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| Larimer County Water Plan, Larimer County, Colorado  PRELIMINARY DRAFT October 4, 2024  (uNFORMATTED) | |
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Water Plan Overview

The Water Plan Overview will introduce the document by explaining its purpose and the rationale behind its development, aiming to engage the reader and lay a foundation for the content that follows. The Larimer County Water Plan (Water Plan) uses technical language throughout; please refer to the glossary in Section 7 for technical definitions. The overview will succinctly discuss the following:

* Larimer County’s history, highlighting key factors that led to the creation of the Water Plan (e.g., population growth, climate change)
* A discussion on the significance of a water plan, including a brief explanation of watershed concepts, to underscore its critical role in ensuring the health and effective management of watersheds
* A description of the Water Plan’s intended use, detailing the target audience, their expected interactions with the plan, and the time frame over which the plan will be relevant and applicable.

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**Planning Commission**

* Patrick Rowe, *Chair*
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**Larimer County Boards, Commissions, and Committees**

* Agricultural Advisory Board
* Environmental Science and Advisory Board
* Equity, Diversity, and Inclusion Advisory Board
* Open Lands Advisory Board
* Parks Advisory Board

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# Why is Larimer County Developing a Water Plan?

The Larimer County Water Plan (Water Plan or plan) will support the county’s goals outlined in the 2019 and 2024–2028 Strategic Plans of **“improving long-term planning for water supply in unincorporated areas,”** to **“promote water-sharing strategies to preserve agriculture and sustain water supplies,”** and to **“support the conservation, stewardship, and resiliency of our natural and built environments”** (Larimer County 2019a, 2024a). The plan will also support the county’s Climate Smart Future Ready plan’s strategy to **“increase regional effectiveness of water use across urban, agricultural, and ecological needs”** (Larimer County 2024b). This initiative, known as the Water Plan, will be a key part of Larimer County’s strategy to guide decisions on water, stormwater, and the health of the county’s natural water systems. Larimer County and community members have recognized the myriad of challenges about future water supply, drought, flooding, watershed health, and sustainability. While Larimer County is not a water provider, the county can play an important role in advancing water goals for the region and working with partners to ensure the health of our watersheds and future water supply.

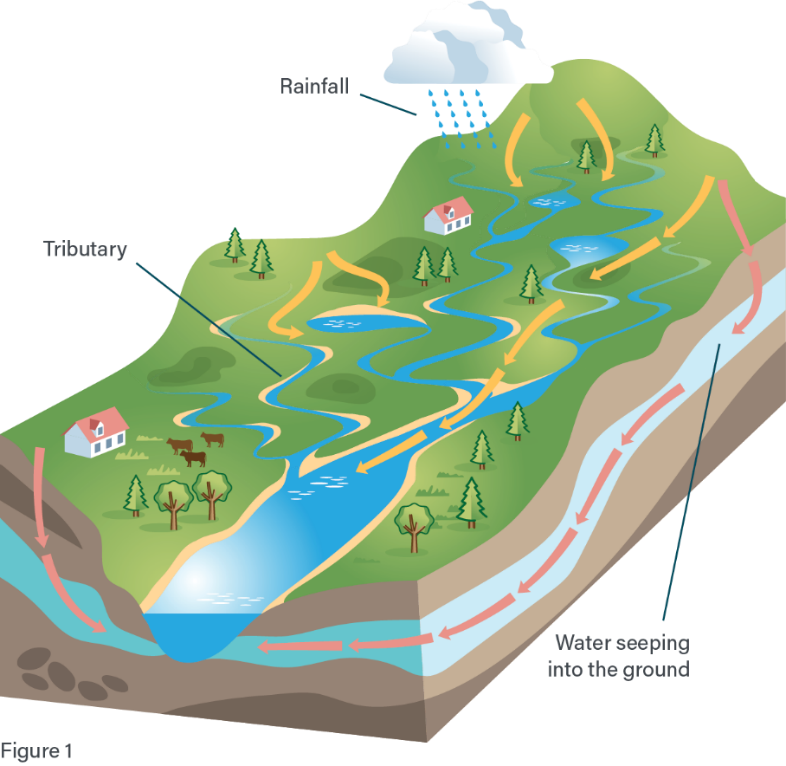
Larimer County prepared this Water Plan to assist strategic planning efforts for the county’s watersheds and water resources. The plan will help the county evaluate current and future water requirements in the community and set up long-term goals for sustainable water use and watershed management, which the county outlines in its 2019 Comprehensive Plan (Larimer County 2019b). The sections in this plan highlight:

