Conservation Actions;
- Storage Actions;
- Conveyance Actions;
- Operational Actions;
- Measurement Actions;
- Restoration Actions; or
- other analytically distinct categories appropriate to the accounting.

An individual Accounting Action may reasonably belong to more than one classification where it materially influences multiple Accounting Objects.

Classification is intended to improve analytical organization rather than imply a sequence of accounting events.

Accordingly, classification should remain proportional to the complexity of the Accounting Question.

Where classification materially influences the Accounting Findings, the analytical basis for assigning an Accounting Action to a particular classification should be explicitly documented.

Classification does not determine the accounting significance of an Accounting Action.

Rather, it provides a consistent organizational framework through which Accounting Actions may be compared, analyzed, and evaluated using the Analytical Accounting Framework.

Regardless of classification, every Accounting Action shall ultimately be evaluated according to its measurable physical consequences within the accounting system.

### 7.4 Evaluation of Accounting Actions

Every Accounting Action shall be evaluated according to its measurable physical consequences within the Physical Accounting system.

The purpose of evaluating an Accounting Action is to determine how the action influences one or more Accounting Objects and whether those influences are supported by documented Evidence.

Evaluation should proceed sequentially through the Analytical Accounting Framework.

Accordingly, the analysis should determine, where applicable:

- the nature of the Accounting Action;
- the Accounting Objects directly affected;
- the available Evidence supporting the action;
- the relevant Accounting Relationships;
- the required Accounting Transformations;
- the resulting Accounting Findings; and
- any subsequent Analytical Inferences or Policy Considerations.

Evaluation of an Accounting Action should distinguish between direct physical effects and indirect or consequential effects.

Direct effects are those that can be evaluated through documented Evidence and Physical Accounting.

Indirect effects may be evaluated where supported by appropriate Evidence and Accounting Relationships but should remain analytically distinguishable from directly observed physical changes.

The evaluation of an Accounting Action should also distinguish between demonstrated outcomes and anticipated outcomes.

An Accounting Action may reasonably be expected to influence Depletion, Available Supply, Terminal Delivery, or Lake Accretion without those outcomes having yet occurred or been verified.

Accordingly, expected outcomes should not be represented as Accounting Findings unless supported by documented Evidence and completed Physical Accounting.

Where multiple Accounting Actions contribute to a common Accounting Finding, the analysis should identify the contribution of each action whenever practicable.

If individual contributions cannot be reasonably separated, the analysis should document the basis upon which the combined effects are evaluated.

The significance of an Accounting Action is determined by the measurable physical changes it produces within the accounting system rather than by the intent, scale, funding source, or institutional origin of the action.

## 7.5 Accounting Pathways

Accounting Actions influence the Physical Accounting system through one or more Accounting Pathways.

An Accounting Pathway is the sequence of Accounting Objects through which the measurable physical consequences of an Accounting Action are represented within the Analytical Accounting Framework.

The purpose of an Accounting Pathway is to preserve analytical continuity by documenting how changes introduced by an Accounting Action propagate through the physical accounting system.

Depending upon the Accounting Question, an Accounting Pathway may include one or more of the following Accounting Objects:

- Water Provenance;
- Source Attribution;
- Diversion;
- Return Flow;
- Depletion;
- Available Supply;
- Dedicated Water;
- Bankability;
- Terminal Delivery; and
- Lake Accretion.

The Accounting Pathway applicable to a particular Accounting Action shall be determined by the measurable physical consequences of that action rather than by its stated purpose or anticipated benefit.

Not every Accounting Action traverses every Accounting Object.

Some Accounting Actions may terminate following evaluation of Diversion or Depletion.

Others may continue through Dedicated Water, Bankability, and Terminal Delivery before ultimately contributing to measurable Lake Accretion.

Each material transition within an Accounting Pathway should be supported by documented Evidence, appropriate Accounting Relationships, and transparent Accounting Transformations.

Where an Accounting Pathway cannot be demonstrated beyond a particular Accounting Object because of insufficient Evidence, uncertainty, legal limitations, or physical constraints, the analysis should identify the point at which the pathway becomes indeterminate.

Subsequent Accounting Objects should not be presumed solely because earlier components of the pathway have been demonstrated.

Accordingly, each stage of an Accounting Pathway shall be evaluated independently while preserving continuity throughout the analytical accounting process.

Accounting Pathways provide the principal analytical mechanism through which Accounting Actions are translated into measurable Accounting Findings under the Great Salt Lake Accounting Standard.

## 7.6 Accounting Pathway Evaluation

Accounting Pathways shall be evaluated sequentially using the Analytical Accounting Framework established by this standard.

The purpose of Accounting Pathway Evaluation is to determine the extent to which the measurable physical consequences of an Accounting Action have been demonstrated through documented Evidence.

Evaluation shall proceed independently at each stage of the Accounting Pathway.

Evidence supporting one Accounting Object shall not be presumed to establish subsequent Accounting Objects without additional analytical support.

Accordingly, the evaluation should determine, where applicable:

- whether the Accounting Action has been demonstrated;
- whether Water Provenance has been established;
- whether Source Attribution has been performed;
- whether changes in Diversion have been demonstrated;
- whether changes in Return Flow have been evaluated;
- whether changes in Depletion have been quantified;
- whether changes in Available Supply have been established;
- whether Dedicated Water has been demonstrated;
- whether Bankability has been evaluated;
- whether Terminal Delivery has been estimated or verified; and
- whether measurable Lake Accretion has been demonstrated.

Each stage of the Accounting Pathway should remain analytically distinguishable.

Evidence supporting one stage shall not be interpreted as evidence supporting subsequent stages unless the necessary Accounting Relationships and Accounting Transformations have been explicitly demonstrated.

Where an Accounting Pathway terminates because of insufficient Evidence, unresolved uncertainty, legal limitations, or physical constraints, the point of termination should be explicitly identified together with the reason the analysis cannot reliably proceed.

Accordingly, Accounting Findings should be limited to the portion of the Accounting Pathway supported by the available Evidence.

Accounting Pathway Evaluation improves analytical transparency by distinguishing demonstrated physical outcomes from anticipated, inferred, or hypothetical outcomes and thereby strengthens the credibility and reproducibility of the resulting Accounting Findings.

## 7.7 Accounting Pathway Termination

Not every Accounting Pathway extends through every Accounting Object.

An Accounting Pathway terminates when the available Evidence is no longer sufficient to support continuation of Physical Accounting using the Analytical Accounting Framework established by this standard.

The purpose of identifying pathway termination is to distinguish between demonstrated accounting outcomes and outcomes that remain uncertain, hypothetical, or beyond the scope of the available Evidence.

Accounting Pathway termination may occur for a variety of reasons, including:

- insufficient Evidence;
- unresolved Water Provenance;
- incomplete Source Attribution;
- uncertainty regarding Return Flow;
- inability to quantify changes in Depletion;
- unknown changes in Available Supply;
- unresolved legal dedication;
- uncertainty regarding Bankability;
- inability to demonstrate Terminal Delivery; or
- inability to verify measurable Lake Accretion.

Termination of an Accounting Pathway does not imply that subsequent physical outcomes cannot occur.

Rather, it indicates that those outcomes cannot be established through the available Evidence using the methodology prescribed by this standard.

Accordingly, analyses should clearly distinguish between:

- demonstrated Accounting Findings;
- supported Analytical Inferences; and
- unverified or hypothetical outcomes beyond the point of pathway termination.

The point of Accounting Pathway termination should be explicitly identified together with the principal reason the analysis cannot proceed further.

Where additional Evidence becomes available, Accounting Pathways may subsequently be extended through additional Accounting Objects using the methodology established by this standard.

Recognition of Accounting Pathway termination preserves analytical transparency, prevents unsupported accounting claims, and ensures that Accounting Findings remain proportional to the available Evidence.

## 7.8 Verification of Accounting Actions

Accounting Actions should be verified using the best available Evidence before they are incorporated into Accounting Findings.

The purpose of verification is to establish that an Accounting Action has occurred, that its principal characteristics have been accurately represented, and that its measurable physical consequences are supported by documented Evidence.

Verification should be proportional to the Accounting Question and the significance of the Accounting Action.

Depending upon the nature of the analysis, verification may include:

- direct observation;
- field measurement;
- administrative records;
- utility records;
- water-right documentation;
- operational records;
- remote sensing;
- hydrologic monitoring;
- published datasets;
- technical reports; or
- other documented sources of Evidence.

Verification of an Accounting Action should distinguish between:

- verification that the action occurred;
- verification of the magnitude of the action;
- verification of the resulting physical changes; and
- verification of subsequent Accounting Objects within the Accounting Pathway.

Verification of an Accounting Action does not, by itself, verify subsequent changes in Diversion, Depletion, Available Supply, Dedicated Water, Bankability, Terminal Delivery, or Lake Accretion.

Each subsequent Accounting Object should be independently evaluated using the Analytical Accounting Framework established by this standard.

Where direct verification is not practicable, the analytical methodology used to represent the Accounting Action should be explicitly documented together with the supporting Evidence, material assumptions, and resulting uncertainty.

The absence of complete verification should not prevent analytical accounting where sufficient Evidence exists to support transparent Accounting Findings.

However, the level of verification achieved should be clearly communicated so that users of the accounting may appropriately evaluate the resulting conclusions.

Verification strengthens the credibility, reproducibility, and technical independence of analytical accounting by ensuring that Accounting Findings are supported by documented physical evidence rather than assumption or expectation.

## 7.9 Documentation of Accounting Actions

Every Accounting Action incorporated into an analytical accounting process shall be documented in a manner sufficient to support independent review and reproduction.

The purpose of documentation is to preserve transparency throughout the Analytical Accounting Framework by providing a complete record of the Accounting Action, the supporting Evidence, the analytical methodology employed, and the resulting Accounting Findings.

Documentation should be proportional to the complexity and significance of the Accounting Action.

At a minimum, documentation should identify, where applicable:

- the Accounting Action being evaluated;
- the Accounting Question;
- the analytical scope;
- the physical accounting boundary;
- relevant Water Provenance;
- Source Attribution methodology;
- supporting Evidence;
- applicable Accounting Relationships;
- Accounting Transformations performed;
- Accounting Pathway;
- point of Accounting Pathway termination, where applicable;
- resulting Accounting Findings;
- supporting Analytical Inferences; and
- any resulting Policy Considerations.

Documentation should clearly distinguish between:

- observed conditions;
- measured quantities;
- estimated quantities;
- analytical assumptions;
- Accounting Findings;
- Analytical Inferences; and
- Policy Considerations.

Material uncertainty, analytical limitations, and unresolved questions should be explicitly identified together with their potential influence on the resulting Accounting Findings.

Documentation should be sufficiently complete to enable an independent investigator to understand the analytical process, evaluate the supporting Evidence, reproduce the principal Accounting Transformations, and assess the validity of the resulting Accounting Findings.

Accordingly, documentation represents the permanent analytical record of an Accounting Action and provides the basis for subsequent technical review, revision, or future application of the Great Salt Lake Accounting Standard.

## 7.10 Chapter Summary

This chapter establishes the standardized framework for evaluating Accounting Actions under the Great Salt Lake Accounting Standard.

Accounting Actions represent the point at which measurable physical change enters the Analytical Accounting Framework and initiates the analytical accounting process.

The chapter establishes the principles governing:

- identification of Accounting Actions;

- classification of Accounting Actions;
- evaluation of measurable physical consequences;
- development and evaluation of Accounting Pathways;
- recognition of Accounting Pathway termination;
- verification of Accounting Actions; and
- documentation of analytical results.

Together, these components provide a transparent and reproducible methodology for tracing the physical consequences of Accounting Actions through the Physical Accounting system.

The chapter further establishes that the significance of an Accounting Action is determined not by its intent, funding source, legal authority, or anticipated benefit, but by the measurable physical changes it produces within the accounting system as demonstrated through documented Evidence.

Subsequent chapters apply this methodology to the principal Accounting Objects represented within the Great Salt Lake Accounting Standard, beginning with Diversion and the physical movement of water through the Analytical Accounting Framework.





## 8. Climate Accounting

### 8.1 Purpose

The purpose of this chapter is to establish the standardized approach for representing and evaluating Climate within the Great Salt Lake Accounting Standard (GSLAS).

Within GSLAS, Climate represents the primary natural driver of basin hydrology and provides the accounting foundation from which Basin Yield is subsequently determined.

The objective of Climate Accounting is to provide a transparent, reproducible, and physically defensible representation of the climatic conditions influencing the Physical Accounting system during the Accounting Period.

Climate Accounting evaluates the natural hydrologic inputs and atmospheric losses that collectively establish the quantity of water available for subsequent Basin Yield Accounting.

Accordingly, Climate Accounting provides the accounting framework for representing:

- precipitation;
- natural evapotranspiration;
- climatic variability;
- hydrologic regimes;
- system evolution where relevant to climate response; and
- other climatic conditions materially influencing Basin Yield.

Climate Accounting should be based upon documented Evidence, reproducible analytical methods, and transparent assumptions appropriate to the Accounting Question.

Unless otherwise stated, Climate Accounting should be evaluated in accordance with the methodology established in Chapters 1 through 7.

### 8.2 Climate

Climate represents the long-term atmospheric conditions that govern the natural hydrologic behavior of the Physical Accounting system.

Within the Great Salt Lake Accounting Standard, Climate serves as the foundational Accounting Object from which Basin Yield is subsequently determined.

The purpose of Climate Accounting is to characterize the natural hydrologic conditions influencing Basin Yield during the Accounting Period.

Climate should be represented using documented Evidence and appropriate Accounting Units.

Where practicable, Climate Accounting should identify:

- precipitation;
- natural evapotranspiration;
- snowfall and snow water equivalent, where applicable;
- seasonal distribution;
- temporal persistence;
- the applicable hydrologic regime;
- significant climatic departures from historical conditions; and
- other climatic characteristics materially influencing Basin Yield.

Climate represents a natural physical condition rather than an Accounting Action or management outcome.

Accordingly, Climate should be evaluated according to measurable atmospheric and hydrologic conditions rather than anticipated management objectives or policy outcomes.

Equivalent annual precipitation does not, by itself, establish equivalent Basin Yield.

Similarly, equivalent Basin Yield should not be presumed solely because annual precipitation totals appear comparable.

The relationship between Climate and Basin Yield depends upon the interaction of precipitation, natural evapotranspiration, antecedent conditions, snowpack, soil moisture, groundwater conditions, seasonal timing, and other documented hydrologic processes.

Accordingly, Climate shall be evaluated using the physical relationships applicable to the identified hydrologic regime and the demonstrated condition of the basin during the Accounting Period.

Climate represents the natural accounting foundation from which Basin Yield is subsequently determined.

Accordingly, accurate Climate Accounting provides the analytical basis for subsequent Basin Yield Accounting and all downstream Physical Accounting within the Great Salt Lake Accounting Standard.

### 8.3 Classification of Climate

Climate should be classified according to the physical characteristics that materially influence Basin Yield within the Physical Accounting system.

The purpose of Climate classification is to improve analytical consistency by organizing climatic conditions according to their hydrologic accounting significance rather than by meteorological description alone.

Classification should remain proportional to the Accounting Question and should identify those climatic characteristics that materially influence subsequent Basin Yield Accounting.

Depending upon the nature of the analysis, Climate may be classified according to:

- precipitation characteristics;
- natural evapotranspiration;
- snow accumulation and snow water equivalent;
- seasonal distribution;
- hydrologic regime;
- temporal persistence;
- geographic extent;
- Accounting Period; or
- other analytically relevant climatic characteristics.

Where material to the Accounting Question, Climate should distinguish among conditions associated with:

- wet hydrologic regimes;
- dry hydrologic regimes;
- transitional periods between regimes;
- persistent climatic anomalies;
- extreme climatic events; or
- other documented climatic conditions.

Equivalent annual precipitation totals should not be presumed to represent equivalent climatic conditions.

Classification should therefore recognize that differences in seasonal timing, snowpack accumulation, evapotranspiration, antecedent soil moisture, groundwater conditions, storm intensity, and climatic persistence may produce materially different Basin Yield.

Similarly, climatic conditions observed during one Accounting Period should not be presumed representative of subsequent Accounting Periods solely because annual precipitation totals appear comparable.

Accordingly, Climate classification should emphasize those characteristics that materially influence Basin Yield rather than relying upon precipitation totals alone.

Where Climate classification materially influences subsequent Accounting Findings, the analytical basis for the selected classification should be explicitly documented.

### 8.4 Evaluation of Climate

Climate shall be evaluated according to the measurable atmospheric and hydrologic conditions influencing Basin Yield during the Accounting Period.

The purpose of Climate evaluation is to characterize the natural conditions under which Basin Yield is produced and to establish the climatic foundation for subsequent Physical Accounting.

Evaluation should begin with documented climatic observations and proceed through the Accounting Relationships linking Climate to Basin Yield.

Where applicable, the analysis should determine:

- precipitation;
- natural evapotranspiration;
- snowfall and snow water equivalent;
- seasonal distribution;
- antecedent hydrologic conditions;
- temporal persistence;
- the applicable hydrologic regime;
- evidence of System Evolution, where material;
- supporting climatic Evidence; and
- resulting implications for Basin Yield.

Evaluation of Climate should distinguish between observed climatic conditions and their accounting significance.

Equivalent annual precipitation does not, by itself, establish equivalent Basin Yield.

Similarly, equivalent Basin Yield should not be presumed solely because annual precipitation totals appear comparable.

The accounting significance of Climate depends upon the interaction of precipitation, natural evapotranspiration, snowpack, antecedent soil moisture, groundwater conditions, seasonal timing, and other documented hydrologic processes operating within the identified hydrologic regime.

Where material to the Accounting Question, Climate evaluation should consider whether observed hydrologic behavior remains consistent with historical basin response or whether evidence suggests System Evolution has altered the relationship between Climate and Basin Yield.

Examples of System Evolution may include changes in land use, urban development, agricultural conversion, infrastructure, drainage systems, reservoir operations, vegetation, or other basin characteristics that materially influence hydrologic response.

Accordingly, Climate shall be evaluated using the Accounting Relationships applicable to the identified hydrologic regime and the demonstrated condition of the basin during the Accounting Period.

Evaluation of Climate provides the analytical foundation for subsequent Basin Yield Accounting by establishing the natural hydrologic conditions under which Basin Yield is produced.

## 8.5 Climate Accounting Relationships

Climate shall be evaluated within the context of its Accounting Relationships to Basin Yield and subsequent Physical Accounting.

The purpose of Climate Accounting Relationships is to establish how measurable climatic conditions influence the production of Basin Yield while preserving analytical transparency throughout the Physical Accounting system.

Climate represents the natural hydrologic conditions under which Basin Yield is produced.

Accordingly, the principal Accounting Relationship established in this chapter is the relationship between Climate and Basin Yield.

Subsequent Accounting Relationships proceed through Basin Yield into the remainder of the Physical Accounting system.

Climate therefore influences downstream Accounting Objects through successive Accounting Relationships rather than independently.

These downstream Accounting Objects may include:

- Available Supply;
- Diversion;
- Return Flow;
- Depletion;
- Terminal Delivery; and
- Terminal Balance.

The existence of a Climate Accounting Relationship does not imply that equivalent climatic conditions will produce equivalent Basin Yield or equivalent downstream Accounting Objects.

Rather, each Accounting Relationship shall be evaluated independently using documented Evidence, Accounting Relationships, and Accounting Transformations.

Equivalent precipitation totals do not, by themselves, establish equivalent Basin Yield.

Similarly, equivalent Basin Yield does not, by itself, establish equivalent Available Supply, Diversions, Return Flow, Depletion, Terminal Delivery, or Terminal Balance.

Additional Accounting Relationships are required before each subsequent Accounting Object can be demonstrated.

Climate Accounting Relationships are influenced by the identified Hydrologic Regime and the demonstrated condition of the basin.

Accordingly, comparable climatic conditions occurring under materially different Hydrologic Regimes should not be presumed to produce equivalent Basin Yield.

Likewise, where evidence indicates System Evolution has materially altered basin response, historical Climate Accounting Relationships should not be presumed to remain unchanged.

Each stage of the Physical Accounting system shall therefore be evaluated using the Accounting Relationships applicable to the identified Hydrologic Regime and the demonstrated condition of the basin during the Accounting Period.

Accordingly, no individual Accounting Relationship should be presumed solely because a preceding relationship has been demonstrated.

Each stage of the Physical Accounting system requires independent analytical support.

Where multiple Accounting Relationships influence the same Accounting Finding, those relationships should be explicitly documented together with any material assumptions and resulting uncertainty.

Evaluation of Climate Accounting Relationships improves analytical transparency by demonstrating how natural climatic conditions influence Basin Yield while preventing unsupported conclusions regarding subsequent Physical Accounting.

## 8.6 Hydrologic Regimes

Hydrologic Regimes represent persistent climatic and hydrologic conditions that produce materially different Accounting Relationships within the Physical Accounting system.

The purpose of identifying Hydrologic Regimes is to improve the accuracy and reproducibility of Climate Accounting by recognizing that basin response may differ under sustained wet, dry, or transitional conditions.

Hydrologic Regimes should be identified using documented Evidence and measurable physical characteristics rather than individual climatic events or isolated Accounting Periods.

A Hydrologic Regime should not be established solely because of a single wet year, dry year, flood, drought, or other short-term climatic anomaly.

Rather, a Hydrologic Regime represents a sustained pattern of climatic and hydrologic behavior that materially influences Basin Yield and subsequent Physical Accounting.

Where material to the Accounting Question, Hydrologic Regimes should consider:

- long-term precipitation characteristics;
- natural evapotranspiration;
- snowpack persistence;
- antecedent soil moisture;
- groundwater conditions;
- runoff response;
- climatic persistence;
- observed Basin Yield; and
- other documented hydrologic characteristics.

Equivalent climatic observations occurring under different Hydrologic Regimes should not be presumed to produce equivalent Basin Yield or equivalent downstream Accounting Objects.

Similarly, a temporary return to average precipitation should not, by itself, be presumed to represent a return to a previous Hydrologic Regime.

The transition between Hydrologic Regimes should be determined using documented Evidence demonstrating sustained changes in basin behavior rather than isolated climatic observations.

Where evidence indicates that Accounting Relationships differ materially between identified Hydrologic Regimes, those relationships should be independently evaluated and documented.

Recognition of Hydrologic Regimes improves Climate Accounting by ensuring that Physical Accounting reflects the demonstrated behavior of the basin rather than assuming constant hydrologic response through time.

## 8.7 System Evolution

System Evolution represents the long-term physical modification of the basin that may materially alter the Accounting Relationships between Climate and Basin Yield.

The purpose of evaluating System Evolution is to determine whether changes in the physical characteristics of the basin have altered its hydrologic response sufficiently to warrant modification of previously established Accounting Relationships.

System Evolution should be evaluated using documented Evidence demonstrating sustained physical change within the Physical Accounting system.

System Evolution should not be presumed solely because time has elapsed between Accounting Periods.

Rather, System Evolution should be evaluated only where documented Evidence indicates that physical changes to the basin may materially influence hydrologic response.

Where material to the Accounting Question, System Evolution may consider changes including:

- land use;
- urban development;
- agricultural conversion;
- reservoir construction or operational changes;
- canals and conveyance infrastructure;
- highways and transportation corridors;
- stormwater management systems;
- drainage modifications;
- vegetation and wetland changes;
- groundwater conditions; or
- other documented physical modifications affecting basin hydrology.

Evidence of System Evolution should be evaluated according to its demonstrated influence on Accounting Relationships rather than the mere existence of physical change.

Accordingly, physical modifications should not be presumed to alter Basin Yield unless documented Evidence demonstrates a material change in basin response.

Similarly, historical Accounting Relationships should not be presumed to remain valid where documented Evidence indicates that System Evolution has materially altered the relationship between Climate and Basin Yield.

Where System Evolution materially influences Physical Accounting, the revised Accounting Relationships should be explicitly documented together with the supporting Evidence, applicable Hydrologic Regime, analytical methodology, and resulting uncertainty.

Recognition of System Evolution improves Climate Accounting by ensuring that the Physical Accounting system reflects the demonstrated condition of the basin rather than assuming that historical hydrologic behavior remains unchanged indefinitely.

## 8.8 Verification of Climate

Climate incorporated into Physical Accounting should be verified using the best available Evidence.

The purpose of verification is to establish that the climatic conditions represented in Climate Accounting accurately characterize the natural hydrologic conditions influencing Basin Yield during the Accounting Period.

Verification should be proportional to the Accounting Question and the significance of the Climate Accounting within the Physical Accounting system.

Depending upon the nature of the analysis, Climate verification may include:

- precipitation records;
- temperature records;
- snowpack and snow water equivalent observations;
- evapotranspiration estimates;
- streamflow observations supporting climatic interpretation;
- groundwater observations;
- remote sensing;
- meteorological monitoring;
- climatological datasets;
- field observations; or
- other documented sources of Evidence.

Verification should distinguish between:

- observed climatic conditions;
- interpreted climatic conditions;
- the identified Hydrologic Regime;
- evidence of System Evolution, where applicable;
- supporting climatic Evidence;
- analytical assumptions; and
- resulting implications for Basin Yield.

Verification of Climate does not, by itself, establish Basin Yield.

Similarly, verification of climatic observations does not, by itself, establish the Accounting Relationships governing Basin Yield under the identified Hydrologic Regime.

Each subsequent stage of the Physical Accounting system shall be independently evaluated using the methodology established by this standard.

Where Climate Accounting depends upon interpreted Hydrologic Regimes, evidence of System Evolution, modeled evapotranspiration, or other analytical assumptions, those assumptions should be explicitly documented together with the supporting Evidence and resulting uncertainty.

The level of verification achieved should be communicated transparently so that users of the accounting may appropriately evaluate the reliability and accounting significance of the resulting Climate Accounting.

Verification strengthens Climate Accounting by ensuring that subsequent Basin Yield Accounting is supported by documented climatic evidence rather than assumption or expectation.

## 8.9 Chapter Summary

This chapter establishes the standardized framework for representing and evaluating Climate under the Great Salt Lake Accounting Standard.

Climate represents the natural hydrologic conditions from which Basin Yield is subsequently determined and serves as the foundational Accounting Object within the Physical Accounting system.

The chapter establishes the principles governing:

- representation of Climate;
- classification of Climate;
- evaluation of climatic conditions;
- evaluation of Climate Accounting Relationships;
- identification of Hydrologic Regimes;
- evaluation of System Evolution;
- verification of Climate; and
- documentation of Climate Accounting.

Together, these components provide a transparent and reproducible methodology for incorporating Climate into the Physical Accounting system while preserving Accounting Continuity throughout the basin water ledger.

The chapter further establishes that equivalent climatic observations should not be presumed to produce equivalent Basin Yield solely because annual precipitation or other individual climatic measurements appear similar.

Similarly, temporary climatic anomalies should not be presumed to represent transitions between Hydrologic Regimes, and historical Accounting Relationships should not be presumed to remain valid where documented Evidence indicates that System Evolution has materially altered basin response.

Rather, the accounting significance of Climate depends upon documented Evidence, demonstrated Accounting Relationships, the identified Hydrologic Regime, consideration of System Evolution where applicable, and transparent analytical methodology.

Subsequent chapters continue the basin water ledger by establishing the standardized approach for evaluating Basin Yield and its role within the Physical Accounting system.





## 9. Basin Yield Accounting

### 9.1 Purpose

The purpose of this chapter is to establish the standardized approach for representing and evaluating Basin Yield under the Great Salt Lake Accounting Standard (GSLAS).

Within GSLAS, Basin Yield represents the quantity of water naturally produced by the basin during the Accounting Period as determined through Climate Accounting.

The objective of Basin Yield Accounting is to provide a transparent, reproducible, and physically defensible representation of the natural water produced by the basin before consideration of Imports, Exports, or subsequent human and environmental Accounting Actions.

Basin Yield Accounting serves as the foundational accounting calculation within the basin water ledger and provides the basis for subsequent determination of Available Supply.

Accordingly, Basin Yield Accounting establishes the accounting framework for:

- representing Basin Yield;
- evaluating Basin Yield;
- documenting Accounting Relationships influencing Basin Yield;
- verifying Basin Yield; and
- supporting subsequent Physical Accounting.

Basin Yield Accounting should be based upon documented Evidence, transparent analytical methodology, and reproducible Accounting Transformations appropriate to the Accounting Question.

Unless otherwise stated, Basin Yield Accounting should be evaluated in accordance with the methodology established in Chapters 1 through 8.

### 9.2 Basin Yield

Basin Yield represents the quantity of water naturally produced by the basin during the Accounting Period as determined through Climate Accounting.

Within the Great Salt Lake Accounting Standard, Basin Yield serves as the foundational accounting quantity from which Available Supply is subsequently determined.

The purpose of Basin Yield Accounting is to determine the quantity of naturally produced water available for subsequent accounting within the basin water ledger.

Basin Yield shall be determined using documented Climate Accounting and the accounting methodology adopted for the basin.

Basin Yield may consist of one or more naturally occurring hydrologic components, including:

- surface runoff;
- groundwater recharge;
- baseflow;
- spring discharge; or
- other documented natural sources of Basin Yield appropriate to the accounting methodology adopted for the basin.

The selection and representation of Basin Yield components shall be consistent with the adopted accounting methodology and shall be explicitly documented.

Where practicable, Basin Yield Accounting should identify:

- the Accounting Period;
- the contributing basin;
- the applicable Climate Accounting;

- the documented components of Basin Yield;
- the resulting Basin Yield;
- the applicable Hydrologic Regime;
- evidence of System Evolution, where material;
- supporting Evidence; and
- resulting implications for subsequent Physical Accounting.

Basin Yield represents a natural accounting quantity rather than a management outcome, Accounting Action, or policy objective.

Accordingly, Basin Yield should be evaluated according to documented climatic and hydrologic conditions rather than anticipated operational decisions or management objectives.

Equivalent climatic observations do not, by themselves, establish equivalent Basin Yield.

Similarly, equivalent Basin Yield should not be presumed to produce equivalent Available Supply.

The accounting significance of Basin Yield depends upon the documented Climate Accounting, the adopted accounting methodology, the identified Hydrologic Regime, demonstrated Accounting Relationships, and the physical condition of the basin during the Accounting Period.

Accordingly, Basin Yield shall be evaluated using the Accounting Relationships established through Climate Accounting together with the documented hydrologic characteristics of the basin and the adopted accounting methodology.

Basin Yield represents the first accounting quantity within the basin water ledger and provides the analytical foundation for subsequent Imports and Exports Accounting and determination of Available Supply.

### 9.3 Classification of Basin Yield

Basin Yield should be classified according to the physical characteristics that materially influence subsequent Physical Accounting within the basin water ledger.

The purpose of Basin Yield classification is to improve analytical consistency by organizing Basin Yield according to the hydrologic conditions under which it is produced rather than by quantity alone.

Classification should remain proportional to the Accounting Question and should identify those characteristics that materially influence subsequent Imports and Exports Accounting and Available Supply.

Depending upon the nature of the analysis, Basin Yield may be classified according to:

- contributing basin;
- Accounting Period;
- quantity;
- seasonal distribution;
- Hydrologic Regime;
- climatic conditions;
- geographic extent;
- System Evolution, where material; or
- other analytically relevant hydrologic characteristics.

Where material to the Accounting Question, Basin Yield should distinguish among yield associated with:

- persistent wet Hydrologic Regimes;
- persistent dry Hydrologic Regimes;
- transitional Hydrologic Regimes;
- snowmelt-dominated systems;
- rainfall-dominated systems; or
- other documented hydrologic conditions.

Equivalent quantities of Basin Yield should not be presumed to possess equivalent accounting significance.

Classification should therefore recognize that identical quantities of Basin Yield may produce materially different subsequent Accounting Relationships because of differences in timing, geographic distribution, Hydrologic Regime, System Evolution, or other documented basin characteristics.

Similarly, Basin Yield observed during one Accounting Period should not be presumed representative of future Accounting Periods solely because comparable quantities have previously been observed.

Accordingly, Basin Yield classification should emphasize the hydrologic characteristics governing subsequent Physical Accounting rather than numerical quantity alone.

Where Basin Yield classification materially influences subsequent Accounting Findings, the analytical basis for the selected classification should be explicitly documented.

## 9.4 Evaluation of Basin Yield

Basin Yield shall be evaluated according to the documented climatic and hydrologic conditions influencing natural water production within the basin during the Accounting Period.

The purpose of Basin Yield evaluation is to determine the quantity of naturally produced water entering the basin water ledger and to establish the accounting foundation for subsequent Imports and Exports Accounting.

Evaluation should begin with documented Climate Accounting and proceed through the Accounting Relationships governing Basin Yield.

Where applicable, the analysis should determine:

- the contributing basin;
- the Accounting Period;
- documented Climate Accounting;
- precipitation;
- natural evapotranspiration;
- the resulting Basin Yield;
- the applicable Hydrologic Regime;
- evidence of System Evolution, where material;
- supporting Evidence;
- Accounting Relationships influencing Basin Yield; and
- resulting implications for subsequent Physical Accounting.

Evaluation of Basin Yield should distinguish between climatic observations and the resulting accounting quantity.

Equivalent climatic observations do not, by themselves, establish equivalent Basin Yield.

Similarly, equivalent quantities of Basin Yield should not be presumed to produce equivalent Available Supply.

The accounting significance of Basin Yield depends upon the documented Climate Accounting, demonstrated Accounting Relationships, the identified Hydrologic Regime, evidence of System Evolution where applicable, and the demonstrated physical condition of the basin during the Accounting Period.

Where material to the Accounting Question, Basin Yield evaluation should consider whether observed hydrologic behavior remains consistent with previously documented Accounting Relationships or whether documented Evidence indicates that revised Accounting Relationships are warranted.

Accordingly, Basin Yield shall be evaluated using the Accounting Relationships established through Climate Accounting together with documented basin conditions applicable to the identified Hydrologic Regime.

Evaluation of Basin Yield provides the analytical foundation for subsequent Imports and Exports Accounting and determination of Available Supply within the basin water ledger.

## 9.5 Basin Yield Accounting Relationships

Basin Yield shall be evaluated within the context of its Accounting Relationships to subsequent components of the basin water ledger.

The purpose of Basin Yield Accounting Relationships is to establish how naturally produced water progresses through the basin water ledger while preserving analytical transparency throughout subsequent Physical Accounting.

Basin Yield represents the first accounting quantity produced through Climate Accounting.

Accordingly, the principal Accounting Relationship established in this chapter is the relationship between Basin Yield and Imports and Exports.

Following adjustment for documented Imports and Exports, Basin Yield contributes to the determination of Available Supply.

Subsequent Accounting Relationships then proceed through the remaining components of the basin water ledger.

These downstream accounting quantities may include:

- Available Supply;
- Diversion;
- Return Flow;
- Depletion;
- Terminal Delivery; and
- Terminal Balance.

The existence of a Basin Yield Accounting Relationship does not imply that equivalent quantities of Basin Yield will produce equivalent downstream accounting quantities.

Rather, each Accounting Relationship shall be evaluated independently using documented Evidence, Accounting Relationships, and Accounting Transformations.

Equivalent quantities of Basin Yield do not, by themselves, establish equivalent Available Supply.

Similarly, equivalent Available Supply does not, by itself, establish equivalent Diversions, Return Flow, Depletion, Terminal Delivery, or Terminal Balance.

Additional Accounting Relationships are required before each subsequent accounting quantity can be demonstrated.

Basin Yield Accounting Relationships are influenced by the identified Hydrologic Regime, documented Climate Accounting, and the demonstrated physical condition of the basin.

Accordingly, comparable quantities of Basin Yield occurring under materially different Hydrologic Regimes should not be presumed to produce equivalent downstream accounting quantities.

Likewise, where documented Evidence indicates that System Evolution has materially altered basin response, previously established Basin Yield Accounting Relationships should not be presumed to remain unchanged.

Each stage of the basin water ledger shall therefore be evaluated using the Accounting Relationships applicable to the identified Hydrologic Regime and the demonstrated condition of the basin during the Accounting Period.

Accordingly, no subsequent accounting quantity should be presumed solely because a preceding accounting quantity has been demonstrated.

Each component of the basin water ledger requires independent analytical support.

Where multiple Accounting Relationships influence the same Accounting Finding, those relationships should be explicitly documented together with any material assumptions and resulting uncertainty.

Evaluation of Basin Yield Accounting Relationships improves analytical transparency by demonstrating how naturally produced water progresses through the basin water ledger while preventing unsupported conclusions regarding subsequent accounting quantities.

## 9.6 Basin Yield Pathways

Basin Yield shall be evaluated according to the basin water ledger through which naturally produced water influences subsequent accounting quantities.

The purpose of evaluating Basin Yield Pathways is to determine how Basin Yield contributes to subsequent components of the Physical Accounting system while preserving analytical transparency.

A demonstrated Basin Yield establishes only the quantity of naturally produced water within the basin during the Accounting Period.

It does not, by itself, establish Imports and Exports, Available Supply, Diversions, Return Flow, Depletion, Terminal Delivery, or Terminal Balance.

Accordingly, the basin water ledger shall be evaluated sequentially using documented Evidence, Accounting Relationships, and Accounting Transformations.

Depending upon the Accounting Question, Basin Yield may:

- be adjusted by documented Imports and Exports;
- establish Available Supply;
- support subsequent Diversions;

- influence Return Flow;
- influence Depletion;
- contribute to Terminal Delivery; or
- contribute to Terminal Balance.

The pathway followed by Basin Yield may differ under different Hydrologic Regimes.

Similarly, equivalent quantities of Basin Yield occurring under different climatic conditions or basin characteristics may follow materially different accounting pathways.

Documented Climate Accounting, Hydrologic Regimes, System Evolution, seasonal distribution, ground-water interaction, and other demonstrated hydrologic characteristics may each materially influence the subsequent accounting pathway.

Accordingly, each subsequent component of the basin water ledger shall be evaluated independently using the Accounting Relationships applicable to the identified Hydrologic Regime and the demonstrated condition of the basin during the Accounting Period.

