

Watershed Management Plan

Protecting Our Drinking Water Supply



Keeping Our Drinking Water Pure Is The Purpose Of The Watershed Management Plan



Plan Need & Historical Context



GOAL

Protect the high-quality source of drinking water supply that originates from our watershed areas.



NEED

Salt Lake City Department of Public Utilities is required by the Safe Drinking Water Act to create and implement a plan that documents how our source waters are protected. The conditions in our watershed areas have changed and they are under pressure on multiple fronts. It's time to update the plan.



VISION

Develop sound policy that can be executed methodically by Salt Lake City Department of Public Utilities through collaborative management with trusted partners.

“The eyes of the future are looking back at us, and they are praying for us to see beyond our time”

– Local author and naturalist Terry Tempest Williams

Jurisdictional Roles

Water Quality

- U.S. Environmental Protection Agency
- Utah Division of Drinking Water
- Utah Division of Water Quality
- Salt Lake County Health Department
- Salt Lake County Watershed Restoration and Planning
- Salt Lake City Department of Public Utilities

Wetlands

- U.S. Army Corps of Engineers
- Uinta-Wasatch-Cache National Forest
- Salt Lake County Health Department
- Salt Lake City Department of Public Utilities
- Sandy City

Stream Alteration & Flood Control

- Utah Division of Water Rights
- Salt Lake County Flood Control
- Salt Lake City

Land Use

- Uinta-Wasatch-Cache National Forest
- Salt Lake County
- Salt Lake County Health Department
- Salt Lake County Metropolitan Service District
- Salt Lake City
- Town of Alta
- Town of Brighton
- Emigration Township
- Sandy

Law Enforcement

- U.S. Forest Service
- Unified Police Department
- Salt Lake City Police
- Town of Alta Marshals
- University of Utah Police

Wildfire Response & Fuels Reduction

- U.S. Forest Service
- Utah Division of Forestry, Fire & State Lands
- Unified Fire Authority
- Salt Lake City Fire Department

A lot of entities involved but there are still gaps and having enough funding for what is needed is an issue

Existing Plans

The Purpose Of The Watershed Management Plan

Public Utilities is required and has the authority to protect its source waters and to demonstrate they are appropriately protected. One way we do this is by having in place the Watershed Management Plan. It helps guide the City's and Public Utilities watershed policies, programs and ordinances.

- Wasatch Cache National Forest Plan 2003
- Salt Lake County Canyons Master Plan
- Salt Lake County Water Quality Stewardship Plan 2009, 2015 update
- Salt Lake City Watershed Management Plan 1999
- City Creek Canyon Master Plan 1988
- Emigration Township General Plan
- Town of Brighton General Plan (Underway)
- Mountain Accord
- Central Wasatch Commission Mountain Transportation System
- UDOT Little Cottonwood Canyon Transportation EIS
- U.S. Forest Service & Salt Lake County Trails Master Plan (Starting)
- Town of Brighton Trails Plan (Starting)
- Salt Lake City Trails & Natural Lands – Foothill Trails Master Plan
- Salt Lake City Trails & Natural Lands – Master Plan
- Division of Wildlife Resources Little Dell Fishery Plan (Draft, On Hold)
- City Creek Water Treatment Plant Rebuild (Public Outreach)
- Big Cottonwood Canyon Water Treatment Plant Rebuild (Public Outreach)

Why Update The Plan?

- Plan is updated every 6 years as required per DEQ/DDW. Time for a more in-depth review
- Changes in the existing condition as compared to 1999
- Change in environmental stressors
- Identification of new trends
- Adaptive and proactive management

High quality water + ongoing stewardship = Pure water for the future



High quality water at the source = Reliability of the supply & a benefit to public health

Strategies to protect water quality have been working, ...