* how the county developed this plan (Section 1.3),
* key challenges identified by stakeholders related to protecting water supplies (Section 2),
* the plan’s vision and goals (Section 3),
* focus areas that the county has prioritized for action (Section 4), and
* strategies and related actions that the county and/or its partners intend to take to work toward water sustainability in the county (Section 5).

Because this is a countywide, regional plan, watersheds are an important component and organizing aspect of the plan and its strategies.

## What is a Watershed?

A **watershed** is a geographic area that collects and channels water from precipitation, such as rainfall or snowmelt, into a common outlet, such as a river, lake, or ocean (Figure 1.1).

Defining a watershed

	•	An area of land where all the water that falls as rain or snow drains into a common waterway.
	•	It acts like a natural basin, collecting and channeling water to a central point.
	•	Watersheds are scalable. They can be as small as those shown in Figure 1, or they can cover larger areas such as the Cache La Poudre.

Why Do Watersheds Matter?
	•	Many factors can impact watersheds, such as pollutants, natural disasters like forest fires and flooding, nearby land use, and recreation.
	•	Protecting the health and function of a watershed is important to ensure safe, reliable, and sustainable water supplies, as well as recreational opportunities for Larimer County residents.

Figure 1.1. An illustration of a watershed.

## Larimer County’s Water Sources and Water Rights

Did You Know?
In Larimer County, much of the water we use comes from the other side of the mountains on the Western Slope. Moving water from the Western Slope to our side on the Front Range is called “water diversions” or “transbasin diversions.”An existing conditions report (Brendle Group 2022) for water resources in the county was developed prior to the Water Plan and details the water profile in Larimer County. Water sources in Larimer County primarily come from surface water and groundwater aquifers. The demand for water increases as populations in the county increase. To meet this demand, there are many water service providers (Table 1) and eight major transbasin water diversions with numerous inbasin diversions for water supply and delivery (Brendle Group 2022).

In Larimer County, all surface water uses and some groundwater uses are associated with a water right (Brendle Group 2022). Over time, water use in the county has shifted from mostly irrigation for agriculture to domestic water use in homes due to the increase in urbanization. Additionally, water rights have become more important and difficult to obtain as water resource supplies have decreased in the western United States and demand has increased (Brown et al. 2019). See Table 1.1 for a detailed summary of water resources and population growth in Larimer County.

Table 1.1. Water Resources and Population Growth Summary for Larimer County

|  |  |  |  |
| --- | --- | --- | --- |
| Metric | | Description | Implication |
| Population Growth | 56% | Population growth from 2017 to 2040 | Projections indicate that the population size in Larimer County will increase by 56%, with the population estimated to reach 535,756 by 2040. As population growth increases, so does water use. |
| 96% | Percentage of population growth contributed to municipalities, compared to unincorporated areas, through 2040 |
| Water Supplies | 43% | Percentage of water sourced from the Colorado River | A lot of Larimer County’s water supply comes from the Western Slope, specifically from the Colorado River. Natural hazards such as fire and drought can impact the ability to move water and can lower water supply across the county. |
| Agricultural Land | 47% | Percentage decrease in irrigated agricultural lands | As population grows in urban areas of Larimer County, agricultural lands have decreased by 47% in the past 30 years. |
| Water Providers | 124 | Number of water providers | As water demand increases in Larimer County, the number of water providers and wells has increased. |
| 13,090 | Number of water wells |

Source: Brendle Group (2022: subset of Table 1).

## How Was This Plan Developed?

The county began the process to create the Water Plan in August 2023 and completed it in December 2024. Stakeholders were involved throughout the plan’s development. Water resource experts reviewed relevant water resource data and plans, performed a watershed analysis with relevant data, and developed actions to work toward water sustainability and reliability in Larimer County (Figure 1.2). The strategic planning and continued collaboration with stakeholders ensured that the plan will be relevant to the community and an effective and informed planning tool.

