Landscape Water Best Uses

David Rice

Conservation Programs

Weber Basin Water Conservancy District

Why the best management of water in landscapes matters

GREAT SALT LAKE ELEVATION

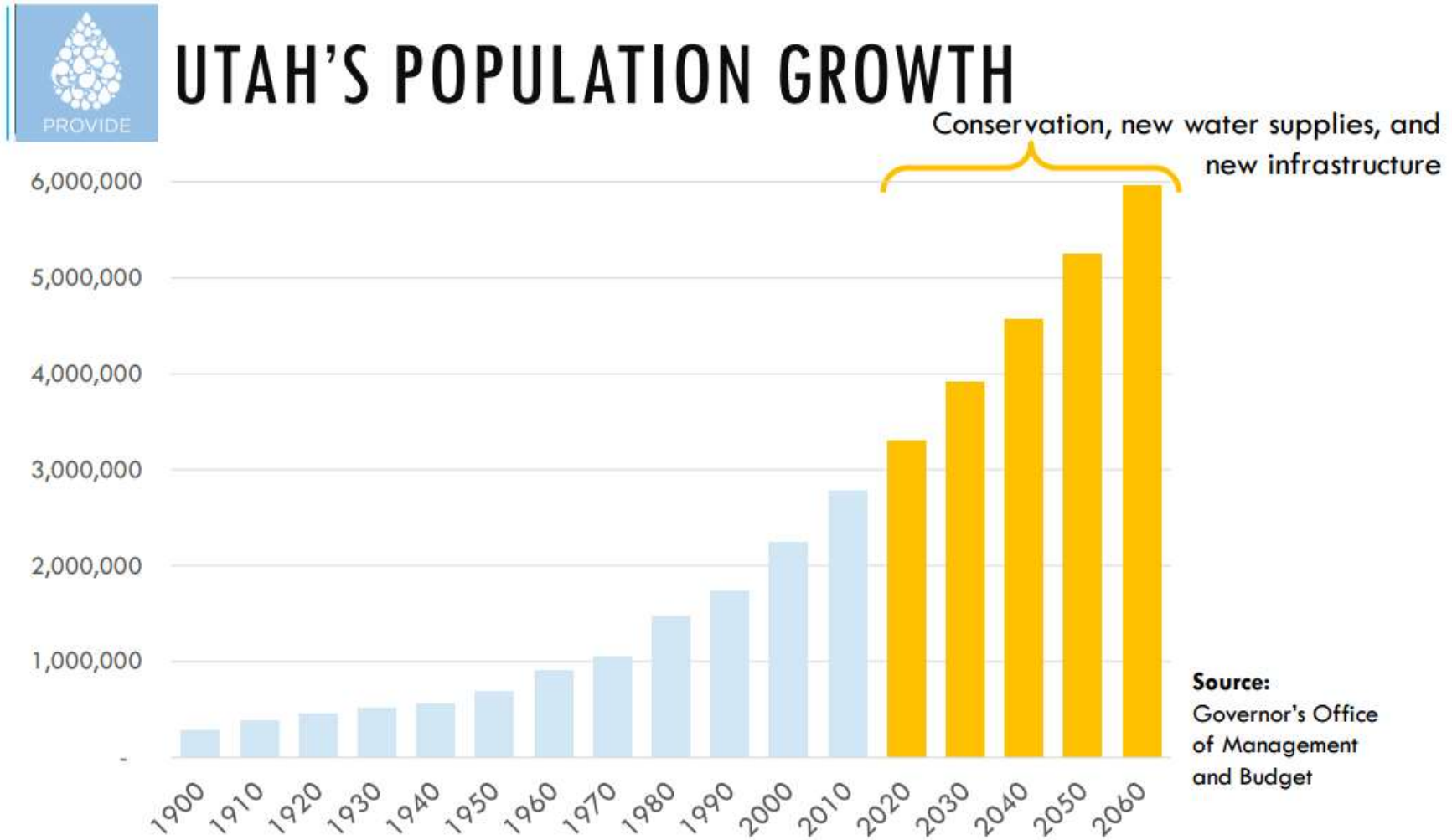
RECORD HIGH
4211.65 FEET

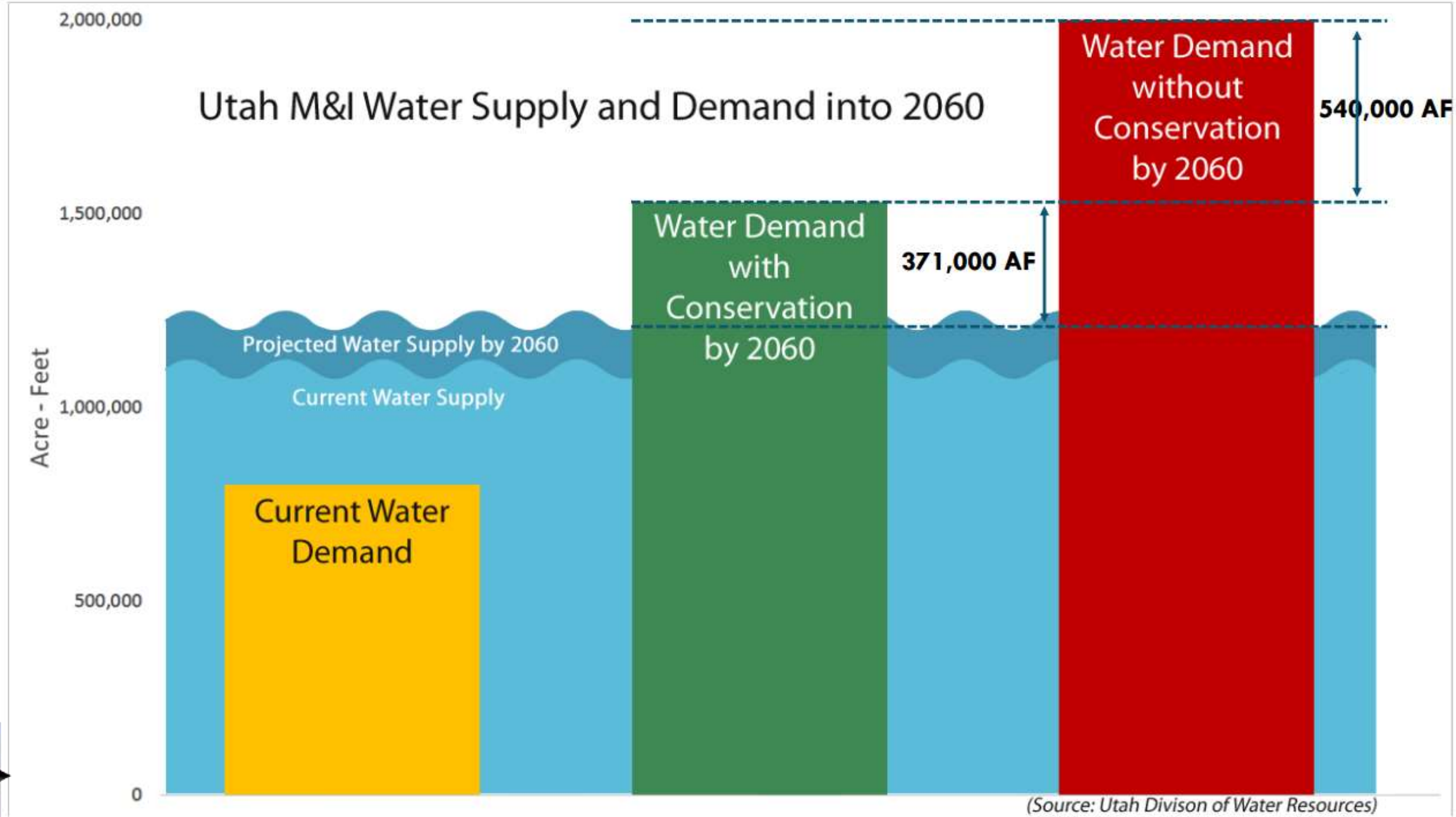
AVERAGE
4202.2 FEET

NEW RECORD LOW CURRENT
4191.3 FEET

Weber Basin's Service Area

Why is water conservation/management important?




Utah M&I Water Supply and Demand into 2060
2,000,000
1,500,000
1,000,000
500,000
0
Acre - Feet
Water Demand without Conservation by 2060
540,000 AF
Water Demand with Conservation by 2060
371,000 AF
Projected Water Supply by 2060
Current Water Supply
Current Water Demand
(Source: Utah Divison of Water Resources)