Entering the water treatment plants

Water quality has been consistently high, requiring minimal treatment

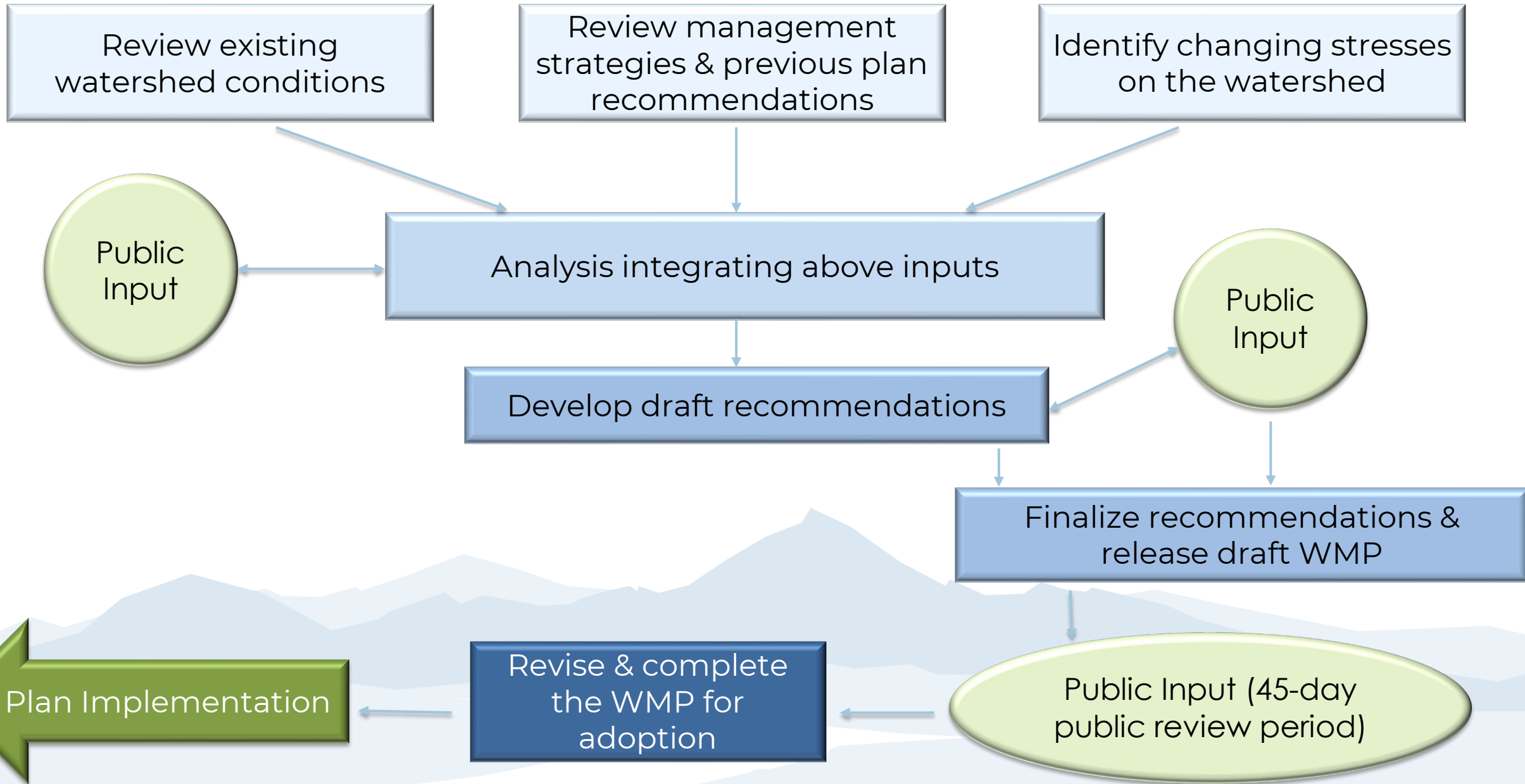
Leaving the water treatment plants

Treated water exceeds all US EPA requirements (SLCDPU Water Quality Report, 2021)