*Larimer County Water Plan Process

1 - Committee Formation
2 - Identify Challenges
3 - Vision and Goals / Public Workshops
4 - Data Review, Inventory and Gap Analysis 
5 - Watershed Analysis 
6 - Develop Actions
7 - Develop Water Master Plan*

Figure 1.2. The Water Plan process.

### Who Was Involved in the Plan’s Development?

Larimer County worked with the following four groups in the Water Plan process:

1. Technical Advisory Group (TAG)
2. Water Advisory Group (WAG)
3. Board of County Commissioners and Planning Commission
4. Larimer County Advisory Boards
5. Public

	•	Project Website (August 2023)
	•	Vision and Goals Workshop (November 2023)
	•	County Core Team
	•	Technical Advisory Group
	•	Water Advisory Group
	•	Public Surveys for Watershed Categories (November 2023)
	•	Finalized Watershed Analysis Results (May 2024)
	•	Results Public Open House (May 2024)
	•	Draft Plan Public Open House (October 2024)Larimer County created the TAG and the WAG to bring diverse technical knowledge and water resource experiences to the plan development process and invited individuals from water utilities and towns, water-focused non-profit organizations, community water providers, water researchers, agriculture and irrigation practitioners, development groups, water educators, and indigenous groups to participate. The acknowledgements at the beginning of this document list the members of each group. Larimer County held several meetings with each group: four TAG meetings, three WAG meetings, four Board of County Commissioners and Planning Commission meetings, and three public meetings. These groups helped identify challenges of water supply protection (Section 2), create the vision and goals (Section 3), and identify strategies (Section 4) that the county or their partners could employ to support water sustainability and reliability in Larimer County.

### What Resources Were Used in the Plan Development?

In addition to the Larimer County Regional Water Existing Conditions Report (Brendle Group 2022; see Section 1.2), the county, the state of Colorado, the federal government, and county partners have extensive data sources and information to help inform the plan. Some examples of data that were used or reviewed for inclusion include Larimer County geospatial data sets and data from the Colorado Division of Water Resources, the National Drought Mitigation Center, the U.S. Geological Survey Water Quality Portal, the Federal Emergency Management Agency, the Colorado Water Conservation Board, the City of Fort Collins, and the City of Loveland (see Appendix A, Exhibit A1). Section 2, Section 4, Appendix A, and Appendix B provide more information about the data included in this plan and how the plan uses the data to better understand water in Larimer County.

# Identifying Challenges

Before creating the plan’s vision and goals, the county held discussions with stakeholders and the public to hear their thoughts on the biggest concerns in protecting our water supply. After gathering feedback, the TAG and the WAG, along with county staff, organized the suggestions and narrowed them down to the key challenges. Figure 2.1 shows these key challenges.

Here’s the cleaned-up version of the text:

Key Challenges

	1.	Water Supply & Demand Planning
Planning for how much water we have and how much we will need in the future.
	2.	Water Infrastructure
Taking good care of water systems and supporting thoughtful storage.
	3.	Watershed Health
Protecting important habitats and keeping water clean and safe.
	4.	Water Conservation Policies & Guidelines
Promoting effective policies and resources to help maximize the use of available water.
	5.	Water Rights
Understanding the rules around water use to better protect Larimer County’s agricultural heritage.
	6.	Water Education
Providing more opportunities for local leaders, government officials, and the public to learn about water in Larimer County.



Figure 2.1. Some of the biggest challenges to protect our water supply.

To understand each of these challenges on a deeper level, the county collected and analyzed different types of data, including public information, data from partners, and internal records. For instance, for watershed health, the county examined data related to factors like wildfires, water quality, and local habitats and how they affect the health of our watersheds and the cleanliness of our water supply (see Figure 2.2 for a detailed example and explanation of the role these factors play).

A diagram of a diagram

Description automatically generated

Figure 2.2. Decreasing the destructive potential of uncontrolled wildfires, maintaining good water quality, and protecting local habitats all contribute to the overall health of our watersheds and promote a cleaner, more reliable water supply.