The accounting significance of Basin Yield increases only as subsequent accounting quantities are independently demonstrated through documented Evidence.

Where the accounting pathway cannot be demonstrated beyond a particular accounting quantity, the point of pathway termination should be explicitly identified together with the principal source of remaining uncertainty.

Recognition of Basin Yield Pathways preserves analytical transparency by distinguishing the production of natural water within the basin from the progressively greater accounting significance associated with subsequent components of the basin water ledger.

## 9.7 Verification of Basin Yield

Basin Yield incorporated into the basin water ledger should be verified using the best available Evidence.

The purpose of verification is to establish that Basin Yield accurately represents the quantity of naturally produced water within the basin during the Accounting Period.

Verification should be proportional to the Accounting Question and the significance of Basin Yield within the Physical Accounting system.

Depending upon the nature of the analysis, Basin Yield verification may include:

- documented Climate Accounting;
- precipitation records;
- natural evapotranspiration estimates;
- streamflow observations;
- hydrologic monitoring;
- groundwater observations;
- remote sensing;
- basin water balance analyses;
- field observations; or
- other documented sources of Evidence.

Verification should distinguish between:

- documented Climate Accounting;
- measured Basin Yield;
- estimated Basin Yield;
- the identified Hydrologic Regime;
- evidence of System Evolution, where applicable;
- supporting Evidence;
- analytical assumptions; and
- resulting implications for subsequent Physical Accounting.

Verification of Basin Yield does not, by itself, establish Imports and Exports, Available Supply, Diversions, Return Flow, Depletion, Terminal Delivery, or Terminal Balance.

Similarly, verification of Basin Yield does not, by itself, establish the Accounting Relationships governing subsequent components of the basin water ledger.

Each subsequent accounting quantity shall be independently evaluated using the methodology established by this standard.

Where Basin Yield Accounting depends upon interpreted Hydrologic Regimes, evidence of System Evolution, modeled hydrologic relationships, or other analytical assumptions, those assumptions should be explicitly documented together with the supporting Evidence and resulting uncertainty.

The level of verification achieved should be communicated transparently so that users of the accounting may appropriately evaluate the reliability and accounting significance of the resulting Basin Yield.

Verification strengthens Basin Yield Accounting by ensuring that subsequent components of the basin water ledger are supported by documented hydrologic evidence rather than assumption or expectation.

## 9.8 Documentation of Basin Yield

Every Basin Yield incorporated into the basin water ledger shall be documented in a manner sufficient to support independent review, reproduction, and subsequent Physical Accounting.

The purpose of documentation is to preserve a transparent accounting record of Basin Yield, the supporting Evidence, the analytical methodology employed, and the resulting Accounting Findings.

Documentation should be proportional to the significance of Basin Yield and the complexity of the Accounting Question.

At a minimum, documentation should identify, where applicable:

- the contributing basin;
- the Accounting Period;
- documented Climate Accounting;
- precipitation;
- natural evapotranspiration;
- the resulting Basin Yield;
- the identified Hydrologic Regime;
- evidence of System Evolution, where material;
- supporting Evidence;
- applicable Accounting Relationships;
- Accounting Transformations performed;
- the resulting accounting pathway;
- resulting Accounting Findings;
- supporting Analytical Inferences; and
- any resulting Policy Considerations.

Documentation should clearly distinguish between:

- observed climatic conditions;
- measured Basin Yield;
- estimated Basin Yield;
- analytical assumptions;
- Accounting Findings;
- Analytical Inferences; and
- Policy Considerations.

Documentation should also distinguish between documented Basin Yield and the subsequent accounting significance assigned to that Basin Yield within the basin water ledger.

The existence of Basin Yield should not be represented as evidence of Imports and Exports, Available Supply, Diversions, Return Flow, Depletion, Terminal Delivery, or Terminal Balance unless those subsequent accounting quantities have been independently demonstrated through the Physical Accounting framework.

Material uncertainty, analytical limitations, unresolved questions, and alternative interpretations affecting Basin Yield should be explicitly documented together with their potential influence upon subsequent components of the basin water ledger.

Documentation should be sufficiently complete to enable an independent investigator to understand how Basin Yield was determined, reproduce the principal analytical procedures, evaluate the resulting Accounting Findings, and understand the basis upon which subsequent accounting quantities were or were not demonstrated.

Accordingly, Basin Yield documentation provides the permanent analytical record through which Basin Yield becomes a transparent, reproducible, and independently reviewable component of the Great Salt Lake Accounting Standard.

## 9.9 Chapter Summary

This chapter establishes the standardized framework for representing and evaluating Basin Yield under the Great Salt Lake Accounting Standard.

Basin Yield represents the quantity of water naturally produced by the basin during the Accounting Period and serves as the foundational accounting quantity within the basin water ledger.

The chapter establishes the principles governing:

- representation of Basin Yield;
- classification of Basin Yield;
- evaluation of Basin Yield;
- evaluation of Basin Yield Accounting Relationships;
- evaluation of Basin Yield Pathways;
- verification of Basin Yield; and
- documentation of Basin Yield.

Together, these components provide a transparent and reproducible methodology for incorporating Basin Yield into the basin water ledger while preserving Accounting Continuity throughout the Physical Accounting system.

The chapter further establishes that Basin Yield is determined through documented Climate Accounting but does not, by itself, establish Imports and Exports, Available Supply, Diversions, Return Flow, Depletion, Terminal Delivery, or Terminal Balance.

Similarly, equivalent quantities of Basin Yield should not be presumed to possess equivalent accounting significance solely because comparable quantities have been observed.

Rather, the accounting significance of Basin Yield depends upon documented Climate Accounting, demonstrated Accounting Relationships, the identified Hydrologic Regime, consideration of System Evolution where applicable, and transparent analytical methodology.

Subsequent chapters continue the basin water ledger by establishing the standardized approach for evaluating Imports and Exports and their role in determining Available Supply.





# 10. Imports and Exports Accounting

## 10.1 Purpose

The purpose of this chapter is to establish the standardized approach for representing and evaluating Imports and Exports within the Great Salt Lake Accounting Standard (GSLAS).

Within GSLAS, Imports and Exports represent physical transfers of water across the accounting boundary of the basin and provide the accounting adjustment necessary to determine Available Supply from Basin Yield.

The objective of Imports and Exports Accounting is to provide a transparent, reproducible, and physically defensible representation of water entering or leaving the basin independent of natural Basin Yield.

Imports and Exports Accounting serves as the accounting bridge between Basin Yield and Available Supply within the basin water ledger.

Accordingly, Imports and Exports Accounting establishes the framework for:

- representing Imports and Exports;
- evaluating physical transfers across the basin boundary;
- documenting Accounting Relationships influencing Available Supply;
- verifying Imports and Exports; and
- supporting subsequent Physical Accounting.

Imports and Exports Accounting should be based upon documented Evidence, transparent analytical methodology, and reproducible Accounting Transformations appropriate to the Accounting Question.

Unless otherwise stated, Imports and Exports Accounting should be evaluated in accordance with the methodology established in Chapters 1 through 9.

## 10.2 Imports and Exports

Imports and Exports represent the physical transfer of water across the accounting boundary of the basin during the Accounting Period.

Within the Great Salt Lake Accounting Standard, Imports and Exports serve as the accounting adjustment between Basin Yield and Available Supply within the basin water ledger.

The purpose of Imports and Exports Accounting is to determine the quantity of water physically entering or leaving the basin independently of natural Basin Yield.

Imports and Exports should be represented using documented Evidence and appropriate Accounting Units.

Where practicable, Imports and Exports Accounting should identify:

- the Accounting Period;
- the accounting boundary;
- the originating basin, where applicable;
- the receiving basin, where applicable;
- imported water;
- exported water;
- the resulting net Imports or Exports;
- supporting Evidence; and
- resulting implications for Available Supply.

Imports and Exports represent physical accounting quantities rather than natural hydrologic production, Accounting Actions occurring within the basin, or management objectives.

Accordingly, Imports and Exports should be evaluated according to documented physical movement of water across the accounting boundary.

Equivalent quantities of Basin Yield do not, by themselves, establish equivalent Imports and Exports.

Similarly, equivalent Imports and Exports should not be presumed to produce equivalent Available Supply without consideration of the complete basin water ledger.

The accounting significance of Imports and Exports depends upon the documented physical transfer of water across the accounting boundary together with the applicable Accounting Relationships established within the basin water ledger.

Accordingly, Imports and Exports shall be evaluated using documented physical evidence demonstrating movement of water into or out of the accounting boundary during the Accounting Period.

Imports and Exports provide the accounting adjustment by which Basin Yield is converted to Available Supply and therefore establish the analytical foundation for subsequent Available Supply Accounting.

### 10.3 Classification of Imports and Exports

Imports and Exports should be classified according to the physical characteristics that materially influence Available Supply within the basin water ledger.

The purpose of Imports and Exports classification is to improve analytical consistency by organizing physical transfers of water across the accounting boundary according to their accounting significance rather than by quantity alone.

Classification should remain proportional to the Accounting Question and should identify those characteristics that materially influence subsequent Available Supply Accounting.

Depending upon the nature of the analysis, Imports and Exports may be classified according to:

- imported water;
- exported water;
- originating basin;
- receiving basin;
- accounting boundary;
- timing;
- quantity;
- method of transfer; or
- other analytically relevant physical characteristics.

Where material to the Accounting Question, Imports and Exports should distinguish among transfers resulting from:

- interbasin conveyance;
- interstate delivery;
- imported municipal supplies;
- exported municipal supplies;
- reservoir operations;
- engineered conveyance systems; or
- other documented physical transfers across the accounting boundary.

Equivalent quantities of Imports and Exports should not be presumed to possess equivalent accounting significance.

Classification should therefore recognize that identical quantities of transferred water may produce materially different subsequent Accounting Relationships because of differences in timing, destination, originating source, physical accessibility, accounting boundary, or other documented basin characteristics.

Similarly, Imports and Exports observed during one Accounting Period should not be presumed representative of future Accounting Periods solely because comparable quantities have previously occurred.

Accordingly, Imports and Exports classification should emphasize the physical characteristics governing subsequent Available Supply rather than numerical quantity alone.

Where Imports and Exports classification materially influences subsequent Accounting Findings, the analytical basis for the selected classification should be explicitly documented.

## 10.4 Evaluation of Imports and Exports

Imports and Exports shall be evaluated according to the documented physical transfer of water across the accounting boundary during the Accounting Period.

The purpose of Imports and Exports evaluation is to determine the quantity of water entering or leaving the basin independent of natural Basin Yield and to establish the accounting adjustment necessary to determine Available Supply.

Evaluation should begin with documented physical transfers across the accounting boundary and proceed through the Accounting Relationships governing Available Supply.

Where applicable, the analysis should determine:

- the Accounting Period;
- the accounting boundary;
- the originating basin;
- the receiving basin;
- imported water;
- exported water;
- the resulting net Imports or Exports;
- supporting Evidence;
- Accounting Relationships influencing Available Supply; and
- resulting implications for subsequent Physical Accounting.

Evaluation of Imports and Exports should distinguish between the physical movement of water across the accounting boundary and the resulting accounting adjustment within the basin water ledger.

Equivalent quantities of Basin Yield do not, by themselves, establish equivalent Imports and Exports.

Similarly, equivalent quantities of Imports and Exports should not be presumed to produce equivalent Available Supply without consideration of the complete basin water ledger.

The accounting significance of Imports and Exports depends upon documented physical transfers together with the applicable Accounting Relationships governing Available Supply.

Where material to the Accounting Question, Imports and Exports evaluation should consider whether changes in conveyance infrastructure, reservoir operations, accounting boundaries, or other documented physical conditions materially influence the accounting treatment of transferred water.

Accordingly, Imports and Exports shall be evaluated using documented physical evidence together with the Accounting Relationships applicable to the demonstrated condition of the basin during the Accounting Period.

Evaluation of Imports and Exports provides the analytical foundation for subsequent Available Supply Accounting by establishing the physical accounting adjustment between Basin Yield and Available Supply.

## 10.5 Imports and Exports Accounting Relationships

Imports and Exports shall be evaluated within the context of their Accounting Relationships to subsequent components of the basin water ledger.

The purpose of Imports and Exports Accounting Relationships is to establish how physical transfers of water across the accounting boundary influence Available Supply while preserving analytical transparency throughout the basin water ledger.

Imports and Exports represent the accounting adjustment between Basin Yield and Available Supply.

Accordingly, the principal Accounting Relationship established in this chapter is the relationship between Imports and Exports and Available Supply.

Following determination of Available Supply, subsequent Accounting Relationships proceed through the remaining components of the basin water ledger.

These downstream accounting quantities may include:

- Diversion;
- Return Flow;
- Depletion;
- Terminal Delivery; and

- Terminal Balance.

The existence of an Imports and Exports Accounting Relationship does not imply that equivalent physical transfers will produce equivalent downstream accounting quantities.

Rather, each Accounting Relationship shall be evaluated independently using documented Evidence, Accounting Relationships, and Accounting Transformations.

Equivalent quantities of Imports and Exports do not, by themselves, establish equivalent Available Supply.

Similarly, equivalent Available Supply does not, by itself, establish equivalent Diversions, Return Flow, Depletion, Terminal Delivery, or Terminal Balance.

Additional Accounting Relationships are required before each subsequent accounting quantity can be demonstrated.

Imports and Exports Accounting Relationships are influenced by the demonstrated physical movement of water across the accounting boundary together with the documented characteristics of the basin.

Accordingly, comparable quantities of imported or exported water should not be presumed to produce equivalent downstream accounting quantities where accounting boundaries, timing, conveyance systems, operational practices, or other documented physical conditions differ materially.

Each stage of the basin water ledger shall therefore be evaluated using the Accounting Relationships applicable to the demonstrated physical condition of the basin during the Accounting Period.

Accordingly, no subsequent accounting quantity should be presumed solely because Available Supply has been determined.

Each component of the basin water ledger requires independent analytical support.

Where multiple Accounting Relationships influence the same Accounting Finding, those relationships should be explicitly documented together with any material assumptions and resulting uncertainty.

Evaluation of Imports and Exports Accounting Relationships improves analytical transparency by demonstrating how physical transfers across the accounting boundary influence Available Supply while preventing unsupported conclusions regarding subsequent accounting quantities.

## 10.6 Imports and Exports Pathways

Imports and Exports shall be evaluated according to the basin water ledger through which physical transfers across the accounting boundary influence subsequent accounting quantities.

The purpose of evaluating Imports and Exports Pathways is to determine how imported and exported water contributes to Available Supply and subsequent Physical Accounting while preserving analytical transparency.

A demonstrated Import or Export establishes only that water has physically crossed the accounting boundary during the Accounting Period.

It does not, by itself, establish Available Supply, Diversions, Return Flow, Depletion, Terminal Delivery, or Terminal Balance.

Accordingly, the basin water ledger shall be evaluated sequentially using documented Evidence, Accounting Relationships, and Accounting Transformations.

Depending upon the Accounting Question, Imports and Exports may:

- adjust Basin Yield to determine Available Supply;
- support subsequent Diversions;
- influence Return Flow;
- influence Depletion;
- contribute to Terminal Delivery; or
- contribute to Terminal Balance.

The accounting pathway followed by imported or exported water may differ according to the accounting boundary, timing, method of conveyance, operational practices, destination, and other demonstrated physical characteristics.

Equivalent quantities of imported or exported water should therefore not be presumed to follow equivalent accounting pathways.

Documented conveyance systems, reservoir operations, groundwater interaction, physical accessibility, and other demonstrated basin characteristics may each materially influence subsequent accounting quantities.

Accordingly, each subsequent component of the basin water ledger shall be evaluated independently using the Accounting Relationships applicable to the demonstrated condition of the basin during the Accounting Period.

The accounting significance of Imports and Exports increases only as subsequent accounting quantities are independently demonstrated through documented Evidence.

Where the accounting pathway cannot be demonstrated beyond a particular accounting quantity, the point of pathway termination should be explicitly identified together with the principal source of remaining uncertainty.

Recognition of Imports and Exports Pathways preserves analytical transparency by distinguishing physical transfers across the accounting boundary from the progressively greater accounting significance associated with subsequent components of the basin water ledger.

## 10.7 Verification of Imports and Exports

Imports and Exports incorporated into the basin water ledger should be verified using the best available Evidence.

The purpose of verification is to establish that documented Imports and Exports accurately represent the physical transfer of water across the accounting boundary during the Accounting Period.

Verification should be proportional to the Accounting Question and the significance of the Imports and Exports within the Physical Accounting system.

Depending upon the nature of the analysis, Imports and Exports verification may include:

- stream gaging records;
- conveyance system records;
- reservoir operating records;
- interbasin transfer records;
- interstate accounting records;
- water delivery records;
- hydrologic monitoring;
- remote sensing;
- field observations; or
- other documented sources of Evidence.

Verification should distinguish between:

- documented Imports;
- documented Exports;
- measured transfers;
- estimated transfers;
- the accounting boundary;
- supporting Evidence;
- analytical assumptions; and
- resulting implications for Available Supply.

Verification of Imports and Exports does not, by itself, establish Available Supply, Diversions, Return Flow, Depletion, Terminal Delivery, or Terminal Balance.

Similarly, verification of physical transfers does not, by itself, establish the Accounting Relationships governing subsequent components of the basin water ledger.

Each subsequent accounting quantity shall be independently evaluated using the methodology established by this standard.

Where Imports and Exports Accounting depends upon estimated transfers, accounting boundary assumptions, operational records, modeled conveyance, or other analytical assumptions, those assumptions should be explicitly documented together with the supporting Evidence and resulting uncertainty.

The level of verification achieved should be communicated transparently so that users of the accounting may appropriately evaluate the reliability and accounting significance of the resulting Imports and Exports Accounting.

Verification strengthens Imports and Exports Accounting by ensuring that subsequent components of the basin water ledger are supported by documented physical evidence rather than assumption or expectation.

## 10.8 Documentation of Imports and Exports

Every Import and Export incorporated into the basin water ledger shall be documented in a manner sufficient to support independent review, reproduction, and subsequent Physical Accounting.

The purpose of documentation is to preserve a transparent accounting record of Imports and Exports, the supporting Evidence, the analytical methodology employed, and the resulting Accounting Findings.

Documentation should be proportional to the significance of the Imports and Exports and the complexity of the Accounting Question.

At a minimum, documentation should identify, where applicable:

- the Accounting Period;
- the accounting boundary;
- the originating basin;
- the receiving basin;
- documented Imports;
- documented Exports;
- the resulting net Imports or Exports;
- supporting Evidence;
- applicable Accounting Relationships;
- Accounting Transformations performed;
- the resulting accounting pathway;
- resulting Accounting Findings;
- supporting Analytical Inferences; and
- any resulting Policy Considerations.

Documentation should clearly distinguish between:

- observed physical transfers;
- measured Imports and Exports;
- estimated Imports and Exports;
- analytical assumptions;
- Accounting Findings;
- Analytical Inferences; and
- Policy Considerations.

Documentation should also distinguish between documented physical transfers across the accounting boundary and the subsequent accounting significance assigned to those transfers within the basin water ledger.

The existence of documented Imports or Exports should not be represented as evidence of Available Supply, Diversions, Return Flow, Depletion, Terminal Delivery, or Terminal Balance unless those subsequent accounting quantities have been independently demonstrated through the Physical Accounting framework.

Material uncertainty, analytical limitations, unresolved questions, and alternative interpretations affecting Imports and Exports should be explicitly documented together with their potential influence upon subsequent components of the basin water ledger.

Documentation should be sufficiently complete to enable an independent investigator to understand how Imports and Exports were determined, reproduce the principal analytical procedures, evaluate the resulting Accounting Findings, and understand the basis upon which subsequent accounting quantities were or were not demonstrated.

Accordingly, Imports and Exports documentation provides the permanent analytical record through which physical transfers across the accounting boundary become transparent, reproducible, and independently reviewable components of the Great Salt Lake Accounting Standard.

## 10.9 Chapter Summary

This chapter establishes the standardized framework for representing and evaluating Imports and Exports under the Great Salt Lake Accounting Standard.

Imports and Exports represent the physical transfer of water across the accounting boundary of the basin and serve as the accounting adjustment between Basin Yield and Available Supply within the basin water ledger.

The chapter establishes the principles governing:

- representation of Imports and Exports;
- classification of Imports and Exports;
- evaluation of Imports and Exports;
- evaluation of Imports and Exports Accounting Relationships;
- evaluation of Imports and Exports Pathways;
- verification of Imports and Exports; and
- documentation of Imports and Exports.

Together, these components provide a transparent and reproducible methodology for incorporating physical transfers across the accounting boundary into the basin water ledger while preserving Accounting Continuity throughout the Physical Accounting system.

The chapter further establishes that documented Imports and Exports do not, by themselves, establish Available Supply, Diversions, Return Flow, Depletion, Terminal Delivery, or Terminal Balance.

Similarly, equivalent quantities of imported or exported water should not be presumed to possess equivalent accounting significance solely because comparable quantities have been observed.

Rather, the accounting significance of Imports and Exports depends upon documented physical transfers across the accounting boundary, demonstrated Accounting Relationships, transparent analytical methodology, and the demonstrated physical condition of the basin during the Accounting Period.

Subsequent chapters continue the basin water ledger by establishing the standardized approach for evaluating Available Supply and its role within the Physical Accounting system.





# 11. Available Supply Accounting

## 11.1 Purpose

The purpose of this chapter is to establish the standardized approach for representing and evaluating Available Supply under the Great Salt Lake Accounting Standard (GSLAS).

Within GSLAS, Available Supply represents the quantity of water available within the basin water ledger following adjustment of Basin Yield for documented Imports and Exports.

The objective of Available Supply Accounting is to provide a transparent, reproducible, and physically defensible representation of the water available for subsequent Physical Accounting within the basin.

Available Supply Accounting serves as the accounting transition between the natural production of water and subsequent accounting for Diversions, Return Flow, Depletion, and Terminal Delivery.

Accordingly, Available Supply Accounting establishes the framework for:

- representing Available Supply;
- evaluating Available Supply;
- documenting Accounting Relationships influencing subsequent Physical Accounting;
- verifying Available Supply; and
- supporting subsequent components of the basin water ledger.

Available Supply Accounting should be based upon documented Evidence, transparent analytical methodology, and reproducible Accounting Transformations appropriate to the Accounting Question.

Unless otherwise stated, Available Supply Accounting should be evaluated in accordance with the methodology established in Chapters 1 through 10.

## 11.2 Available Supply

Available Supply represents the quantity of water physically available within the accounting boundary following adjustment of documented Basin Yield for documented Imports and Exports during the Accounting Period.

Within the Great Salt Lake Accounting Standard, Available Supply serves as the principal accounting quantity from which subsequent Diversions, Return Flow, Depletion, and Terminal Delivery are evaluated.

The purpose of Available Supply Accounting is to determine the quantity of water physically available within the accounting boundary prior to subsequent human and environmental uses.

Available Supply shall be determined from documented Basin Yield together with documented Imports and Exports applicable to the Accounting Period.

Available Supply represents an accounting quantity rather than a hydrologic pathway.

Accordingly, Available Supply includes water represented within documented Basin Yield regardless of whether that water reaches the accounting boundary through surface runoff, groundwater discharge, base-flow, springs, or other natural hydrologic pathways.

Where practicable, Available Supply Accounting should identify:

- the Accounting Period;
- the accounting boundary;
- documented Basin Yield;
- documented Imports;
- documented Exports;
- the resulting Available Supply;
- supporting Evidence;
- applicable Accounting Relationships; and
- resulting implications for subsequent Physical Accounting.

Available Supply represents a physical accounting quantity rather than an Accounting Action, management objective, engineering proposal, or policy outcome.

Accordingly, Available Supply should be evaluated according to documented physical accounting rather than anticipated future operations or management decisions.

Equivalent quantities of Basin Yield do not, by themselves, establish equivalent Available Supply.

Similarly, equivalent Available Supply should not be presumed to produce equivalent Diversions, Return Flow, Depletion, Terminal Delivery, or Terminal Balance.

The accounting significance of Available Supply depends upon documented Basin Yield, documented Imports and Exports, demonstrated Accounting Relationships, and the demonstrated condition of the basin during the Accounting Period.

Accordingly, Available Supply shall be evaluated using documented Basin Yield together with documented Imports and Exports applicable to the accounting boundary and Accounting Period.

Available Supply represents the first quantity of water physically available for allocation within the basin water ledger and provides the accounting foundation for subsequent Diversion Accounting.

### 11.3 Classification of Available Supply

Available Supply should be classified according to the physical characteristics that materially influence subsequent Physical Accounting within the basin water ledger.

The purpose of Available Supply classification is to improve analytical consistency by organizing physically available water according to its accounting significance rather than by quantity alone.

Classification should remain proportional to the Accounting Question and should identify those characteristics that materially influence subsequent Diversion Accounting.

Depending upon the nature of the analysis, Available Supply may be classified according to:

- accounting boundary;
- Accounting Period;
- contributing Basin Yield;
- documented Imports and Exports;
- quantity;
- seasonal distribution;
- geographic availability;
- physical accessibility; or
- other analytically relevant physical characteristics.

Where material to the Accounting Question, Available Supply should distinguish among water that is:

- naturally produced within the basin;
- physically imported into the basin;
- seasonally available;
- operationally constrained;
- geographically constrained; or
- otherwise distinguished by documented physical characteristics.

Equivalent quantities of Available Supply should not be presumed to possess equivalent accounting significance.

Classification should therefore recognize that identical quantities of Available Supply may produce materially different subsequent Accounting Relationships because of differences in timing, location, accessibility, infrastructure, operational constraints, accounting boundaries, or other documented basin characteristics.

Similarly, Available Supply observed during one Accounting Period should not be presumed representative of future Accounting Periods solely because comparable quantities have previously occurred.

Accordingly, Available Supply classification should emphasize the physical characteristics governing subsequent Diversion Accounting rather than numerical quantity alone.

Where Available Supply classification materially influences subsequent Accounting Findings, the analytical basis for the selected classification should be explicitly documented.

## 11.4 Evaluation of Available Supply

Available Supply shall be evaluated according to documented Basin Yield together with documented Imports and Exports applicable to the accounting boundary during the Accounting Period.

The purpose of Available Supply evaluation is to determine the quantity of water physically available within the basin for subsequent Physical Accounting.

Evaluation should begin with documented Basin Yield and proceed through the Accounting Relationships established by documented Imports and Exports.

Where applicable, the analysis should determine:

- the Accounting Period;
- the accounting boundary;
- documented Basin Yield;
- documented Imports;
- documented Exports;
- the resulting Available Supply;
- supporting Evidence;
- Accounting Relationships influencing subsequent Physical Accounting; and
- resulting implications for Diversions, Return Flow, Depletion, Terminal Delivery, and Terminal Balance.

Evaluation of Available Supply should distinguish between natural water production and the quantity of water physically available within the accounting boundary.

Equivalent quantities of Basin Yield do not, by themselves, establish equivalent Available Supply.

Similarly, equivalent quantities of Available Supply should not be presumed to produce equivalent Diversions, Return Flow, Depletion, Terminal Delivery, or Terminal Balance.

The accounting significance of Available Supply depends upon documented Basin Yield, documented Imports and Exports, demonstrated Accounting Relationships, and the demonstrated physical condition of the basin during the Accounting Period.

Where material to the Accounting Question, Available Supply evaluation should consider whether changes in accounting boundaries, imported supplies, exported supplies, conveyance systems, or other documented physical conditions materially influence the quantity of water physically available within the basin.

Accordingly, Available Supply shall be evaluated using documented Basin Yield together with documented Imports and Exports applicable to the accounting boundary during the Accounting Period.

Evaluation of Available Supply provides the accounting foundation for subsequent Diversion Accounting by establishing the quantity of water physically available within the basin water ledger.

## 11.5 Available Supply Accounting Relationships

Available Supply shall be evaluated within the context of its Accounting Relationships to subsequent components of the basin water ledger.

The purpose of Available Supply Accounting Relationships is to establish how physically available water supports subsequent Physical Accounting while preserving analytical transparency throughout the basin water ledger.

Available Supply represents the quantity of water physically available within the accounting boundary following adjustment of Basin Yield for documented Imports and Exports.

Accordingly, the principal Accounting Relationship established in this chapter is the relationship between Available Supply and Diversions.

Following documented Diversions, subsequent Accounting Relationships proceed through the remaining components of the basin water ledger.

These downstream accounting quantities may include:

- Return Flow;
- Depletion;
- Terminal Delivery; and
- Terminal Balance.

The existence of an Available Supply Accounting Relationship does not imply that equivalent quantities of Available Supply will produce equivalent downstream accounting quantities.

Rather, each Accounting Relationship shall be evaluated independently using documented Evidence, Accounting Relationships, and Accounting Transformations.

Equivalent quantities of Available Supply do not, by themselves, establish equivalent Diversions.

Similarly, equivalent Diversions do not, by themselves, establish equivalent Return Flow, Depletion, Terminal Delivery, or Terminal Balance.

Additional Accounting Relationships are required before each subsequent accounting quantity can be demonstrated.

Available Supply Accounting Relationships are influenced by documented Basin Yield, documented Imports and Exports, the accounting boundary, timing, physical accessibility, operational constraints, and other documented basin characteristics.

Accordingly, comparable quantities of Available Supply should not be presumed to produce equivalent downstream accounting quantities where physical conditions or Accounting Relationships differ materially.

Each stage of the basin water ledger shall therefore be evaluated using the Accounting Relationships applicable to the demonstrated condition of the basin during the Accounting Period.

Accordingly, no subsequent accounting quantity should be presumed solely because Diversions have been demonstrated.

Each component of the basin water ledger requires independent analytical support.

Where multiple Accounting Relationships influence the same Accounting Finding, those relationships should be explicitly documented together with any material assumptions and resulting uncertainty.

Evaluation of Available Supply Accounting Relationships improves analytical transparency by demonstrating how physically available water progresses through the basin water ledger while preventing unsupported conclusions regarding subsequent accounting quantities.

## 11.6 Available Supply Pathways

Available Supply shall be evaluated according to the basin water ledger through which physically available water influences subsequent accounting quantities.

The purpose of evaluating Available Supply Pathways is to determine how Available Supply contributes to subsequent Physical Accounting while preserving analytical transparency.

A demonstrated Available Supply establishes only the quantity of water physically available within the accounting boundary during the Accounting Period.

It does not, by itself, establish Diversions, Return Flow, Depletion, Terminal Delivery, or Terminal Balance.

Accordingly, the basin water ledger shall be evaluated sequentially using documented Evidence, Accounting Relationships, and Accounting Transformations.

Depending upon the Accounting Question, Available Supply may:

- support Diversions;
- influence Return Flow;
- influence Depletion;
- contribute to Terminal Delivery; or
- contribute to Terminal Balance.

The accounting pathway followed by Available Supply may differ according to physical accessibility, geographic distribution, seasonal timing, operational constraints, infrastructure, hydrologic conditions, and other demonstrated basin characteristics.

Equivalent quantities of Available Supply should therefore not be presumed to follow equivalent accounting pathways.

Documented Accounting Relationships, conveyance systems, operational practices, Hydrologic Regimes, System Evolution, and other demonstrated physical characteristics may each materially influence subsequent accounting quantities.

Accordingly, each subsequent component of the basin water ledger shall be evaluated independently using the Accounting Relationships applicable to the demonstrated condition of the basin during the Accounting Period.

The accounting significance of Available Supply increases only as subsequent accounting quantities are independently demonstrated through documented Evidence.

Where the accounting pathway cannot be demonstrated beyond a particular accounting quantity, the point of pathway termination should be explicitly identified together with the principal source of remaining uncertainty.

Recognition of Available Supply Pathways preserves analytical transparency by distinguishing physically available water from the progressively greater accounting significance associated with subsequent components of the basin water ledger.

## 11.7 Verification of Available Supply

Available Supply incorporated into the basin water ledger should be verified using the best available Evidence.

The purpose of verification is to establish that Available Supply accurately represents the quantity of water physically available within the accounting boundary during the Accounting Period.

Verification should be proportional to the Accounting Question and the significance of Available Supply within the Physical Accounting system.

Depending upon the nature of the analysis, Available Supply verification may include:

- documented Basin Yield;
- documented Imports and Exports;
- streamflow records;
- reservoir accounting records;
- interbasin transfer records;
- water accounting ledgers;
- hydrologic monitoring;
- field observations;
- remote sensing; or
- other documented sources of Evidence.

Verification should distinguish between:

- documented Basin Yield;
- documented Imports;
- documented Exports;
- calculated Available Supply;
- the accounting boundary;
- supporting Evidence;
- analytical assumptions; and
- resulting implications for subsequent Physical Accounting.

Verification of Available Supply does not, by itself, establish Diversions, Return Flow, Depletion, Terminal Delivery, or Terminal Balance.

Similarly, verification of Available Supply does not, by itself, establish the Accounting Relationships governing subsequent components of the basin water ledger.

Each subsequent accounting quantity shall be independently evaluated using the methodology established by this standard.

Where Available Supply Accounting depends upon accounting boundary assumptions, estimated Imports or Exports, operational records, modeled accounting relationships, or other analytical assumptions, those assumptions should be explicitly documented together with the supporting Evidence and resulting uncertainty.

The level of verification achieved should be communicated transparently so that users of the accounting may appropriately evaluate the reliability and accounting significance of the resulting Available Supply.

Verification strengthens Available Supply Accounting by ensuring that subsequent components of the basin water ledger are supported by documented physical accounting rather than assumption or expectation.

## 11.8 Documentation of Available Supply

Every Available Supply incorporated into the basin water ledger shall be documented in a manner sufficient to support independent review, reproduction, and subsequent Physical Accounting.

The purpose of documentation is to preserve a transparent accounting record of Available Supply, the supporting Evidence, the analytical methodology employed, and the resulting Accounting Findings.

Documentation should be proportional to the significance of Available Supply and the complexity of the Accounting Question.

At a minimum, documentation should identify, where applicable:

- the Accounting Period;
- the accounting boundary;
- documented Basin Yield;
- documented Imports;
- documented Exports;
- the resulting Available Supply;
- supporting Evidence;
- applicable Accounting Relationships;
- Accounting Transformations performed;
- the resulting accounting pathway;
- resulting Accounting Findings;
- supporting Analytical Inferences; and
- any resulting Policy Considerations.

Documentation should clearly distinguish between:

- documented Basin Yield;
- documented Imports and Exports;
- calculated Available Supply;
- analytical assumptions;
- Accounting Findings;
- Analytical Inferences; and
- Policy Considerations.

Documentation should also distinguish between the calculated quantity of Available Supply and the subsequent accounting significance assigned to that Available Supply within the basin water ledger.

The existence of Available Supply should not be represented as evidence of Diversions, Return Flow, Depletion, Terminal Delivery, or Terminal Balance unless those subsequent accounting quantities have been independently demonstrated through the Physical Accounting framework.

Material uncertainty, analytical limitations, unresolved questions, and alternative interpretations affecting Available Supply should be explicitly documented together with their potential influence upon subsequent components of the basin water ledger.

Documentation should be sufficiently complete to enable an independent investigator to understand how Available Supply was determined, reproduce the principal analytical procedures, evaluate the resulting Accounting Findings, and understand the basis upon which subsequent accounting quantities were or were not demonstrated.

Accordingly, Available Supply documentation provides the permanent analytical record through which Available Supply becomes a transparent, reproducible, and independently reviewable component of the Great Salt Lake Accounting Standard.

## 11.9 Chapter Summary

This chapter establishes the standardized framework for representing and evaluating Available Supply under the Great Salt Lake Accounting Standard.

Available Supply represents the quantity of water physically available within the accounting boundary following adjustment of documented Basin Yield for documented Imports and Exports during the Accounting Period.

The chapter establishes the principles governing:

- representation of Available Supply;
- classification of Available Supply;
- evaluation of Available Supply;
- evaluation of Available Supply Accounting Relationships;
- evaluation of Available Supply Pathways;
- verification of Available Supply; and
- documentation of Available Supply.

Together, these components provide a transparent and reproducible methodology for incorporating Available Supply into the basin water ledger while preserving Accounting Continuity throughout the Physical Accounting system.

The chapter further establishes that Available Supply represents the principal quantity of water physically available for subsequent Physical Accounting but does not, by itself, establish Diversions, Return Flow, Depletion, Terminal Delivery, or Terminal Balance.

Similarly, equivalent quantities of Available Supply should not be presumed to possess equivalent accounting significance solely because comparable quantities have been calculated.

Rather, the accounting significance of Available Supply depends upon documented Basin Yield, documented Imports and Exports, demonstrated Accounting Relationships, transparent analytical methodology, and the demonstrated physical condition of the basin during the Accounting Period.

Subsequent chapters continue the basin water ledger by establishing the standardized approach for evaluating Diversions and their influence on subsequent Physical Accounting.





## 12. Diversion

### 12.1 Purpose

The purpose of this chapter is to establish the standardized approach for representing and evaluating Diversion within the Great Salt Lake Accounting Standard (GSLAS).

Diversion represents one of the principal Accounting Objects within the Physical Accounting system and serves as the point at which water is intentionally redirected from its natural course for human, environmental, operational, or management purposes.

The objective of this chapter is to establish a consistent analytical framework for evaluating Diversion using documented Evidence, transparent Accounting Relationships, and reproducible Accounting Transformations.

Diversion should be evaluated according to its measurable physical characteristics and subsequent influence on the Physical Accounting system rather than according to its legal status, administrative purpose, or intended benefit.

Accordingly, this chapter establishes the principles by which Diversion is represented, measured, evaluated, and incorporated into Accounting Findings under the Great Salt Lake Accounting Standard.

Unless otherwise stated, Diversion should be evaluated in accordance with the methodology established in Chapters 1 through 11.

### 12.2 Diversion

Diversion represents the physical withdrawal or redirection of Available Supply from its natural course during the Accounting Period.

Within the Great Salt Lake Accounting Standard, Diversion serves as the first Accounting Action within the basin water ledger and establishes the accounting basis from which Return Flow, Depletion, Terminal Delivery, and Terminal Balance are subsequently evaluated.