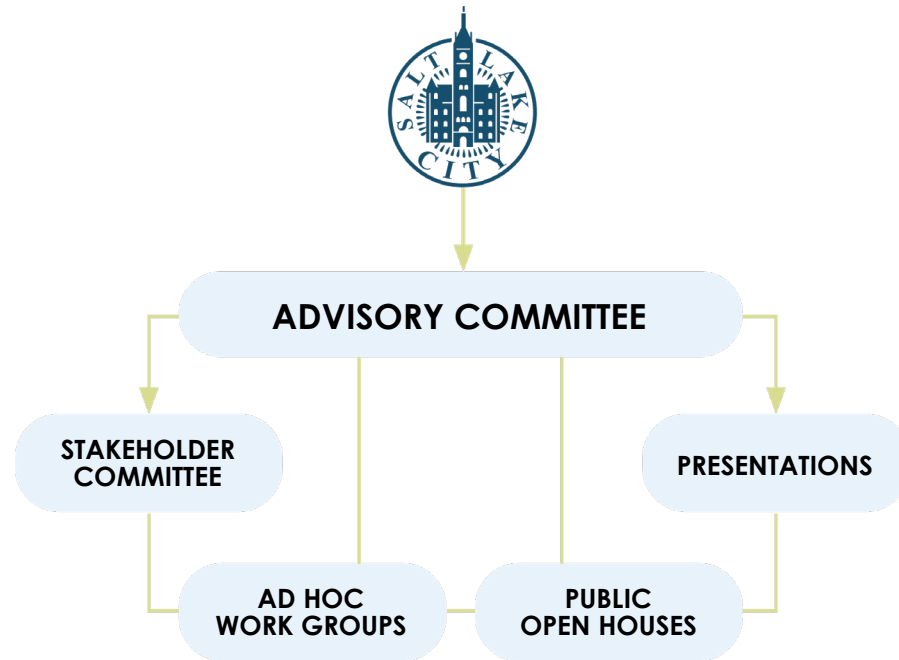
- Increasing population
- Pressure for more recreational opportunities
- Continued development
- New threats from climate change
- Existing & amplified wildfire threat

... But ... We need to proactively protect our water from new and increasing threats.

Plan Development Framework



Engagement Framework



Advisory Committee Meetings (3 total)

- **Meeting 1 – Process Framework**
March 14, 3:00 – 4:00 pm

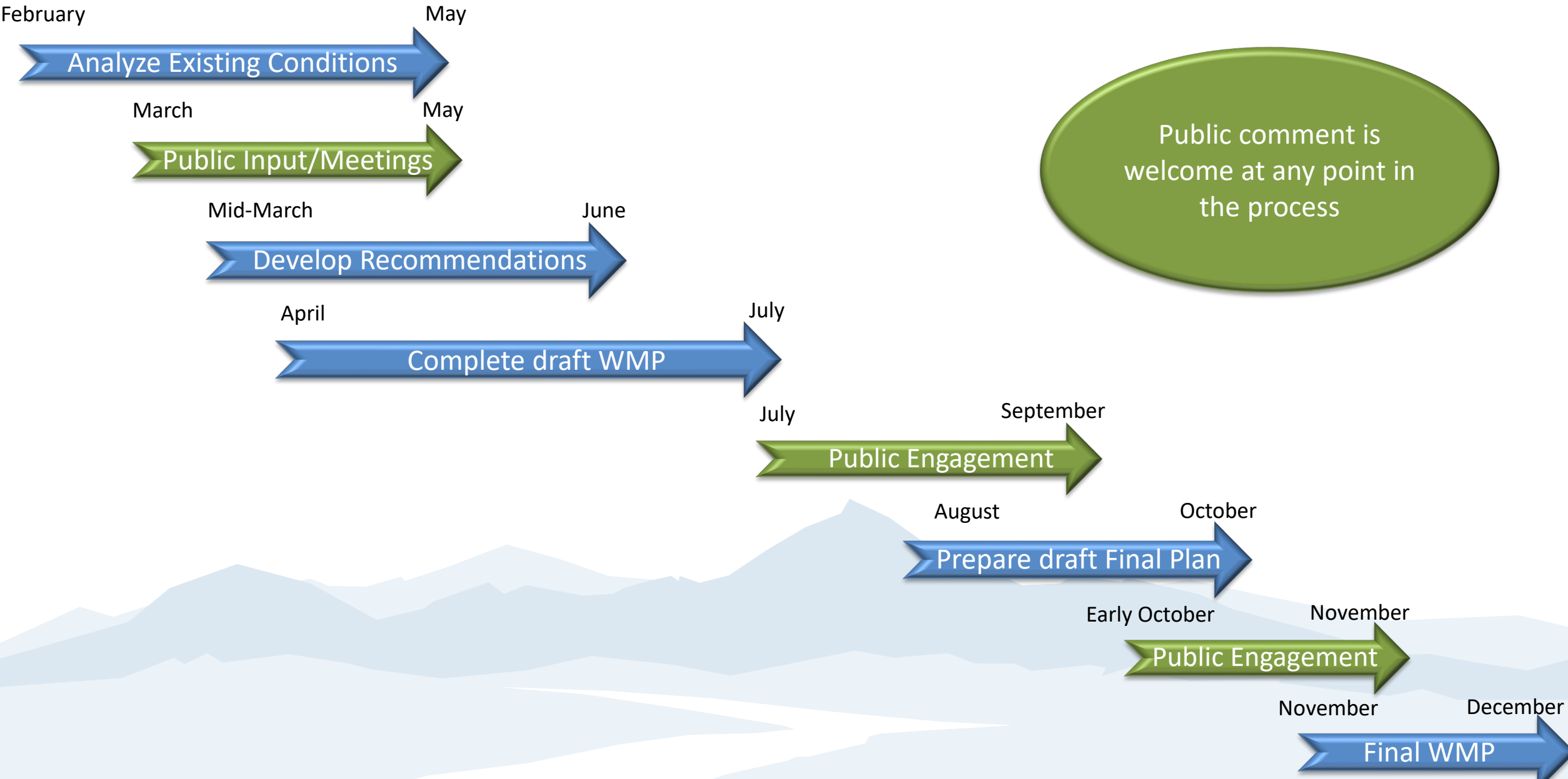
Stakeholder Committee Meetings (8 total)