The figure above shows how each key challenge is influenced by several factors that can impact water reliability. By collecting and analyzing data related to these challenges, the county and its stakeholders developed a vision and goals for the plan that address these issues. More details about the other challenges, their influencing factors, and the data used for analysis can be found in Appendix B.

# Vision and Goals

Larimer County developed the vision and goals for the Water Plan in consultation with the public, the TAG, the WAG, five Larimer County Advisory Boards, and various members from the Board of County Commissioners and Planning Commission. The vision and goals below show what Larimer County hopes to achieve by putting this plan into action in the future.

**Vision (Larimer County 2024):**

***“Larimer County, guided by a commitment to stewardship, is dedicated to safeguarding local and regional water systems, aligning future land use with available water resources, and helping to build resilient communities and ecosystems equipped to address future water challenges.”***

*Here’s the cleaned-up version of the text:

Goal 1

Minimize the threat to watersheds from hazards (e.g., floods, severe wildfires).
Improve ecological conditions to enhance water quality while increasing resilience, focusing on the high-risk watersheds identified in the Water Master Plan.

OBJ. 01
Identify grants, funding opportunities, and restoration efforts to improve the conditions of fire-scarred areas, while proactively helping to increase the ecological resilience of unburned forested areas.

OBJ. 02
Collaborate with local, state, and federal agencies, community organizations, education institutions, and other relevant stakeholders to incorporate risk mitigation strategies and actions into existing planning processes.

OBJ. 03
Integrate water-related hazard mitigation strategies into ongoing and future planning processes, such as the Hazard Mitigation Plan, Climate Smart Plan, Comprehensive Plan, and Larimer County’s Land Use Code.
*

*Here’s the cleaned-up version of the text:

Goal 2

Communicate and Collaborate to Support Water Sustainability
Strengthen communication, coordination, and collaboration among water-related organizations, stakeholders, and departments to improve the sustainability and resilience of our communities and their water resources.

OBJ. 01
Establish channels and partnerships with partner organizations to enhance collaboration.

OBJ. 02
Create and maintain systems that support collaboration and capacity-building for utility providers.
*

*Here’s the cleaned-up version of the text:

Goal 3

Promote Water Literacy in Our Community
Enhance and promote existing water education efforts available to Larimer County, ensuring resources are easily accessible for the community.

OBJ. 01
Create resources to educate the community about watershed health, water provider boundaries, water use, and water-related topics to improve understanding.

OBJ. 02
Incorporate interactive and engaging materials to increase awareness and understanding of water-related risks.
*

*Here’s the cleaned-up version of the text:

Goal 4

Align Land Use Planning with Water Resources
Develop and implement programs or policies that support sustainable growth and development while ensuring water supply reliability and adequacy.

OBJ. 01
Coordinate land use and zoning for unincorporated areas to reflect known information about water resources and availability in those areas.

OBJ. 02
Address water affordability considerations alongside adequate water resource planning. Implement equitable actions that address the diverse needs and challenges of different groups.

OBJ. 03
Ensure the long-term viability of agricultural water resources in Larimer County by promoting efficiency and conservation methods. Support the identification of alternatives during buy-and-dry situations and assist in establishing water-sharing agreements between stakeholders.

OBJ. 04
Incentivize the preservation and ecological protection of the most important agricultural lands to ensure sustainable water management.

OBJ. 05
Implement measures that minimize the transfer of water out of Larimer County to build local water resilience and improve instream flows.

*

*Here’s the cleaned-up version of the text:

Goal 5

Enhance Water Efficiency and Conservation Measures
Identify and implement opportunities for water conservation and increased water efficiency. Establish partnerships with key stakeholders, such as municipalities, utilities, agriculture, and community organizations, to broaden efforts.

OBJ. 01
Evaluate and update Land Use Codes and policies in Larimer County to improve water efficiency both indoors and outdoors.