The purpose of Diversion Accounting is to determine the quantity of water physically removed, diverted, or redirected from Available Supply regardless of its ultimate disposition.

Diversions shall be determined using documented Available Supply together with documented physical withdrawals or redirections occurring during the Accounting Period.

Diversions may occur from one or more components of Available Supply, including:

- surface water;
- groundwater;
- springs;
- reservoirs;
- imported supplies; or
- other documented sources represented within Available Supply.

The selection and representation of Diversion sources shall be consistent with the adopted accounting methodology and shall be explicitly documented.

Where practicable, Diversion Accounting should identify:

- the Accounting Period;
- the accounting boundary;
- the source of the Diversion;
- the quantity diverted;
- the purpose of the Diversion;
- supporting Evidence;
- applicable Accounting Relationships; and
- resulting implications for subsequent Physical Accounting.

Diversion represents an Accounting Action rather than a consumptive use, Depletion, management outcome, or policy objective.

Accordingly, Diversions should be evaluated according to documented physical withdrawals or redirections rather than the ultimate disposition of the diverted water.

Equivalent quantities of Available Supply do not, by themselves, establish equivalent Diversions.

Similarly, equivalent Diversions should not be presumed to produce equivalent Return Flow, Depletion, Terminal Delivery, or Terminal Balance.

The accounting significance of Diversion depends upon documented Available Supply, demonstrated physical withdrawal or redirection, demonstrated Accounting Relationships, and the demonstrated condition of the basin during the Accounting Period.

Accordingly, Diversion shall be evaluated using documented Available Supply together with documented physical withdrawals or redirections applicable to the Accounting Period.

Diversion represents the first Accounting Action within the basin water ledger and provides the accounting foundation for subsequent Return Flow Accounting.

### 12.3 Classification of Diversions

Diversions should be classified according to the physical characteristics that materially influence subsequent Physical Accounting within the basin water ledger.

The purpose of Diversion classification is to improve analytical consistency by organizing Diversions according to their accounting significance rather than by quantity alone.

Classification should remain proportional to the Accounting Question and should identify those characteristics that materially influence subsequent Return Flow Accounting and Depletion Accounting.

Depending upon the nature of the analysis, Diversions may be classified according to:

- source;
- purpose;
- point of diversion;
- accounting boundary;
- Accounting Period;
- quantity;
- timing;
- method of diversion; or
- other analytically relevant physical characteristics.

Where material to the Accounting Question, Diversions should distinguish among withdrawals or redirections from:

- surface water;
- groundwater;
- springs;
- reservoirs;
- imported supplies;
- environmental water; or
- other documented sources represented within Available Supply.

Equivalent quantities of Diversions should not be presumed to possess equivalent accounting significance.

Classification should therefore recognize that identical quantities of diverted water may produce materially different subsequent Accounting Relationships because of differences in source, timing, purpose, conveyance, operational practices, hydrologic conditions, or other documented basin characteristics.

Similarly, Diversions occurring during one Accounting Period should not be presumed representative of future Accounting Periods solely because comparable quantities have previously occurred.

Accordingly, Diversion classification should emphasize the physical characteristics governing subsequent Return Flow and Depletion rather than numerical quantity alone.

Where Diversion classification materially influences subsequent Accounting Findings, the analytical basis for the selected classification should be explicitly documented.

## 12.4 Evaluation of Diversions

Diversions shall be evaluated according to documented physical withdrawals or redirections of Available Supply during the Accounting Period.

The purpose of Diversion evaluation is to determine the quantity of water physically removed or redirected from Available Supply and to establish the accounting foundation for subsequent Return Flow and Depletion Accounting.

Evaluation should begin with documented Available Supply and proceed through the documented Accounting Actions representing physical withdrawals or redirections.

Where applicable, the analysis should determine:

- the Accounting Period;
- the accounting boundary;
- the source of the Diversion;
- the point of diversion;
- the quantity diverted;
- the purpose of the Diversion;
- supporting Evidence;
- Accounting Relationships influencing subsequent Physical Accounting; and
- resulting implications for Return Flow, Depletion, Terminal Delivery, and Terminal Balance.

Evaluation of Diversions should distinguish between the physical withdrawal or redirection of water and its subsequent disposition within the basin water ledger.

Equivalent quantities of Available Supply do not, by themselves, establish equivalent Diversions.

Similarly, equivalent Diversions should not be presumed to produce equivalent Return Flow, Depletion, Terminal Delivery, or Terminal Balance.

The accounting significance of Diversions depends upon documented Available Supply, documented Accounting Actions, demonstrated Accounting Relationships, and the demonstrated condition of the basin during the Accounting Period.

Where material to the Accounting Question, Diversion evaluation should consider whether operational practices, conveyance systems, groundwater withdrawals, diversion timing, or other documented physical conditions materially influence subsequent Physical Accounting.

Accordingly, Diversions shall be evaluated using documented Available Supply together with documented physical withdrawals or redirections applicable to the Accounting Period.

Evaluation of Diversions provides the accounting foundation for subsequent Return Flow Accounting by establishing the physical movement of water from Available Supply into the managed water system.

## 12.5 Diversion Accounting Relationships

Diversions shall be evaluated within the context of their Accounting Relationships to subsequent components of the basin water ledger.

The purpose of Diversion Accounting Relationships is to establish how physical withdrawals or redirections of Available Supply influence subsequent Return Flow while preserving analytical transparency throughout the basin water ledger.

Diversions represent the first Accounting Action affecting Available Supply.

Accordingly, the principal Accounting Relationship established in this chapter is the relationship between Diversions and Return Flow.

Following determination of Return Flow, subsequent Accounting Relationships proceed through the remaining components of the basin water ledger.

These downstream accounting quantities may include:

- Depletion;
- Terminal Delivery; and
- Terminal Balance.

The existence of a Diversion Accounting Relationship does not imply that equivalent Diversions will produce equivalent downstream accounting quantities.

Rather, each Accounting Relationship shall be evaluated independently using documented Evidence, Accounting Relationships, and Accounting Transformations.

Equivalent quantities of Diversions do not, by themselves, establish equivalent Return Flow.

Similarly, equivalent Return Flow does not, by itself, establish equivalent Depletion, Terminal Delivery, or Terminal Balance.

Additional Accounting Relationships are required before each subsequent accounting quantity can be demonstrated.

Diversion Accounting Relationships are influenced by the source of the Diversion, the purpose of the Diversion, operational practices, conveyance systems, timing, Hydrologic Regime, System Evolution, and other documented basin characteristics.

Accordingly, comparable Diversions should not be presumed to produce equivalent downstream accounting quantities where physical conditions or Accounting Relationships differ materially.

Each stage of the basin water ledger shall therefore be evaluated using the Accounting Relationships applicable to the demonstrated condition of the basin during the Accounting Period.

Accordingly, no subsequent accounting quantity should be presumed solely because Return Flow has been demonstrated.

Each component of the basin water ledger requires independent analytical support.

Where multiple Accounting Relationships influence the same Accounting Finding, those relationships should be explicitly documented together with any material assumptions and resulting uncertainty.

Evaluation of Diversion Accounting Relationships improves analytical transparency by demonstrating how physical withdrawals or redirections influence Return Flow while preventing unsupported conclusions regarding subsequent accounting quantities.

## 12.6 Diversion Pathways

Diversions shall be evaluated according to the basin water ledger through which physical withdrawals or redirections influence subsequent accounting quantities.

The purpose of evaluating Diversion Pathways is to determine how diverted water contributes to Return Flow, Depletion, Terminal Delivery, and Terminal Balance while preserving analytical transparency.

A demonstrated Diversion establishes only that water has been physically withdrawn or redirected from Available Supply during the Accounting Period.

It does not, by itself, establish Return Flow, Depletion, Terminal Delivery, or Terminal Balance.

Accordingly, the basin water ledger shall be evaluated sequentially using documented Evidence, Accounting Relationships, and Accounting Transformations.

Depending upon the Accounting Question, Diversions may:

- produce Return Flow;
- contribute to Depletion;
- influence Terminal Delivery; or
- influence Terminal Balance.

The accounting pathway followed by diverted water may differ according to the source of the Diversion, the purpose of the Diversion, physical accessibility, timing, method of conveyance, operational practices, Hydrologic Regime, System Evolution, and other demonstrated basin characteristics.

Equivalent Diversions should therefore not be presumed to follow equivalent accounting pathways.

Documented Accounting Relationships, conveyance systems, groundwater interactions, operational practices, and other demonstrated physical characteristics may each materially influence subsequent accounting quantities.

Accordingly, each subsequent component of the basin water ledger shall be evaluated independently using the Accounting Relationships applicable to the demonstrated condition of the basin during the Accounting Period.

The accounting significance of Diversions increases only as subsequent accounting quantities are independently demonstrated through documented Evidence.

Where the accounting pathway cannot be demonstrated beyond a particular accounting quantity, the point of pathway termination should be explicitly identified together with the principal source of remaining uncertainty.

Recognition of Diversion Pathways preserves analytical transparency by distinguishing the physical withdrawal or redirection of water from the progressively greater accounting significance associated with subsequent components of the basin water ledger.

## 12.7 Verification of Diversions

Diversions incorporated into the basin water ledger should be verified using the best available Evidence.

The purpose of verification is to establish that documented Diversions accurately represent the physical withdrawal or redirection of Available Supply during the Accounting Period.

Verification should be proportional to the Accounting Question and the significance of the Diversion within the Physical Accounting system.

Depending upon the nature of the analysis, Diversion verification may include:

- diversion records;
- water-right administration records;
- stream gaging records;
- groundwater pumping records;
- reservoir operating records;
- conveyance system records;
- water delivery records;
- hydrologic monitoring;
- field observations;
- remote sensing; or
- other documented sources of Evidence.

Verification should distinguish between:

- documented Available Supply;
- measured Diversions;
- estimated Diversions;
- the source of the Diversion;
- supporting Evidence;
- analytical assumptions; and
- resulting implications for subsequent Physical Accounting.

Verification of Diversions does not, by itself, establish Return Flow, Depletion, Terminal Delivery, or Terminal Balance.

Similarly, verification of physical withdrawals or redirections does not, by itself, establish the Accounting Relationships governing subsequent components of the basin water ledger.

Each subsequent accounting quantity shall be independently evaluated using the methodology established by this standard.

Where Diversion Accounting depends upon estimated withdrawals, groundwater pumping estimates, operational records, modeled diversions, or other analytical assumptions, those assumptions should be explicitly documented together with the supporting Evidence and resulting uncertainty.

The level of verification achieved should be communicated transparently so that users of the accounting may appropriately evaluate the reliability and accounting significance of the resulting Diversions.

Verification strengthens Diversion Accounting by ensuring that subsequent components of the basin water ledger are supported by documented physical evidence rather than assumption or expectation.

## 12.8 Documentation of Diversions

Every Diversion incorporated into the basin water ledger shall be documented in a manner sufficient to support independent review, reproduction, and subsequent Physical Accounting.

The purpose of documentation is to preserve a transparent accounting record of Diversions, the supporting Evidence, the analytical methodology employed, and the resulting Accounting Findings.

Documentation should be proportional to the significance of the Diversion and the complexity of the Accounting Question.

At a minimum, documentation should identify, where applicable:

- the Accounting Period;
- the accounting boundary;
- the source of the Diversion;
- the point of diversion;
- the quantity diverted;
- the purpose of the Diversion;
- supporting Evidence;
- applicable Accounting Relationships;
- Accounting Transformations performed;
- the resulting accounting pathway;
- resulting Accounting Findings;
- supporting Analytical Inferences; and
- any resulting Policy Considerations.

Documentation should clearly distinguish between:

- observed Diversions;
- measured Diversions;
- estimated Diversions;
- analytical assumptions;
- Accounting Findings;
- Analytical Inferences; and
- Policy Considerations.

Documentation should also distinguish between the documented physical withdrawal or redirection of water and the subsequent accounting significance assigned to that Diversion within the basin water ledger.

The existence of a documented Diversion should not be represented as evidence of Return Flow, Depletion, Terminal Delivery, or Terminal Balance unless those subsequent accounting quantities have been independently demonstrated through the Physical Accounting framework.

Material uncertainty, analytical limitations, unresolved questions, and alternative interpretations affecting Diversions should be explicitly documented together with their potential influence upon subsequent components of the basin water ledger.

Documentation should be sufficiently complete to enable an independent investigator to understand how the Diversion was determined, reproduce the principal analytical procedures, evaluate the resulting Accounting Findings, and understand the basis upon which subsequent accounting quantities were or were not demonstrated.

Accordingly, Diversion documentation provides the permanent analytical record through which Diversions become transparent, reproducible, and independently reviewable components of the Great Salt Lake Accounting Standard.

## 12.9 Chapter Summary

This chapter establishes the standardized framework for representing and evaluating Diversions under the Great Salt Lake Accounting Standard.

Diversions represent the physical withdrawal or redirection of Available Supply and serve as the first Accounting Action within the basin water ledger.

The chapter establishes the principles governing:

- representation of Diversions;
- classification of Diversions;
- evaluation of Diversions;
- evaluation of Diversion Accounting Relationships;
- evaluation of Diversion Pathways;
- verification of Diversions; and
- documentation of Diversions.

Together, these components provide a transparent and reproducible methodology for incorporating Diversions into the basin water ledger while preserving Accounting Continuity throughout the Physical Accounting system.

The chapter further establishes that documented Diversions represent physical withdrawals or redirections of Available Supply but do not, by themselves, establish Return Flow, Depletion, Terminal Delivery, or Terminal Balance.

Similarly, equivalent Diversions should not be presumed to possess equivalent accounting significance solely because comparable quantities have been documented.

Rather, the accounting significance of Diversions depends upon documented Available Supply, documented Accounting Actions, demonstrated Accounting Relationships, transparent analytical methodology, and the demonstrated condition of the basin during the Accounting Period.

Subsequent chapters continue the basin water ledger by establishing the standardized approach for evaluating Return Flow and its role within the Physical Accounting system.





## 13. Return Flow Accounting

### 13.1 Purpose

The purpose of this chapter is to establish the standardized approach for representing and evaluating Return Flow under the Great Salt Lake Accounting Standard (GSLAS).

Within GSLAS, Return Flow represents the portion of diverted water that subsequently reenters the Physical Accounting system during the Accounting Period or a documented future Accounting Period.

The objective of Return Flow Accounting is to provide a transparent, reproducible, and physically defensible representation of water returning to the basin water ledger following Diversion.

Return Flow Accounting serves as the accounting transition between Diversion and Depletion by identifying the quantity of diverted water that remains available for subsequent Physical Accounting.

Accordingly, Return Flow Accounting establishes the framework for:

- representing Return Flow;
- evaluating Return Flow;
- documenting Accounting Relationships influencing subsequent Physical Accounting;
- verifying Return Flow; and
- supporting subsequent components of the basin water ledger.

Return Flow Accounting shall account for the physical return of water rather than the original Diversion or the resulting Depletion.

Accordingly, Return Flow should be evaluated independently from Diversion and Depletion even where those quantities are subsequently related through documented Accounting Relationships.

Return Flow may occur through one or more documented hydrologic pathways, including surface-water return, groundwater return, baseflow, spring discharge, operational releases, or other documented mechanisms appropriate to the accounting methodology adopted for the basin.

Return Flow Accounting should be based upon documented Evidence, transparent analytical methodology, and reproducible Accounting Transformations appropriate to the Accounting Question.

Unless otherwise stated, Return Flow Accounting should be evaluated in accordance with the methodology established in Chapters 1 through 12.

### 13.2 Return Flow

Return Flow represents the portion of diverted water that subsequently reenters the Physical Accounting system during the Accounting Period or a documented future Accounting Period.

Within the Great Salt Lake Accounting Standard, Return Flow serves as the accounting quantity linking Diversion to Depletion by identifying water that remains within the basin water ledger following Diversion.

The purpose of Return Flow Accounting is to determine the quantity of diverted water that physically returns to the Physical Accounting system and therefore remains available for subsequent accounting.

Return Flow shall be determined using documented Diversions together with documented hydrologic evidence demonstrating the physical return of water.

Return Flow may occur through one or more documented hydrologic pathways, including:

- surface-water return;
- groundwater return;
- baseflow;
- spring discharge;
- operational releases;
- reservoir releases;
- subsurface flow; or

- other documented return mechanisms appropriate to the accounting methodology adopted for the basin.

The selection and representation of Return Flow pathways shall be consistent with the adopted accounting methodology and shall be explicitly documented.

Where practicable, Return Flow Accounting should identify:

- the Accounting Period;
- the originating Diversion;
- the documented return pathway;
- the quantity of Return Flow;
- the timing of Return Flow;
- supporting Evidence;
- applicable Accounting Relationships; and
- resulting implications for subsequent Physical Accounting.

Return Flow represents a physical accounting quantity rather than a Diversion, Depletion, management outcome, or policy objective.

Accordingly, Return Flow should be evaluated according to documented physical return of water rather than assumptions regarding recovery or reuse.

Equivalent Diversions do not, by themselves, establish equivalent Return Flow.

Similarly, equivalent Return Flow should not be presumed to produce equivalent Depletion, Terminal Delivery, or Terminal Balance.

The accounting significance of Return Flow depends upon documented Diversions, demonstrated physical return mechanisms, demonstrated Accounting Relationships, and the demonstrated condition of the basin during the Accounting Period.

Accordingly, Return Flow shall be evaluated using documented Diversions together with documented hydrologic evidence demonstrating physical return to the Physical Accounting system.

Return Flow represents the accounting foundation for subsequent Depletion Accounting by identifying the portion of diverted water that remains within the basin water ledger.

### 13.3 Classification of Return Flow

Return Flow should be classified according to the physical characteristics that materially influence subsequent Physical Accounting within the basin water ledger.

The purpose of Return Flow classification is to improve analytical consistency by organizing Return Flow according to its accounting significance rather than by quantity alone.

Classification should remain proportional to the Accounting Question and should identify those characteristics that materially influence subsequent Depletion Accounting.

Depending upon the nature of the analysis, Return Flow may be classified according to:

- return pathway;
- originating Diversion;
- destination;
- Accounting Period;
- quantity;
- timing;
- travel time;
- method of return; or
- other analytically relevant physical characteristics.

Where material to the Accounting Question, Return Flow should distinguish among returns occurring through:

- surface-water return;
- groundwater return;
- baseflow;
- spring discharge;
- reservoir releases;

- operational return flows;
- subsurface pathways; or
- other documented hydrologic mechanisms.

Equivalent quantities of Return Flow should not be presumed to possess equivalent accounting significance.

Classification should therefore recognize that identical quantities of Return Flow may produce materially different subsequent Accounting Relationships because of differences in return pathway, timing, travel time, Hydrologic Regime, System Evolution, groundwater interaction, or other documented basin characteristics.

Similarly, Return Flow occurring during one Accounting Period should not be presumed representative of future Accounting Periods solely because comparable quantities have previously occurred.

Accordingly, Return Flow classification should emphasize the physical characteristics governing subsequent Depletion rather than numerical quantity alone.

Where Return Flow classification materially influences subsequent Accounting Findings, the analytical basis for the selected classification should be explicitly documented.

## 13.4 Evaluation of Return Flow

Return Flow shall be evaluated according to documented hydrologic evidence demonstrating the physical return of previously diverted water to the Physical Accounting system.

The purpose of Return Flow evaluation is to determine the quantity of diverted water that physically returns to the basin water ledger and to establish the accounting foundation for subsequent Depletion Accounting.

Evaluation should begin with documented Diversions and proceed through the documented Accounting Relationships governing physical return.

Where applicable, the analysis should determine:

- the Accounting Period;
- the originating Diversion;
- the documented return pathway;
- the quantity of Return Flow;
- the timing of Return Flow;
- the destination of Return Flow;
- supporting Evidence;
- Accounting Relationships influencing subsequent Physical Accounting; and
- resulting implications for Depletion, Terminal Delivery, and Terminal Balance.

Evaluation of Return Flow should distinguish between the physical return of water and its subsequent accounting significance within the basin water ledger.

Equivalent Diversions do not, by themselves, establish equivalent Return Flow.

Similarly, equivalent Return Flow should not be presumed to produce equivalent Depletion, Terminal Delivery, or Terminal Balance.

The accounting significance of Return Flow depends upon documented Diversions, documented return mechanisms, demonstrated Accounting Relationships, Hydrologic Regime, System Evolution where applicable, and the demonstrated condition of the basin during the Accounting Period.

Where material to the Accounting Question, Return Flow evaluation should consider whether groundwater storage, travel time, conveyance systems, operational practices, seasonal timing, or other documented physical conditions materially influence the quantity or timing of Return Flow.

Accordingly, Return Flow shall be evaluated using documented Diversions together with documented hydrologic evidence demonstrating physical return to the Physical Accounting system.

Evaluation of Return Flow provides the accounting foundation for subsequent Depletion Accounting by distinguishing water that remains within the basin water ledger from water that is physically depleted.

## 13.5 Return Flow Accounting Relationships

Return Flow shall be evaluated within the context of its Accounting Relationships to subsequent components of the basin water ledger.

The purpose of Return Flow Accounting Relationships is to establish how the physical return of previously diverted water influences Depletion while preserving analytical transparency throughout the basin water ledger.

Return Flow represents the portion of diverted water that physically reenters the Physical Accounting system.

Accordingly, the principal Accounting Relationship established in this chapter is the relationship between Return Flow and Depletion.

Following determination of Depletion, subsequent Accounting Relationships proceed through the remaining components of the basin water ledger.

These downstream accounting quantities may include:

- Terminal Delivery; and
- Terminal Balance.

The existence of a Return Flow Accounting Relationship does not imply that equivalent Return Flows will produce equivalent downstream accounting quantities.

Rather, each Accounting Relationship shall be evaluated independently using documented Evidence, Accounting Relationships, and Accounting Transformations.

Equivalent quantities of Return Flow do not, by themselves, establish equivalent Depletion.

Similarly, equivalent Depletion does not, by itself, establish equivalent Terminal Delivery or Terminal Balance.

Additional Accounting Relationships are required before each subsequent accounting quantity can be demonstrated.

Return Flow Accounting Relationships are influenced by the return pathway, travel time, groundwater storage, operational practices, Hydrologic Regime, System Evolution, and other documented basin characteristics.

Accordingly, comparable Return Flows should not be presumed to produce equivalent downstream accounting quantities where physical conditions or Accounting Relationships differ materially.

Each stage of the basin water ledger shall therefore be evaluated using the Accounting Relationships applicable to the demonstrated condition of the basin during the Accounting Period.

Accordingly, no subsequent accounting quantity should be presumed solely because Depletion has been demonstrated.

Each component of the basin water ledger requires independent analytical support.

Where multiple Accounting Relationships influence the same Accounting Finding, those relationships should be explicitly documented together with any material assumptions and resulting uncertainty.

Evaluation of Return Flow Accounting Relationships improves analytical transparency by demonstrating how the physical return of diverted water influences Depletion while preventing unsupported conclusions regarding subsequent accounting quantities.

## 13.6 Return Flow Pathways

Return Flow shall be evaluated according to the basin water ledger through which previously diverted water physically reenters the Physical Accounting system and influences subsequent accounting quantities.

The purpose of evaluating Return Flow Pathways is to determine how returned water contributes to subsequent Depletion, Terminal Delivery, and Terminal Balance while preserving analytical transparency.

A demonstrated Return Flow establishes only that previously diverted water has physically returned to the Physical Accounting system.

It does not, by itself, establish Depletion, Terminal Delivery, or Terminal Balance.

Accordingly, the basin water ledger shall be evaluated sequentially using documented Evidence, Accounting Relationships, and Accounting Transformations.

Depending upon the Accounting Question, Return Flow may:

- reduce Depletion;
- contribute to Terminal Delivery;
- influence Terminal Balance; or
- reenter subsequent Physical Accounting within the basin.

The accounting pathway followed by Return Flow may differ according to the return mechanism, groundwater storage, travel time, Hydrologic Regime, System Evolution, operational practices, physical accessibility, and other demonstrated basin characteristics.

Equivalent quantities of Return Flow should therefore not be presumed to follow equivalent accounting pathways.

Documented Accounting Relationships, groundwater interaction, stream-aquifer exchange, conveyance systems, reservoir operations, seasonal timing, and other demonstrated physical characteristics may each materially influence subsequent accounting quantities.

Accordingly, each subsequent component of the basin water ledger shall be evaluated independently using the Accounting Relationships applicable to the demonstrated condition of the basin during the Accounting Period.

The accounting significance of Return Flow increases only as subsequent accounting quantities are independently demonstrated through documented Evidence.

Where the accounting pathway cannot be demonstrated beyond a particular accounting quantity, the point of pathway termination should be explicitly identified together with the principal source of remaining uncertainty.

Recognition of Return Flow Pathways preserves analytical transparency by distinguishing the physical return of diverted water from the progressively greater accounting significance associated with subsequent components of the basin water ledger.

## 13.7 Verification of Return Flow

Return Flow incorporated into the basin water ledger should be verified using the best available Evidence.

The purpose of verification is to establish that documented Return Flow accurately represents the physical return of previously diverted water to the Physical Accounting system during the Accounting Period.

Verification should be proportional to the Accounting Question and the significance of Return Flow within the Physical Accounting system.

Depending upon the nature of the analysis, Return Flow verification may include:

- stream gaging records;
- groundwater monitoring records;
- spring discharge measurements;
- reservoir operating records;
- return flow monitoring;
- seepage investigations;
- water quality tracing;
- remote sensing;
- field observations; or
- other documented sources of Evidence.

Verification should distinguish between:

- documented Diversions;
- measured Return Flow;
- estimated Return Flow;
- the documented return pathway;
- supporting Evidence;
- analytical assumptions; and
- resulting implications for subsequent Physical Accounting.

Verification of Return Flow does not, by itself, establish Depletion, Terminal Delivery, or Terminal Balance.

Similarly, verification of the physical return of water does not, by itself, establish the Accounting Relationships governing subsequent components of the basin water ledger.

Each subsequent accounting quantity shall be independently evaluated using the methodology established by this standard.

Where Return Flow Accounting depends upon estimated travel times, groundwater models, seepage estimates, operational records, or other analytical assumptions, those assumptions should be explicitly documented together with the supporting Evidence and resulting uncertainty.

The level of verification achieved should be communicated transparently so that users of the accounting may appropriately evaluate the reliability and accounting significance of the resulting Return Flow.

Verification strengthens Return Flow Accounting by ensuring that subsequent components of the basin water ledger are supported by documented physical evidence rather than assumption or expectation.

## 13.8 Documentation of Return Flow

Every Return Flow incorporated into the basin water ledger shall be documented in a manner sufficient to support independent review, reproduction, and subsequent Physical Accounting.

The purpose of documentation is to preserve a transparent accounting record of Return Flow, the supporting Evidence, the analytical methodology employed, and the resulting Accounting Findings.

Documentation should be proportional to the significance of Return Flow and the complexity of the Accounting Question.

At a minimum, documentation should identify, where applicable:

- the Accounting Period;
- the originating Diversion;
- the documented return pathway;
- the quantity of Return Flow;
- the timing of Return Flow;
- the destination of Return Flow;
- supporting Evidence;
- applicable Accounting Relationships;
- Accounting Transformations performed;
- the resulting accounting pathway;
- resulting Accounting Findings;
- supporting Analytical Inferences; and
- any resulting Policy Considerations.

Documentation should clearly distinguish between:

- observed Return Flow;
- measured Return Flow;
- estimated Return Flow;
- analytical assumptions;
- Accounting Findings;
- Analytical Inferences; and
- Policy Considerations.

Documentation should also distinguish between the documented physical return of water and the subsequent accounting significance assigned to that Return Flow within the basin water ledger.

The existence of documented Return Flow should not be represented as evidence of Depletion, Terminal Delivery, or Terminal Balance unless those subsequent accounting quantities have been independently demonstrated through the Physical Accounting framework.

Material uncertainty, analytical limitations, unresolved questions, and alternative interpretations affecting Return Flow should be explicitly documented together with their potential influence upon subsequent components of the basin water ledger.

Documentation should be sufficiently complete to enable an independent investigator to understand how Return Flow was determined, reproduce the principal analytical procedures, evaluate the resulting Accounting Findings, and understand the basis upon which subsequent accounting quantities were or were not demonstrated.

Accordingly, Return Flow documentation provides the permanent analytical record through which Return Flow becomes a transparent, reproducible, and independently reviewable component of the Great Salt Lake Accounting Standard.

## 13.9 Chapter Summary

This chapter establishes the standardized framework for representing and evaluating Return Flow under the Great Salt Lake Accounting Standard.

Return Flow represents the portion of previously diverted water that physically reenters the Physical Accounting system and serves as the accounting quantity linking Diversion and Depletion within the basin water ledger.

The chapter establishes the principles governing:

- representation of Return Flow;
- classification of Return Flow;
- evaluation of Return Flow;
- evaluation of Return Flow Accounting Relationships;
- evaluation of Return Flow Pathways;
- verification of Return Flow; and
- documentation of Return Flow.

Together, these components provide a transparent and reproducible methodology for incorporating Return Flow into the basin water ledger while preserving Accounting Continuity throughout the Physical Accounting system.

The chapter further establishes that documented Return Flow represents the physical return of previously diverted water but does not, by itself, establish Depletion, Terminal Delivery, or Terminal Balance.

Similarly, equivalent quantities of Return Flow should not be presumed to possess equivalent accounting significance solely because comparable quantities have been documented.

Rather, the accounting significance of Return Flow depends upon documented Diversions, demonstrated physical return mechanisms, demonstrated Accounting Relationships, transparent analytical methodology, and the demonstrated condition of the basin during the Accounting Period.

Subsequent chapters continue the basin water ledger by establishing the standardized approach for evaluating Depletion and its role within the Physical Accounting system.





# 14. Depletion Accounting

## 14.1 Purpose

The purpose of this chapter is to establish the standardized approach for representing and evaluating Depletion under the Great Salt Lake Accounting Standard (GSLAS).

Within GSLAS, Depletion represents the portion of Available Supply that is not returned to the Physical Accounting system through documented Return Flow during the applicable Accounting Period.

The objective of Depletion Accounting is to provide a transparent, reproducible, and physically defensible representation of the quantity of water no longer available for subsequent Physical Accounting.

Depletion Accounting serves as the accounting transition between Return Flow and Terminal Delivery by identifying the quantity of water permanently or effectively removed from the basin water ledger.

Accordingly, Depletion Accounting establishes the framework for:

- representing Depletion;
- evaluating Depletion;
- documenting Accounting Relationships influencing subsequent Physical Accounting;
- verifying Depletion; and
- supporting subsequent components of the basin water ledger.

Depletion Accounting shall account for the physical loss of water from subsequent Physical Accounting rather than the original Diversion or the documented Return Flow.

Accordingly, Depletion should be evaluated independently from Diversion and Return Flow even where those quantities are subsequently related through documented Accounting Relationships.

Depletion Accounting should distinguish between physical Diversions and actual Depletions. Diversions may remain unchanged under differing Hydrologic Regimes while Return Flow and resulting Depletion vary materially according to documented physical conditions.

Depletion Accounting should be based upon documented Evidence, transparent analytical methodology, and reproducible Accounting Transformations appropriate to the Accounting Question.

Unless otherwise stated, Depletion Accounting should be evaluated in accordance with the methodology established in Chapters 1 through 13.

## 14.2 Depletion

Depletion represents the portion of Available Supply that is not returned to the Physical Accounting system through documented Return Flow during the applicable Accounting Period.

Within the Great Salt Lake Accounting Standard, Depletion serves as the principal accounting quantity representing the net consumptive effect of human and environmental water use within the basin water ledger.

The purpose of Depletion Accounting is to determine the quantity of water no longer available for subsequent Physical Accounting following consideration of documented Return Flow.

Depletion shall be determined using documented Diversions together with documented Return Flow and other demonstrated Accounting Relationships applicable to the Accounting Period.

Depletion may result from one or more documented mechanisms, including:

- consumptive use;
- evapotranspiration;
- evaporation;
- exported water;
- groundwater storage changes;
- long-term losses from subsequent Physical Accounting; or
- other documented depletion mechanisms appropriate to the accounting methodology adopted for the basin.

The selection and representation of Depletion mechanisms shall be consistent with the adopted accounting methodology and shall be explicitly documented.

Where practicable, Depletion Accounting should identify:

- the Accounting Period;
- the originating Diversion;
- documented Return Flow;
- the resulting Depletion;
- the mechanism of Depletion;
- supporting Evidence;
- applicable Accounting Relationships; and
- resulting implications for Terminal Delivery and Terminal Balance.

Depletion represents a physical accounting quantity rather than a Diversion, Return Flow, management outcome, or policy objective.

Accordingly, Depletion should be evaluated according to documented physical loss from subsequent Physical Accounting rather than assumptions regarding water use efficiency or conservation.

Equivalent Diversions do not, by themselves, establish equivalent Depletion.

Similarly, equivalent Return Flow does not, by itself, establish equivalent Depletion.

The accounting significance of Depletion depends upon documented Diversions, documented Return Flow, demonstrated Accounting Relationships, Hydrologic Regimes, System Evolution where applicable, and the demonstrated condition of the basin during the Accounting Period.

Accordingly, Depletion shall be evaluated using documented Diversions together with documented Return Flow and demonstrated physical accounting relationships.

Depletion represents the final accounting quantity describing the net removal of water from subsequent Physical Accounting and provides the accounting foundation for Terminal Delivery Accounting.

### 14.3 Classification of Depletion

Depletion should be classified according to the physical characteristics that materially influence subsequent Physical Accounting within the basin water ledger.

The purpose of Depletion classification is to improve analytical consistency by organizing Depletion according to its accounting significance rather than by quantity alone.

Classification should remain proportional to the Accounting Question and should identify those characteristics that materially influence subsequent Terminal Delivery and Terminal Balance Accounting.

Depending upon the nature of the analysis, Depletion may be classified according to:

- depletion mechanism;
- originating Diversion;
- Accounting Period;
- quantity;
- timing;
- location;
- sector of use;
- permanence; or
- other analytically relevant physical characteristics.

Where material to the Accounting Question, Depletion should distinguish among depletion resulting from:

- agricultural consumptive use;
- municipal and industrial consumptive use;
- environmental water use;
- evaporation;
- groundwater storage changes;
- exported water;
- phreatophytic vegetation;
- other documented depletion mechanisms.

Equivalent quantities of Depletion should not be presumed to possess equivalent accounting significance.

Classification should therefore recognize that identical quantities of Depletion may produce materially different subsequent Accounting Relationships because of differences in depletion mechanism, Hydrologic Regime, System Evolution, timing, location, groundwater interaction, or other documented basin characteristics.

Similarly, Depletion occurring during one Accounting Period should not be presumed representative of future Accounting Periods solely because comparable quantities have previously occurred.

Diversions may remain relatively constant while Return Flow and resulting Depletion vary materially between Hydrologic Regimes.

Accordingly, Depletion classification should emphasize the physical characteristics governing subsequent Terminal Delivery rather than numerical quantity alone.

Where Depletion classification materially influences subsequent Accounting Findings, the analytical basis for the selected classification should be explicitly documented.

## 14.4 Evaluation of Depletion

Depletion shall be evaluated according to documented Diversions, documented Return Flow, and demonstrated Accounting Relationships governing the net removal of water from subsequent Physical Accounting.

The purpose of Depletion evaluation is to determine the quantity of water no longer available within the basin water ledger and to establish the accounting foundation for subsequent Terminal Delivery Accounting.

Evaluation should begin with documented Diversions and documented Return Flow and proceed through the demonstrated Accounting Relationships governing net Depletion.

Where applicable, the analysis should determine:

- the Accounting Period;
- the originating Diversion;
- documented Return Flow;
- the resulting Depletion;
- the mechanism of Depletion;
- supporting Evidence;
- Accounting Relationships influencing subsequent Physical Accounting; and
- resulting implications for Terminal Delivery and Terminal Balance.

Evaluation of Depletion should distinguish between the physical withdrawal of water, the physical return of water, and the resulting net Depletion.

Equivalent Diversions do not, by themselves, establish equivalent Depletion.

Similarly, equivalent Return Flow does not, by itself, establish equivalent Depletion.

The accounting significance of Depletion depends upon documented Diversions, documented Return Flow, demonstrated Accounting Relationships, Hydrologic Regimes, System Evolution where applicable, and the demonstrated condition of the basin during the Accounting Period.

Where material to the Accounting Question, Depletion evaluation should consider whether changes in Hydrologic Regime, groundwater conditions, return-flow pathways, operational practices, timing, or other documented physical conditions materially influence the resulting Depletion.

Accordingly, Diversions may remain substantially unchanged while Return Flow and resulting Depletion differ materially under different Hydrologic Regimes.

Depletion shall therefore be evaluated using documented Diversions together with documented Return Flow and demonstrated physical accounting relationships rather than Diversions alone.

Evaluation of Depletion provides the accounting foundation for subsequent Terminal Delivery Accounting by identifying the net quantity of water no longer available for downstream Physical Accounting.

## 14.5 Depletion Accounting Relationships

Depletion shall be evaluated within the context of its Accounting Relationships to subsequent components of the basin water ledger.

The purpose of Depletion Accounting Relationships is to establish how the net removal of water from subsequent Physical Accounting influences Terminal Delivery while preserving analytical transparency throughout the basin water ledger.

Depletion represents the net quantity of water no longer available within the basin water ledger following consideration of documented Return Flow.

Accordingly, the principal Accounting Relationship established in this chapter is the relationship between Depletion and Terminal Delivery.

Following determination of Terminal Delivery, subsequent Accounting Relationships proceed through the remaining components of the basin water ledger.

These downstream accounting quantities may include:

- Terminal Balance.

The existence of a Depletion Accounting Relationship does not imply that equivalent Depletions will produce equivalent downstream accounting quantities.

Rather, each Accounting Relationship shall be evaluated independently using documented Evidence, Accounting Relationships, and Accounting Transformations.

Equivalent quantities of Depletion do not, by themselves, establish equivalent Terminal Delivery.

Similarly, equivalent Terminal Delivery does not, by itself, establish equivalent Terminal Balance.