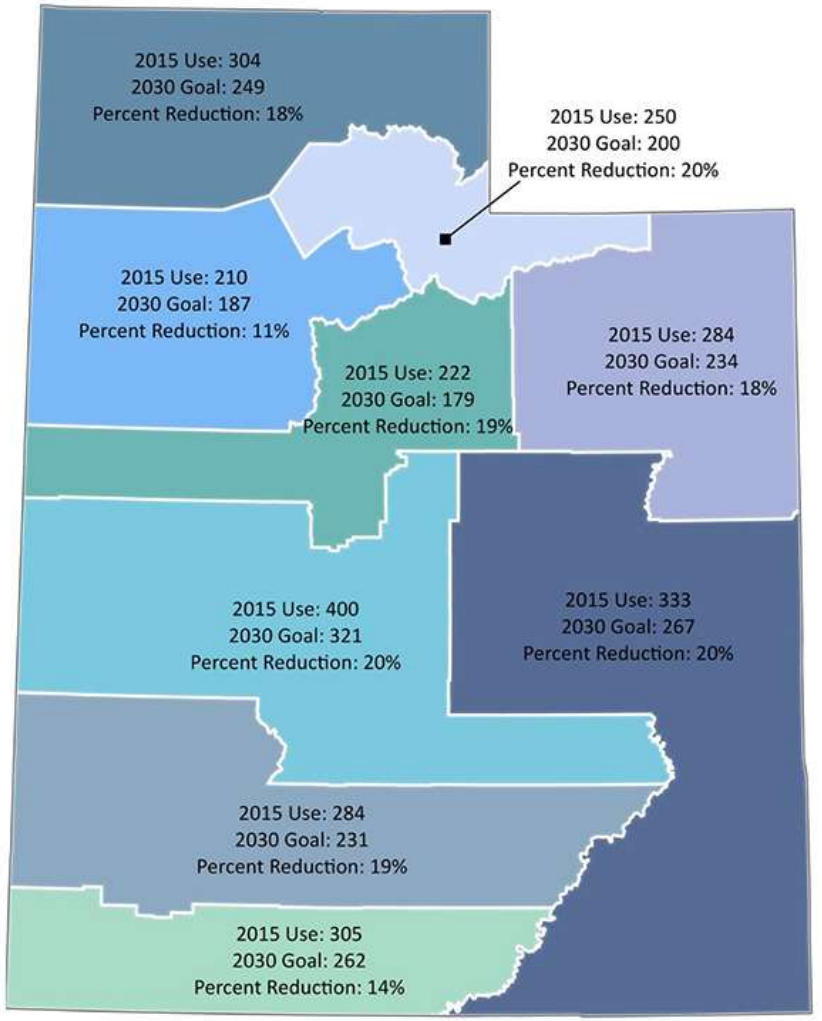
CONSERVATION GOAL

- 25% per capita reduction by 2025
- 35% per capita reduction by 2050

Conservation Inputs	% Reduction Required
Indoor Conservation	10.5%
Potable Outdoor Conservation	21.1%
Secondary Conservation	42.1%

Utah's Regional Conservation Goals

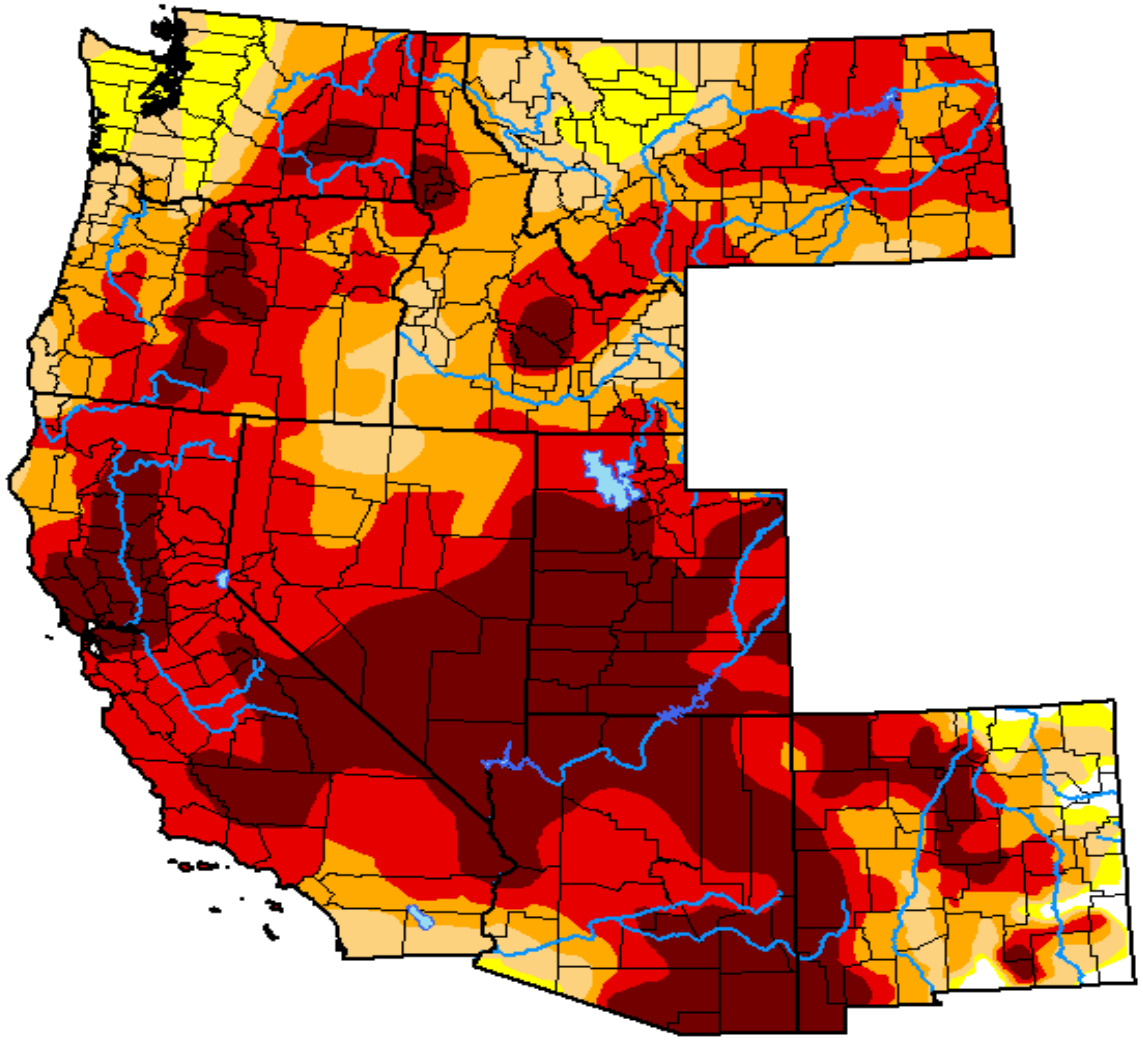
M&I Water Conservation Regions
2015 Use Vs 2030 Goals