OBJ. 02
Expand the reach of water-efficient programs and incentives, prioritizing affordability and equity. Reconcile policies and approaches between Larimer County and local municipalities to ensure better alignment and consistency in water management.
*

# Focus Areas

The goals of this Water Plan played a crucial role in narrowing the focus on strategies and actions for the county to take, especially since water management is a complex issue with many possible solutions. Recognizing the need to maximize the impact of its efforts, the county collaborated closely with the plan’s stakeholder groups to identify geographic areas where it should focus its efforts. They used watershed boundaries to group relevant data by region and assigned scores from one to ten for each watershed based on data related to the challenges outlined in Section 2. The county identified the watersheds with the highest scores as higher priority and labeled them as Focus Areas. Figures of the Focus Areas for each of the mapped challenges are found in Exhibits B2 through B5 in Appendix B. These Focus Areas will help guide future actions and concentrate efforts where they may be needed most. Figure 4.1 provides an example of the mapping and scores for one of the Focus Area watersheds for the challenges related to Watershed Health.

A map of different colored areas

Description automatically generated with medium confidence

Figure 4.1. This figure shows a watershed along the Big Thompson River selected as a Focus Area for Watershed Health. The scores given to this watershed show that all three influencing factors (wildfire, water quality, and habitat) are a concern in this area. Maintaining good water quality in this watershed may be one of the biggest challenges.

Not all of the identified challenges are geographically focused. To prioritize strategies related to Water Conservation and Water Education, the county developed a collection of current resources, initiatives, and programs that other agencies are executing or are currently involved in. Having an inventory of these efforts will help the county identify partners as well as opportunities to improve its own strategies related to these topics. This information can be found in Appendix B.

# Developing Strategies

With the key challenges carefully identified and the Focus Areas selected, Larimer County staff joined forces with members of the County Board of Commissioners, the Planning Commission, five Advisory Boards, the TAG, the WAG, and engaged community members to craft strategies for the plan. Guided by the Water Plan’s vision, goals, and objectives, the groups’ discussions naturally evolved into plans to strengthen water education, improve policies, and enhance watershed health through strong, community-driven partnerships.

## Strategy Summary Table

Ten key strategies emerged from the stakeholder discussions. These strategies represent the most effective ways Larimer County can achieve this plan’s goals by focusing on areas where it has the most influence and authority. Table 5.1 summarizes these clear, actionable strategies and outlines how each will help to achieve the plan’s goals. Appendix C provides further details about each strategy. Appendix D provides the full list of strategies that were considered throughout plan development.