Additional Accounting Relationships are required before each subsequent accounting quantity can be demonstrated.

Depletion Accounting Relationships are influenced by Return Flow, groundwater interaction, Hydrologic Regime, System Evolution, timing, location, operational practices, and other documented basin characteristics.

Accordingly, comparable Depletions should not be presumed to produce equivalent downstream accounting quantities where physical conditions or Accounting Relationships differ materially.

Diversions may remain substantially unchanged while differences in Return Flow produce materially different Depletions and, consequently, materially different Terminal Delivery.

Each stage of the basin water ledger shall therefore be evaluated using the Accounting Relationships applicable to the demonstrated condition of the basin during the Accounting Period.

Accordingly, no subsequent accounting quantity should be presumed solely because Terminal Delivery has been demonstrated.

Each component of the basin water ledger requires independent analytical support.

Where multiple Accounting Relationships influence the same Accounting Finding, those relationships should be explicitly documented together with any material assumptions and resulting uncertainty.

Evaluation of Depletion Accounting Relationships improves analytical transparency by demonstrating how the net removal of water influences Terminal Delivery while preventing unsupported conclusions regarding subsequent accounting quantities.

## 14.6 Depletion Pathways

Depletion shall be evaluated according to the basin water ledger through which water becomes unavailable for subsequent Physical Accounting.

The purpose of evaluating Depletion Pathways is to determine how the net removal of water influences Terminal Delivery, Terminal Balance, and the accounting significance of management actions while preserving analytical transparency.

A demonstrated Depletion establishes only that water is no longer available for subsequent Physical Accounting.

It does not, by itself, establish Terminal Delivery or Terminal Balance.

Accordingly, the basin water ledger shall be evaluated sequentially using documented Evidence, Accounting Relationships, and Accounting Transformations.

Depending upon the Accounting Question, Depletion may:

- reduce Terminal Delivery;
- influence Terminal Balance; or
- contribute to long-term changes in basin storage.

The accounting pathway followed by Depletion may differ according to the depletion mechanism, Return Flow, groundwater interaction, Hydrologic Regime, System Evolution, timing, operational practices, and other demonstrated basin characteristics.

Equivalent quantities of Depletion should therefore not be presumed to follow equivalent accounting pathways.

Documented Accounting Relationships, return-flow pathways, groundwater storage, stream-aquifer interaction, conveyance systems, operational practices, and other demonstrated physical characteristics may each materially influence subsequent accounting quantities.

Accordingly, each subsequent component of the basin water ledger shall be evaluated independently using the Accounting Relationships applicable to the demonstrated condition of the basin during the Accounting Period.

The accounting significance of Depletion increases only as subsequent accounting quantities are independently demonstrated through documented Evidence.

Accordingly, reductions in Depletion should not be presumed to produce equivalent increases in Terminal Delivery unless the intervening Accounting Relationships have been independently demonstrated.

Where the accounting pathway cannot be demonstrated beyond a particular accounting quantity, the point of pathway termination should be explicitly identified together with the principal source of remaining uncertainty.

Recognition of Depletion Pathways preserves analytical transparency by distinguishing the physical removal of water from subsequent Physical Accounting from the progressively greater accounting significance associated with downstream accounting quantities.

## 14.7 Verification of Depletion

Depletion incorporated into the basin water ledger should be verified using the best available Evidence.

The purpose of verification is to establish that documented Depletion accurately represents the net removal of water from subsequent Physical Accounting during the Accounting Period.

Verification should be proportional to the Accounting Question and the significance of Depletion within the Physical Accounting system.

Depending upon the nature of the analysis, Depletion verification may include:

- documented Diversions;
- documented Return Flow;
- stream gaging records;
- groundwater monitoring records;
- evapotranspiration estimates;
- reservoir operating records;
- consumptive use analyses;
- remote sensing;
- field observations; or
- other documented sources of Evidence.

Verification should distinguish between:

- documented Diversions;
- documented Return Flow;
- measured Depletion;
- estimated Depletion;
- the documented depletion mechanism;
- supporting Evidence;
- analytical assumptions; and
- resulting implications for subsequent Physical Accounting.

Verification of Depletion does not, by itself, establish Terminal Delivery or Terminal Balance.

Similarly, verification of the net removal of water does not, by itself, establish the Accounting Relationships governing subsequent components of the basin water ledger.

Each subsequent accounting quantity shall be independently evaluated using the methodology established by this standard.

Where Depletion Accounting depends upon estimated consumptive use, groundwater models, evapotranspiration estimates, return-flow assumptions, operational records, or other analytical assumptions, those assumptions should be explicitly documented together with the supporting Evidence and resulting uncertainty.

The level of verification achieved should be communicated transparently so that users of the accounting may appropriately evaluate the reliability and accounting significance of the resulting Depletion.

Verification strengthens Depletion Accounting by ensuring that subsequent components of the basin water ledger are supported by documented physical evidence rather than assumption or expectation.

## 14.8 Documentation of Depletion

Every Depletion incorporated into the basin water ledger shall be documented in a manner sufficient to support independent review, reproduction, and subsequent Physical Accounting.

The purpose of documentation is to preserve a transparent accounting record of Depletion, the supporting Evidence, the analytical methodology employed, and the resulting Accounting Findings.

Documentation should be proportional to the significance of Depletion and the complexity of the Accounting Question.

At a minimum, documentation should identify, where applicable:

- the Accounting Period;
- the originating Diversion;
- documented Return Flow;
- the resulting Depletion;
- the documented depletion mechanism;
- supporting Evidence;
- applicable Accounting Relationships;
- Accounting Transformations performed;
- the resulting accounting pathway;
- resulting Accounting Findings;
- supporting Analytical Inferences; and
- any resulting Policy Considerations.

Documentation should clearly distinguish between:

- documented Diversions;
- documented Return Flow;
- measured Depletion;
- estimated Depletion;
- analytical assumptions;
- Accounting Findings;
- Analytical Inferences; and
- Policy Considerations.

Documentation should also distinguish between the documented net removal of water from subsequent Physical Accounting and the subsequent accounting significance assigned to that Depletion within the basin water ledger.

The existence of documented Depletion should not be represented as evidence of Terminal Delivery or Terminal Balance unless those subsequent accounting quantities have been independently demonstrated through the Physical Accounting framework.

Material uncertainty, analytical limitations, unresolved questions, and alternative interpretations affecting Depletion should be explicitly documented together with their potential influence upon subsequent components of the basin water ledger.

Documentation should be sufficiently complete to enable an independent investigator to understand how Depletion was determined, reproduce the principal analytical procedures, evaluate the resulting Accounting

Findings, and understand the basis upon which subsequent accounting quantities were or were not demonstrated.

Accordingly, Depletion documentation provides the permanent analytical record through which Depletion becomes a transparent, reproducible, and independently reviewable component of the Great Salt Lake Accounting Standard.

## 14.9 Chapter Summary

This chapter establishes the standardized framework for representing and evaluating Depletion under the Great Salt Lake Accounting Standard.

Depletion represents the net quantity of water no longer available for subsequent Physical Accounting following consideration of documented Return Flow and serves as the principal accounting quantity describing consumptive loss within the basin water ledger.

The chapter establishes the principles governing:

- representation of Depletion;
- classification of Depletion;
- evaluation of Depletion;
- evaluation of Depletion Accounting Relationships;
- evaluation of Depletion Pathways;
- verification of Depletion; and
- documentation of Depletion.

Together, these components provide a transparent and reproducible methodology for incorporating Depletion into the basin water ledger while preserving Accounting Continuity throughout the Physical Accounting system.

The chapter further establishes that Depletion is determined through documented Diversions, documented Return Flow, and demonstrated Accounting Relationships, but does not, by itself, establish Terminal Delivery or Terminal Balance.

Similarly, equivalent Diversions should not be presumed to produce equivalent Depletions, and equivalent Depletions should not be presumed to produce equivalent Terminal Delivery, solely because comparable quantities have been observed.

Rather, the accounting significance of Depletion depends upon documented Diversions, documented Return Flow, demonstrated Accounting Relationships, Hydrologic Regimes, System Evolution where applicable, transparent analytical methodology, and the demonstrated condition of the basin during the Accounting Period.

Accordingly, Diversions may remain substantially unchanged while differences in Return Flow produce materially different Depletions and, consequently, materially different downstream accounting outcomes.

Subsequent chapters continue the basin water ledger by establishing the standardized approach for evaluating Terminal Delivery and its role within the Physical Accounting system.





# 15. Terminal Delivery Accounting

## 15.1 Purpose

The purpose of this chapter is to establish the standardized approach for representing and evaluating Terminal Delivery under the Great Salt Lake Accounting Standard (GSLAS).

Within GSLAS, Terminal Delivery represents the quantity of water physically delivered to the accounting endpoint following consideration of documented Climate, Basin Yield, Imports and Exports, Available Supply, Diversions, Return Flow, and Depletion during the Accounting Period.

The objective of Terminal Delivery Accounting is to provide a transparent, reproducible, and physically defensible representation of the quantity of water ultimately reaching the accounting endpoint of the Physical Accounting system.

Terminal Delivery Accounting serves as the culmination of the basin water ledger by identifying the quantity of water physically delivered after all preceding Accounting Relationships have been evaluated.

Accordingly, Terminal Delivery Accounting establishes the framework for:

- representing Terminal Delivery;
- evaluating Terminal Delivery;
- documenting Accounting Relationships influencing Terminal Balance;
- verifying Terminal Delivery; and
- supporting subsequent analytical accounting.

Terminal Delivery Accounting shall account for the physical delivery of water to the accounting endpoint rather than the upstream processes producing that delivery.

Accordingly, Terminal Delivery should be evaluated independently from Basin Yield, Available Supply, Diversions, Return Flow, and Depletion even where those quantities are related through documented Accounting Relationships.

The accounting endpoint shall be explicitly identified and documented.

Depending upon the accounting methodology adopted for the basin, the accounting endpoint may include:

- a terminal lake;
- an interstate boundary;
- an ex-basin delivery point;
- a downstream accounting location; or
- another documented accounting endpoint appropriate to the basin.

Terminal Delivery Accounting should be based upon documented Evidence, transparent analytical methodology, and reproducible Accounting Transformations appropriate to the Accounting Question.

Unless otherwise stated, Terminal Delivery Accounting should be evaluated in accordance with the methodology established in Chapters 1 through 14.

## 15.2 Terminal Delivery

Terminal Delivery represents the quantity of water physically delivered to the accounting endpoint following consideration of documented Climate, Basin Yield, Imports and Exports, Available Supply, Diversions, Return Flow, and Depletion during the Accounting Period.

Within the Great Salt Lake Accounting Standard, Terminal Delivery serves as the final accounting quantity within the basin water ledger and represents the physical outcome of all preceding Accounting Relationships.

The purpose of Terminal Delivery Accounting is to determine the quantity of water physically reaching the accounting endpoint.

Terminal Delivery shall be determined using documented Depletion together with documented physical delivery to the accounting endpoint.

The accounting endpoint shall be explicitly identified as part of the adopted accounting methodology.

Depending upon the accounting system adopted for the basin, Terminal Delivery may represent delivery to:

- a terminal lake;
- an interstate boundary;
- an ex-basin discharge point;
- a downstream accounting location; or
- another documented accounting endpoint.

The selection and representation of the accounting endpoint shall be consistent with the adopted accounting methodology and shall be explicitly documented.

Where the accounting endpoint is a terminal lake fed through intervening wetland or bay systems, as at Great Salt Lake, delivery to an upstream measurement boundary is not by itself Terminal Delivery to the lake; see §E.4 for the Great Salt Lake Zone 1/Zone 2 treatment of this distinction.

Where practicable, Terminal Delivery Accounting should identify:

- the Accounting Period;
- the accounting endpoint;
- documented Depletion;
- the resulting Terminal Delivery;
- supporting Evidence;
- applicable Accounting Relationships; and
- resulting implications for subsequent Terminal Balance and Analytical Accounting.

Terminal Delivery represents a physical accounting quantity rather than a management objective, policy outcome, engineering proposal, or accounting inference.

Accordingly, Terminal Delivery should be evaluated according to documented physical delivery to the accounting endpoint rather than anticipated environmental benefit or management intent.

Equivalent Depletions do not, by themselves, establish equivalent Terminal Delivery.

Similarly, equivalent Terminal Delivery should not be presumed to produce equivalent Terminal Balance or equivalent environmental outcomes.

The accounting significance of Terminal Delivery depends upon documented Depletion, demonstrated Accounting Relationships, the adopted accounting methodology, and the demonstrated condition of the basin during the Accounting Period.

Accordingly, Terminal Delivery shall be evaluated using documented physical evidence demonstrating delivery to the identified accounting endpoint.

Terminal Delivery represents the culminating quantity within the basin water ledger and provides the accounting foundation for Dedicated Water Accounting, Bankability, and subsequent Analytical Accounting.

### 15.3 Classification of Terminal Delivery

Terminal Delivery should be classified according to the physical characteristics that materially influence subsequent Physical Accounting and Analytical Accounting.

The purpose of Terminal Delivery classification is to improve analytical consistency by organizing Terminal Delivery according to its accounting significance rather than by quantity alone.

Classification should remain proportional to the Accounting Question and should identify those characteristics that materially influence subsequent Terminal Balance, Dedicated Water Accounting, and Bankability.

Depending upon the nature of the analysis, Terminal Delivery may be classified according to:

- accounting endpoint;
- Accounting Period;
- quantity;
- timing;
- source basin;
- Hydrologic Regime;

- method of delivery; or
- other analytically relevant physical characteristics.

Where material to the Accounting Question, Terminal Delivery should distinguish among deliveries to:

- terminal lakes;
- interstate boundaries;
- ex-basin discharge points;
- downstream accounting locations; or
- other documented accounting endpoints.

Equivalent quantities of Terminal Delivery should not be presumed to possess equivalent accounting significance.

Classification should therefore recognize that identical quantities of Terminal Delivery may produce materially different subsequent Accounting Relationships because of differences in accounting endpoint, Hydrologic Regime, timing, operational practices, System Evolution, or other documented basin characteristics.

Similarly, Terminal Delivery observed during one Accounting Period should not be presumed representative of future Accounting Periods solely because comparable quantities have previously occurred.

Accordingly, Terminal Delivery classification should emphasize the physical characteristics governing subsequent Terminal Balance and Analytical Accounting rather than numerical quantity alone.

Where Terminal Delivery classification materially influences subsequent Accounting Findings, the analytical basis for the selected classification should be explicitly documented.

## 15.4 Evaluation of Terminal Delivery

Terminal Delivery shall be evaluated according to documented physical delivery of water to the identified accounting endpoint during the Accounting Period.

The purpose of Terminal Delivery evaluation is to determine the quantity of water physically reaching the accounting endpoint and to establish the accounting foundation for subsequent Terminal Balance and Analytical Accounting.

Evaluation should begin with documented Depletion and proceed through the demonstrated Accounting Relationships governing physical delivery to the accounting endpoint.

Where applicable, the analysis should determine:

- the Accounting Period;
- the identified accounting endpoint;
- documented Depletion;
- the resulting Terminal Delivery;
- supporting Evidence;
- Accounting Relationships influencing Terminal Balance; and
- resulting implications for Dedicated Water, Bankability, and subsequent Analytical Accounting.

Evaluation of Terminal Delivery should distinguish between upstream accounting quantities and the quantity of water physically delivered to the accounting endpoint.

Equivalent Depletions do not, by themselves, establish equivalent Terminal Delivery.

Similarly, equivalent Terminal Delivery should not be presumed to produce equivalent Terminal Balance, Lake Accretion, or equivalent environmental outcomes.

The accounting significance of Terminal Delivery depends upon documented Depletion, demonstrated Accounting Relationships, the adopted accounting methodology, Hydrologic Regime where applicable, System Evolution where applicable, and the demonstrated condition of the basin during the Accounting Period.

Where material to the Accounting Question, Terminal Delivery evaluation should consider whether conveyance losses, groundwater interaction, travel time, operational practices, hydrologic conditions, or other documented physical conditions materially influence the quantity of water physically delivered to the accounting endpoint.

Accordingly, Terminal Delivery shall be evaluated using documented Depletion together with documented physical evidence demonstrating delivery to the identified accounting endpoint.

Evaluation of Terminal Delivery provides the accounting foundation for subsequent Dedicated Water Accounting and Bankability by establishing the quantity of water physically reaching the accounting endpoint.

## 15.5 Terminal Delivery Accounting Relationships

Terminal Delivery shall be evaluated within the context of its Accounting Relationships to subsequent components of the Great Salt Lake Accounting Standard.

The purpose of Terminal Delivery Accounting Relationships is to establish how the physical delivery of water to the accounting endpoint influences Terminal Balance while preserving analytical transparency throughout the Great Salt Lake Accounting Standard.

Terminal Delivery represents the culmination of the Physical Accounting system and the final accounting quantity within the basin water ledger.

Accordingly, the principal Accounting Relationship established in this chapter is the relationship between Terminal Delivery and Terminal Balance.

Following determination of Terminal Balance, subsequent analytical evaluation may consider:

- Dedicated Water;
- Bankability;
- Accounting Findings;
- Analytical Inference; and
- Policy Considerations.

The existence of a Terminal Delivery Accounting Relationship does not imply that equivalent quantities of Terminal Delivery will produce equivalent downstream accounting quantities or policy outcomes.

Rather, each Accounting Relationship shall be evaluated independently using documented Evidence, Accounting Relationships, and Accounting Transformations.

Equivalent quantities of Terminal Delivery do not, by themselves, establish equivalent Terminal Balance.

Similarly, equivalent Terminal Balance does not, by itself, establish equivalent Dedicated Water, Bankability, Accounting Findings, or Analytical Inference.

Additional Accounting Relationships are required before each subsequent analytical conclusion can be demonstrated.

Terminal Delivery Accounting Relationships are influenced by the accounting endpoint, Hydrologic Regime, System Evolution, travel time, operational practices, physical basin conditions, and other documented characteristics applicable to the adopted accounting methodology.

Accordingly, comparable quantities of Terminal Delivery should not be presumed to produce equivalent downstream accounting quantities where physical conditions or Accounting Relationships differ materially.

Each stage of the Great Salt Lake Accounting Standard shall therefore be evaluated using the Accounting Relationships applicable to the demonstrated condition of the basin during the Accounting Period.

Accordingly, no subsequent analytical conclusion should be presumed solely because Terminal Balance has been demonstrated.

Each component of the accounting framework requires independent analytical support.

Where multiple Accounting Relationships influence the same Accounting Finding, those relationships should be explicitly documented together with any material assumptions and resulting uncertainty.

Evaluation of Terminal Delivery Accounting Relationships improves analytical transparency by demonstrating how physical delivery to the accounting endpoint supports subsequent analytical accounting while preventing unsupported analytical conclusions.

## 15.6 Terminal Delivery Pathways

Terminal Delivery shall be evaluated according to the basin water ledger through which water is physically conveyed to the identified accounting endpoint.

The purpose of evaluating Terminal Delivery Pathways is to determine how water physically reaches the accounting endpoint while preserving analytical transparency and supporting subsequent Analytical Accounting.

A demonstrated Terminal Delivery establishes only that water has physically reached the identified accounting endpoint.

It does not, by itself, establish Terminal Balance, Dedicated Water, Bankability, Accounting Findings, Analytical Inference, or Policy Considerations.

Accordingly, the accounting framework shall be evaluated sequentially using documented Evidence, Accounting Relationships, and Accounting Transformations.

Depending upon the Accounting Question, Terminal Delivery may:

- contribute to Terminal Balance;
- support Dedicated Water;
- support evaluation of Bankability;
- support Accounting Findings;
- support Analytical Inference; or
- support subsequent Policy Considerations.

The accounting pathway followed by Terminal Delivery may differ according to the accounting endpoint, Hydrologic Regime, System Evolution, travel time, operational practices, groundwater interaction, conveyance characteristics, and other demonstrated basin conditions.

Equivalent quantities of Terminal Delivery should therefore not be presumed to follow equivalent accounting pathways.

Documented Accounting Relationships, physical basin characteristics, operational practices, climatic conditions, and other demonstrated physical factors may each materially influence subsequent accounting quantities.

Accordingly, each subsequent component of the Great Salt Lake Accounting Standard shall be evaluated independently using the Accounting Relationships applicable to the demonstrated condition of the basin during the Accounting Period.

The accounting significance of Terminal Delivery increases only as subsequent accounting quantities are independently demonstrated through documented Evidence.

Accordingly, increases in Terminal Delivery should not be presumed to produce equivalent increases in Terminal Balance, Dedicated Water, Bankability, or environmental benefit unless the intervening Accounting Relationships have been independently demonstrated.

Where the accounting pathway cannot be demonstrated beyond a particular accounting quantity, the point of pathway termination should be explicitly identified together with the principal source of remaining uncertainty.

Recognition of Terminal Delivery Pathways preserves analytical transparency by distinguishing the physical delivery of water to the accounting endpoint from the progressively greater accounting significance associated with subsequent analytical conclusions.

## 15.7 Verification of Terminal Delivery

Terminal Delivery incorporated into the basin water ledger should be verified using the best available Evidence.

The purpose of verification is to establish that documented Terminal Delivery accurately represents the physical quantity of water reaching the identified accounting endpoint during the Accounting Period.

Verification should be proportional to the Accounting Question and the significance of Terminal Delivery within the Physical Accounting system.

Depending upon the nature of the analysis, Terminal Delivery verification may include:

- stream gaging records;
- lake inflow measurements;
- interstate accounting records;
- downstream monitoring records;
- reservoir operating records;
- hydrologic monitoring;
- groundwater monitoring where applicable;
- remote sensing;

- field observations; or
- other documented sources of Evidence.

Verification should distinguish between:

- documented Depletion;
- measured Terminal Delivery;
- estimated Terminal Delivery;
- the identified accounting endpoint;
- supporting Evidence;
- analytical assumptions; and
- resulting implications for subsequent Analytical Accounting.

Verification of Terminal Delivery does not, by itself, establish Terminal Balance, Dedicated Water, Bankability, Accounting Findings, Analytical Inference, or Policy Considerations.

Similarly, verification of physical delivery does not, by itself, establish the Accounting Relationships governing subsequent components of the Great Salt Lake Accounting Standard.

Each subsequent accounting quantity shall be independently evaluated using the methodology established by this standard.

Where Terminal Delivery Accounting depends upon estimated inflows, modeled travel times, operational records, groundwater interaction, or other analytical assumptions, those assumptions should be explicitly documented together with the supporting Evidence and resulting uncertainty.

The level of verification achieved should be communicated transparently so that users of the accounting may appropriately evaluate the reliability and accounting significance of the resulting Terminal Delivery.

Verification strengthens Terminal Delivery Accounting by ensuring that subsequent analytical conclusions are supported by documented physical evidence rather than assumption or expectation.

## 15.8 Documentation of Terminal Delivery

Every Terminal Delivery incorporated into the basin water ledger shall be documented in a manner sufficient to support independent review, reproduction, and subsequent Analytical Accounting.

The purpose of documentation is to preserve a transparent accounting record of Terminal Delivery, the supporting Evidence, the analytical methodology employed, and the resulting Accounting Findings.

Documentation should be proportional to the significance of Terminal Delivery and the complexity of the Accounting Question.

At a minimum, documentation should identify, where applicable:

- the Accounting Period;
- the identified accounting endpoint;
- documented Depletion;
- the resulting Terminal Delivery;
- supporting Evidence;
- applicable Accounting Relationships;
- Accounting Transformations performed;
- the resulting accounting pathway;
- resulting Accounting Findings;
- supporting Analytical Inferences; and
- any resulting Policy Considerations.

Documentation should clearly distinguish between:

- observed Terminal Delivery;
- measured Terminal Delivery;
- estimated Terminal Delivery;
- analytical assumptions;
- Accounting Findings;
- Analytical Inferences; and
- Policy Considerations.



Documentation should also distinguish between the documented physical delivery of water to the accounting endpoint and the subsequent accounting significance assigned to that Terminal Delivery within the Great Salt Lake Accounting Standard.

The existence of documented Terminal Delivery should not be represented as evidence of Terminal Balance, Dedicated Water, Bankability, Accounting Findings, Analytical Inference, or Policy Considerations unless those subsequent accounting quantities have been independently demonstrated through the accounting framework.

Material uncertainty, analytical limitations, unresolved questions, and alternative interpretations affecting Terminal Delivery should be explicitly documented together with their potential influence upon subsequent analytical conclusions.

Documentation should be sufficiently complete to enable an independent investigator to understand how Terminal Delivery was determined, reproduce the principal analytical procedures, evaluate the resulting Accounting Findings, and understand the basis upon which subsequent accounting quantities were or were not demonstrated.

Accordingly, Terminal Delivery documentation provides the permanent analytical record through which Terminal Delivery becomes a transparent, reproducible, and independently reviewable component of the Great Salt Lake Accounting Standard.

## 15.9 Chapter Summary

This chapter establishes the standardized framework for representing and evaluating Terminal Delivery under the Great Salt Lake Accounting Standard.

Terminal Delivery represents the quantity of water physically delivered to the identified accounting endpoint following consideration of documented Climate, Basin Yield, Imports and Exports, Available Supply, Diversions, Return Flow, and Depletion.

The chapter establishes the principles governing:

- representation of Terminal Delivery;
- classification of Terminal Delivery;
- evaluation of Terminal Delivery;
- evaluation of Terminal Delivery Accounting Relationships;
- evaluation of Terminal Delivery Pathways;
- verification of Terminal Delivery; and
- documentation of Terminal Delivery.

Together, these components provide a transparent and reproducible methodology for incorporating Terminal Delivery into the basin water ledger while preserving Accounting Continuity throughout the Physical Accounting system.

The chapter further establishes that Terminal Delivery represents the culmination of the Physical Accounting system but does not, by itself, establish Terminal Balance, Dedicated Water, Bankability, Accounting Findings, Analytical Inference, or Policy Considerations.

Similarly, equivalent quantities of Terminal Delivery should not be presumed to possess equivalent accounting significance solely because comparable quantities have been observed.

Rather, the accounting significance of Terminal Delivery depends upon documented physical delivery to the identified accounting endpoint, demonstrated Accounting Relationships, the adopted accounting methodology, transparent analytical methodology, and the demonstrated condition of the basin during the Accounting Period.

Accordingly, Terminal Delivery provides the physical accounting foundation upon which Dedicated Water, Bankability, Accounting Findings, Analytical Inference, and Policy Considerations may subsequently be evaluated.

Subsequent chapters transition from the Physical Accounting system to Analytical Accounting by establishing the standardized approach for evaluating Dedicated Water and its role in supporting defensible water accounting.





## 16. Dedicated Water Accounting

### 16.1 Purpose

The purpose of this chapter is to establish the standardized approach for representing and evaluating Dedicated Water under the Great Salt Lake Accounting Standard (GSLAS).

Within GSLAS, Dedicated Water represents water that has been demonstrably committed to a documented accounting objective through legally, operationally, or physically established mechanisms.

The objective of Dedicated Water Accounting is to provide a transparent, reproducible, and physically defensible representation of water that has been intentionally dedicated to a specified accounting purpose.

Dedicated Water Accounting serves as the transition from Physical Accounting to Analytical Accounting by distinguishing physical delivery from documented management commitments.

Accordingly, Dedicated Water Accounting establishes the framework for:

- representing Dedicated Water;
- evaluating Dedicated Water;
- documenting Accounting Relationships supporting Dedicated Water;
- verifying Dedicated Water; and
- supporting subsequent Bankability and Analytical Accounting.

Dedicated Water Accounting shall distinguish between physical delivery of water and documented dedication of that water to an identified accounting objective.

Accordingly, Dedicated Water should not be presumed solely because Terminal Delivery has been demonstrated.

Dedicated Water requires independent evidence demonstrating that water has been intentionally dedicated through documented legal, operational, contractual, administrative, or other verifiable mechanisms appropriate to the Accounting Question.

Dedicated Water Accounting should be based upon documented Evidence, transparent analytical methodology, and reproducible Accounting Transformations appropriate to the Accounting Question.

Unless otherwise stated, Dedicated Water Accounting should be evaluated in accordance with the methodology established in Chapters 1 through 15.

### 16.2 Dedicated Water

Dedicated Water represents water that has been demonstrably committed to a documented accounting objective through legally, operationally, or physically established mechanisms.

Within the Great Salt Lake Accounting Standard, Dedicated Water serves as the first analytical accounting quantity and establishes the foundation upon which Bankability is subsequently evaluated.

The purpose of Dedicated Water Accounting is to determine whether water has been demonstrably dedicated to a specific accounting objective independent of the physical processes represented within the basin water ledger.

Dedicated Water shall be determined using documented Terminal Delivery together with documented evidence demonstrating intentional dedication.

Dedicated Water may be established through one or more documented mechanisms, including:

- statutory dedication;
- water-right dedication;
- contractual dedication;
- administrative dedication;
- operational dedication;
- legally enforceable agreements; or

- other documented mechanisms appropriate to the Accounting Question.

The selection and representation of the dedication mechanism shall be explicitly documented.

Where practicable, Dedicated Water Accounting should identify:

- the Accounting Period;
- the documented Terminal Delivery;
- the quantity of Dedicated Water;
- the accounting objective;
- the dedication mechanism;
- supporting Evidence;
- applicable Accounting Relationships; and
- resulting implications for subsequent Bankability.

Dedicated Water represents an analytical accounting quantity rather than a physical accounting quantity.

Accordingly, Dedicated Water should be evaluated according to documented evidence demonstrating intentional dedication rather than the physical presence of water at the accounting endpoint.

Equivalent quantities of Terminal Delivery do not, by themselves, establish equivalent Dedicated Water.

Similarly, equivalent quantities of Dedicated Water should not be presumed to produce equivalent Bankability.

The accounting significance of Dedicated Water depends upon documented Terminal Delivery, demonstrated dedication mechanisms, demonstrated Accounting Relationships, and the applicable legal, operational, and physical conditions governing the Accounting Question.

Accordingly, Dedicated Water shall be evaluated using documented Terminal Delivery together with documented evidence demonstrating intentional dedication.

Dedicated Water provides the analytical foundation for subsequent Bankability by distinguishing physical water delivery from demonstrably committed water.

### 16.3 Classification of Dedicated Water

Dedicated Water should be classified according to the characteristics that materially influence subsequent Bankability and Analytical Accounting.

The purpose of Dedicated Water classification is to improve analytical consistency by organizing Dedicated Water according to its accounting significance rather than by quantity alone.

Classification should remain proportional to the Accounting Question and should identify those characteristics that materially influence subsequent Bankability.

Depending upon the nature of the analysis, Dedicated Water may be classified according to:

- dedication mechanism;
- accounting objective;
- Accounting Period;
- quantity;
- duration;
- legal enforceability;
- operational restrictions; or
- other analytically relevant characteristics.

Where material to the Accounting Question, Dedicated Water should distinguish among water dedicated through:

- statutory mechanisms;
- contractual agreements;
- administrative actions;
- water-right transactions;
- operational commitments;
- conservation agreements; or
- other documented dedication mechanisms.

Equivalent quantities of Dedicated Water should not be presumed to possess equivalent accounting significance.

Classification should therefore recognize that identical quantities of Dedicated Water may produce materially different subsequent Accounting Relationships because of differences in legal authority, operational restrictions, enforceability, duration, accounting objective, or other documented characteristics.

Similarly, Dedicated Water established during one Accounting Period should not be presumed representative of future Accounting Periods solely because comparable quantities have previously been dedicated.

Accordingly, Dedicated Water classification should emphasize the characteristics governing subsequent Bankability rather than numerical quantity alone.

Where Dedicated Water classification materially influences subsequent Accounting Findings, the analytical basis for the selected classification should be explicitly documented.

## 16.4 Evaluation of Dedicated Water

Dedicated Water shall be evaluated according to documented evidence demonstrating that water has been intentionally committed to a specified accounting objective.

The purpose of Dedicated Water evaluation is to determine whether documented Terminal Delivery has been demonstrably dedicated through legally, operationally, administratively, contractually, or otherwise verifiable mechanisms.

Evaluation should begin with documented Terminal Delivery and proceed through the documented dedication mechanisms supporting the Accounting Question.

Where applicable, the analysis should determine:

- the Accounting Period;
- documented Terminal Delivery;
- the quantity of Dedicated Water;
- the accounting objective;
- the dedication mechanism;
- supporting Evidence;
- Accounting Relationships influencing subsequent Bankability; and
- resulting implications for subsequent Analytical Accounting.

Evaluation of Dedicated Water should distinguish between the physical delivery of water and the documented commitment of that water to a specified accounting objective.

Equivalent quantities of Terminal Delivery do not, by themselves, establish equivalent Dedicated Water.

Similarly, equivalent quantities of Dedicated Water should not be presumed to produce equivalent Bankability.

The accounting significance of Dedicated Water depends upon documented Terminal Delivery, demonstrated dedication mechanisms, documented Accounting Relationships, and the legal, operational, and physical conditions applicable to the Accounting Question.

Where material to the Accounting Question, Dedicated Water evaluation should consider whether legal authority, contractual enforceability, operational controls, accounting restrictions, timing, or other documented conditions materially influence the validity or durability of the dedication.

Accordingly, Dedicated Water shall be evaluated using documented Terminal Delivery together with documented evidence demonstrating intentional dedication.

Evaluation of Dedicated Water provides the analytical foundation for subsequent Bankability by establishing whether physically delivered water has been demonstrably committed to the identified accounting objective.

## 16.5 Dedicated Water Accounting Relationships

Dedicated Water shall be evaluated within the context of its Accounting Relationships to subsequent components of the Great Salt Lake Accounting Standard.

The purpose of Dedicated Water Accounting Relationships is to establish how documented dedication of water influences Bankability and subsequent Analytical Accounting while preserving analytical transparency.

Dedicated Water represents water that has been demonstrably committed to a documented accounting objective through verifiable mechanisms.

Accordingly, Dedicated Water may influence one or more subsequent accounting quantities, including:

- Bankability;
- Accounting Findings;
- Analytical Inference; and
- Policy Considerations.

The existence of a Dedicated Water Accounting Relationship does not imply that equivalent quantities of Dedicated Water will produce equivalent downstream accounting conclusions or policy outcomes.

Rather, each Accounting Relationship shall be evaluated independently using documented Evidence, Accounting Relationships, and Accounting Transformations.

Equivalent quantities of Dedicated Water do not, by themselves, establish equivalent Bankability.

Similarly, equivalent Bankability does not, by itself, establish equivalent Accounting Findings, Analytical Inference, or Policy Considerations.

Additional Accounting Relationships are required before each subsequent analytical quantity can be demonstrated.

Dedicated Water Accounting Relationships are influenced by the dedication mechanism, legal authority, operational controls, duration, enforceability, accounting objective, and other documented characteristics applicable to the Accounting Question.

Accordingly, comparable quantities of Dedicated Water should not be presumed to produce equivalent downstream analytical conclusions where legal, operational, physical, or Accounting Relationships differ materially.

Each stage of the Great Salt Lake Accounting Standard shall therefore be evaluated using the Accounting Relationships applicable to the demonstrated condition of the Accounting Question during the Accounting Period.

Accordingly, no subsequent analytical quantity should be presumed solely because Dedicated Water has been demonstrated.

Each component of the analytical framework requires independent analytical support.

Where multiple Accounting Relationships influence the same Accounting Finding, those relationships should be explicitly documented together with any material assumptions and resulting uncertainty.

Evaluation of Dedicated Water Accounting Relationships improves analytical transparency by demonstrating how documented dedication supports subsequent Bankability while preventing unsupported conclusions regarding subsequent analytical quantities.

## 16.6 Dedicated Water Pathways

Dedicated Water shall be evaluated according to the analytical pathway through which documented physical water becomes demonstrably committed to an identified accounting objective.

The purpose of evaluating Dedicated Water Pathways is to determine how documented dedication supports subsequent Bankability and Analytical Accounting while preserving analytical transparency.

A demonstrated Dedicated Water establishes only that water has been intentionally committed through documented legal, operational, administrative, contractual, or other verifiable mechanisms.

It does not, by itself, establish Bankability, Accounting Findings, Analytical Inference, or Policy Considerations.

Accordingly, the analytical framework shall be evaluated sequentially using documented Evidence, Accounting Relationships, and Accounting Transformations.

Depending upon the Accounting Question, Dedicated Water may:

- support Bankability;
- support Accounting Findings;
- support Analytical Inference; or
- support subsequent Policy Considerations.

The analytical pathway followed by Dedicated Water may differ according to the dedication mechanism, legal authority, operational controls, enforceability, accounting objective, duration, and other documented characteristics.

Equivalent quantities of Dedicated Water should therefore not be presumed to follow equivalent analytical pathways.

Documented Accounting Relationships, legal frameworks, operational practices, institutional controls, physical accounting evidence, and other demonstrated characteristics may each materially influence subsequent analytical conclusions.

Accordingly, each subsequent component of the Great Salt Lake Accounting Standard shall be evaluated independently using the Accounting Relationships applicable to the demonstrated condition of the Accounting Question during the Accounting Period.

The accounting significance of Dedicated Water increases only as subsequent analytical quantities are independently demonstrated through documented Evidence.

Accordingly, demonstrated Dedicated Water should not be presumed to establish Bankability or subsequent analytical conclusions unless the intervening Accounting Relationships have been independently demonstrated.

Where the analytical pathway cannot be demonstrated beyond a particular accounting quantity, the point of pathway termination should be explicitly identified together with the principal source of remaining uncertainty.

Recognition of Dedicated Water Pathways preserves analytical transparency by distinguishing documented dedication from the progressively greater accounting significance associated with subsequent analytical conclusions.

## 16.7 Verification of Dedicated Water

Dedicated Water incorporated into the Great Salt Lake Accounting Standard should be verified using the best available Evidence.

The purpose of verification is to establish that documented Dedicated Water accurately represents water that has been demonstrably committed to an identified accounting objective through verifiable mechanisms.

Verification should be proportional to the Accounting Question and the significance of Dedicated Water within the analytical accounting framework.