- **Meeting 1 – Need, Characteristics & Framework**
March 24, 1:00 – 3:00 pm
- **Meeting 2 – Climate Change**
April 11, 3:00 – 5:00 pm
- **Meeting 3 – Wildfire**
April 21, 10:00 – 12:00
- **Meeting 4 – Human Impacts**
May 6, 10:00 – 12:00
- Meeting 5 – Elements To Be Explored
TBD
- Meeting 6 – Draft Guidelines/Practices/Tools
TBD
- Meeting 7 – Draft Plan
TBD
- Meeting 8 – Updated Draft Plan
TBD

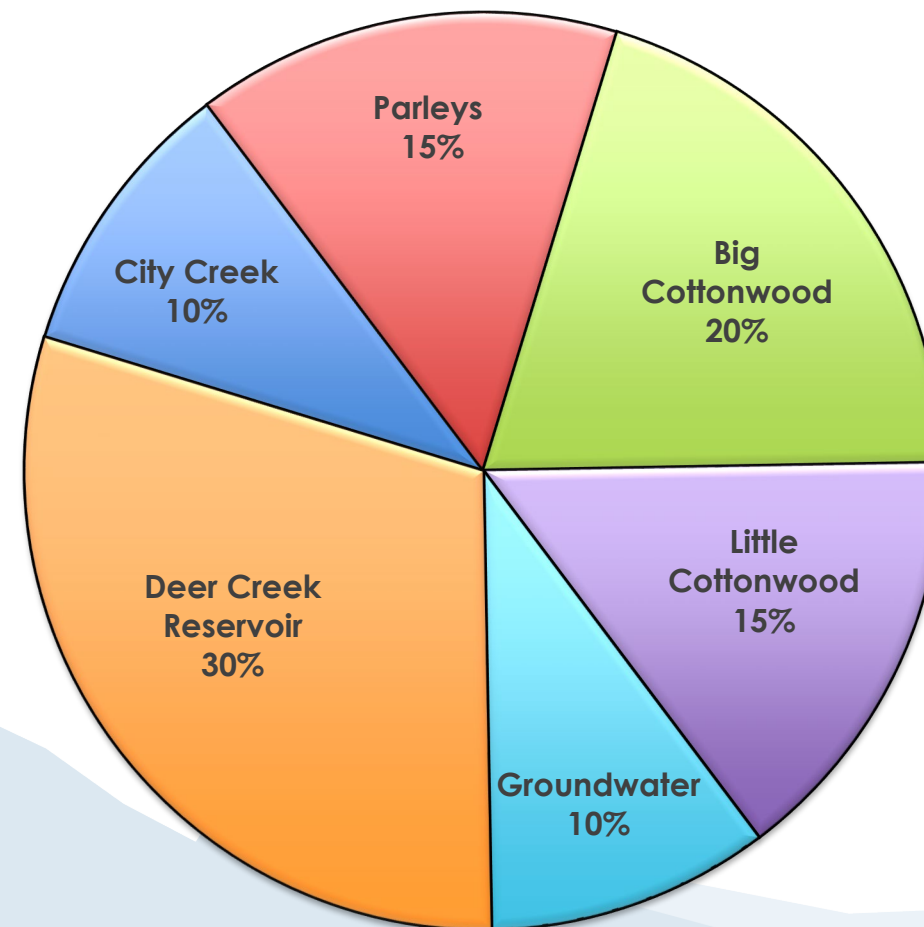
Public Open Houses (4 total)