Table 5.1. Summary Table of Water Plan Strategies

| **Strategy** | **County Actions** | **Associated Goals** |
| --- | --- | --- |
| ***Integrate the Water Plan into Existing Larimer County Plans***  Update existing Larimer County plans to include relevant actions and goals from the Water Plan | * Update the Comprehensive Plan and reassess other existing plans to determine if policies, codes, required buffers, and setbacks are in line with Water Plan goals. | Goal 2: Objectives 1 & 2  Goal 4: Objectives 1 & 4 Goal 5: Objectives 1 & 2 |
| ***Support Fuel Reduction Outcomes***  Identify funding opportunities and help support fuel reduction activities that remove dry plants and other flammable materials to slow wildfires when aligned with watershed health goals. | * Work with partners to support fuel reduction efforts for both private and public lands. * Identify funding and labor assistance for fuel reduction projects. * Support effective mitigation treatment, including partner efforts on prescribed fires. | Goal 1: Objectives 1 & 2 Goal 2: Objective 1 |
| ***Support Watershed Health Outcomes***  Increase support to Larimer County coalitions that aim to improve the health of forests and watersheds. | * Identify funding sources and mechanisms that could be used to help watershed coalitions enhance their current efforts. * Share information about the benefits of partner events and projects. | Goal 1: Objectives 1 & 2 Goal 2: Objective 1 |
| ***Water Security***  Improve and clarify the process for the county to determine whether developments will have adequate and secure water into the future. | * Make sure all water providers share the same type of information during the county’s review process and include them in zoning discussions. * Find projects that were approved but not built because of water limitations and work with providers to solve problems. | Goal 2: Objectives 1 & 2 Goal 4: Objective 1 |
| ***Protect Water Supplies***  Show a unified commitment to protect local water supplies through partnerships, policies, and actions. | * Clarify concerns, limitations, and the county’s role in protecting local water supplies. * Draft public statement with partners to protect Northern Colorado water supplies. * Explore ways to keep water tied to the land. | Goal 2: Objective 1 Goal 4: Objective 5 |
| ***Improve Water Efficiency and Conservation***  Update Land Use and Building Codes to enhance water conservation in new community developments and protect water resources. | * Align zoning with areas where water provider service areas. * Improve water efficiency through updated landscaping and building codes. * Support partner incentive programs for removing nonfunctional turf from existing developments. | Goal 4: Objectives 1 & 4 Goal 5: Objectives 1 & 2 |
| ***Protect Water to Promote a Viable Agricultural Economy***  Improve public education and policies to maintain a viable agricultural economy that is connected with regional water. | * Bring rural and suburban communities together to improve relationships between residents. * Work with farmers to improve irrigation water conservation. * Explore tools to keep water tied to agricultural land. | Goal 2: Objective 1 Goal 3: Objective 2 Goal 4: Objectives 1, 3 & 4 |
| ***Grow Water Smart***  Seek out opportunities for the county and their partners to learn about and apply best practices for water efficiency and conservation while planning for community growth. | * Participate in the 2024 Water Smart Workshop. * Consider participating in future years to advance watershed health goals. * Host educational opportunities in-house, with additional partners. | Goal 4: Objectives 1-5 Goal 5: Objectives 1 & 2 |
| ***Public Education & Resource Clearinghouse***  Identify and support programs and ideas to improve public water education and create a helpful resource center for residents on the county website. | * Expand water education through field trips, conservation projects, and information about where water comes from. * Support existing, successful education programs. * Develop an interactive map showing which water providers serve each area of the county, while also sharing water-saving tips and helpful information for new residents on the county website. | Goal 2: Objective 2 Goal 3: Objectives 1 & 2 Goal 5: Objective 2 |
| ***Address Water Efficiency in Disproportionately Impacted Communities***  Identify opportunities to address disproportionately impacted communities through education and water efficiency programs. | * Support educational opportunities and system upgrades when possible. * Promote programs that offer free or discounted indoor fixture replacements to help lower water bills for residents and increase efficiency. | Goal 2: Objective 1 Goal 4: Objective 2 Goal 5: Objective 1 |

Combined, these strategies address every goal and objective of the water plan (Figure 5.1) and will allow the county to fulfill the plan’s vision while operating within its realm of influence.

Here’s the cleaned-up version of the text:

GOAL 1: Minimize the Threat to Watersheds from Hazards

(e.g., floods, severe wildfires)

GOAL 2: Communicate and Collaborate to Support Water Sustainability

GOAL 3: Promote Water Literacy in Our Community

GOAL 4: Align Land Use Planning with Water Resources

GOAL 5: Enhance Water Efficiency and Conservation Measures

Strategies That Help Achieve Goals

	1.	Integrating the Water Plan into Existing Larimer County Plans
	2.	Support Fuel Reduction Outcomes
	3.	Support Watershed Health Outcomes
	4.	Water Security
	5.	Protecting Water Supplies
	6.	Improve Water Efficiency and Conservation
	7.	Protecting Water to Promote a Viable Agricultural Economy
	8.	Growing Water Smart
	9.	Public Education & Resource Clearinghouse
	10.	Address Water Efficiency in Disproportionately Impacted Communities


**Figure 5.1 Together, the 10 strategies that the county selected for this plan address every goal and objective that the county, with the help of stakeholders, set. Achieving each goal will help fulfill the plan’s vision of protecting water supplies, aligning land use with resources, and building resilient communities for future water challenges.**

The county is deeply committed to protecting one of our most precious resources: water. From the rivers and lakes that shape our landscape to the water flowing in our homes, every drop is valued. By promoting conservation, keeping our watersheds healthy, and partnering with local communities, the county will play a part in ensuring that future generations can enjoy clean, abundant water and healthy watersheds and ecosystems. This commitment is rooted in the belief that water is not just a utility but a shared resource that connects us all, and caring for it means caring for the health and well-being of every resident and the environment we call home.

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# Glossary

**Colorado Big-Thompson Project (CBT)** – A large-scale water diversion and storage project in Colorado, designed to collect water from the Colorado River Basin and transport it to the Front Range for irrigation, municipal supply, and hydroelectric power generation.