Depending upon the nature of the analysis, Dedicated Water verification may include:

- statutes;
- water-right records;
- contracts;
- administrative orders;
- operational agreements;
- accounting records;
- management plans;
- governing policies;
- field verification; or
- other documented sources of Evidence.

Verification should distinguish between:

- documented Terminal Delivery;
- documented Dedicated Water;
- demonstrated dedication mechanisms;
- supporting Evidence;
- analytical assumptions; and
- resulting implications for subsequent Analytical Accounting.

Verification of Dedicated Water does not, by itself, establish Bankability, Accounting Findings, Analytical Inference, or Policy Considerations.

Similarly, verification of a documented dedication mechanism does not, by itself, establish the Accounting Relationships governing subsequent analytical quantities.

Each subsequent analytical quantity shall be independently evaluated using the methodology established by this standard.

Where Dedicated Water Accounting depends upon legal interpretation, contractual assumptions, administrative decisions, operational practices, or other analytical assumptions, those assumptions should be explicitly documented together with the supporting Evidence and resulting uncertainty.

The level of verification achieved should be communicated transparently so that users of the accounting may appropriately evaluate the reliability and accounting significance of the resulting Dedicated Water.

Verification strengthens Dedicated Water Accounting by ensuring that subsequent analytical conclusions are supported by documented evidence rather than assumption or expectation.

## 16.8 Documentation of Dedicated Water

Every Dedicated Water determination incorporated into the Great Salt Lake Accounting Standard shall be documented in a manner sufficient to support independent review, reproduction, and subsequent Analytical Accounting.

The purpose of documentation is to preserve a transparent accounting record of Dedicated Water, the supporting Evidence, the analytical methodology employed, and the resulting Accounting Findings.

Documentation should be proportional to the significance of Dedicated Water and the complexity of the Accounting Question.

At a minimum, documentation should identify, where applicable:

- the Accounting Period;
- documented Terminal Delivery;
- the quantity of Dedicated Water;
- the accounting objective;
- the dedication mechanism;
- supporting Evidence;
- applicable Accounting Relationships;
- Accounting Transformations performed;
- the resulting analytical pathway;
- resulting Accounting Findings;
- supporting Analytical Inferences; and
- any resulting Policy Considerations.

Documentation should clearly distinguish between:

- documented Terminal Delivery;
- documented Dedicated Water;
- demonstrated dedication mechanisms;
- analytical assumptions;
- Accounting Findings;
- Analytical Inferences; and
- Policy Considerations.

Documentation should also distinguish between documented physical delivery of water and the subsequent analytical significance assigned through Dedicated Water Accounting.

The existence of documented Dedicated Water should not be represented as evidence of Bankability, Accounting Findings, Analytical Inference, or Policy Considerations unless those subsequent analytical quantities have been independently demonstrated through the accounting framework.

Material uncertainty, analytical limitations, unresolved questions, and alternative interpretations affecting Dedicated Water should be explicitly documented together with their potential influence upon subsequent analytical conclusions.

Documentation should be sufficiently complete to enable an independent investigator to understand how Dedicated Water was determined, reproduce the principal analytical procedures, evaluate the resulting Accounting Findings, and understand the basis upon which subsequent analytical quantities were or were not demonstrated.

Accordingly, Dedicated Water documentation provides the permanent analytical record through which Dedicated Water becomes a transparent, reproducible, and independently reviewable component of the Great Salt Lake Accounting Standard.

## 16.9 Chapter Summary

This chapter establishes the standardized framework for representing and evaluating Dedicated Water under the Great Salt Lake Accounting Standard.

Dedicated Water represents water that has been demonstrably committed to a documented accounting objective through legally, operationally, administratively, contractually, or otherwise verifiable mechanisms.

The chapter establishes the principles governing:

- representation of Dedicated Water;
- classification of Dedicated Water;
- evaluation of Dedicated Water;
- evaluation of Dedicated Water Accounting Relationships;
- evaluation of Dedicated Water Pathways;
- verification of Dedicated Water; and
- documentation of Dedicated Water.

Together, these components provide a transparent and reproducible methodology for incorporating Dedicated Water into the analytical accounting framework while preserving Accounting Continuity between Physical Accounting and Analytical Accounting.

The chapter further establishes that Dedicated Water is determined through documented Terminal Delivery together with demonstrated dedication mechanisms, but does not, by itself, establish Bankability, Accounting Findings, Analytical Inference, or Policy Considerations.

Similarly, equivalent quantities of Terminal Delivery should not be presumed to produce equivalent Dedicated Water, and equivalent quantities of Dedicated Water should not be presumed to produce equivalent Bankability solely because comparable quantities have been documented.

Rather, the accounting significance of Dedicated Water depends upon documented Terminal Delivery, demonstrated dedication mechanisms, documented Accounting Relationships, transparent analytical methodology, and the legal, operational, and physical conditions applicable to the Accounting Question.

Accordingly, Dedicated Water provides the analytical accounting foundation upon which Bankability and subsequent analytical conclusions may be evaluated.

Subsequent chapters continue the analytical accounting framework by establishing the standardized approach for evaluating Bankability and its role in supporting defensible Accounting Findings, Analytical Inference, and Policy Considerations.





# 17. Bankability

## 17.1 Purpose

The purpose of this chapter is to establish the standardized approach for representing and evaluating Bankability under the Great Salt Lake Accounting Standard (GSLAS).

Within GSLAS, Bankability is the degree to which water associated with a proposed or completed Accounting Action is expected, or demonstrated, to produce measurable Lake Accretion, consistent with the definition established in §3.24.

The objective of Bankability Accounting is to provide a transparent, reproducible, and physically defensible framework for evaluating whether water identified for Great Salt Lake will remain physically available, avoid subsequent depletion or interception, achieve Terminal Delivery, and contribute to measurable Lake Accretion – and for evaluating the confidence warranted in that assessment given the supporting Evidence and methodology.

Bankability Accounting serves as the principal bridge between documented Physical Accounting and subsequent Analytical Accounting by evaluating whether water associated with an Accounting Action is likely to translate into durable, measurable lake benefit.

Accordingly, Bankability Accounting establishes the framework for:

- representing Bankability;
- classifying Bankability according to the factors that govern it;
- evaluating Bankability;
- documenting Accounting Relationships supporting Bankability;
- verifying Bankability assessments; and
- supporting subsequent Accounting Findings, Analytical Inference, and Policy Considerations.

Bankability shall be evaluated independently from Dedicated Water, Terminal Delivery, or any preceding accounting quantity.

Accordingly, documented Physical Accounting alone does not establish Bankability.

Bankability requires independent evaluation of the physical factors – Proximity, Timing, Control, and Measurement and Durability – that determine whether water will actually reach and remain in Great Salt Lake, together with the quality of the Evidence, the reproducibility of the methodology, and the transparency of the resulting Accounting Findings that support that evaluation.

Bankability Accounting should be based upon documented Evidence, transparent analytical methodology, reproducible Accounting Transformations, and demonstrated Physical Accounting appropriate to the Accounting Question.

Unless otherwise stated, Bankability Accounting should be evaluated in accordance with the methodology established in Chapters 1 through 16.

## 17.2 Bankability

Bankability is the degree to which water associated with a proposed or completed Accounting Action is expected, or demonstrated, to produce measurable Lake Accretion, as defined in §3.24.

Within the Great Salt Lake Accounting Standard, Bankability serves as the principal analytical accounting quantity through which the physical reliability of a water management action is evaluated: whether water identified for Great Salt Lake will remain physically available, avoid subsequent depletion or interception, achieve Terminal Delivery, and contribute to measurable Lake Accretion.

The purpose of Bankability Accounting is to determine, using documented Physical Accounting and demonstrated Accounting Relationships, the degree to which an Accounting Action can be expected to

produce durable lake benefit — and to determine how much confidence that determination warrants given the supporting Evidence.

Bankability shall be determined using documented Physical Accounting together with demonstrated Accounting Relationships, Accounting Transformations, and the supporting Evidence applicable to the Accounting Question.

Bankability may be supported through one or more documented elements, including:

- demonstrated Physical Accounting;
- documented Accounting Relationships;
- reproducible Accounting Transformations;
- independently verifiable Evidence;
- transparent analytical methodology;
- explicit assumptions; or
- other documented analytical support appropriate to the Accounting Question.

The selection and representation of supporting analytical elements shall be explicitly documented.

Where practicable, Bankability Accounting should identify:

- the Accounting Period;
- the Accounting Question;
- the supporting Physical Accounting;
- the applicable Accounting Relationships;
- the supporting Evidence;
- the resulting Bankability assessment;
- documented limitations; and
- resulting implications for subsequent Accounting Findings.

Bankability represents a physical accounting characteristic of the water itself — not an Accounting Action, an Accounting Finding, a policy preference, a management objective, or a statement of scientific certainty.

Accordingly, Bankability should be evaluated according to the physical factors that govern whether water reaches and remains in the lake, and the confidence assigned to that evaluation should in turn be evaluated according to the strength of the supporting Evidence rather than the desirability of the proposed outcome.

Equivalent quantities of Dedicated Water do not, by themselves, establish equivalent Bankability.

Similarly, equivalent Bankability should not be presumed to produce equivalent Accounting Findings, Analytical Inference, or Policy Considerations.

The accounting significance of a Bankability assessment depends upon documented Physical Accounting, demonstrated Accounting Relationships, transparent methodology, reproducible Accounting Transformations, supporting Evidence, and the demonstrated condition applicable to the Accounting Question.

Accordingly, Bankability shall be evaluated using documented Physical Accounting together with demonstrated analytical support appropriate to the Accounting Question.

Bankability provides the analytical foundation for subsequent Accounting Findings by distinguishing water reasonably expected to produce durable Lake Accretion, and adequately supported by demonstrated Physical Accounting, Accounting Relationships, and Evidence, from water whose expected benefit lacks sufficient evidentiary support.

## 17.3 Classification of Bankability

Bankability shall be classified according to four physical factors that determine whether water associated with an Accounting Action will actually reach and remain in Great Salt Lake: **Proximity**, **Timing**, **Control**, and **Measurement and Durability**.

The purpose of Bankability classification is to organize the evaluation of Bankability around the physical characteristics that materially influence whether water produces measurable Lake Accretion, rather than around the magnitude of the proposed Accounting Action.

- **Proximity.** The physical distance and number of intervening hydrologic layers — diversion, reuse, storage, wetland transition — between the point of the Accounting Action and Great Salt Lake. Water originating far

upstream must pass through more opportunities for interception, delay, or loss than water delivered near-terminal or directly to the lake.

- **Timing.** The relationship between when water becomes available and the hydrologic conditions under which it is delivered. Water delivered when downstream systems — particularly Zone 2 wetlands — are unsaturated is substantially absorbed before reaching the open lake; water delivered when those systems are saturated passes through more efficiently.
- **Control.** Whether the underlying Accounting Action creates water capable of increasing downstream inflow. Under prior appropriation, only a reduction in consumptive use — not a change in diversion, and not an administrative reclassification — creates water with the physical capacity to reach the lake.
- **Measurement and Durability.** Whether the mechanism produces a repeatable, auditable outcome across wet and dry years, and whether the underlying legal or operational authorization persists over time rather than expiring or requiring renewal.

Classification should remain proportional to the Accounting Question and should identify which of these four factors materially constrains the Accounting Action under evaluation.

Where material to the Accounting Question, Bankability classification should also distinguish the strength of the analytical support underlying the classification itself — the quality of Evidence, the reproducibility of the methodology, the transparency of assumptions, and the demonstrated Accounting Relationships — since identical physical circumstances may be classified with differing confidence depending on the completeness of the supporting analysis.

Equivalent quantities of Physical Accounting should not be presumed to possess equivalent Bankability: two Accounting Actions of the same Dedicated Water volume may score differently on Proximity, Timing, Control, or Measurement and Durability, and therefore produce materially different Bankable outcomes.

Similarly, Bankability established during one Accounting Period should not be presumed representative of future Accounting Periods solely because comparable accounting quantities have previously been evaluated; Hydrologic Regime and System Evolution may alter Timing or Control between periods.

Accordingly, Bankability classification should emphasize the physical factors governing delivery of water to the lake, together with the strength of the analytical support for that classification, rather than the magnitude or desirability of the resulting Accounting Finding.

Where Bankability classification materially influences subsequent Accounting Findings, the analytical basis for the selected classification — including the rating assigned to each of the four factors — should be explicitly documented.

## 17.4 Evaluation of Bankability

Bankability shall be evaluated according to the degree to which water associated with an Accounting Action is expected, or demonstrated, to produce measurable Lake Accretion — assessed against the Proximity, Timing, Control, and Measurement and Durability factors established in §17.3.

The purpose of Bankability evaluation is to determine whether an Accounting Action is physically likely to translate into durable lake benefit, and whether the available Physical Accounting, Accounting Relationships, and Evidence support that determination with sufficient confidence.

Evaluation should begin with the documented Physical Accounting and proceed through the demonstrated Accounting Relationships, Accounting Transformations, Evidence, and analytical methodology supporting the Accounting Question.

Where applicable, the analysis should determine:

- the Accounting Period;
- the Accounting Question;
- the supporting Physical Accounting;
- the demonstrated Accounting Relationships;
- the applicable Accounting Transformations;
- the supporting Evidence;
- the resulting Bankability assessment, including its rating on each of the four factors established in §17.3;
- documented uncertainty; and
- resulting implications for subsequent Accounting Findings.

Evaluation of Bankability should distinguish between the physical determination of whether water is expected to reach and remain in the lake and the analytical confidence assigned to that determination.

Equivalent quantities of Physical Accounting do not, by themselves, establish equivalent Bankability.

Similarly, equivalent Bankability should not be presumed to produce equivalent Accounting Findings, Analytical Inference, or Policy Considerations.

The accounting significance of a Bankability evaluation depends upon the completeness of the Physical Accounting, the strength of the demonstrated Accounting Relationships, the quality of the supporting Evidence, the reproducibility of the methodology, the transparency of assumptions, and the demonstrated applicability to the Accounting Question.

Where material to the Accounting Question, Bankability evaluation should consider whether uncertainty, competing interpretations, data limitations, methodological assumptions, System Evolution, Hydrologic Regime, or other documented factors materially influence confidence in the resulting assessment.

Accordingly, Bankability shall be evaluated using documented Physical Accounting together with demonstrated analytical support rather than the perceived desirability or policy implications of the proposed conclusion.

Evaluation of Bankability provides the analytical foundation for subsequent Accounting Findings by establishing both the physical expectation of Lake Accretion and the degree of confidence justified by the available accounting evidence.

## 17.5 Bankability Accounting Relationships

Bankability shall be evaluated within the context of its Accounting Relationships to subsequent components of the Great Salt Lake Accounting Standard.

The purpose of Bankability Accounting Relationships is to establish how a physical determination that water is expected to produce measurable Lake Accretion — supported by documented Physical Accounting, demonstrated Accounting Relationships, and supporting Evidence — informs subsequent Accounting Findings while preserving analytical transparency.

Bankability represents the physical expectation that water will reach and remain in Great Salt Lake, together with the degree of confidence warranted by the demonstrated accounting support for that expectation.

Accordingly, Bankability may influence one or more subsequent analytical quantities, including:

- Accounting Findings;
- Analytical Inference; and
- Policy Considerations.

The existence of a Bankability Accounting Relationship does not imply that equivalent levels of Bankability will produce equivalent analytical conclusions or policy outcomes.

Rather, each Accounting Relationship shall be evaluated independently using documented Evidence, demonstrated Accounting Relationships, and reproducible Accounting Transformations.

Equivalent levels of Bankability do not, by themselves, establish equivalent Accounting Findings.

Similarly, equivalent Accounting Findings do not, by themselves, establish equivalent Analytical Inference or Policy Considerations.

Additional Accounting Relationships are required before each subsequent analytical quantity can be demonstrated.

Bankability Accounting Relationships are influenced by the Proximity, Timing, Control, and Measurement and Durability of the underlying Accounting Action, together with the quality of the supporting Evidence, the completeness of the Physical Accounting, methodological transparency, reproducibility, uncertainty, and other documented characteristics applicable to the Accounting Question.

Accordingly, comparable levels of Bankability should not be presumed to produce equivalent analytical conclusions where the underlying physical factors, Evidence, methodology, uncertainty, or Accounting Relationships differ materially.

Each stage of the Great Salt Lake Accounting Standard shall therefore be evaluated using the Accounting Relationships applicable to the demonstrated condition of the Accounting Question during the Accounting Period.

Accordingly, no subsequent analytical quantity should be presumed solely because a Bankability assessment has been completed.

Each component of the analytical framework requires independent analytical support.

Where multiple Accounting Relationships influence the same Accounting Finding, those relationships should be explicitly documented together with any material assumptions and resulting uncertainty.

Evaluation of Bankability Accounting Relationships improves analytical transparency by demonstrating how the physical expectation of Lake Accretion, and the confidence warranted in that expectation, together support subsequent Accounting Findings while preventing unsupported Analytical Inference or Policy Considerations.

## 17.6 Bankability Pathways

Bankability shall be evaluated according to the analytical pathway through which a physical determination that water is expected to produce measurable Lake Accretion supports subsequent analytical conclusions.

The purpose of evaluating Bankability Pathways is to determine how a Bankability assessment contributes to Accounting Findings, Analytical Inference, and Policy Considerations while preserving analytical transparency.

A demonstrated Bankability assessment establishes the physical expectation that water will reach and remain in the lake, together with the degree of confidence warranted by the available accounting support.

It does not, by itself, establish Accounting Findings, Analytical Inference, or Policy Considerations.

Accordingly, the analytical framework shall be evaluated sequentially using documented Evidence, Accounting Relationships, and Accounting Transformations.

Depending upon the Accounting Question, Bankability may:

- support Accounting Findings;
- support Analytical Inference;
- support Policy Considerations; or
- support subsequent analytical decision-making.

The analytical pathway followed by Bankability may differ according to the Proximity, Timing, Control, and Measurement and Durability of the underlying Accounting Action, the quality of the Evidence, the completeness of the Physical Accounting, the demonstrated Accounting Relationships, methodological transparency, reproducibility, uncertainty, and other documented characteristics applicable to the Accounting Question.

Equivalent Bankability assessments should therefore not be presumed to follow equivalent analytical pathways.

Documented Accounting Relationships, supporting Evidence, methodological assumptions, Physical Accounting, uncertainty, and other demonstrated analytical characteristics may each materially influence subsequent analytical conclusions.

Accordingly, each subsequent component of the Great Salt Lake Accounting Standard shall be evaluated independently using the Accounting Relationships applicable to the demonstrated condition of the Accounting Question during the Accounting Period.

The accounting significance of Bankability increases only as subsequent analytical quantities are independently demonstrated through documented Evidence.

Accordingly, a demonstrated Bankability assessment should not be presumed to establish Accounting Findings, Analytical Inference, or Policy Considerations unless the intervening Accounting Relationships have been independently demonstrated.

Where the analytical pathway cannot be demonstrated beyond a particular analytical quantity, the point of pathway termination should be explicitly identified together with the principal source of remaining uncertainty.

Recognition of Bankability Pathways preserves analytical transparency by distinguishing the physical expectation of Lake Accretion, and confidence in that expectation, from the progressively greater analytical significance associated with subsequent conclusions.

## 17.7 Verification of Bankability

Bankability assessments incorporated into the Great Salt Lake Accounting Standard should be verified using the best available Evidence.

The purpose of verification is to establish that a Bankability assessment accurately reflects both the physical expectation that water will reach and remain in the lake and the degree of confidence justified by the documented Physical Accounting, demonstrated Accounting Relationships, and supporting Evidence.

Verification should be proportional to the Accounting Question and the significance of the resulting Accounting Finding within the analytical accounting framework.

Depending upon the nature of the analysis, Bankability verification may include:

- independent review of the Physical Accounting;
- verification of Accounting Relationships;
- confirmation of Accounting Transformations;
- evaluation of Evidence quality;
- reproducibility testing;
- sensitivity analysis;
- uncertainty analysis;
- independent technical review;
- peer review; or
- other documented verification procedures appropriate to the Accounting Question.

Verification should distinguish between:

- documented Physical Accounting;
- demonstrated Accounting Relationships;
- supporting Evidence;
- the resulting Bankability assessment;
- analytical assumptions;
- documented uncertainty; and
- resulting implications for subsequent Analytical Accounting.

Verification of Bankability does not, by itself, establish Accounting Findings, Analytical Inference, or Policy Considerations.

Similarly, verification of the supporting Evidence does not, by itself, establish the Accounting Relationships governing subsequent analytical quantities.

Each subsequent analytical quantity shall be independently evaluated using the methodology established by this standard.

Where Bankability depends upon analytical assumptions, methodological choices, data limitations, uncertainty estimates, expert judgment, or other documented considerations, those assumptions should be explicitly documented together with the supporting Evidence and resulting uncertainty.

The level of verification achieved should be communicated transparently so that users of the accounting may appropriately evaluate the reliability and accounting significance of the resulting Bankability assessment.

Verification strengthens Bankability by ensuring that subsequent analytical conclusions are supported by demonstrable accounting rather than unsupported assertion or expectation.

## 17.8 Documentation of Bankability

Every Bankability assessment incorporated into the Great Salt Lake Accounting Standard shall be documented in a manner sufficient to support independent review, reproduction, and subsequent Analytical Accounting.

The purpose of documentation is to preserve a transparent accounting record of the Bankability assessment, the supporting Evidence, the analytical methodology employed, and the resulting Accounting Findings.

Documentation should be proportional to the significance of the Accounting Question and the complexity of the supporting analysis.

At a minimum, documentation should identify, where applicable:

- the Accounting Period;
- the Accounting Question;
- the supporting Physical Accounting;
- the demonstrated Accounting Relationships;
- the applicable Accounting Transformations;



- the supporting Evidence;
- the resulting Bankability assessment;
- documented uncertainty;
- resulting Accounting Findings;
- supporting Analytical Inferences; and
- any resulting Policy Considerations.

Documentation should clearly distinguish between:

- documented Physical Accounting;
- demonstrated Accounting Relationships;
- supporting Evidence;
- analytical assumptions;
- the resulting Bankability assessment;
- Accounting Findings;
- Analytical Inferences; and
- Policy Considerations.

Documentation should also distinguish between the demonstrated accounting support and the subsequent analytical significance assigned through the Bankability assessment.

The existence of a documented Bankability assessment should not be represented as evidence of Accounting Findings, Analytical Inference, or Policy Considerations unless those subsequent analytical quantities have been independently demonstrated through the accounting framework.

Material uncertainty, analytical limitations, unresolved questions, competing interpretations, and alternative analytical approaches affecting the Bankability assessment should be explicitly documented together with their potential influence upon subsequent analytical conclusions.

Documentation should be sufficiently complete to enable an independent investigator to understand how the Bankability assessment was performed, reproduce the principal analytical procedures, evaluate the resulting Accounting Findings, and understand the basis upon which subsequent analytical quantities were or were not demonstrated.

Accordingly, Bankability documentation provides the permanent analytical record through which the physical expectation of Lake Accretion, and confidence in that expectation, become transparent, reproducible, and independently reviewable within the Great Salt Lake Accounting Standard.

## 17.9 Chapter Summary

This chapter establishes the standardized framework for representing and evaluating Bankability under the Great Salt Lake Accounting Standard.

Bankability is the degree to which water associated with a proposed or completed Accounting Action is expected, or demonstrated, to produce measurable Lake Accretion, as defined in §3.24 — evaluated against four physical factors (Proximity, Timing, Control, and Measurement and Durability) and supported by documented Physical Accounting, demonstrated Accounting Relationships, transparent analytical methodology, and sufficient Evidence to justify confidence in the resulting assessment.

The chapter establishes the principles governing:

- representation of Bankability;
- classification of Bankability;
- evaluation of Bankability;
- evaluation of Bankability Accounting Relationships;
- evaluation of Bankability Pathways;
- verification of Bankability; and
- documentation of Bankability.

Together, these components provide a transparent and reproducible methodology for evaluating whether water is physically expected to reach and remain in Great Salt Lake, while preserving Accounting Continuity between Physical Accounting and Analytical Accounting.

The chapter further establishes that Bankability describes a physical expectation of the water itself and does not, by itself, establish Accounting Findings, Analytical Inference, or Policy Considerations.

Similarly, equivalent Physical Accounting should not be presumed to produce equivalent Bankability, and equivalent Bankability should not be presumed to produce equivalent analytical conclusions solely because comparable quantities or methodologies have been evaluated.

Rather, the accounting significance of Bankability depends upon documented Physical Accounting, demonstrated Accounting Relationships, transparent analytical methodology, reproducible Accounting Transformations, supporting Evidence, documented uncertainty, and the demonstrated applicability of the analysis to the Accounting Question.

Accordingly, Bankability provides the analytical foundation upon which defensible Accounting Findings, Analytical Inference, and ultimately Policy Considerations may be developed.

Subsequent chapters transition from evaluating whether water is expected to reach and remain in the lake to communicating what the accounting demonstrates through standardized Accounting Findings, Analytical Inference, and Policy Considerations.



## 18. Accounting Findings

### 18.1 Purpose

The purpose of this chapter is to establish the standardized approach for developing and communicating Accounting Findings under the Great Salt Lake Accounting Standard (GSLAS).

Within GSLAS, an Accounting Finding represents a conclusion that is directly supported by documented Physical Accounting, demonstrated Accounting Relationships, transparent analytical methodology, and an evaluated level of Bankability.

The objective of Accounting Findings is to distinguish conclusions that are supported by the accounting from interpretations, opinions, recommendations, or policy preferences.

Accounting Findings serve as the first formal analytical output of the Great Salt Lake Accounting Standard by communicating what the accounting demonstrates without extending beyond the demonstrated Evidence.

Accordingly, Accounting Findings establish the framework for:

- representing Accounting Findings;
- evaluating Accounting Findings;
- documenting Accounting Relationships supporting Accounting Findings;
- verifying Accounting Findings; and
- supporting subsequent Analytical Inference and Policy Considerations.

Accounting Findings shall be derived from demonstrated accounting rather than advocacy, expectation, or desired policy outcomes.

Accordingly, Accounting Findings should remain independent of subsequent Analytical Inference and Policy Considerations even where those subsequent analytical quantities rely upon the same supporting Evidence.

Every Accounting Finding should be traceable to documented Physical Accounting, demonstrated Accounting Relationships, supporting Evidence, and the corresponding Bankability assessment.

Accounting Findings should be based upon documented Evidence, transparent analytical methodology, reproducible Accounting Transformations, and demonstrated Physical Accounting appropriate to the Accounting Question.

Unless otherwise stated, Accounting Findings should be evaluated in accordance with the methodology established in Chapters 1 through 17.

### 18.2 Accounting Findings

An Accounting Finding represents a conclusion that is directly supported by documented Physical Accounting, demonstrated Accounting Relationships, transparent analytical methodology, and an evaluated level of Bankability.

Within the Great Salt Lake Accounting Standard, Accounting Findings serve as the primary analytical product through which the results of accounting are communicated.

The purpose of Accounting Findings is to communicate what the accounting demonstrates without extending beyond the documented Evidence and demonstrated Accounting Relationships.

Accounting Findings shall be determined using documented Physical Accounting together with demonstrated Accounting Relationships, supporting Evidence, and the applicable Bankability assessment.

An Accounting Finding may be supported through one or more documented analytical elements, including:

- demonstrated Physical Accounting;
- documented Accounting Relationships;
- reproducible Accounting Transformations;
- verified Evidence;

- evaluated Bankability;
- transparent analytical methodology; or
- other documented analytical support appropriate to the Accounting Question.

The analytical basis supporting each Accounting Finding shall be explicitly documented.

Where practicable, Accounting Findings should identify:

- the Accounting Period;
- the Accounting Question;
- the supporting Physical Accounting;
- the demonstrated Accounting Relationships;
- the supporting Evidence;
- the applicable Bankability assessment;
- the resulting Accounting Finding;
- documented uncertainty; and
- resulting implications for subsequent Analytical Inference.

Accounting Findings represent analytical conclusions rather than policy recommendations, management objectives, scientific certainty, or advocacy.

Accordingly, Accounting Findings should be evaluated according to the demonstrated accounting support rather than the desirability or implications of the resulting conclusion.

Equivalent Physical Accounting does not, by itself, establish equivalent Accounting Findings.

Similarly, equivalent Accounting Findings should not be presumed to produce equivalent Analytical Inference or Policy Considerations.

The accounting significance of an Accounting Finding depends upon documented Physical Accounting, demonstrated Accounting Relationships, transparent analytical methodology, supporting Evidence, evaluated Bankability, documented uncertainty, and the demonstrated applicability of the analysis to the Accounting Question.

Accordingly, Accounting Findings shall be developed using documented accounting support together with demonstrated analytical justification appropriate to the Accounting Question.

Accounting Findings provide the analytical foundation for subsequent Analytical Inference by distinguishing what the accounting demonstrates from what may reasonably be inferred beyond the demonstrated accounting.

### 18.3 Classification of Accounting Findings

Accounting Findings should be classified according to the analytical characteristics that materially influence their interpretation and subsequent use within the Great Salt Lake Accounting Standard.

The purpose of Accounting Finding classification is to improve analytical consistency by organizing findings according to the nature and strength of their demonstrated accounting support rather than by their policy implications or perceived importance.

Classification should remain proportional to the Accounting Question and should identify those characteristics that materially influence subsequent Analytical Inference and Policy Considerations.

Depending upon the nature of the analysis, Accounting Findings may be classified according to:

- Accounting Question;
- applicable Physical Accounting;
- supporting Accounting Relationships;
- evaluated Bankability;
- Accounting Period;
- level of uncertainty;
- scope of applicability; or
- other analytically relevant characteristics.

Where material to the Accounting Question, Accounting Findings should distinguish among findings supported by:

- direct Physical Accounting;

- demonstrated Accounting Relationships;
- verified Accounting Transformations;
- independently reproducible analyses;
- observed physical evidence;
- validated analytical models; or
- other documented analytical support.

Equivalent quantities of Physical Accounting should not be presumed to produce equivalent Accounting Findings.

Classification should therefore recognize that identical physical accounting quantities may support materially different Accounting Findings because of differences in Evidence, Accounting Relationships, Bankability, uncertainty, analytical methodology, or applicability to the Accounting Question.

Similarly, Accounting Findings developed during one Accounting Period should not be presumed applicable to future Accounting Periods solely because comparable accounting quantities have been observed.

Accordingly, Accounting Finding classification should emphasize the demonstrated analytical support underlying the finding rather than the significance of its potential implications.

Where Accounting Finding classification materially influences subsequent Analytical Inference or Policy Considerations, the analytical basis for the selected classification should be explicitly documented.

## 18.4 Evaluation of Accounting Findings

Accounting Findings shall be evaluated according to the degree to which they are supported by documented Physical Accounting, demonstrated Accounting Relationships, supporting Evidence, and the applicable Bankability assessment.

The purpose of Accounting Finding evaluation is to determine whether a stated conclusion accurately reflects what the accounting demonstrates without extending beyond the demonstrated analytical support.

Evaluation should begin with the documented Physical Accounting and proceed through the demonstrated Accounting Relationships, Accounting Transformations, supporting Evidence, Bankability assessment, and resulting analytical conclusion.

Where applicable, the analysis should determine:

- the Accounting Period;
- the Accounting Question;
- the supporting Physical Accounting;
- the demonstrated Accounting Relationships;
- the applicable Accounting Transformations;
- the supporting Evidence;
- the evaluated Bankability;
- the resulting Accounting Finding;
- documented uncertainty; and
- resulting implications for subsequent Analytical Inference.

Evaluation of Accounting Findings should distinguish between demonstrated accounting conclusions and broader interpretations, policy recommendations, management objectives, or scientific speculation.

Equivalent Physical Accounting does not, by itself, establish equivalent Accounting Findings.

Similarly, equivalent Accounting Findings should not be presumed to produce equivalent Analytical Inference or Policy Considerations.

The accounting significance of an Accounting Finding depends upon the completeness of the Physical Accounting, the strength of the demonstrated Accounting Relationships, the quality of the supporting Evidence, the evaluated Bankability, the transparency of the analytical methodology, documented uncertainty, and the demonstrated applicability to the Accounting Question.

Where material to the Accounting Question, Accounting Finding evaluation should consider whether uncertainty, competing interpretations, methodological assumptions, data limitations, Hydrologic Regime, System Evolution, or other documented factors materially influence the validity or scope of the Accounting Finding.

Accordingly, Accounting Findings shall be evaluated according to what the accounting demonstrably supports rather than what may be desirable, expected, or advocated.

Evaluation of Accounting Findings provides the analytical foundation for subsequent Analytical Inference by clearly distinguishing demonstrated accounting conclusions from reasoned interpretation.

## 18.5 Accounting Finding Relationships

Accounting Findings shall be evaluated within the context of their Accounting Relationships to subsequent components of the Great Salt Lake Accounting Standard.

The purpose of Accounting Finding Relationships is to establish how demonstrated accounting conclusions support subsequent Analytical Inference and Policy Considerations while preserving analytical transparency.

An Accounting Finding represents a conclusion directly supported by documented Physical Accounting, demonstrated Accounting Relationships, supporting Evidence, and the applicable Bankability assessment.

Accordingly, an Accounting Finding may influence one or more subsequent analytical quantities, including:

- Analytical Inference; and
- Policy Considerations.

The existence of an Accounting Finding Relationship does not imply that equivalent Accounting Findings will produce equivalent Analytical Inference or Policy Considerations.

Rather, each Accounting Relationship shall be evaluated independently using documented Evidence, demonstrated Accounting Relationships, transparent analytical methodology, and reproducible Accounting Transformations.

Equivalent Accounting Findings do not, by themselves, establish equivalent Analytical Inference.

Similarly, equivalent Analytical Inference does not, by itself, establish equivalent Policy Considerations.

Additional Accounting Relationships are required before each subsequent analytical quantity can be demonstrated.

Accounting Finding Relationships are influenced by the quality of the supporting Evidence, the demonstrated Accounting Relationships, the evaluated Bankability, methodological transparency, documented uncertainty, the scope of applicability, and other documented characteristics applicable to the Accounting Question.

Accordingly, comparable Accounting Findings should not be presumed to produce equivalent downstream analytical conclusions where Evidence, methodology, uncertainty, or Accounting Relationships differ materially.

Each stage of the Great Salt Lake Accounting Standard shall therefore be evaluated using the Accounting Relationships applicable to the demonstrated condition of the Accounting Question during the Accounting Period.

Accordingly, no subsequent analytical quantity should be presumed solely because an Accounting Finding has been established.

Each component of the analytical framework requires independent analytical support.

Where multiple Accounting Relationships influence the same Analytical Inference or Policy Consideration, those relationships should be explicitly documented together with any material assumptions and resulting uncertainty.

Evaluation of Accounting Finding Relationships improves analytical transparency by demonstrating how supported accounting conclusions contribute to subsequent Analytical Inference while preventing unsupported extension beyond what the accounting demonstrates.

## 18.6 Accounting Finding Pathways

Accounting Findings shall be evaluated according to the analytical pathway through which documented Physical Accounting supports subsequent analytical conclusions.

The purpose of evaluating Accounting Finding Pathways is to determine how demonstrated accounting conclusions contribute to subsequent Analytical Inference and Policy Considerations while preserving analytical transparency.

A demonstrated Accounting Finding establishes only what is directly supported by documented Physical Accounting, demonstrated Accounting Relationships, supporting Evidence, and the applicable Bankability assessment.

It does not, by itself, establish Analytical Inference or Policy Considerations.

Accordingly, the analytical framework shall be evaluated sequentially using documented Evidence, Accounting Relationships, Accounting Transformations, and transparent analytical methodology.

Depending upon the Accounting Question, an Accounting Finding may:

- support Analytical Inference;
- support Policy Considerations;
- support comparative evaluation; or
- support subsequent analytical decision-making.

The analytical pathway followed by an Accounting Finding may differ according to the quality of the supporting Evidence, the demonstrated Accounting Relationships, the evaluated Bankability, methodological transparency, documented uncertainty, the scope of applicability, and other documented analytical characteristics.

Equivalent Accounting Findings should therefore not be presumed to follow equivalent analytical pathways.

Documented Accounting Relationships, supporting Evidence, methodological assumptions, Physical Accounting, uncertainty, and other demonstrated analytical characteristics may each materially influence subsequent analytical conclusions.

Accordingly, each subsequent component of the Great Salt Lake Accounting Standard shall be evaluated independently using the Accounting Relationships applicable to the demonstrated condition of the Accounting Question during the Accounting Period.

The analytical significance of an Accounting Finding increases only as subsequent analytical quantities are independently demonstrated through documented Evidence.

Accordingly, an Accounting Finding should not be presumed to establish Analytical Inference or Policy Considerations unless the intervening Accounting Relationships have been independently demonstrated.

Where the analytical pathway cannot be demonstrated beyond a particular analytical quantity, the point of pathway termination should be explicitly identified together with the principal source of remaining uncertainty.

Recognition of Accounting Finding Pathways preserves analytical transparency by distinguishing demonstrated accounting conclusions from the progressively greater analytical significance associated with subsequent interpretation and policy development.

## 18.7 Verification of Accounting Findings

Accounting Findings incorporated into the Great Salt Lake Accounting Standard should be verified using the best available Evidence.

The purpose of verification is to establish that an Accounting Finding accurately reflects the demonstrated Physical Accounting, documented Accounting Relationships, supporting Evidence, and applicable Bankability assessment.

Verification should be proportional to the Accounting Question and the significance of the resulting Accounting Finding within the analytical accounting framework.

Depending upon the nature of the analysis, Accounting Finding verification may include:

- independent review of the Physical Accounting;
- verification of Accounting Relationships;
- confirmation of Accounting Transformations;
- evaluation of supporting Evidence;
- reproducibility testing;
- uncertainty analysis;
- sensitivity analysis;
- independent technical review;
- peer review; or

- other documented verification procedures appropriate to the Accounting Question.

Verification should distinguish between:

- documented Physical Accounting;
- demonstrated Accounting Relationships;
- supporting Evidence;
- the applicable Bankability assessment;
- the resulting Accounting Finding;
- analytical assumptions;
- documented uncertainty; and
- resulting implications for subsequent Analytical Inference.