- **Meeting 1 – Need, Characteristics, Framework, Areas Of Focus**
May 25, 5:00 – 7:00 pm and June 1, 5:00 – 7:00

Anticipated Timeline



Salt Lake City Drinking Water Supply





View from Brighton Ski Area

Photo: JW Associates – Jessica Wald

The unique
watersheds of the
Wasatch Front

Critical for water,
valued by the
community

Unique Attributes of Salt Lake City and the Wasatch Watersheds

➤ Proximity to urban core

- Approximately 60% of the service area's drinking water comes from these canyons.

➤ Short distance from source to tap

- Time for a drop of water to go from the top of Big Cottonwood Canyon and into the tap is about 24 hours.

➤ Major recreational areas concentrated in small canyons

➤ Rapid population growth



View of Wasatch from Sugar House Park

Photo: JW Associates – Jessica Wald

Also in the Watersheds

- **4 world-famous ski resorts** less than 30 miles from downtown Salt Lake City
- **3 Wilderness Areas** with trailheads a few miles from Salt Lake City
- **Major Freeway**, highways up canyons
- **Extensive trail network** for hiking and biking: some walking distance from the edge of town
- Rapidly growing **mountain bike, skiing and other recreational opportunities** that are gaining national attention

Management - watersheds are open to most recreation with minimal restrictions on traffic in City Creek and domestic animals in the protected watershed areas