**Curtailment** – The reduction or limitation of water allocations to users due to shortages in a river’s flow. It is typically implemented during times of drought or when the available water supply cannot meet the demands of all users. Curtailment measures may involve reducing water allocations to agricultural, industrial, or municipal users.

**Ditches and canals** – These elements of water infrastructure are artificial channels for water transport in water resource management. Ditches are narrow, often shallow trenches used for irrigation or drainage, while canals are larger waterways for conveying water over longer distances and across diverse terrain, serving purposes like irrigation, flood control, and urban water supply. In Northern Colorado, these tend to end up in some sort of water storage (i.e., reservoir) and are often managed by ditch companies.

**Ditch company** – An organization or entity responsible for managing and maintaining a network of ditches used for irrigation or drainage purposes. Landowners who rely on the ditches for supplying water to their fields or managing excess water typically form these companies. Ditch companies often oversee the construction, operation, and maintenance of the ditches, as well as the allocation of water rights among their members.

**Ecological conditions** – The overall health, structure, and functioning of ecosystems, including factors such as biodiversity, habitat quality, species populations, and ecosystem services.

**Floods** – An overflow of water onto normally dry land, caused by heavy rainfall, rapid snowmelt, or the breaching of natural or artificial barriers such as levees or dams.

**Highest-producing lands** – Agricultural lands or regions with high productivity and output in terms of crop yields, livestock production, or other agricultural activities, often supported by favorable climate, soil fertility, water availability, and management practices.

**Impaired waters** – Bodies of water, such as rivers, lakes, and estuaries, that do not meet established water quality standards due to pollution, contaminants, or other factors, posing risks to human health and aquatic ecosystems.

**Intense wildfires** – Wildfires characterized by their rapid spread, high intensity, and significant ecological and socioeconomic impacts, often fueled by dry vegetation, hot temperatures, and strong winds.

**Mitigation strategies** – Measures and actions aimed at reducing or preventing the adverse impacts of natural or human-induced hazards and disasters, such as floods, droughts, wildfires, and climate change, through planning, preparedness, and risk reduction efforts. In the Water Plan context, these strategies will lessen water-related vulnerabilities.

**Resilient** – The capacity of a system, community, or ecosystem to withstand and recover from disturbances, shocks, or stresses while maintaining its essential functions and structures.

**Riparian areas** – Ecologically significant zones adjacent to rivers, streams, and other waterbodies, characterized by unique vegetation, habitats, and wildlife, playing crucial roles in flood control, water quality maintenance, and biodiversity conservation.

**Stewardship** – The responsible and sustainable management and care of natural resources, ecosystems, and cultural heritage, with the goal of ensuring their preservation and protection for future generations.

**Transbasin / Transmountain Diversion** – The removal or transport of water from one river basin to another river basin, generally across mountain ranges. In Colorado, a transmountain diversion is a transbasin diversion that transports water over the Continental Divide.

**Water adequacy** – The sufficiency of available water resources to meet the needs of various sectors, such as agriculture, industry, households, and the environment, without causing significant depletion or degradation.

**Water call (e.g., administrative call)** – A legal mechanism or process requiring water rights holders to release or curtail their water withdrawals from a common source, usually to satisfy the needs of higher priority users or to comply with regulatory mandates.

**Water conservation** – The deliberate and sustainable management of water resources to reduce consumption, minimize waste, and preserve natural ecosystems, often through the implementation of efficiency measures, regulations, and behavioral changes.

**Water efficiency** – The optimization of water use to minimize waste and maximize productivity, often achieved through the adoption of technologies, practices, and policies that reduce water consumption and losses.

**Water literacy** - The understanding and knowledge of water-related issues, including water availability, quality, conservation, and management practices, among individuals, communities, and decision-makers.

**Water provider** – An entity or organization responsible for supplying and distributing water to consumers, including households, businesses, industries, and agricultural operations, often through public utilities or private companies.

**Water right** – Legal entitlement or permission granted to an individual, organization, or entity to use a specific quantity of water from a water source for a defined purpose, typically regulated by government authorities.

**Watershed** – A geographical area defined by the natural flow of water, such as rivers, streams, and tributaries, where all surface water drains into a single point, typically a larger body of water like a lake or ocean.