Verification of an Accounting Finding does not, by itself, establish Analytical Inference or Policy Considerations.

Similarly, verification of the supporting Evidence does not, by itself, establish the Accounting Relationships governing subsequent analytical quantities.

Each subsequent analytical quantity shall be independently evaluated using the methodology established by this standard.

Where an Accounting Finding depends upon analytical assumptions, methodological choices, data limitations, uncertainty estimates, expert judgment, or other documented considerations, those assumptions should be explicitly documented together with the supporting Evidence and resulting uncertainty.

The level of verification achieved should be communicated transparently so that users of the accounting may appropriately evaluate the reliability and accounting significance of the resulting Accounting Finding.

Verification strengthens Accounting Findings by ensuring that subsequent analytical conclusions are supported by demonstrable accounting rather than unsupported assertion or expectation.

## 18.8 Documentation of Accounting Findings

Every Accounting Finding incorporated into the Great Salt Lake Accounting Standard shall be documented in a manner sufficient to support independent review, reproduction, and subsequent Analytical Accounting.

The purpose of documentation is to preserve a transparent accounting record of the Accounting Finding, the supporting Evidence, the analytical methodology employed, and the resulting analytical conclusions.

Documentation should be proportional to the significance of the Accounting Question and the complexity of the supporting analysis.

At a minimum, documentation should identify, where applicable:

- the Accounting Period;
- the Accounting Question;
- the supporting Physical Accounting;
- the demonstrated Accounting Relationships;
- the applicable Accounting Transformations;
- the supporting Evidence;
- the applicable Bankability assessment;
- the resulting Accounting Finding;
- documented uncertainty;
- supporting Analytical Inferences; and
- any resulting Policy Considerations.

Documentation should clearly distinguish between:

- documented Physical Accounting;
- demonstrated Accounting Relationships;
- supporting Evidence;
- the applicable Bankability assessment;
- analytical assumptions;
- the resulting Accounting Finding;
- Analytical Inferences; and



- Policy Considerations.

Documentation should also distinguish between demonstrated Accounting Findings and subsequent Analytical Inference or Policy Considerations derived from those findings.

The existence of a documented Accounting Finding should not be represented as evidence of Analytical Inference or Policy Considerations unless those subsequent analytical quantities have been independently demonstrated through the accounting framework.

Material uncertainty, analytical limitations, unresolved questions, competing interpretations, and alternative analytical approaches affecting an Accounting Finding should be explicitly documented together with their potential influence upon subsequent analytical conclusions.

Documentation should be sufficiently complete to enable an independent investigator to understand how the Accounting Finding was developed, reproduce the principal analytical procedures, evaluate the resulting analytical conclusions, and understand the basis upon which subsequent analytical quantities were or were not demonstrated.

Accordingly, Accounting Finding documentation provides the permanent analytical record through which demonstrated accounting conclusions become transparent, reproducible, and independently reviewable within the Great Salt Lake Accounting Standard.

## 18.9 Chapter Summary

This chapter establishes the standardized framework for developing, evaluating, and communicating Accounting Findings under the Great Salt Lake Accounting Standard.

Accounting Findings represent conclusions that are directly supported by documented Physical Accounting, demonstrated Accounting Relationships, transparent analytical methodology, supporting Evidence, and an evaluated level of Bankability.

The chapter establishes the principles governing:

- representation of Accounting Findings;
- classification of Accounting Findings;
- evaluation of Accounting Findings;
- evaluation of Accounting Finding Relationships;
- evaluation of Accounting Finding Pathways;
- verification of Accounting Findings; and
- documentation of Accounting Findings.

Together, these components provide a transparent and reproducible methodology for communicating what the accounting demonstrates while preserving Accounting Continuity between Physical Accounting and subsequent Analytical Accounting.

The chapter further establishes that Accounting Findings communicate demonstrated accounting conclusions but do not, by themselves, establish Analytical Inference or Policy Considerations.

Similarly, equivalent Physical Accounting should not be presumed to produce equivalent Accounting Findings, and equivalent Accounting Findings should not be presumed to produce equivalent Analytical Inference solely because comparable accounting quantities or methodologies have been evaluated.

Rather, the accounting significance of an Accounting Finding depends upon documented Physical Accounting, demonstrated Accounting Relationships, transparent analytical methodology, reproducible Accounting Transformations, supporting Evidence, evaluated Bankability, documented uncertainty, and the demonstrated applicability of the analysis to the Accounting Question.

Accordingly, Accounting Findings provide the analytical foundation upon which reasoned Analytical Inference and ultimately defensible Policy Considerations may be developed.

Subsequent chapters continue the analytical accounting framework by establishing the standardized approach for developing Analytical Inference while maintaining a clear distinction between demonstrated accounting conclusions and reasoned interpretation.





# 19. Analytical Inference

## 19.1 Purpose

The purpose of this chapter is to establish the standardized approach for developing and evaluating Analytical Inference under the Great Salt Lake Accounting Standard (GSLAS).

Within GSLAS, an Analytical Inference represents a reasoned conclusion derived from one or more Accounting Findings through documented analytical reasoning supported by demonstrated Accounting Relationships, transparent methodology, and evaluated Bankability.

The objective of Analytical Inference is to distinguish logical interpretation from demonstrated Accounting Findings while preserving transparency regarding the assumptions and reasoning supporting the inference.

Analytical Inference serves as the second analytical output of the Great Salt Lake Accounting Standard by communicating what may reasonably be inferred from the demonstrated accounting without representing those inferences as direct Accounting Findings.

Accordingly, Analytical Inference establishes the framework for:

- representing Analytical Inference;
- evaluating Analytical Inference;
- documenting Accounting Relationships supporting Analytical Inference;
- verifying Analytical Inference; and
- supporting subsequent Policy Considerations.

Analytical Inference shall be derived from documented Accounting Findings rather than directly from Physical Accounting alone.

Accordingly, Analytical Inference should remain independent of subsequent Policy Considerations even where both rely upon the same Accounting Findings.

Every Analytical Inference should be traceable to documented Accounting Findings, demonstrated Accounting Relationships, supporting Evidence, and the corresponding Bankability assessments.

Analytical Inference should be based upon documented Accounting Findings, transparent analytical methodology, reproducible reasoning, and demonstrated Accounting Relationships appropriate to the Accounting Question.

Unless otherwise stated, Analytical Inference should be evaluated in accordance with the methodology established in Chapters 1 through 18.

## 19.2 Analytical Inference

An Analytical Inference represents a reasoned conclusion derived from one or more Accounting Findings through documented analytical reasoning supported by demonstrated Accounting Relationships, transparent methodology, and evaluated Bankability.

Within the Great Salt Lake Accounting Standard, Analytical Inference serves as the principal analytical interpretation through which demonstrated Accounting Findings are synthesized into broader understanding.

The purpose of Analytical Inference is to communicate what may reasonably be inferred from demonstrated Accounting Findings while maintaining a clear distinction between documented accounting conclusions and subsequent interpretation.

Analytical Inference shall be determined using documented Accounting Findings together with demonstrated Accounting Relationships, supporting Evidence, applicable Bankability assessments, and transparent analytical reasoning.

An Analytical Inference may be supported through one or more documented analytical elements, including:

- demonstrated Accounting Findings;
- documented Accounting Relationships;

- evaluated Bankability;
- supporting Evidence;
- transparent analytical reasoning;
- reproducible analytical methodology; or
- other documented analytical support appropriate to the Accounting Question.

The analytical basis supporting each Analytical Inference shall be explicitly documented.

Where practicable, Analytical Inference should identify:

- the Accounting Period;
- the Accounting Question;
- the supporting Accounting Findings;
- the demonstrated Accounting Relationships;
- the supporting Evidence;
- the applicable Bankability assessments;
- the resulting Analytical Inference;
- documented uncertainty; and
- resulting implications for subsequent Policy Considerations.

Analytical Inference represents reasoned interpretation rather than demonstrated Physical Accounting, Accounting Findings, policy recommendations, or advocacy.

Accordingly, Analytical Inference should be evaluated according to the strength of the documented analytical reasoning rather than the desirability or implications of the resulting conclusion.

Equivalent Accounting Findings do not, by themselves, establish equivalent Analytical Inference.

Similarly, equivalent Analytical Inference should not be presumed to produce equivalent Policy Considerations.

The accounting significance of an Analytical Inference depends upon documented Accounting Findings, demonstrated Accounting Relationships, supporting Evidence, evaluated Bankability, transparent analytical reasoning, documented uncertainty, and the demonstrated applicability of the analysis to the Accounting Question.

Accordingly, Analytical Inference shall be developed using documented Accounting Findings together with demonstrated analytical reasoning appropriate to the Accounting Question.

Analytical Inference provides the analytical foundation for subsequent Policy Considerations by distinguishing reasoned interpretation from demonstrated Accounting Findings.

### 19.3 Classification of Analytical Inference

Analytical Inference should be classified according to the analytical characteristics that materially influence its interpretation and subsequent use within the Great Salt Lake Accounting Standard.

The purpose of Analytical Inference classification is to improve analytical consistency by organizing inferences according to the nature and strength of their analytical support rather than by their policy implications or perceived importance.

Classification should remain proportional to the Accounting Question and should identify those characteristics that materially influence subsequent Policy Considerations.

Depending upon the nature of the analysis, Analytical Inference may be classified according to:

- Accounting Question;
- supporting Accounting Findings;
- demonstrated Accounting Relationships;
- evaluated Bankability;
- Accounting Period;
- level of uncertainty;
- scope of applicability; or
- other analytically relevant characteristics.

Where material to the Accounting Question, Analytical Inference should distinguish among interpretations supported by:

- one or more demonstrated Accounting Findings;
- multiple independent Accounting Relationships;
- independently reproducible analytical reasoning;
- corroborating Evidence;
- validated analytical methodologies; or
- other documented analytical support.

Equivalent Accounting Findings should not be presumed to produce equivalent Analytical Inference.

Classification should therefore recognize that identical Accounting Findings may support materially different Analytical Inferences because of differences in analytical reasoning, Evidence, Bankability, uncertainty, applicability, or demonstrated Accounting Relationships.

Similarly, Analytical Inference developed during one Accounting Period should not be presumed applicable to future Accounting Periods solely because comparable Accounting Findings have previously been established.

Accordingly, Analytical Inference classification should emphasize the demonstrated analytical support underlying the inference rather than the significance of its potential implications.

Where Analytical Inference classification materially influences subsequent Policy Considerations, the analytical basis for the selected classification should be explicitly documented.

## 19.4 Evaluation of Analytical Inference

Analytical Inference shall be evaluated according to the degree to which it is supported by documented Accounting Findings, demonstrated Accounting Relationships, supporting Evidence, and the applicable Bankability assessments.

The purpose of Analytical Inference evaluation is to determine whether a stated interpretation accurately reflects what may reasonably be inferred from the demonstrated accounting without extending beyond the available analytical support.

Evaluation should begin with the documented Accounting Findings and proceed through the demonstrated Accounting Relationships, supporting Evidence, Bankability assessments, transparent analytical reasoning, and resulting interpretation.

Where applicable, the analysis should determine:

- the Accounting Period;
- the Accounting Question;
- the supporting Accounting Findings;
- the demonstrated Accounting Relationships;
- the supporting Evidence;
- the applicable Bankability assessments;
- the resulting Analytical Inference;
- documented uncertainty; and
- resulting implications for subsequent Policy Considerations.

Evaluation of Analytical Inference should distinguish between demonstrated Accounting Findings and broader interpretation, policy recommendations, management objectives, advocacy, or scientific speculation.

Equivalent Accounting Findings do not, by themselves, establish equivalent Analytical Inference.

Similarly, equivalent Analytical Inference should not be presumed to produce equivalent Policy Considerations.

The accounting significance of an Analytical Inference depends upon the completeness of the supporting Accounting Findings, the strength of the demonstrated Accounting Relationships, the quality of the supporting Evidence, the applicable Bankability assessments, the transparency of the analytical reasoning, documented uncertainty, and the demonstrated applicability to the Accounting Question.

Where material to the Accounting Question, Analytical Inference evaluation should consider whether uncertainty, competing interpretations, methodological assumptions, data limitations, Hydrologic Regime, System Evolution, or other documented factors materially influence the validity or scope of the Analytical Inference.

Accordingly, Analytical Inference shall be evaluated according to what may reasonably be inferred from the demonstrated accounting rather than what may be desirable, expected, or advocated.

Evaluation of Analytical Inference provides the analytical foundation for subsequent Policy Considerations by clearly distinguishing reasoned interpretation from demonstrated Accounting Findings.

## 19.5 Analytical Inference Relationships

Analytical Inference shall be evaluated within the context of its Accounting Relationships to subsequent components of the Great Salt Lake Accounting Standard.

The purpose of Analytical Inference Relationships is to establish how reasoned interpretation derived from demonstrated Accounting Findings supports subsequent Policy Considerations while preserving analytical transparency.

An Analytical Inference represents a reasoned interpretation supported by documented Accounting Findings, demonstrated Accounting Relationships, supporting Evidence, and the applicable Bankability assessments.

Accordingly, an Analytical Inference may influence one or more subsequent analytical quantities, including:

- Policy Considerations.

The existence of an Analytical Inference Relationship does not imply that equivalent Analytical Inferences will produce equivalent Policy Considerations.

Rather, each Accounting Relationship shall be evaluated independently using documented Evidence, demonstrated Accounting Relationships, transparent analytical methodology, reproducible reasoning, and applicable Bankability assessments.

Equivalent Analytical Inferences do not, by themselves, establish equivalent Policy Considerations.

Additional Accounting Relationships are required before subsequent policy conclusions can be demonstrated.

Analytical Inference Relationships are influenced by the quality of the supporting Accounting Findings, the demonstrated Accounting Relationships, the applicable Bankability assessments, methodological transparency, documented uncertainty, the scope of applicability, and other documented characteristics applicable to the Accounting Question.

Accordingly, comparable Analytical Inferences should not be presumed to produce equivalent policy conclusions where Evidence, methodology, uncertainty, or Accounting Relationships differ materially.

Each stage of the Great Salt Lake Accounting Standard shall therefore be evaluated using the Accounting Relationships applicable to the demonstrated condition of the Accounting Question during the Accounting Period.

Accordingly, no Policy Consideration should be presumed solely because an Analytical Inference has been established.

Each component of the analytical framework requires independent analytical support.

Where multiple Accounting Relationships influence the same Policy Consideration, those relationships should be explicitly documented together with any material assumptions and resulting uncertainty.

Evaluation of Analytical Inference Relationships improves analytical transparency by demonstrating how reasoned interpretation supports subsequent Policy Considerations while preventing unsupported extension beyond what the accounting reasonably supports.

## 19.6 Analytical Inference Pathways

Analytical Inference shall be evaluated according to the analytical pathway through which documented Accounting Findings support subsequent Policy Considerations.

The purpose of evaluating Analytical Inference Pathways is to determine how reasoned interpretation contributes to Policy Considerations while preserving analytical transparency.

A demonstrated Analytical Inference establishes only what may reasonably be inferred from documented Accounting Findings.

It does not, by itself, establish Policy Considerations.

Accordingly, the analytical framework shall be evaluated sequentially using documented Evidence, Accounting Relationships, transparent analytical methodology, and reproducible reasoning.

Depending upon the Accounting Question, an Analytical Inference may:

- support Policy Considerations;
- support comparative evaluation;
- support management alternatives; or
- support subsequent analytical decision-making.

The analytical pathway followed by an Analytical Inference may differ according to the quality of the supporting Accounting Findings, the demonstrated Accounting Relationships, the applicable Bankability assessments, methodological transparency, documented uncertainty, the scope of applicability, and other documented analytical characteristics.

Equivalent Analytical Inferences should therefore not be presumed to follow equivalent analytical pathways.

Documented Accounting Relationships, supporting Evidence, methodological assumptions, Accounting Findings, uncertainty, and other demonstrated analytical characteristics may each materially influence subsequent policy conclusions.

Accordingly, each subsequent component of the Great Salt Lake Accounting Standard shall be evaluated independently using the Accounting Relationships applicable to the demonstrated condition of the Accounting Question during the Accounting Period.

The analytical significance of an Analytical Inference increases only as subsequent analytical quantities are independently demonstrated through documented Evidence.

Accordingly, an Analytical Inference should not be presumed to establish Policy Considerations unless the intervening Accounting Relationships have been independently demonstrated.

Where the analytical pathway cannot be demonstrated beyond a particular analytical quantity, the point of pathway termination should be explicitly identified together with the principal source of remaining uncertainty.

Recognition of Analytical Inference Pathways preserves analytical transparency by distinguishing reasoned interpretation from the progressively greater analytical significance associated with subsequent Policy Considerations.

## 19.7 Verification of Analytical Inference

Analytical Inferences incorporated into the Great Salt Lake Accounting Standard should be verified using the best available Evidence.

The purpose of verification is to establish that an Analytical Inference accurately reflects the reasoned interpretation supported by documented Accounting Findings, demonstrated Accounting Relationships, supporting Evidence, and the applicable Bankability assessments.

Verification should be proportional to the Accounting Question and the significance of the resulting Analytical Inference within the analytical accounting framework.

Depending upon the nature of the analysis, Analytical Inference verification may include:

- independent review of the supporting Accounting Findings;
- verification of Accounting Relationships;
- evaluation of supporting Evidence;
- confirmation of analytical reasoning;
- reproducibility testing;
- uncertainty analysis;
- sensitivity analysis;
- independent technical review;
- peer review; or
- other documented verification procedures appropriate to the Accounting Question.

Verification should distinguish between:

- documented Accounting Findings;

- demonstrated Accounting Relationships;
- supporting Evidence;
- the applicable Bankability assessments;
- the resulting Analytical Inference;
- analytical assumptions;
- documented uncertainty; and
- resulting implications for subsequent Policy Considerations.

Verification of an Analytical Inference does not, by itself, establish Policy Considerations.

Similarly, verification of the supporting Evidence or Accounting Findings does not, by itself, establish the Accounting Relationships governing subsequent analytical quantities.

Each subsequent analytical quantity shall be independently evaluated using the methodology established by this standard.

Where an Analytical Inference depends upon analytical assumptions, methodological choices, data limitations, uncertainty estimates, expert judgment, or other documented considerations, those assumptions should be explicitly documented together with the supporting Evidence and resulting uncertainty.

The level of verification achieved should be communicated transparently so that users of the accounting may appropriately evaluate the reliability and accounting significance of the resulting Analytical Inference.

Verification strengthens Analytical Inference by ensuring that subsequent policy conclusions are supported by demonstrable analytical reasoning rather than unsupported assertion or expectation.

## 19.8 Documentation of Analytical Inference

Every Analytical Inference incorporated into the Great Salt Lake Accounting Standard shall be documented in a manner sufficient to support independent review, reproduction, and subsequent Policy Considerations.

The purpose of documentation is to preserve a transparent analytical record of the Analytical Inference, the supporting Accounting Findings, the Evidence, the analytical methodology employed, and the resulting conclusions.

Documentation should be proportional to the significance of the Accounting Question and the complexity of the supporting analysis.

At a minimum, documentation should identify, where applicable:

- the Accounting Period;
- the Accounting Question;
- the supporting Accounting Findings;
- the demonstrated Accounting Relationships;
- the supporting Evidence;
- the applicable Bankability assessments;
- the resulting Analytical Inference;
- documented uncertainty;
- supporting analytical reasoning; and
- any resulting Policy Considerations.

Documentation should clearly distinguish between:

- documented Accounting Findings;
- demonstrated Accounting Relationships;
- supporting Evidence;
- the applicable Bankability assessments;
- analytical assumptions;
- the resulting Analytical Inference; and
- Policy Considerations.

Documentation should also distinguish between demonstrated Accounting Findings and the subsequent Analytical Inference derived from those findings.



The existence of a documented Analytical Inference should not be represented as evidence of Policy Considerations unless those subsequent analytical quantities have been independently demonstrated through the accounting framework.

Material uncertainty, analytical limitations, unresolved questions, competing interpretations, and alternative analytical approaches affecting an Analytical Inference should be explicitly documented together with their potential influence upon subsequent Policy Considerations.

Documentation should be sufficiently complete to enable an independent investigator to understand how the Analytical Inference was developed, reproduce the principal analytical procedures, evaluate the resulting conclusions, and understand the basis upon which subsequent Policy Considerations were or were not developed.

Accordingly, Analytical Inference documentation provides the permanent analytical record through which reasoned interpretation becomes transparent, reproducible, and independently reviewable within the Great Salt Lake Accounting Standard.

## 19.9 Chapter Summary

This chapter establishes the standardized framework for developing, evaluating, and communicating Analytical Inference under the Great Salt Lake Accounting Standard.

Analytical Inference represents reasoned interpretation derived from documented Accounting Findings, demonstrated Accounting Relationships, supporting Evidence, transparent analytical methodology, and applicable Bankability assessments.

The chapter establishes the principles governing:

- representation of Analytical Inference;
- classification of Analytical Inference;
- evaluation of Analytical Inference;
- evaluation of Analytical Inference Relationships;
- evaluation of Analytical Inference Pathways;
- verification of Analytical Inference; and
- documentation of Analytical Inference.

Together, these components provide a transparent and reproducible methodology for developing reasoned interpretation while preserving Accounting Continuity between demonstrated Accounting Findings and subsequent Policy Considerations.

The chapter further establishes that Analytical Inference represents reasoned interpretation but does not, by itself, establish Policy Considerations.

Similarly, equivalent Accounting Findings should not be presumed to produce equivalent Analytical Inference, and equivalent Analytical Inference should not be presumed to produce equivalent Policy Considerations solely because comparable accounting conclusions or methodologies have been evaluated.

Rather, the accounting significance of an Analytical Inference depends upon documented Accounting Findings, demonstrated Accounting Relationships, transparent analytical methodology, reproducible analytical reasoning, supporting Evidence, applicable Bankability assessments, documented uncertainty, and the demonstrated applicability of the analysis to the Accounting Question.

Accordingly, Analytical Inference provides the analytical foundation upon which defensible Policy Considerations may be developed while maintaining a clear distinction between demonstrated accounting conclusions and reasoned interpretation.

Subsequent chapters complete the analytical accounting framework by establishing the standardized approach for developing Policy Considerations while preserving the distinction between accounting, inference, and decision-making.





## 20. Policy Considerations

### 20.1 Purpose

The purpose of this chapter is to establish the standardized approach for developing and communicating Policy Considerations under the Great Salt Lake Accounting Standard (GSLAS).

Within GSLAS, a Policy Consideration represents an application of documented Accounting Findings and Analytical Inference to inform decision-making while remaining clearly distinguished from the accounting itself.

The objective of Policy Considerations is to provide a transparent framework for communicating the potential implications of the accounting without representing those implications as demonstrated accounting conclusions.

Policy Considerations serve as the final analytical output of the Great Salt Lake Accounting Standard by distinguishing what the accounting demonstrates, what may reasonably be inferred, and what may ultimately be considered by decision-makers.

Accordingly, Policy Considerations establish the framework for:

- representing Policy Considerations;
- evaluating Policy Considerations;
- documenting Accounting Relationships supporting Policy Considerations;
- verifying Policy Considerations; and
- communicating the appropriate relationship between accounting and decision-making.

Policy Considerations shall be derived from documented Accounting Findings and Analytical Inference rather than directly from Physical Accounting alone.

Accordingly, Policy Considerations should remain independent of advocacy, institutional preference, political objectives, or predetermined management outcomes.

Every Policy Consideration should be traceable to documented Accounting Findings, demonstrated Analytical Inference, supporting Evidence, and the corresponding Bankability assessments.

Policy Considerations should be based upon documented accounting, transparent analytical methodology, reproducible reasoning, and demonstrated Accounting Relationships appropriate to the Accounting Question.

Unless otherwise stated, Policy Considerations should be evaluated in accordance with the methodology established in Chapters 1 through 19.

### 20.2 Policy Considerations

A Policy Consideration represents an application of documented Accounting Findings and Analytical Inference to inform decision-making while remaining clearly distinguished from the accounting itself.

Within the Great Salt Lake Accounting Standard, Policy Considerations serve as the final analytical product through which accounting information may be applied to management, planning, investment, regulatory, or legislative decisions.

The purpose of Policy Considerations is to communicate the potential implications of demonstrated accounting while maintaining a clear distinction between accounting, inference, and decision-making.

Policy Considerations shall be developed using documented Accounting Findings together with demonstrated Analytical Inference, supporting Evidence, applicable Bankability assessments, and transparent analytical reasoning.

A Policy Consideration may be supported through one or more documented analytical elements, including:

- demonstrated Accounting Findings;
- documented Analytical Inference;
- applicable Bankability assessments;

- supporting Evidence;
- transparent analytical reasoning;
- reproducible analytical methodology; or
- other documented analytical support appropriate to the Accounting Question.

The analytical basis supporting each Policy Consideration shall be explicitly documented.

Where practicable, Policy Considerations should identify:

- the Accounting Period;
- the Accounting Question;
- the supporting Accounting Findings;
- the supporting Analytical Inference;
- the supporting Evidence;
- the applicable Bankability assessments;
- the resulting Policy Consideration;
- documented uncertainty; and
- any material limitations affecting application.

Policy Considerations represent applications of accounting rather than demonstrated Physical Accounting, Accounting Findings, or Analytical Inference.

Accordingly, Policy Considerations should be evaluated according to the strength of the documented accounting support rather than the desirability, popularity, or political implications of the proposed action.

Equivalent Accounting Findings or Analytical Inference do not, by themselves, establish equivalent Policy Considerations.

The accounting significance of a Policy Consideration depends upon documented Accounting Findings, demonstrated Analytical Inference, supporting Evidence, applicable Bankability assessments, transparent analytical reasoning, documented uncertainty, and the demonstrated applicability of the analysis to the Accounting Question.

Accordingly, Policy Considerations shall be developed using documented accounting support together with transparent analytical reasoning appropriate to the Accounting Question.

Policy Considerations represent the final application of the Great Salt Lake Accounting Standard by distinguishing what the accounting supports from the decisions ultimately made by policymakers, managers, stakeholders, or other decision-makers.

### 20.3 Classification of Policy Considerations

Policy Considerations should be classified according to the analytical characteristics that materially influence their interpretation, applicability, and use in decision-making.

The purpose of Policy Consideration classification is to improve analytical consistency by organizing policy considerations according to the strength and scope of their supporting accounting rather than by their political significance or anticipated outcomes.

Classification should remain proportional to the Accounting Question and should identify those characteristics that materially influence implementation, applicability, and interpretation.

Depending upon the nature of the analysis, Policy Considerations may be classified according to:

- Accounting Question;
- supporting Accounting Findings;
- supporting Analytical Inference;
- applicable Bankability;
- Accounting Period;
- scope of applicability;
- level of uncertainty; or
- other analytically relevant characteristics.

Where material to the Accounting Question, Policy Considerations should distinguish among recommendations supported by:

- demonstrated Accounting Findings;

- documented Analytical Inference;
- independently reproducible analyses;
- corroborating Evidence;
- validated analytical methodologies; or
- other documented analytical support.

Equivalent Accounting Findings or Analytical Inference should not be presumed to produce equivalent Policy Considerations.

Classification should therefore recognize that identical accounting support may justify materially different Policy Considerations because of differences in objectives, institutional responsibilities, legal authorities, implementation constraints, uncertainty, or the demonstrated applicability of the analysis.

Similarly, Policy Considerations developed during one Accounting Period should not be presumed applicable to future Accounting Periods solely because comparable accounting conditions have previously existed.

Accordingly, Policy Consideration classification should emphasize the demonstrated analytical support underlying each consideration rather than its anticipated policy consequences.

Where Policy Consideration classification materially influences implementation or interpretation, the analytical basis for the selected classification should be explicitly documented.

## 20.4 Evaluation of Policy Considerations

Policy Considerations shall be evaluated according to the degree to which they are supported by documented Accounting Findings, demonstrated Analytical Inference, supporting Evidence, and the applicable Bankability assessments.

The purpose of Policy Consideration evaluation is to determine whether a proposed policy application accurately reflects what may reasonably be supported by the demonstrated accounting without extending beyond the available analytical support.

Evaluation should begin with the documented Accounting Findings and proceed through the demonstrated Analytical Inference, supporting Evidence, Bankability assessments, transparent analytical reasoning, and resulting Policy Consideration.

Where applicable, the analysis should determine:

- the Accounting Period;
- the Accounting Question;
- the supporting Accounting Findings;
- the supporting Analytical Inference;
- the supporting Evidence;
- the applicable Bankability assessments;
- the resulting Policy Consideration;
- documented uncertainty; and
- any material limitations affecting implementation.

Evaluation of Policy Considerations should distinguish between demonstrated accounting, reasoned Analytical Inference, and the application of that information to policy, management, planning, or investment decisions.

Equivalent Accounting Findings or Analytical Inference do not, by themselves, establish equivalent Policy Considerations.

The accounting significance of a Policy Consideration depends upon the completeness of the supporting Accounting Findings, the strength of the supporting Analytical Inference, the quality of the supporting Evidence, the applicable Bankability assessments, the transparency of the analytical methodology, documented uncertainty, and the demonstrated applicability of the analysis to the Accounting Question.

Where material to the Accounting Question, Policy Consideration evaluation should consider whether uncertainty, competing interpretations, legal authority, institutional responsibilities, implementation constraints, Hydrologic Regime, System Evolution, or other documented factors materially influence the appropriateness or applicability of the proposed Policy Consideration.

Accordingly, Policy Considerations shall be evaluated according to what may reasonably be supported by the demonstrated accounting rather than what may be desirable, expected, or politically preferred.

Evaluation of Policy Considerations completes the analytical framework by clearly distinguishing demonstrated accounting, reasoned interpretation, and informed decision-making.

## 20.5 Policy Consideration Relationships

Policy Considerations shall be evaluated within the context of their Accounting Relationships to the demonstrated accounting supporting the proposed application.

The purpose of Policy Consideration Relationships is to establish how documented Accounting Findings and Analytical Inference support informed decision-making while preserving analytical transparency.

A Policy Consideration represents an application of demonstrated accounting rather than an extension of the accounting itself.

Accordingly, a Policy Consideration shall be supported by one or more documented analytical quantities, including:

- Accounting Findings;
- Analytical Inference;
- applicable Bankability assessments; and
- supporting Evidence.

The existence of a Policy Consideration Relationship does not imply that equivalent Accounting Findings or Analytical Inference will produce equivalent policy applications.

Rather, each Policy Consideration shall be evaluated independently using documented Evidence, demonstrated Accounting Relationships, transparent analytical methodology, reproducible reasoning, and applicable Bankability assessments.

Equivalent Policy Considerations do not, by themselves, establish equivalent management outcomes.

Similarly, equivalent management outcomes do not, by themselves, validate the underlying accounting.

Additional Accounting Relationships are required before implementation outcomes can be demonstrated.

Policy Consideration Relationships are influenced by the quality of the supporting Accounting Findings, the demonstrated Analytical Inference, applicable Bankability assessments, institutional responsibilities, legal authorities, implementation constraints, documented uncertainty, and other characteristics applicable to the Accounting Question.

Accordingly, comparable Policy Considerations should not be presumed to produce equivalent outcomes where accounting support, implementation conditions, or Accounting Relationships differ materially.

Each stage of the Great Salt Lake Accounting Standard shall therefore be evaluated using the Accounting Relationships applicable to the demonstrated condition of the Accounting Question during the Accounting Period.

Accordingly, no management action, regulatory decision, investment decision, or legislative action should be presumed solely because a Policy Consideration has been developed.

Each component of the analytical framework requires independent analytical support.

Where multiple Accounting Relationships influence the same Policy Consideration, those relationships should be explicitly documented together with any material assumptions and resulting uncertainty.

Evaluation of Policy Consideration Relationships preserves analytical transparency by distinguishing demonstrated accounting from the decisions ultimately made by policymakers, managers, regulators, investors, or other decision-makers.

## 20.6 Policy Consideration Pathways

Policy Considerations shall be evaluated according to the analytical pathway through which demonstrated accounting supports informed decision-making.

The purpose of evaluating Policy Consideration Pathways is to determine how documented Accounting Findings and Analytical Inference contribute to potential management, planning, regulatory, legislative, or investment decisions while preserving analytical transparency.

A demonstrated Policy Consideration establishes only that a proposed application is reasonably supported by the available accounting.

It does not, by itself, establish that a particular decision should be made or that a particular outcome will occur.

Accordingly, the analytical framework shall be evaluated sequentially using documented Evidence, Accounting Relationships, transparent analytical methodology, and reproducible reasoning.

Depending upon the Accounting Question, a Policy Consideration may:

- support management decisions;
- support planning decisions;
- support regulatory decisions;
- support legislative decisions;
- support investment decisions; or
- support other documented applications appropriate to the Accounting Question.

The analytical pathway followed by a Policy Consideration may differ according to the quality of the supporting Accounting Findings, the demonstrated Analytical Inference, applicable Bankability assessments, legal authority, institutional responsibilities, implementation constraints, documented uncertainty, and other demonstrated characteristics.

Equivalent Policy Considerations should therefore not be presumed to follow equivalent implementation pathways.

Documented Accounting Relationships, supporting Evidence, legal frameworks, institutional responsibilities, implementation assumptions, uncertainty, and other demonstrated analytical characteristics may each materially influence subsequent decision-making.

Accordingly, each implementation decision shall be evaluated independently using the Accounting Relationships applicable to the demonstrated condition of the Accounting Question during the Accounting Period.

The significance of a Policy Consideration increases only as subsequent implementation decisions are independently supported through documented Evidence.

Accordingly, a Policy Consideration should not be presumed to establish implementation success, environmental benefit, or management outcome unless those subsequent relationships have been independently demonstrated.

Where the analytical pathway cannot be demonstrated beyond a particular implementation decision, the point of pathway termination should be explicitly identified together with the principal source of remaining uncertainty.

Recognition of Policy Consideration Pathways preserves analytical transparency by distinguishing demonstrated accounting support from the independent decisions ultimately made by responsible decision-makers.

## 20.7 Verification of Policy Considerations

Policy Considerations incorporated into the Great Salt Lake Accounting Standard should be verified using the best available Evidence.

The purpose of verification is to establish that a Policy Consideration accurately reflects the documented Accounting Findings, demonstrated Analytical Inference, supporting Evidence, and applicable Bankability assessments upon which it is based.

Verification should be proportional to the Accounting Question and the significance of the resulting Policy Consideration within the analytical accounting framework.

Depending upon the nature of the analysis, Policy Consideration verification may include:

- independent review of the supporting Accounting Findings;
- verification of the supporting Analytical Inference;
- evaluation of supporting Evidence;
- confirmation of analytical reasoning;
- reproducibility testing;
- uncertainty analysis;
- sensitivity analysis;
- independent technical review;
- peer review; or
- other documented verification procedures appropriate to the Accounting Question.

Verification should distinguish between:

- documented Accounting Findings;
- demonstrated Analytical Inference;
- supporting Evidence;
- applicable Bankability assessments;
- the resulting Policy Consideration;
- analytical assumptions;
- documented uncertainty; and
- resulting implementation limitations.

Verification of a Policy Consideration does not, by itself, establish that a particular management action, regulatory decision, legislative action, investment, or implementation outcome is appropriate.

Similarly, verification of the supporting accounting does not, by itself, establish the implementation relationships governing subsequent decision-making.

Each implementation decision shall be independently evaluated using the methodology established by this standard.

Where a Policy Consideration depends upon analytical assumptions, legal interpretation, institutional responsibilities, implementation constraints, uncertainty estimates, expert judgment, or other documented considerations, those assumptions should be explicitly documented together with the supporting Evidence and resulting uncertainty.

The level of verification achieved should be communicated transparently so that users of the accounting may appropriately evaluate the reliability and accounting significance of the resulting Policy Consideration.

Verification strengthens Policy Considerations by ensuring that proposed applications remain firmly grounded in demonstrated accounting rather than unsupported assertion, advocacy, or expectation.

## 20.8 Documentation of Policy Considerations

Every Policy Consideration incorporated into the Great Salt Lake Accounting Standard shall be documented in a manner sufficient to support independent review, reproduction, and informed decision-making.

The purpose of documentation is to preserve a transparent analytical record of the Policy Consideration, the supporting Accounting Findings, the supporting Analytical Inference, the Evidence, the analytical methodology employed, and the resulting conclusions.

Documentation should be proportional to the significance of the Accounting Question and the complexity of the supporting analysis.

At a minimum, documentation should identify, where applicable:

- the Accounting Period;
- the Accounting Question;
- the supporting Accounting Findings;
- the supporting Analytical Inference;
- the supporting Evidence;
- the applicable Bankability assessments;
- the resulting Policy Consideration;
- documented uncertainty;
- implementation assumptions; and
- any material limitations affecting application.

Documentation should clearly distinguish between:

- documented Accounting Findings;
- demonstrated Analytical Inference;
- supporting Evidence;
- applicable Bankability assessments;
- analytical assumptions;
- the resulting Policy Consideration; and
- implementation considerations.



Documentation should also distinguish between demonstrated accounting, reasoned interpretation, and the subsequent Policy Consideration derived from those analytical quantities.

The existence of a documented Policy Consideration should not be represented as evidence that a particular management action, regulatory decision, legislative action, investment, or implementation outcome is required or will necessarily occur.

Material uncertainty, analytical limitations, unresolved questions, competing interpretations, implementation constraints, and alternative policy approaches affecting a Policy Consideration should be explicitly documented together with their potential influence upon subsequent decision-making.

Documentation should be sufficiently complete to enable an independent investigator to understand how the Policy Consideration was developed, reproduce the principal analytical procedures, evaluate the resulting conclusions, and understand the basis upon which the proposed application was developed.

Accordingly, Policy Consideration documentation provides the permanent analytical record through which demonstrated accounting is translated into transparent, reproducible, and independently reviewable decision support while preserving a clear distinction between accounting and policymaking.