Brighton Ski Area

Photo: JW Associates - Jessica Wald



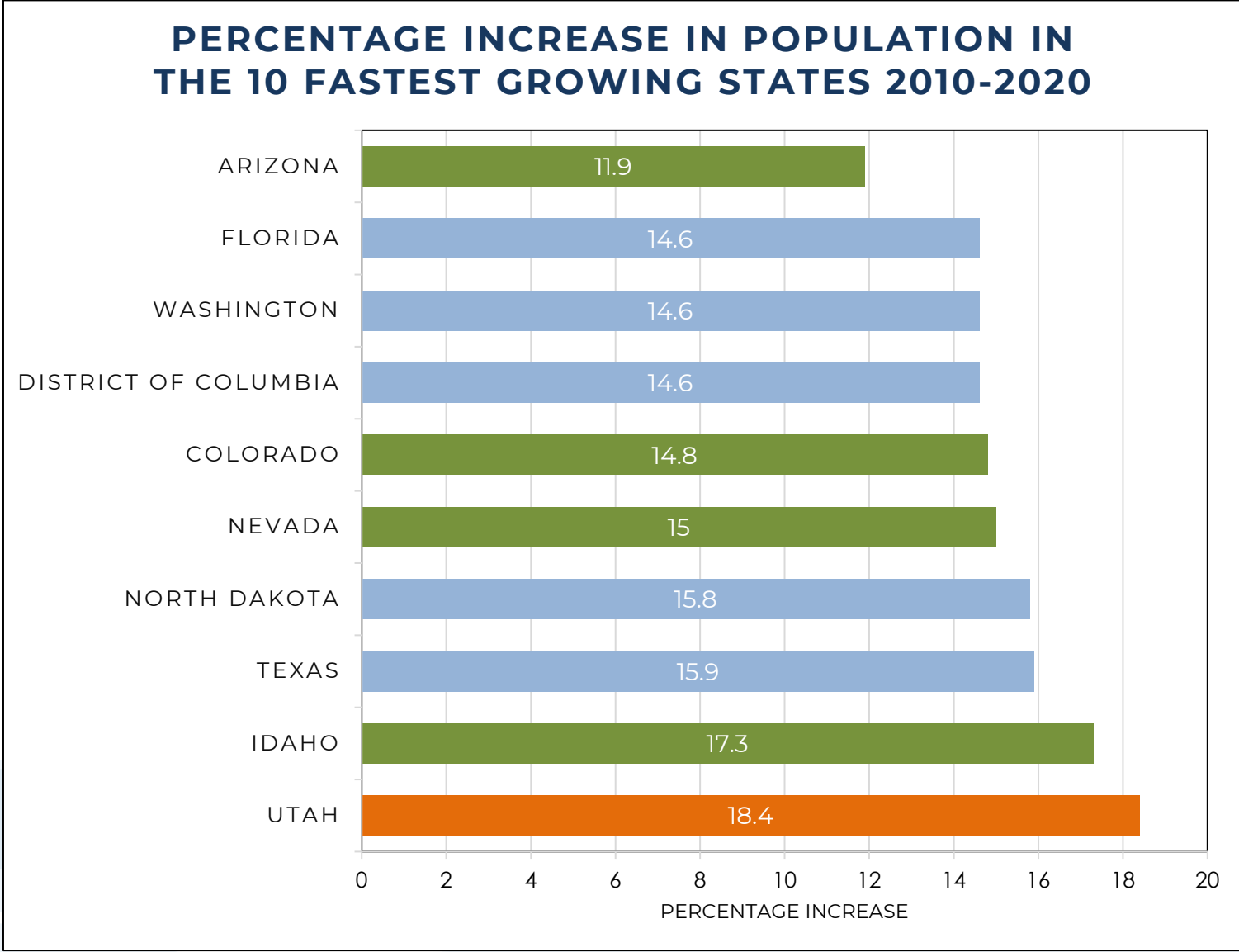
Unique Watershed Attributes – Rapid Population Growth

Utah is the fastest growing state in the US

The **Uinta-Wasatch-Cache National Forest** is among the top five most visited in the nation

More visitors annually than Yellowstone NP (average of 4.2 million past 5 years)

Source: Best Practices for Watersheds and Recreation: 2018 Research Paper by Headwaters Economics



Source: Census Bureau

Watershed management in other communities around the west





Watershed Condition – Vulnerability to Stress

“Watershed condition changes over time due to natural processes and anthropogenic influences. The most pervasive impacts to watershed condition are expected to come from population increases . . . and climate change”

US EPA, Healthy Watersheds Protection: Developing a Watershed Vulnerability Index, EPA.gov.



Mountain Dell and Little Dell Reservoirs, Parleys Canyon

Photo: Patrick Nelson

Driving Concept – Watershed Resiliency

Watershed Resiliency Definition

The ability of a watershed to withstand, or recover quickly, from a severe event such as fires, floods or extreme weather.