## 20.9 Chapter Summary

This chapter establishes the standardized framework for developing, evaluating, and communicating Policy Considerations under the Great Salt Lake Accounting Standard.

Policy Considerations represent applications of documented Accounting Findings and Analytical Inference to inform decision-making while remaining clearly distinguished from the accounting itself.

The chapter establishes the principles governing:

- representation of Policy Considerations;
- classification of Policy Considerations;
- evaluation of Policy Considerations;
- evaluation of Policy Consideration Relationships;
- evaluation of Policy Consideration Pathways;
- verification of Policy Considerations; and
- documentation of Policy Considerations.

Together, these components provide a transparent and reproducible methodology for applying demonstrated accounting to decision support while preserving a clear distinction between accounting, interpretation, and policymaking.

The chapter further establishes that Policy Considerations represent applications of demonstrated accounting but do not, by themselves, establish that a particular management action, regulatory decision, legislative action, investment, or implementation outcome is correct or required.

Similarly, equivalent Accounting Findings or Analytical Inference should not be presumed to produce equivalent Policy Considerations solely because comparable accounting conclusions or methodologies have been evaluated.

Rather, the analytical significance of a Policy Consideration depends upon documented Accounting Findings, demonstrated Analytical Inference, transparent analytical methodology, reproducible reasoning, supporting Evidence, applicable Bankability assessments, documented uncertainty, implementation constraints, and the demonstrated applicability of the analysis to the Accounting Question.

Accordingly, Policy Considerations complete the Great Salt Lake Accounting Standard by providing a disciplined framework through which demonstrated accounting may inform—but not dictate—management, planning, regulatory, legislative, and investment decisions.

The Great Salt Lake Accounting Standard therefore preserves a clear progression from Physical Accounting, to Analytical Accounting, to informed decision support while maintaining a transparent distinction between what the accounting demonstrates, what may reasonably be inferred, and what ultimately remains a policy decision.





## Appendices



## A. Applying the Great Salt Lake Accounting Standard

This appendix is informative.

It provides practical guidance for applying the Great Salt Lake Accounting Standard (GSLAS) as an integrated analytical framework.

Nothing in this appendix modifies, replaces, or expands the normative requirements established in Chapters 1 through 20.

### A.1 Purpose

The purpose of this appendix is to illustrate a practical workflow for applying the Great Salt Lake Accounting Standard (GSLAS).

Where Chapters 1 through 20 establish the principles, terminology, methodology, accounting requirements, and analytical distinctions governing the standard, this appendix demonstrates how those components may be applied during an accounting engagement.

The workflow presented in this appendix is illustrative rather than mandatory.

Individual analyses may require additional steps, omit steps that are not material to the Accounting Question, or revisit earlier analytical stages as additional Evidence becomes available.

The objective is not to prescribe a rigid sequence for every investigation.

The objective is to demonstrate how the components of GSLAS operate together as an integrated analytical framework while preserving Accounting Continuity from the initial Accounting Question through subsequent Policy Considerations.

### A.2 Typical Accounting Workflow

A typical accounting engagement under the Great Salt Lake Accounting Standard proceeds through the following sequence:

1. define the Accounting Question;
2. establish the analytical scope;
3. identify the required Accounting Units;
4. establish Water Provenance where material;
5. perform Source Attribution where appropriate;
6. assemble and evaluate the available Evidence;
7. identify and document the applicable Accounting Relationships;
8. perform the required Accounting Transformations;
9. reconcile the completed accounting;
10. evaluate Bankability;
11. develop Accounting Findings;
12. develop Analytical Inference where supported; and
13. develop Policy Considerations where appropriate.

Each stage builds upon the analytical support established during the preceding stages.

Accordingly:

- Accounting Transformations should arise from documented Evidence and Accounting Relationships;
- Accounting Findings should arise from completed accounting and evaluated Bankability;
- Analytical Inference should arise from documented Accounting Findings; and

- Policy Considerations should arise from documented Accounting Findings and supported Analytical Inference.

Although presented sequentially, the accounting process may require iteration.

Additional Evidence may require modification of the analytical scope, Accounting Units, Water Provenance, Source Attribution, Accounting Relationships, or Accounting Transformations.

Reconciliation may also identify inconsistencies, omissions, or unresolved uncertainty requiring reconsideration of an earlier stage.

Iteration does not represent failure of the accounting process.

It represents the continued application of analytical transparency, reproducibility, and continuous improvement.

Throughout the workflow, the analysis should remain proportional to the Accounting Question.

A narrowly defined Accounting Question may require only a limited number of Accounting Units and Accounting Relationships.

A basin-wide investigation may require multiple accounting boundaries, Accounting Periods, hydrologic regimes, datasets, Accounting Transformations, and reconciliation procedures.

Regardless of scale, the same governing principle applies:

begin with the accounting, document the Evidence, preserve the analytical pathway, and distinguish demonstrated accounting from subsequent interpretation and decision-making.

### A.3 Physical Accounting

The first substantive stage of an accounting engagement establishes what physically occurred within the defined accounting boundary during the Accounting Period.

Physical Accounting should begin with the Accounting Objects and Accounting Relationships material to the Accounting Question.

Depending upon the scope of the analysis, Physical Accounting may include:

- Climate;
- Basin Yield;
- Imports and Exports;
- Available Supply;
- Diversion;
- Return Flow;
- Depletion; and
- Terminal Delivery.

Not every Accounting Question requires evaluation of every Physical Accounting quantity.

The analysis should include those quantities necessary to preserve Accounting Continuity and support the resulting Accounting Findings.

#### A.3.1 Climate

Climate Accounting establishes the natural climatic and hydrologic conditions influencing the accounting system during the Accounting Period.

Climate should not be represented solely by annual precipitation where seasonal timing, snowpack, natural evapotranspiration, antecedent conditions, hydrologic regime, or System Evolution materially influence Basin Yield.

#### A.3.2 Basin Yield

Basin Yield Accounting determines the quantity of water naturally produced by the basin through application of the documented Climate Accounting and adopted accounting methodology.

Equivalent climatic observations should not be presumed to produce equivalent Basin Yield.

### A.3.3 Imports and Exports

Imports and Exports Accounting identifies physical transfers of water across the accounting boundary.

These quantities provide the adjustment between Basin Yield and Available Supply.

### A.3.4 Available Supply

Available Supply Accounting determines the quantity of water physically available within the accounting boundary following adjustment of Basin Yield for documented Imports and Exports.

Available Supply should not be interpreted as water that will necessarily be diverted, dedicated, delivered to Great Salt Lake, or retained within the lake.

### A.3.5 Diversion

Diversion Accounting identifies the physical withdrawal or redirection of Available Supply.

Diversion represents an Accounting Action.

It does not, by itself, establish Return Flow, Depletion, Terminal Delivery, or Lake Accretion.

### A.3.6 Return Flow

Return Flow Accounting identifies the portion of diverted water that physically reenters the accounting system during the Accounting Period or a documented future Accounting Period.

Return Flow should be evaluated independently from the originating Diversion and subsequent Depletion.

### A.3.7 Depletion

Depletion Accounting identifies the net quantity of water no longer available for subsequent Physical Accounting following consideration of documented Return Flow and other applicable Accounting Relationships.

Diversion should not be used as a substitute for Depletion.

### A.3.8 Terminal Delivery

Terminal Delivery Accounting identifies the quantity of water physically reaching the defined accounting endpoint.

For Great Salt Lake applications, the accounting endpoint may be Great Salt Lake or a documented terminal location used to determine delivery to the lake.

Terminal Delivery does not, by itself, establish Dedicated Water, Bankability, Lake Accretion, or a policy outcome.

The objective of Physical Accounting is to establish a transparent and reproducible representation of physical water movement, storage, return, depletion, and delivery.

Policy conclusions should not be introduced during this stage.

## A.4 Analytical Accounting

Following completion of the applicable Physical Accounting, the analysis proceeds to Analytical Accounting.

Analytical Accounting evaluates the meaning, support, and appropriate use of the completed physical accounting without altering the underlying physical quantities.

Depending upon the Accounting Question, Analytical Accounting may include:

- Dedicated Water;
- Bankability;
- Accounting Findings;
- Analytical Inference; and
- Policy Considerations.

Each analytical quantity should remain distinguishable from those preceding and following it.

### A.4.1 Dedicated Water

Dedicated Water Accounting determines whether water has been demonstrably committed to a documented accounting objective through legally, operationally, administratively, contractually, or otherwise verifiable mechanisms.

Physical delivery does not, by itself, establish Dedicated Water.

Dedicated Water requires independent Evidence of the applicable dedication mechanism.

### A.4.2 Bankability

Bankability evaluates the degree to which water associated with an Accounting Action is expected, or demonstrated, to produce measurable Lake Accretion, as defined in §3.24 — supported by documented Physical Accounting, demonstrated Accounting Relationships, reproducible Accounting Transformations, transparent methodology, and sufficient Evidence.

Bankability evaluates the physical expectation of Lake Accretion and the confidence justified by the accounting.

It does not determine whether a proposed project, policy, or management objective is desirable.

### A.4.3 Accounting Findings

Accounting Findings communicate what the completed accounting demonstrates.

An Accounting Finding should remain within the limits of the documented Evidence, demonstrated Accounting Relationships, applicable Bankability assessment, and defined Accounting Question.

Accounting Findings should not be expanded into broader interpretation or policy recommendation.

### A.4.4 Analytical Inference

Analytical Inference communicates what may reasonably be inferred from one or more documented Accounting Findings.

Analytical Inference requires transparent reasoning and should remain clearly distinguished from the Accounting Findings upon which it is based.

### A.4.5 Policy Considerations

Policy Considerations apply documented Accounting Findings and supported Analytical Inference to inform management, planning, regulatory, legislative, investment, or other decisions.

Policy Considerations represent decision support rather than demonstrated accounting.

They may inform a decision but do not dictate the decision ultimately made by responsible decision-makers.

The analytical progression should therefore remain explicit:

Physical Accounting establishes what physically occurred.

Bankability evaluates whether the water is physically expected to reach and remain in the lake, and the strength of the accounting support for that expectation.

Accounting Findings communicate what the accounting demonstrates.

Analytical Inference communicates what may reasonably be concluded.

Policy Considerations communicate how that accounting and reasoning may inform decision-making.

## A.5 Documentation and Reconciliation

Documentation and Reconciliation should occur throughout the accounting engagement rather than solely at its conclusion.

### A.5.1 Documentation

Documentation should be sufficient to permit an independent investigator to:

- understand the Accounting Question;

- evaluate the analytical scope;
- identify the Accounting Units employed;
- review Water Provenance and Source Attribution where material;
- evaluate the supporting Evidence;
- understand the applicable Accounting Relationships;
- reproduce the principal Accounting Transformations;
- review the Reconciliation;
- evaluate the applicable Bankability assessment;
- understand the resulting Accounting Findings;
- distinguish subsequent Analytical Inference; and
- identify any resulting Policy Considerations.

Documentation should clearly distinguish among:

- Observation;
- Measurement;
- Evidence;
- analytical assumptions;
- Accounting Transformations;
- Accounting Findings;
- Analytical Inference; and
- Policy Considerations.

Measured, calculated, estimated, inferred, and assumed quantities should not be presented as interchangeable.

Material uncertainty, data limitations, competing interpretations, and unresolved questions should be explicitly identified together with their potential influence on the resulting analysis.

## A.5.2 Reconciliation

Reconciliation evaluates whether the principal components of the accounting are internally consistent and whether material differences among available sources of Evidence have been adequately explained.

Depending upon the Accounting Question, Reconciliation may include:

- comparison of independent datasets;
- evaluation of physical water balances;
- comparison of measured and calculated quantities;
- identification of residual differences;
- review of Accounting Period consistency;
- review of accounting boundaries;
- evaluation of Water Provenance and Source Attribution;
- sensitivity testing;
- uncertainty analysis; or
- other procedures appropriate to the accounting.

Reconciliation does not require the elimination of every residual difference.

It requires that material differences be identified, investigated, documented, and evaluated according to their potential influence on the Accounting Findings.

Where complete reconciliation is not practicable, the analysis should identify:

- the unresolved difference;
- the probable sources of that difference;
- the Evidence available to evaluate it;
- the methodology used to represent it; and
- the resulting analytical limitation.

The objective of documentation and Reconciliation is to preserve a transparent analytical record capable of supporting independent review, reproduction, refinement, and future application.

## A.6 Use of Great Salt Lake Accounting Examples

The remaining appendices demonstrate application of the Great Salt Lake Accounting Standard using examples derived primarily from Great Salt Lake Accounting.

Great Salt Lake Accounting serves as the flagship implementation of GSLAS and provides a developed body of Physical Accounting, Accounting Relationships, Accounting Findings, Analytical Inference, Bankability analysis, and Policy Considerations suitable for illustrating the standard in practice.

Examples drawn from Great Salt Lake Accounting may include:

- the 2021–2025 climate-shock accounting;
- the basin water ledger;
- the distinction between Diversion and Depletion;
- the treatment of Available Supply;
- dedicated-water reconciliation;
- Bankability analysis;
- evaluation of Terminal Delivery and Lake Accretion;
- causeway and lake-storage accounting;
- conservation-accounting examples; and
- project-specific policy analyses.

These examples are included to demonstrate application of the standard.

They do not convert the factual assumptions, datasets, Accounting Relationships, Accounting Findings, Analytical Inference, or Policy Considerations of Great Salt Lake Accounting into universal requirements applicable to every GSLAS engagement.

Each new application of GSLAS should establish its own:

- Accounting Question;
- analytical scope;
- Accounting Period;
- accounting boundary;
- Accounting Units;
- Evidence;
- Accounting Relationships;
- Accounting Transformations;
- Reconciliation;
- Bankability assessment; and
- resulting analytical conclusions.

Examples should therefore be used as implementation guidance rather than as substitutes for independent accounting.

Where an example is adapted from Great Salt Lake Accounting, the appendix should identify:

- the original Accounting Question;
- the relevant source material;
- any modifications made for instructional purposes;
- the GSLAS concepts being illustrated; and
- any limitations affecting transfer of the example to another Accounting Question.

The appendices that follow apply this approach by using actual Great Salt Lake Accounting examples wherever those examples provide the clearest and most complete illustration of the standard.



## B. Canonical Water Ledger

This appendix is informative.

It illustrates the recommended presentation of a completed water ledger prepared using the Great Salt Lake Accounting Standard (GSLAS).

The example presented in this appendix is adapted from Great Salt Lake Accounting and demonstrates one recommended reporting format.

The layout presented here is illustrative rather than mandatory.

Alternative reporting formats may be used provided they preserve Accounting Continuity, analytical transparency, and sufficient documentation to permit independent review and reproduction.

### B.1 Purpose

The purpose of this appendix is to demonstrate the completed analytical product produced through application of the Great Salt Lake Accounting Standard.

Where Appendix A illustrates the accounting workflow, this appendix illustrates the resulting water ledger.

The water ledger provides a transparent summary of the principal Physical Accounting quantities, Accounting Relationships, and Analytical Accounting outputs supporting an accounting engagement.

The example presented in this appendix is derived from Great Salt Lake Accounting and illustrates one practical implementation of GSLAS.

### B.2 Recommended Ledger Structure

A completed water ledger should, where applicable, summarize:

- Accounting Question
- Accounting Period
- Accounting Boundary
- Accounting Units
- Principal datasets
- Hydrologic Regime
- Physical Accounting quantities
- Accounting Relationships
- Accounting Findings
- Bankability assessment
- Analytical Inference
- Policy Considerations

The ledger should present sufficient information to permit an informed reader to understand the accounting without reviewing the complete supporting documentation.

Detailed methodology, calculations, assumptions, and supporting Evidence should remain available through the accompanying accounting documentation.

### B.3 Example Water Ledger

The following example reproduces the Great Salt Lake Baseline Ledger published in Great Salt Lake Accounting.

The ledger combines the Utah portions of the Bear River Basin, the Weber River Basin, and the Jordan River Basin under the approximate 1961–1990 long-term equilibrium condition.

Volumes are expressed in thousand acre-feet per year (kaf/year).

The table has been reformatted for presentation under the Great Salt Lake Accounting Standard. The accounting quantities, values, signs, and source attributions remain consistent with the published Great Salt Lake Accounting ledger.

### B.3.1 Accounting Context

| Accounting Attribute        | Example                                                                                                                  |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Accounting Question         | How did water move through the Great Salt Lake Basin under the approximate 1961–1990 long-term equilibrium condition?    |
| Accounting Period           | 1961–1990                                                                                                                |
| Accounting Boundary         | Utah portions of the Bear River, Weber River, and Jordan River Basins, together with the terminal Great Salt Lake system |
| Accounting Endpoint         | Great Salt Lake                                                                                                          |
| Accounting Unit             | Thousand acre-feet per year (kaf/year)                                                                                   |
| Hydrologic Regime           | Baseline long-term equilibrium                                                                                           |
| Average South Arm Elevation | Approximately 4,200 feet                                                                                                 |
| Source Framework            | Combined Bear River, Weber River, and Jordan River Basin Plans                                                           |

### B.3.2 Great Salt Lake Baseline Ledger

| System<br>main               | Control    | Do- | Accounting Quantity                | Volume (kaf/year) | Source or Accounting Method |
|------------------------------|------------|-----|------------------------------------|-------------------|-----------------------------|
| Climate-Controlled Processes |            |     | Basin Precipitation                | 15,100            | Basin plans                 |
| Climate-Controlled Processes |            |     | Natural Evapotranspiration         | –11,400           | Basin plans                 |
| Climate-Controlled Processes |            |     | Basin Yield                        | 3,700             | Basin plans                 |
| Human Domain                 | Management |     | Imports, Exports, and Losses       | 300               | Basin plans                 |
| Human Domain                 | Management |     | Available Supply                   | 4,000             | Basin plans                 |
| Human Domain                 | Management |     | Agricultural Depletion             | –700              | Basin plans                 |
| Human Domain                 | Management |     | Municipal and Industrial Depletion | –300              | Basin plans                 |
| Human Domain                 | Management |     | Wetland and Reservoir Depletion    | –600              | Basin plans                 |
| Human Domain                 | Management |     | Net Inflow to Lake                 | 2,400             | Basin plans                 |

| System main        | Control | Do-  | Accounting Quantity     | Volume (kaf/year) | Source or Accounting Method |
|--------------------|---------|------|-------------------------|-------------------|-----------------------------|
| Terminal Processes |         | Lake | Lake Precipitation      | 1,400             | NOAA KSLC station           |
| Terminal Processes |         | Lake | Lake Evaporation        | -3,600            | Residual                    |
| Terminal Processes |         | Lake | Mineral Extraction      | -200              | Utah Water Budget Model     |
| Terminal Processes |         | Lake | Terminal System Balance | 0                 | 1961–1990 equilibrium       |

### B.3.3 Ledger Relationships

The principal relationships represented in the ledger are:

Basin Precipitation - Natural Evapotranspiration = Basin Yield

Basin Yield + Imports, Exports, and Losses = Available Supply

Available Supply - Agricultural Depletion  
 - Municipal and Industrial Depletion  
 - Wetland and Reservoir Depletion  
 = Net Inflow to Lake

Net Inflow to Lake + Lake Precipitation  
 - Lake Evaporation  
 - Mineral Extraction  
 = Terminal System Balance

## B.4 Reading the Water Ledger

The water ledger should be interpreted sequentially.

Each accounting quantity establishes the analytical basis for subsequent accounting quantities.

Readers should avoid inferring downstream accounting quantities solely from upstream quantities.

For example:

- Basin Yield does not establish Available Supply.
- Available Supply does not establish Diversion.
- Diversion does not establish Depletion.
- Depletion does not establish Terminal Delivery.
- Terminal Delivery does not establish Dedicated Water.
- Dedicated Water does not establish Bankability.

Each accounting quantity requires independent analytical support.

The completed ledger should therefore be interpreted as a sequence of documented Accounting Relationships rather than as a single calculation.

## B.5 Relationship to Great Salt Lake Accounting

Great Salt Lake Accounting serves as the flagship implementation of the Great Salt Lake Accounting Standard.

The example water ledger presented in this appendix is derived from that implementation.

Future GSLAS applications may differ in scope, accounting boundary, Accounting Period, datasets, accounting methodology, and reporting format while continuing to apply the principles established by the standard.

The objective of this appendix is to demonstrate one complete implementation rather than prescribe a single reporting format.

## C. Worked Example: Evaluating a Lake-Elevation Restoration Target

This appendix is informative.

It applies the Analytical Accounting Process established in Chapter 4 to a single, concrete Accounting Question: whether a stated restoration target — raising Great Salt Lake to approximately 4,198 feet (South Arm) by 2034 — is achievable given adequate funding and technical capacity.

This question is chosen deliberately. It is the question most commonly put to general-purpose AI systems and public commentators, and it is the question most vulnerable to being answered from an ungrounded, internet-scale narrative rather than from physical accounting. This appendix demonstrates the difference between the two.

The worked example draws its evidentiary basis from the Great Salt Lake Accounting Standard’s companion implementation, Great Salt Lake Accounting ([gslaccounting.org](http://gslaccounting.org)), including its Methodology, Water Ledger, Bankability, Data & Datasets, and System Conclusions pages, and its accompanying Factsheet v1.0. Every figure used in this appendix is drawn from, or directly derived from, that published material. Where this appendix states a conclusion, it identifies the accounting step and the supporting evidence that produced it.

### C.1 Purpose

The purpose of this appendix is to demonstrate, through a single worked example, how the Analytical Accounting Process established in Chapter 4 is applied to an actual Accounting Question of substantial public interest.

A general-purpose AI system given only a prompt and a set of reference links — without a governing accounting standard — will typically answer a restoration-target question by drawing on its pretrained knowledge of how such questions are usually discussed publicly, rather than by reconstructing the physical accounting the question actually requires. The result frequently reflects prevailing public narrative rather than demonstrated Physical Accounting.

This appendix shows the alternative. It works the Accounting Question through each step of Chapter 4 — defining the question, establishing scope and Accounting Units, establishing Water Provenance, assembling Evidence, evaluating Accounting Relationships, performing Accounting Transformations, developing an Accounting Finding, developing Analytical Inference, and developing Policy Considerations — using the published Great Salt Lake Accounting datasets and methodology as Evidence throughout.

The objective is not to settle the underlying policy question. Under this standard, that would exceed the proper role of Physical Accounting. The objective is to show what a Bankable, evidence-supported answer looks like, so that the difference between that answer and an ungrounded narrative answer is explicit and reproducible.

### C.2 The Accounting Question

Following §4.3, the first step of the Analytical Accounting Process is to state the Accounting Question with sufficient precision that the Evidence required to answer it can be identified.

The question as commonly posed — “is a 4,198 ft lake elevation by 2034 achievable given enough money and smart people?” — is not yet an Accounting Question. It conflates several distinct quantities: a target elevation, a timeframe, an implied funding constraint, and an implied assumption that human effort alone governs the outcome. Before Evidence can be assembled, the question must be restated in terms this standard can evaluate.

Restated as an Accounting Question:

**What Total Gap — expressed as required incremental Net Inflow to Great Salt Lake, sustained annually — must be closed to raise and hold the South Arm at approximately 4,198 feet by water**

**year 2034, and what portion of that Total Gap can plausibly be supplied through Bankable, human-controllable accounting actions within that timeframe?**

This restatement does three things required by this standard. First, it fixes the Accounting Endpoint (Great Salt Lake, South Arm elevation) and the Accounting Period (present through water year 2034). Second, it separates the physical requirement (the Total Gap) from the human-controllable response (Bankable actions), consistent with the Great Salt Lake Accounting Principle established in the front matter of this standard: the question is not how much water is discussed, diverted, conserved, or dedicated, but how much incremental water physically reaches and remains in the lake. Third, it excludes funding and personnel as accounting variables. Money and expertise may enable an accounting action; they do not by themselves constitute Physical Accounting, and this standard does not evaluate them as such.

The original prompt's framing — "given enough money and smart people" — is itself an implicit claim that deserves scrutiny under §2.2 (Principle of Physical Accounting): that human resources are the binding constraint on the outcome. Sections C.4 through C.7 evaluate whether the Evidence supports that claim.

### C.3 Scope and Accounting Units

Following §4.4 and §4.5, the accounting boundary and Accounting Units are established before Evidence is assembled.

**Accounting boundary.** Consistent with the Great Salt Lake Accounting Methodology, this example adopts the Utah portions of the Bear River, Weber River, and Jordan River basins, together with Great Salt Lake and its associated terminal bays and wetlands, as the System Boundary. Net Inflow is accounted at the four Zone 1 terminal gages — Bear River at Corinne, Weber River near Plain City, Jordan River Surplus Canal, and Jordan River at 1700 South — and scaled to estimated total lake delivery using the terminal inflow scaling relationship described in §E.4.

**Regime.** The example evaluates the 1996–2025 30-Year Rolling Ledger as the representative current operating condition, consistent with this standard's preference for rolling regimes over fixed historical normals when current system behavior is the object of the Accounting Question (§2.7, Principle of Reproducibility; see also the Regime Treatment discussion in the Great Salt Lake Accounting Methodology).

**Accounting Endpoint and Period.** The Accounting Endpoint is the South Arm of Great Salt Lake. The Accounting Period runs from the current 30-Year Rolling Ledger through the end of water year 2034 — an eight-year window from water year 2026 through water year 2033, inclusive, consistent with how the target is stated publicly.

**Accounting Units.** Flow quantities are expressed in thousand acre-feet per water year (kaf/year). Storage and volume quantities are expressed in thousand acre-feet (kaf) without a time dimension. Elevation is expressed in feet, NGVD29, consistent with the Casey-Root bathymetry underlying the published Great Salt Lake Accounting datasets.

Holding these definitions constant across the remainder of this appendix is what allows the Accounting Transformations in §C.5 to be reproduced independently by any reader with access to the same public datasets.

### C.4 Assembling the Evidence

Following §4.8, this section assembles the documented Evidence required to evaluate the Accounting Question, drawn from the Great Salt Lake Accounting Water Ledger, Data & Datasets, and System Conclusions pages.

**Current lake condition.** Under the 1996–2025 30-Year Rolling Ledger, the South Arm has averaged approximately 4,195.9 feet, with average Net Inflow of approximately 1,900 kaf/year. During the 2021–2025 shock period, average South Arm elevation fell to approximately 4,191.9 feet on an average Net Inflow of approximately 1,600 kaf/year. As of the beginning of water year 2026, observed South Arm elevation stands at approximately 4,191–4,192 feet.

**Target condition.** Under 1961–1990 baseline climate conditions, the system reconciles near equilibrium at approximately 4,200 feet. Maintaining approximately 4,198 feet under current (30-Year Rolling) climate conditions requires an estimated steady-state Net Inflow of approximately 2,200 kaf/year.

**Steady-state Flow Gap.** The difference between required steady-state inflow (~2,200 kaf/year) and current 30-Year Rolling Net Inflow to Lake (~1,900 kaf/year — the Zone 1 Terminal Inflows scaled per §E.4, not raw

Zone 1 gage flow) is approximately 300 kaf/year, documented as a central estimate within a 200–400 kaf/year range.

**Refill Gap.** Raising total lake storage from approximately 4,192 feet to approximately 4,198 feet requires approximately 4,429 kaf of additional storage, derived from the Casey-Root bathymetry. Distributed across the eight water years from 2026 through 2033, this corresponds to a Refill Gap of approximately 554 kaf/year.

This system-total volume is not read from a single bathymetry row. The Casey-Root relationship publishes South Arm, North Arm, Bear River Bay, and Farmington Bay as independent stage-volume curves, each indexed by its own elevation. South Arm, Bear River Bay, and Farmington Bay volumes are taken at the stated elevation (4,192 ft and 4,198 ft respectively); North Arm volume is taken at that same elevation minus 1.0 foot, consistent with the modeling convention documented in Great Salt Lake System Conclusions, reflecting typical North Arm operation relative to the South Arm under current causeway conditions. Reading North Arm's volume from the South Arm's row instead of its own overstates system volume at both endpoints and, applied inconsistently between the current and target elevation, can materially distort the resulting Refill Gap.

**Total Gap.** The Flow Gap and Refill Gap combine to a Total Gap of approximately 854 kaf/year, sustained for eight consecutive water years.

**Sensitivity to timeframe.** The same Flow Gap (~300 kaf/year) applies regardless of the horizon chosen for closing it, but the Refill Gap is inversely proportional to the number of years allowed to close it. Distributing the same 4,429 kaf of required additional storage across a 30-year horizon rather than an 8-year horizon produces a Refill Gap of approximately 148 kaf/year and a Total Gap of approximately 448 kaf/year — nearly half the 854 kaf/year required under the 8-year framing. This sensitivity is documented further in §C.5.

**Elevation banding.** Published Great Salt Lake Accounting materials distinguish two operating bands rather than a single achievable/not-achievable threshold. Sustained reductions in human depletion — without any assumption of favorable climate — can reasonably maintain the South Arm within an approximate 4,192–4,195 foot band. Sustaining the lake within the higher approximate 4,196–4,200 foot band, which contains the 4,198 ft target, requires both sustained depletion reductions and reversion of climate conditions toward the 30-year (1961–1990-consistent) average. This banding is treated as documented Evidence in this appendix, consistent with §2.9 (Principle of Climate Bounds).

**Currently quantified Bankable portfolio.** The completed order-by-order Great Salt Lake Dedicated Water Reconciliation estimates annual Bankable lake accretion of approximately 119.707 kaf/year under wet-regime conditions and 158.515 kaf/year under dry-regime conditions—reasonably summarized as approximately 100–200 kaf/year. These values describe the currently quantified portfolio, not a ceiling on additional conservation or restoration actions that might be developed and demonstrated in the future. The portfolio's 193.718 kaf of fixed-order maximum associated with unquantified actions and 549.456 kaf of active fixed-order maximum are not Bankable annual lake-accretion estimates.

**Independent scenario modeling.** The Great Salt Lake Strike Team's own scenario modeling — cited on the System Conclusions page — finds that even under a sustained additional 800 kaf/year of inflow beginning in 2025, mean simulated 2034 elevation reaches approximately 4,196.9 feet, still below the 4,198 ft benchmark, with the Strike Team identifying 2055 as a more realistic horizon for reaching 4,198 feet under that scenario.

**Precedent for the required inflow magnitude.** The historic high-inflow sequence of 1982–1986 is documented as the closest historical analogue to the sustained above-average precipitation that would be required to close a gap of this magnitude within the stated timeframe.

Each of these figures is independently reproducible from the public datasets identified in the Great Salt Lake Accounting Data & Datasets page and is treated in this appendix as documented Evidence rather than assumption.

## C.5 The Gap-to-Close Accounting Transformation

Following §4.9 and §4.10, this section evaluates the Accounting Relationships among the assembled Evidence and performs the Accounting Transformation that converts individual observations into a single evaluable quantity: the Total Gap.

**Canonical relationships applied.** This Transformation applies the Gap-to-Close construction established in the Great Salt Lake Accounting Methodology:



Flow Gap = Required Inflow – Current Inflow

Refill Gap = Volume Change ÷ Time Horizon

Total Gap = Flow Gap + Refill Gap

Application to this Accounting Question.

|                                                                 |                  |
|-----------------------------------------------------------------|------------------|
| Required Inflow (to sustain ~4,198 ft under current climate)    | ≈ 2,200 kaf/year |
| Net Inflow to Lake (1996–2025 30-Year Rolling, Zone 1 ÷ 0.8246) | ≈ 1,900 kaf/year |
| Flow Gap = 2,200 – 1,900                                        | ≈ 300 kaf/year   |
| Volume Change (4,192 ft → 4,198 ft, Casey-Root bathymetry)      | ≈ 4,429 kaf      |
| Time Horizon (water years 2026–2033)                            | = 8 years        |
| Refill Gap = 4,429 ÷ 8                                          | ≈ 554 kaf/year   |
| Total Gap = 300 + 554                                           | ≈ 854 kaf/year   |

**Evaluating the Accounting Relationship between the Total Gap and available Bankable mechanisms.** The Total Gap of approximately 854 kaf/year must be compared against the Bankable supply available within the Accounting Period, not against the larger volume of water that is merely discussed, diverted, dedicated, or subject to conservation programs. Per the Great Salt Lake Accounting Principle, only water demonstrated to physically reach and remain in the lake counts toward closing the gap.

As documented in §C.4, the completed order-by-order reconciliation of the currently tracked dedicated-water portfolio estimates approximately 119.707 kaf/year of annual Bankable lake accretion under wet-regime conditions and 158.515 kaf/year under dry-regime conditions. These values—reasonably summarized as approximately 100–200 kaf/year—are well below the required 854 kaf/year and below the central 300 kaf/year steady-state Flow Gap before any Refill Gap is considered. Appendix D illustrates how the standard’s Bankability tests are applied to individual mechanisms.

**Resulting residual.** Against the central 854-kaf/year requirement, the currently quantified portfolio leaves approximately 695–734 kaf/year not presently covered by demonstrated Bankable actions. Closing that residual would require substantial additional Bankable mechanisms beyond the current portfolio, favorable climate producing additional basin yield, or both.

**Sensitivity to the stated timeframe.** Because the Refill Gap is a volume divided by a time horizon, the same physical requirement produces a materially different Total Gap depending on the horizon evaluated:

|                              |                           |                          |
|------------------------------|---------------------------|--------------------------|
| 8-year horizon (2026–2033):  | Refill Gap ≈ 554 kaf/year | Total Gap ≈ 854 kaf/year |
| 30-year horizon (2026–2055): | Refill Gap ≈ 148 kaf/year | Total Gap ≈ 448 kaf/year |

Under a 30-year horizon, the Total Gap falls to approximately 448 kaf/year. The currently quantified portfolio would still leave approximately 289–328 kaf/year not presently covered by demonstrated Bankable actions, but the residual is materially smaller than under the eight-year framing and could be narrowed by additional future Bankable actions, favorable climate, or both. This is consistent with the Great Salt Lake Strike Team’s identification of 2055, rather than 2034, as a more realistic horizon for reaching 4,198 feet (§C.4). The Accounting Question as posed—with an implied 2034 deadline—is therefore materially harder to satisfy than the same physical target evaluated without that deadline. This distinction between the physical target and the timeframe attached to it is itself an Accounting Finding (§C.7): the binding constraint in the original prompt is as much the year 2034 as it is the elevation 4,198 feet.

This Accounting Transformation is fully reproducible from the cited datasets and does not depend on this appendix’s own analytical judgment; only the classification of individual mechanisms as Bankable (Appendix D) requires evaluative judgment, and that judgment is documented separately and transparently in this standard’s Bankability framework (Chapter 17).

C.6 Bankability of Available Mechanisms

Following Chapter 17, this section evaluates whether the “enough money and smart people” premise embedded in the original prompt is supported by the Evidence.



Funding and technical capacity are not, by themselves, Accounting Actions under this standard. They may enable an Accounting Action — for example, financing a permanent change application of the kind evaluated in Appendix D — but they do not directly produce Terminal Delivery or Lake Accretion. Whether additional funding could close the residual gap identified in §C.5 therefore depends on whether additional funding could plausibly generate additional Bankable mechanisms beyond those already documented, not on the quantity of funding alone.

The documented constraints on Bankability (§17.4, Evaluation of Bankability; Bankability to the Great Salt Lake) are structural rather than financial:

- **Proximity.** Water originating far upstream must pass through multiple layers of diversion, reuse, and storage before reaching the lake, regardless of funding.
- **Timing.** Water delivered under conditions where downstream systems, particularly Zone 2 wetlands, are unsaturated is substantially absorbed before reaching the open lake — a hydrologic condition, not a funding constraint.
- **Control.** Under prior appropriation, only reductions in consumptive use — not diversion, and not administrative reclassification — create water capable of increasing downstream inflow. Funding cannot convert a diversion right into a depletion reduction by itself.
- **Measurement and durability.** A mechanism must produce a repeatable, auditable outcome across wet and dry years to be counted as Bankable at all.

Additional funding could accelerate execution of currently identified mechanisms—for example, extending the Huntsville Abbey Farm-style fixed-time agricultural fallowing model to additional upstream acreage or securing additional permanent agricultural retirements near the lake margin comparable to North Point (see Appendix D). Such future actions are not included in the currently quantified 119.707-kaf/year wet-regime and 158.515-kaf/year dry-regime portfolio estimates unless and until their annual Lake Accretion is demonstrated under this standard.

What the Evidence does not support is assuming that incremental funding alone can produce enough additional Bankable water, within the physical constraints of proximity, timing, control, and measurement and within the eight-year window, to close the approximately 695–734 kaf/year residual. The constraint is not primarily financial; it is physical and hydrologic.

## C.7 Accounting Finding

Following §4.12 and Chapter 18, the Accounting Finding states what the accounting demonstrates, without extending beyond the documented Evidence and demonstrated Accounting Relationships developed in §C.4 through §C.6.

**Accounting Finding.** Closing the Total Gap required to raise and hold Great Salt Lake’s South Arm at approximately 4,198 feet by water year 2034 requires approximately 854 kaf/year of sustained additional Net Inflow across eight consecutive water years. The completed order-by-order reconciliation of the currently tracked dedicated-water portfolio estimates approximately 119.707 kaf/year of annual Bankable lake accretion under wet-regime conditions and 158.515 kaf/year under dry-regime conditions—reasonably summarized as approximately 100–200 kaf/year. Against the central requirement, approximately 695–734 kaf/year is not presently covered by demonstrated Bankable actions. Closing that residual would require substantial additional Bankable mechanisms beyond the current portfolio, favorable climate producing additional basin yield, or both. The portfolio’s 193.718 kaf of fixed-order maximum associated with unquantified actions and 549.456 kaf of active fixed-order maximum are not Bankable annual lake-accretion estimates. This constraint is materially a function of the eight-year timeframe: the same physical target evaluated over a 30-year horizon produces a Total Gap of approximately 448 kaf/year and leaves approximately 289–328 kaf/year not presently covered by the currently quantified portfolio (§C.5).

**Supporting elements, per §4.12:**

- **Accounting Period:** Water years 2026–2033.
- **Accounting Question:** §C.2.
- **Supporting Physical Accounting:** §C.4, §C.5.
- **Demonstrated Accounting Relationships:** Gap-to-Close identity, §C.5; Bankability constraints, §C.6.

- **Supporting Evidence:** Great Salt Lake Accounting Water Ledger, Data & Datasets, and System Conclusions pages; 2026 Great Salt Lake Strike Team scenario modeling.
- **Documented uncertainty:** The steady-state Flow Gap ( $\approx 300$  kaf/year) is a central estimate within a documented 200–400 kaf/year range, sensitive to assumed evaporation at 4,198 ft and to the rolling-period definition. The currently quantified portfolio estimates vary by operating regime—119.707 kaf/year wet and 158.515 kaf/year dry—and may expand if new mechanisms are developed and demonstrated.

Consistent with §3.12 (Accounting Finding) and §18.5, this Finding represents an analytical conclusion rather than a policy recommendation, a forecast, or a statement of scientific certainty regarding future climate.

## C.8 Analytical Inference and Policy Considerations

Following §4.13 and Chapter 19, an Analytical Inference may reasonably extend beyond the Accounting Finding stated in §C.7, provided it is clearly distinguished from that Finding and from the Policy Considerations that follow it, consistent with §10-19 of How to Read This Standard and the definitions in §3.13 and §3.14.

**Analytical Inference.** Reaching approximately 4,198 feet by 2034 is achievable only under a combination of sustained, favorable, above-average precipitation and full execution of the currently identified Bankable conservation portfolio. Achieving that combination cannot be assured through funding or personnel alone, because the structural constraints on Bankability (Chapter 17) and the required magnitude of favorable climate are not primarily financial constraints. This inference is consistent with the Great Salt Lake Strike Team's own scenario modeling, which places 4,198 feet by 2034 outside its central range of outcomes even under an aggressive sustained-inflow scenario, and identifies a materially later horizon — 2055 — as more consistent with its modeled central tendency.

This is an inference, not a Finding: it depends on an assessment of what combination of conditions would be required, extending beyond the demonstrated Physical Accounting in §C.4–§C.5 into judgment about the plausibility of sustained favorable climate — a domain in which this standard does not claim predictive authority.

Applying §2.9 (Principle of Climate Bounds) to this inference sharpens it into two distinct bands rather than a single achievable/not-achievable judgment. Sustained Bankable conservation alone, without any assumption of favorable climate, can reasonably be expected to hold the South Arm within an approximate 4,192–4,195 foot band — a real and durable outcome, but below the stated target. Reaching the approximate 4,196–4,200 foot band that contains the 4,198 ft target requires both sustained Bankable conservation and reversion of climate conditions toward the 30-year average. The original prompt's framing treats 4,198 feet as a single yes-or-no threshold; the Evidence supports a graduated answer in which conservation determines a floor and climate determines whether that floor sits within the higher band.

**Policy Considerations.** Following §4.14 and Chapter 20, this appendix identifies, without recommending among, the following considerations that follow from the Accounting Finding and Analytical Inference above:

- Sustained Bankable conservation, even where insufficient alone to reach 4,198 feet by 2034, durably raises the lake's operating floor (§2 of Great Salt Lake System Conclusions) and reduces the severity of future climate-driven shock periods. It is not rendered valueless by its insufficiency to meet a single target date.
- Public communication that represents the 4,198-by-2034 target as achievable through conservation and funding alone, without qualification regarding required climate conditions, creates a foreseeable credibility gap when the target is not met on schedule — a gap that may undermine support for conservation measures that remain necessary regardless of the target date.
- Target elevations and target dates are properly a policy determination, not an accounting determination. This standard's Accounting Findings can inform that determination but do not substitute for it.

Per §C.1, this appendix does not take a position on which policy response is appropriate. It demonstrates that the accounting supporting any such response is reproducible, evidence-based, and distinguishable from advocacy.

## C.9 Contrast with Ungrounded Analysis

This section states explicitly why the analysis in §C.2 through §C.8 differs from the answer a general-purpose AI system typically produces when given the same prompt and the same set of reference links without a governing accounting standard.

An ungrounded response commonly exhibits one or more of the following reasoning errors, each of which this standard is specifically designed to prevent:

**Treating diversion, dedication, or conservation volume as lake benefit.** An ungrounded response frequently cites the total volume of water “dedicated” or “conserved” toward Great Salt Lake as though it were equivalent to measurable lake inflow. §C.6 and Chapter 17 require that any such volume be evaluated for Bankability before it is counted, per the Great Salt Lake Accounting Principle.

**Treating gaged inflow as lake inflow.** An ungrounded response may cite streamflow gage totals directly as the water reaching the lake. §C.3 and §E.4 of this standard require that gaged Zone 1 inflow be distinguished from actual lake delivery, which depends on Zone 2 routing, wetland absorption, and elevation-dependent conditions documented in the Methodology.

**Answering a target-elevation question using present-day or historical average inflow rather than the inflow required at the target elevation.** Required inflow rises with target elevation because evaporating surface area expands nonlinearly with elevation. §C.4 and §C.5 use the inflow required at the specific target elevation, not an undifferentiated historical average.

**Failing to distinguish the steady-state requirement from the refill requirement.** A gap expressed only as an annual average inflow deficit, without separately accounting for the one-time volume needed to raise storage to the target within the stated timeframe, understates the requirement substantially. §C.5 accounts for both components explicitly.

**Substituting confidence in institutional capacity (“enough money and smart people”) for evaluation of physical and hydrologic constraints.** §C.6 evaluates this claim directly and finds that the binding constraints on Bankability are structural, not financial.

**Collapsing a graduated outcome into a single yes-or-no threshold.** An ungrounded response typically treats “4,198 feet by 2034” as a binary achievable/not-achievable question. §2.9 (Principle of Climate Bounds) and §C.8 require separating the elevation band attainable through Bankable management action alone from the higher band attainable only with favorable climate, and separating the physical target from the specific deadline attached to it — the same 4,198 ft target is a materially different accounting problem over eight years than over thirty (§C.5).

**Failing to cite a reproducible source for any quantitative claim.** Every figure in §C.4 through §C.7 is attributed to a specific published dataset or page and is independently reproducible. An ungrounded response typically offers plausible-sounding figures without a traceable accounting derivation.

The difference between this appendix’s Accounting Finding and an ungrounded response is not a difference in conclusion alone — both may correctly characterize the target as difficult. It is a difference in whether the conclusion is reproducible, falsifiable, and traceable to documented Evidence, which is the standard this appendix, and this standard generally, requires.



## D. Bankability Case Studies

This appendix is informative.

It restates four documented Great Salt Lake water transactions — evaluated on the Great Salt Lake Accounting Policy Analysis page using publicly available State of Utah records — in the terminology and structure of this standard’s Bankability framework (Chapter 17) and Dedicated Water framework (Chapter 16).

The four transactions are: the Huntsville Abbey Farm fixed-time agricultural fallowing agreement, the North Point permanent agricultural retirement, the Welby Jacob Utah Lake exchange, and the Compass Minerals industrial lake-withdrawal reduction agreement. Together they span the range of mechanisms available to Great Salt Lake restoration: temporary and permanent, upstream and near-lake, conservation-based and exchange-based and withdrawal-based.

Each case applies the same four-factor evaluation established in §17.3 (Classification of Bankability): Proximity, Timing, Control, and Measurement and Durability. All figures, State Engineer determinations, and order numbers cited in this appendix are drawn from the Great Salt Lake Accounting Policy Analysis page and the underlying Utah Division of Water Rights records it cites.

### D.1 Purpose

The purpose of this appendix is to demonstrate that Bankability, as defined in Chapter 17, is not a theoretical construct but an evaluation that has already been applied to real, documented Great Salt Lake water transactions with real State Engineer determinations attached to them.

Each case study in this appendix follows a consistent structure: the transaction as legally authorized (Dedicated Water, per Chapter 16), the transaction as physically evaluated (Bankability, per Chapter 17), and the resulting Accounting Finding regarding durable Lake Accretion. This structure is intended to make explicit, in each case, the gap between the legally dedicated volume and the physically Bankable volume — a distinction the Great Salt Lake Accounting Standard treats as central and which prevailing public narrative frequently collapses.

Readers seeking the complete order-by-order accounting of all currently tracked Distribution Accounting Tool entries, beyond the four illustrative cases presented here, should consult the Great Salt Lake Dedicated Water Reconciliation page at [gslaccounting.org](http://gslaccounting.org).

### D.2 Huntsville Abbey Farm (f53436) — Upstream Agricultural Fallowing

**Accounting Action.** Fixed-Time Change Application 35-455 (f53436) converts irrigation, domestic, and stockwatering water rights in the upper Weber River basin into dedicated environmental water for Great Salt Lake for a ten-year term, preserving the underlying water rights rather than retiring them permanently.

**Dedicated Water.** The order establishes a maximum annual diversion of 635 acre-feet. Consistent with §16.3 (Classification of Dedicated Water), this Diversion figure is not itself the accounting quantity of interest.

**Physical Accounting.** The Utah State Engineer independently determined that only the historical Depletion associated with the retired agricultural uses — approximately 357 acre-feet per year — may be accounted for as dedicated Great Salt Lake water. This is a Depletion-based determination, not a Diversion-based one, consistent with §3.20 (Depletion) and §3.18 (Diversion) as distinct Accounting Objects.

**Bankability evaluation (§17.3):**

- **Proximity:** Medium. Delivery originates in the upper Weber basin and reaches the lake via Willard Bay exchange releases or direct Weber/Ogden River delivery.
- **Timing:** Medium. Annual accounting is based on measured releases and Weber Basin exchange operations.

- **Control:** The State Engineer's depletion-based accounting already isolates the consumptive-use component from the larger diversion right, consistent with the requirement in §17.4 that only depletion reductions — not diversion changes — create Bankable water.
- **Measurement and durability:** Medium-low. Annual releases are measured against Willard Bay exchange records and measured Weber/Ogden River delivery, but the authorization is a fixed ten-year term and expires unless renewed.

**Accounting Finding.** Durable annual benefit is estimated at approximately 0.30 kaf/year under dry conditions and 0.36 kaf/year under wet conditions — closely aligned with the State Engineer's own 357 acre-foot depletion determination, with the Water Ledger framework's estimate reflecting additional upstream routing uncertainty.

**Significance.** This order is among the first to explicitly account for Depletion rather than Diversion, and its methodology closely parallels this standard's own distinction between the two Accounting Objects (§3.18, §3.20).

### D.3 North Point (a51083) — Near-Lake Agricultural Depletion Reduction

**Accounting Action.** Permanent Change Application 59-6048 (a51083) permanently retires irrigation on approximately 4,130 historically irrigated acres within the North Point Consolidated Irrigation Company and redirects water through the Lower Jordan River, Surplus Canal, Farmington Bay, and Gilbert Bay for wildlife habitat and preservation of Great Salt Lake.

**Dedicated Water.** The total diversion right is 20,650 acre-feet. Historical return flow associated with that right — 11,887 acre-feet — was already part of the river system and, per §16.4 (Evaluation of Dedicated Water), does not represent new water available to the lake.

**Physical Accounting.** The State Engineer independently determined historical consumptive use (Depletion) at approximately 8,762.58 acre-feet per year. Water in excess of that amount remains subject to downstream diversion under existing rights.

#### **Bankability evaluation (§17.3):**

- **Proximity:** High. The project sits immediately upstream of Great Salt Lake within existing conveyance infrastructure.
- **Timing:** High. Delivery is immediate and annual, without a multi-basin routing chain.
- **Control:** High. The retirement is a permanent elimination of consumptive use, not a diversion change or an administrative reclassification.
- **Measurement and durability:** High. The change application is permanent, not fixed-term, and the underlying historical consumptive-use determination was independently measured and set by the State Engineer.

**Accounting Finding.** Durable annual benefit is estimated at approximately 7 kaf/year under dry conditions and 9 kaf/year under wet conditions, closely bracketing the State Engineer's independent 8.8 kaf/year historical depletion determination.

**Significance.** North Point demonstrates the profile of a high-Bankability action under this standard: near-terminal proximity, permanent durability, and a Depletion basis independently validated by state administrative determination. The legal dedication (20.65 kaf) overstates durable Lake Accretion by more than a factor of two; the majority of that volume was already return flow within the system.

### D.4 Welby Jacob Exchange (f50738) — Utah Lake Exchange for Environmental Water

**Accounting Action.** Fixed-Time Change Application 59-5272 (f50738) authorizes Jordan Valley Water Conservancy District, together with state agencies and the Welby Jacob Water Users Company, to dedicate up to 10,000 acre-feet per year of Utah Lake storage water for Great Salt Lake environmental purposes, made available through an operational exchange in which Jordan Valley diverts an equivalent amount of Provo River water for municipal supply.



**Dedicated Water.** The maximum exchange volume is 10,000 acre-feet per year. This is an exchange-created environmental allocation, not a reduction in upstream consumptive use, and per §16.3 (Classification of Dedicated Water) must be evaluated differently than a direct depletion reduction.

**Physical Accounting.** The order calculates historical Depletion associated with the underlying irrigation right at approximately 4,243.33 acre-feet per year, with the balance (approximately 5,757 acre-feet) historically returning to the river system. Water released beyond the historical depletion amount remains subject to downstream diversion.

**Bankability evaluation (§17.3):**

- **Proximity:** Medium. Delivery originates in the upper Jordan River system.
- **Timing:** Medium. Delivery depends on controlled annual exchange operations.
- **Control:** High for the exchange mechanism itself, but bounded by the historical depletion ceiling — the full exchanged volume is not available as new environmental water.
- **Measurement and durability:** High relative to fixed-term agreements — the exchange structure is a repeatable legal authorization with annually measured exchange volumes, though annual realization depends on river administration.

**Accounting Finding.** Durable annual benefit is estimated at approximately 3 kaf/year under dry conditions and 4 kaf/year under wet conditions, reflecting the order's own historical depletion calculation together with dependence on annual exchange operations and downstream administration.

**Significance.** Welby Jacob illustrates that an exchange-created environmental allocation must still be evaluated against the historical consumptive use of the underlying right, per §16.4. The durable benefit ( $\approx 3\text{--}4$  kaf/year) is governed by that historical depletion, not by the 10,000 acre-foot exchange ceiling — a difference of roughly a factor of three.

## D.5 Compass Minerals (a52152) — Industrial Lake-Withdrawal Reduction

**Accounting Action.** Permanent Change Application 13-246 (a52152) adds Great Salt Lake enhancement as a permanent beneficial use of a 156,000 acre-foot industrial water right, under an agreement in which allowable industrial withdrawals decrease as South Arm elevation declines, leaving the unused portion of the authorized diversion in the lake.

**Dedicated Water.** The underlying water right is 156,000 acre-feet — the largest single dedication among the four cases in this appendix — but represents a maximum legal ceiling on industrial withdrawal, not a volume of new water entering the system.

**Physical Accounting.** Unlike the other three cases, this Accounting Action does not reduce watershed Depletion or create new Basin Yield. It directly limits withdrawal from the terminal lake itself, making its Accounting Relationship structurally different: benefit equals the reduction in direct lake withdrawal, not a routed Depletion reduction.

**Bankability evaluation (§17.3):**

- **Proximity:** Very high. Withdrawal occurs directly from the lake; there is no upstream routing pathway to evaluate.
- **Timing:** High. Reduction in withdrawal is immediate once an elevation threshold is reached.
- **Control:** High. The mechanism is a permanent State Engineer order with an elevation-indexed operating schedule.
- **Measurement and durability:** High. The order is permanent and tied to a measurable, elevation-indexed operating schedule, though realized annual benefit depends on actual industrial operations and the applicable elevation threshold in a given year.

**Accounting Finding.** Representative annual benefit is estimated at approximately 32 kaf/year under dry (lower-elevation) conditions and 14 kaf/year under wet (higher-elevation) conditions — an inverse relationship to the other three cases, because lower lake elevations trigger progressively larger reductions in allowable industrial withdrawal.

**Significance.** Compass Minerals demonstrates near-maximal Bankability on proximity, timing, and control — the highest of the four cases on those factors — but at a scale bounded by industrial operating conditions

rather than watershed hydrology. It also demonstrates that the largest legal dedication among these four cases (156 kaf) does not correspond to the largest durable benefit; North Point's smaller legal dedication (20.65 kaf) and Compass Minerals' representative dry-year benefit (32 kaf) are of comparable order, illustrating that legal dedication volume is a poor predictor of Bankable outcome across mechanism types.

## D.6 Comparative Findings

The table below summarizes the four cases evaluated in this appendix, comparing legally Dedicated Water against durable Bankable benefit under dry and wet regimes.

| Case                  | Dedicated (kaf) | Bankable Dry (kaf) | Bankable Wet (kaf) | Durability            |
|-----------------------|-----------------|--------------------|--------------------|-----------------------|
| Huntsville Abbey Farm | 0.635           | 0.30               | 0.36               | Fixed-term (10 yr)    |
| North Point           | 20.65           | 7                  | 9                  | Permanent             |
| Welby Jacob Ex-change | 10              | 3                  | 4                  | Permanent (ex-change) |
| Compass Minerals      | 156             | 32                 | 14                 | Permanent             |

### Cross-case Accounting Findings, consistent with §18.5:

- In every case, legally Dedicated Water materially overstates durable Bankable benefit. The ratio of Dedicated to Bankable volume ranges from roughly 1.8:1 (Huntsville Abbey Farm) to more than 5:1 (Compass Minerals under the dry-regime estimate) and higher still under wet-regime Compass Minerals figures. No case in this sample shows Dedicated and Bankable volumes converging.
- Proximity to the Accounting Endpoint is the strongest single predictor of Bankability across these four cases. Compass Minerals (direct lake withdrawal) and North Point (immediately upstream of the lake) both score “high” or “very high” on proximity and produce Bankable fractions closest to their Dedicated volumes; Huntsville Abbey Farm and Welby Jacob, both originating further upstream, produce the largest proportional gaps.
- Permanence of the underlying Accounting Action does not by itself determine the magnitude of Bankable benefit, but it does determine whether that benefit should be treated as an ongoing contribution to the lake's operating floor (§2 of Great Salt Lake System Conclusions) or as a temporary, expiring contribution requiring renewal, as with Huntsville Abbey Farm.
- Mechanism type is not a reliable predictor of Bankability in isolation. A permanent depletion reduction (North Point), a permanent exchange (Welby Jacob), and a permanent withdrawal limitation (Compass Minerals) all qualify as durable, but their Bankable magnitudes differ by an order of magnitude and are governed by different Accounting Relationships (§16, §17).

**Application to §C.6.** These four cases illustrate why legal dedication cannot be treated as annual Bankable lake accretion and why operating regime matters. The completed order-by-order portfolio reconciliation—not this four-case sample—produces the current quantified estimates of 119.707 kaf/year under wet-regime conditions and 158.515 kaf/year under dry-regime conditions. The sample demonstrates the transaction-level application of the proximity, timing, control, measurement, and durability tests that underlie those portfolio estimates.



## E. Ledger Reconstruction and Validation

This appendix is informative.

It demonstrates how the canonical Water Ledger identity established in Chapter 6 and Appendix B is reconstructed from raw public datasets, and how the resulting ledger is validated for closure. It is intended to serve the same function for AI-assisted analysis that the “How to Use with AI” sections of the Great Salt Lake Accounting Methodology, Water Ledger, and Data & Datasets pages serve on that site: a structured procedure that allows a ledger to be rebuilt and checked, rather than merely summarized or recited.

This appendix does not introduce new accounting relationships beyond those already established in this standard. It applies them, in sequence, to the specific published datasets identified in the Great Salt Lake Accounting Data & Datasets page, and shows how a reconstructed ledger is checked against independent evidence before its results are treated as reliable.

### E.1 Purpose

The purpose of this appendix is to make explicit the procedure by which a Water Ledger — of the kind presented in Appendix B and on the Great Salt Lake Accounting Water Ledger page — is reconstructed from primary data rather than transcribed from a published table.

This distinction matters for AI-assisted analysis in particular. A system that has merely read a published ledger table can repeat its values but cannot verify them, extend them to a new time period, or detect when a cited figure has been transcribed incorrectly. A system that can reconstruct the ledger from the underlying gage records, climate records, bathymetry, and depletion datasets can do all three, and can be checked for internal consistency using the validation procedure in §E.5.

This appendix therefore documents, in sequence: the inputs required (§E.2), the canonical identity and how it is applied to those inputs (§E.3), the single most consequential and least obvious methodological choice in the reconstruction — the Zone 1 terminal gage scaling factor (§E.4) — and how a completed reconstruction is checked for closure against independent evidence (§E.5). §E.6 catalogs the errors most commonly made when this procedure is skipped or performed incorrectly.

### E.2 Required Inputs

Following §4.5 (Identify Accounting Units) and §4.6 (Establish Water Provenance), reconstructing a Water Ledger requires five categories of documented Evidence, each published in structured form on the Great Salt Lake Accounting Data & Datasets page:

- **Bathymetry.** The Casey-Root elevation-area-volume relationship (USGS ScienceBase catalog item 64595c00d34ec179a8368788), covering the South Arm, North Arm, Bear River Bay, and Farmington Bay compartments, in NGVD29 datum. This dataset converts observed lake elevation into storage volume and surface area, both required for the terminal lake balance in §E.3.
- **Climate.** Annual water-year precipitation and evapotranspiration inputs from the KSLC station, used to construct Basin Precipitation and, together with Basin Yield, to derive Natural Evapotranspiration as a residual term.
- **Streamflow.** Annual water-year inflow at the four Zone 1 terminal gages — Bear River at Corinne, Weber River near Plain City, Jordan River Surplus Canal, and Jordan River at 1700 South. These four gages, and only these four, constitute Zone 1 Terminal Inflows for basin-plan-consistent accounting; additional upstream gages are documented for diagnostic purposes and must not be summed into total inflow.
- **Elevation.** Annual observed South Arm lake elevation, from which lake volume and surface area are derived via the bathymetry dataset, and against which the reconstructed ledger is validated in §E.5.

- **Depletions.** Basin- and sector-level consumptive use, reconciled to the published Strike Team totals, with additional granularity by basin, state, and sector to support routing and Bankability analysis (Chapter 17, Appendix D).

Each dataset is published with an accompanying metadata file documenting definitions, units, and reconstruction assumptions; per §E.1, that metadata should be read before the dataset itself.

An accounting boundary and Accounting Period must also be specified before reconstruction begins, per §4.4, exactly as in §C.3.

## E.3 Reconstructing the Canonical Identity

Following §4.9 and §4.10, the canonical Water Ledger identity is applied to the inputs identified in §E.2 in the following sequence. This is the same identity introduced in §6.2 (Physical Accounting Model) and worked in Appendix B, restated here as a reconstruction procedure rather than a completed table.

Step 1:  $\text{Precipitation} - \text{Natural ET} = \text{Basin Yield}$

Step 2:  $\text{Basin Yield} \pm \text{Imports/Exports} \pm \text{Storage/Timing} = \text{Available Supply}$

Step 3:  $\text{Available Supply} - \text{Depletions} = \text{Net Inflow to Great Salt Lake}$

Step 4:  $\text{Net Inflow} + \text{Lake Precipitation} - \text{Lake Evaporation} - \text{Mineral Depletions} = \text{Change in Lake Storage}$

**Step 1.** Baseline Basin Precipitation is fixed at 15,100 kaf/year for the Utah portions of the Bear, Weber, and Jordan River basins for WY1961–1990. For rolling and shock regimes, scale that anchor by the ratio of the applicable period’s unrounded mean KSLC precipitation to the unrounded WY1961–1990 mean KSLC precipitation. Apply the scaling before rounding; round only the completed ledger values for display. Natural Evapotranspiration is not independently measured; it is represented as a residual term, computed as Precipitation minus Basin Yield, and constrained to remain consistent with the basin-scale accounting relationships established elsewhere in the ledger. This is a Conservative Principle under this standard’s own terminology (§2.6, Principle of Explicit Assumptions): residual uncertainty is preferentially absorbed within this derived climate-side term rather than by adjusting directly measured flows.

**Step 2.** Imports and Exports are held near basin-plan values unless clearly documented changes require adjustment. Available Supply is the resulting Accounting Object carried forward into Step 3.

**Step 3.** Depletions are held constant across regimes unless supported by documented changes in use or accounting methodology — a second application of the Conservative Principle. Net Inflow at this step is computed at the Zone 1 terminal gage boundary and then scaled to estimated total lake delivery using the relationship in §E.4; it is not yet the water physically arriving at the open lake.

**Step 4.** At the terminal lake, Lake Precipitation is calculated from observed climate records and lake surface area (from bathymetry, at the relevant elevation). Mineral Depletion is held at a fixed planning ceiling of 200 kaf/year for consistency with prior basin-plan assumptions, notwithstanding a documented lower observed 2020–2024 average of approximately 136 kaf/year — a discrepancy retained transparently rather than silently corrected. Lake Evaporation is solved as the residual required to reconcile the identity against observed Change in Lake Storage, which is itself derived from the elevation record via bathymetry.

This last step is the reconstruction’s strongest internal check: because lake elevation and volume are directly and independently observed, Lake Evaporation cannot be freely assumed — it is constrained by everything else in the identity. §E.5 describes how this constraint is used to validate the reconstruction as a whole.

## E.4 The Gage-to-Lake Scaling Factor

This section documents the single most consequential, and least intuitive, methodological choice in ledger reconstruction: the relationship between water measured at the Zone 1 terminal gages and water actually delivered to the open lake.

**The relationship.** Not all water measured at the four Zone 1 terminal gages reaches the open lake, and not all water reaching the open lake is measured at those gages. A calibrated scaling relationship addresses both facts at once:

$$\text{Net Inflow to Lake} = \text{Zone 1 Terminal Inflows} \div 0.8246$$

The factor 0.8246 represents the share of total estimated lake inflow captured at the four Zone 1 terminal gages; the remaining approximately 17.5 percent arrives through Zone 2 wetland routing and groundwater additions, channel losses, and ungaged near-lake contributions such as Willard Bay spills. The factor is calibrated against reconstructed baseline-period lake behavior and held constant across comparison periods to preserve methodological consistency.

**Why this is not a simple unit conversion.** The Zone 2 budget the factor compresses is itself elevation-dependent. The factor was derived from basin-plan design conditions calibrated to a lake operating between approximately 4,196 and 4,210 feet, where Bear River Bay and Farmington Bay are fully developed and Willard Bay spills with some regularity. At lower elevations — approximately 4,189 to 4,193 feet, the range the lake has occupied during the 2021–2025 shock period — those bays contract, wetland evapotranspiration is reduced, and Willard Bay spills less frequently. The true delivery ratio under those conditions is probably lower than 0.8246, meaning a ledger reconstruction that holds the factor constant may overstate lake inflow specifically during shock-period reconstructions. At elevations near 4,198 feet, the factor is best supported by the underlying basin-plan conditions.

**Why the factor is held constant anyway.** Per §2.6 (Principle of Explicit Assumptions) and §2.7 (Principle of Reproducibility), this standard’s Conservative Principle favors a single, documented, reproducible calibration over a more locally accurate but less transparent elevation-adjusted parameter. Holding the factor constant preserves visibility of residual variance in the reconstruction rather than absorbing that variance into a recalibrated coefficient at every elevation. Any reconstruction that departs from the constant 0.8246 factor must document that departure explicitly, per §2.6, rather than silently substituting an alternative value.

**Zone 1 and Zone 2 defined.** Zone 1 consists of the four principal basin outflow gages identified in §E.2. Zone 2 consists of downstream gages and observations within Bear River Bay, Farmington Bay, and associated wetland systems — including, for example, the Farmington Bay Causeway and Goggin Drain observation points — which measure how much of the Zone 1 outflow ultimately reaches the open lake system. Zone 2 measurements are used for diagnostic and closure purposes; they are not summed into Zone 1 terminal inflow accounting.

**The accounting chain.** These relationships form a three-term chain that should not be collapsed into a single step:

|                         |                                              |
|-------------------------|----------------------------------------------|
| Zone 1 Terminal Inflows | (measured at the four basin gages)           |
| ÷ 0.8246                |                                              |
| Net Inflow to Lake      | (calibrated estimate of total lake delivery) |
| →                       |                                              |
| Lake Accretion          | (measured increase in lake storage, §3.26)   |

Zone 2 terminal gages provide the observed, diagnostic check on the middle term; they confirm or challenge the 0.8246 estimate but are not themselves summed into it. This distinction is most consequential in dry regimes: when Bear River Bay and Farmington Bay are substantially drawn down, a larger share of Zone 1 outflow is absorbed into wetland and substrate recharge before reaching the open lake, and the constant 0.8246 factor — calibrated to conditions where those bays are comparatively full — is most likely to overstate Net Inflow to Lake precisely then. Reporting Zone 1 Terminal Inflows, or the resulting Net Inflow to Lake estimate, as though it were confirmed Lake Accretion skips this chain entirely; this is catalogued as a Common Reconstruction Error in §E.6.

## E.5 Validating Closure

Following §4.11 (Reconciliation) and §6.11 (Physical Accounting Integrity), a reconstructed ledger is not treated as reliable merely because its arithmetic is internally consistent — internal consistency can be achieved by construction, since Lake Evaporation is solved as a residual in §E.3, Step 4. Closure must instead be validated against evidence that was not itself used to construct the ledger.

**The independent cross-check.** The Great Salt Lake Accounting framework validates its residual Lake Evaporation term against an independently calculated evapotranspiration estimate: KSLC station evapotranspiration (Hargreaves-Samani method) multiplied by total lake surface area, itself derived from the Casey-Root bathymetry at observed lake elevation. Over the 2003–2025 record, this independent estimate tracks the reconstructed residual evaporation term at an average ratio of 1.011, with a standard deviation of 0.080 — agreement within approximately one percent on average across twenty-three years of varying lake levels, inflows, and climate conditions.

**Why this check matters.** Agreement between an independently derived climate-based evaporation estimate and the ledger’s residual evaporation term demonstrates that the residual is carrying genuine open-water and wetland evaporation rather than absorbing systematic error from gage placement, the Zone 1 scaling factor (§E.4), or unmeasured groundwater contributions. Without this check, a reconstruction could close arithmetically while being wrong for reasons that arithmetic alone cannot reveal.

**Expected deviation, not failure.** Individual years may show substantial deviation from the 1.011 central tendency — cool, wet years and hot, dry years are documented to produce ratios outside that range, consistent with known limitations of the Hargreaves-Samani method under extreme conditions. Such deviations should be interpreted as method-consistent behavior, not as evidence that the reconstruction has failed, provided the multi-year central tendency remains near unity.

**Procedure for a new reconstruction.** Any reconstruction performed for a new time period or a modified accounting boundary should repeat this cross-check before its Accounting Findings are relied upon. A reconstruction that has not been checked against an independent estimate should be reported as unvalidated, per §6.11, rather than presented with the same confidence as a validated ledger.

## E.6 Common Reconstruction Errors

This section catalogs errors observed when ledger reconstruction is attempted without following §E.2 through §E.5, consistent with the purpose of Appendix F (Great Salt Lake Accounting Crosswalk) and the “Common Accounting Error” pattern used throughout Chapter 3.

**Summing all gaged streamflow rather than the four Zone 1 terminal gages.** Additional upstream gages are published for diagnostic and routing purposes. Including them in a total-inflow sum overstates Zone 1 Terminal Inflows and, propagated through §E.4, overstates estimated total lake delivery.

**Treating Zone 1 Terminal Inflows as equivalent to lake delivery.** Omitting the §E.4 scaling relationship entirely understates total lake inflow by approximately 17.5 percent, since it ignores Zone 2 wetland routing, groundwater additions, and ungaged contributions. This error is most consequential during dry regimes: when Bear River Bay and Farmington Bay are substantially drawn down, a disproportionate share of Zone 1 outflow is absorbed into wetland and substrate recharge rather than reaching the open lake, so the gap between Zone 1 Terminal Inflows and actual lake delivery is largest exactly when the difference matters most for Bankability and Terminal Delivery determinations. Zone 2 terminal gages — not Zone 1 alone — provide the observed check on whether this gap is being represented accurately; see the accounting chain in §E.4.

**Holding the 0.8246 factor constant without acknowledging its elevation dependency.** This is not itself an error — §E.4 establishes it as this standard’s Conservative Principle — but presenting a shock-period reconstruction without noting that the factor may overstate delivery at lower elevations is an undocumented assumption, contrary to §2.6.

**Comparing depletion figures across reports without checking accounting boundary and methodology.** As documented in Great Salt Lake System Conclusions, the 2026 Strike Team and the Utah Water Budget Model report different Municipal and Industrial depletion totals for the same basins and period because of a documented revision to the outdoor depletion factor, not a boundary dispute. A reconstruction that merges figures from incompatible reports without adjustment will misstate Depletion.

**Mixing the Utah Water Budget convention with the Utah-only basin-plan convention without adjustment.** The baseline Water Ledger (Chapter 6, Appendix B) uses the Utah portions of Bear, Weber, and Jordan only. Some published datasets, including certain depletion datasets, use the broader convention of Bear, Weber, Jordan, and Utah Lake, including Idaho and Wyoming Bear River depletions. Combining figures from both conventions without explicit reconciliation, per §4.4 (Establish Scope), produces an internally inconsistent ledger.

**Treating net balance as an exact annual quantity rather than a rounded regime-scale estimate.** At the level of individual water years, the reconstructed identity in §E.3 is internally reconciled. At the

level of multi-year regime summaries (baseline, 30-Year Rolling, shock), net balance is derived from observed differences in lake storage between regimes and is appropriately rounded; treating a regime-scale net balance figure as a precise year-by-year quantity overstates the precision the reconstruction supports.

**Confusing NGVD29 and NAVD88 elevation datums.** The Casey-Root bathymetry and the basin-plan era records this framework is built on use NGVD29. NAVD88, the current federal standard, differs by approximately +3.3 feet at Great Salt Lake. A reconstruction that mixes datums without conversion will misstate both elevation and, through the bathymetry relationship, storage volume.

**Reading North Arm's bathymetric volume from South Arm's elevation row.** The Casey-Root bathymetry publishes South Arm, North Arm, Bear River Bay, and Farmington Bay volumes as independent stage-volume curves, each keyed to its own elevation — not a single elevation shared across all four compartments. A reconstruction must query South Arm's, Bear River Bay's, and Farmington Bay's volume at the South Arm's elevation, and separately query North Arm's volume at its own elevation — directly observed where available, or South Arm's elevation minus 1.0 foot where no observation exists. Applying this offset on only one side of a before/after comparison — for example, using North Arm's observed elevation for a current condition but reading North Arm from South Arm's row for a hypothetical target — produces a materially overstated Refill Gap, since the error does not cancel between the two terms.



## F. Great Salt Lake Accounting Crosswalk

This appendix is informative.

It identifies where the principal concepts of the Great Salt Lake Accounting Standard are demonstrated within Great Salt Lake Accounting.

The purpose of this appendix is to assist readers in locating practical implementations of the analytical concepts established throughout GSLAS.

### F.1 Purpose

The Great Salt Lake Accounting Standard establishes the analytical framework governing physical accounting and analytical accounting.

Great Salt Lake Accounting serves as the flagship implementation of that framework.

This appendix cross-references the principal concepts of GSLAS with their implementation in Great Salt Lake Accounting.

The appendix is intended as a navigation aid rather than an analytical document.

### F.2 Chapter Crosswalk

| GSLAS Chapter         | Primary Great Salt Lake Accounting Reference |
|-----------------------|----------------------------------------------|
| Definitions           | Methodology                                  |
| Methodology           | Methodology                                  |
| Analytical Framework  | Methodology                                  |
| Physical Accounting   | Water Ledger                                 |
| Climate               | Water Ledger / Conclusions                   |
| Basin Yield           | Water Ledger                                 |
| Available Supply      | Water Ledger                                 |
| Diversion             | Water Ledger                                 |
| Return Flow           | Water Ledger                                 |
| Depletion             | Water Ledger                                 |
| Terminal Delivery     | Water Ledger                                 |
| Dedicated Water       | Dedicated Water Reconciliation               |
| Bankability           | Bankability                                  |
| Accounting Findings   | Conclusions                                  |
| Analytical Inference  | Conclusions / FAQ                            |
| Policy Considerations | Policy Analysis                              |

### F.3 Accounting Object Crosswalk

| Accounting Object     | Primary Implementation         |
|-----------------------|--------------------------------|
| Water Provenance      | Methodology                    |
| Source Attribution    | Methodology                    |
| Climate               | Water Ledger                   |
| Basin Yield           | Water Ledger                   |
| Available Supply      | Water Ledger                   |
| Diversion             | Water Ledger                   |
| Return Flow           | Water Ledger                   |
| Depletion             | Water Ledger                   |
| Terminal Delivery     | Water Ledger                   |
| Dedicated Water       | Dedicated Water Reconciliation |
| Bankability           | Bankability                    |
| Accounting Findings   | Conclusions                    |
| Analytical Inference  | Conclusions                    |
| Policy Considerations | Policy Analysis                |

### F.4 Example Crosswalk

| Example                   | Great Salt Lake Accounting Location |
|---------------------------|-------------------------------------|
| 2021–2025 Climate Shock   | Water Ledger / Conclusions          |
| Regime Comparison         | Water Ledger                        |
| Conservation Accounting   | Bankability                         |
| Dedicated Water           | Dedicated Water Reconciliation      |
| Causeway Example          | Conclusions                         |
| Agricultural Optimization | Bankability                         |
| Jordan River Accounting   | Water Ledger                        |
| Little Logan River        | Policy Analysis                     |
| Compass Minerals          | Policy Analysis                     |
| CCC                       | Policy Analysis                     |
| US Magnesium              | Policy Analysis                     |
| North Point               | Policy Analysis                     |



## **F.5 Summary**

The Great Salt Lake Accounting Standard establishes the governing analytical framework.

Great Salt Lake Accounting demonstrates application of that framework to the Great Salt Lake Basin.

The cross-references presented in this appendix are intended to help readers move efficiently between the standard and its flagship implementation.

Future implementations of GSLAS may apply the same analytical framework to different accounting questions, accounting boundaries, or hydrologic systems.