Cornell Cooperative Extension



A healthy riparian zone in Big Cottonwood Canyon

Photo: Sharon Turner

Characteristics of Watershed Resiliency

- Healthy riparian areas
 - Intact wetlands
 - Natural stream flows
 - Functional flood plains
- ✦
- Healthy, diverse upland vegetation
 - Mix of openings/meadows
 - Good ground cover
 - Wildfires in natural disturbance regime
- ✦
- Minimal impervious or compacted cover
 - Lower road density
 - Well designed stream/road crossings

Watershed Resilience – Importance to Water Supply

POST-FIRE ASPEN SPROUTING



East Troublesome Fire, Grand County, CO

Photo: JW Associates - Brad Piehl

1. **Ability to withstand disturbance** =
Reduction in risk to infrastructure
and service disruptions
2. **Rapid recovery from disturbance** =
Reduction in long-term water
treatment costs

Focusing Management Planning

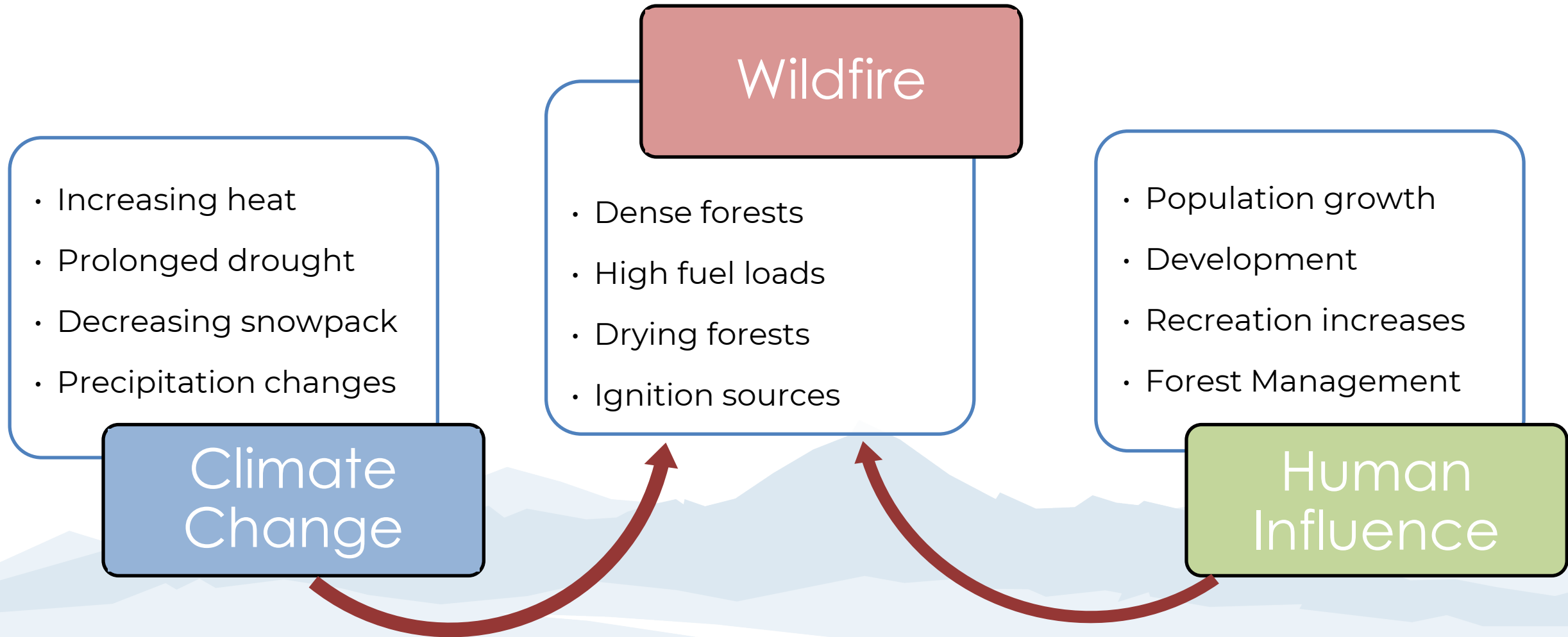
How do we balance the stress of climate change, the desire for recreation and need for infrastructure, with the long-term protection of our watersheds and water supply?

Lake Blanche, Big Cottonwood Canyon

Photo: Sharon Turner



Critical Concerns for watershed health and the quality and reliability of the water supply





We Want Your Input

www.slcwatershedmanagementplan.com



Thank You



Keep It Pure

DON'T POLLUTE THE WATERSHED