A regional approach allows the goals to be tailored for nine different regions and takes into account climate, elevation, and each region's characteristics.
Note: Use is measured in gallons per capita per day.

U.S. Drought Monitor
West

July 13, 2021
(Released Thursday, Jul. 15, 2021)
Valid 8 a.m. EDT



Intensity:

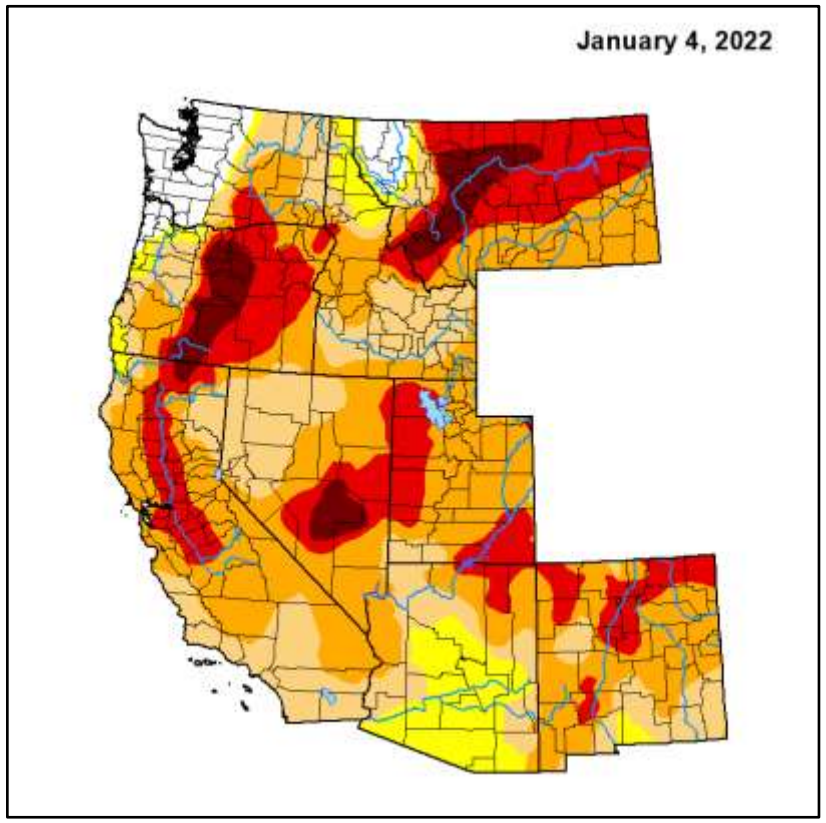
- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

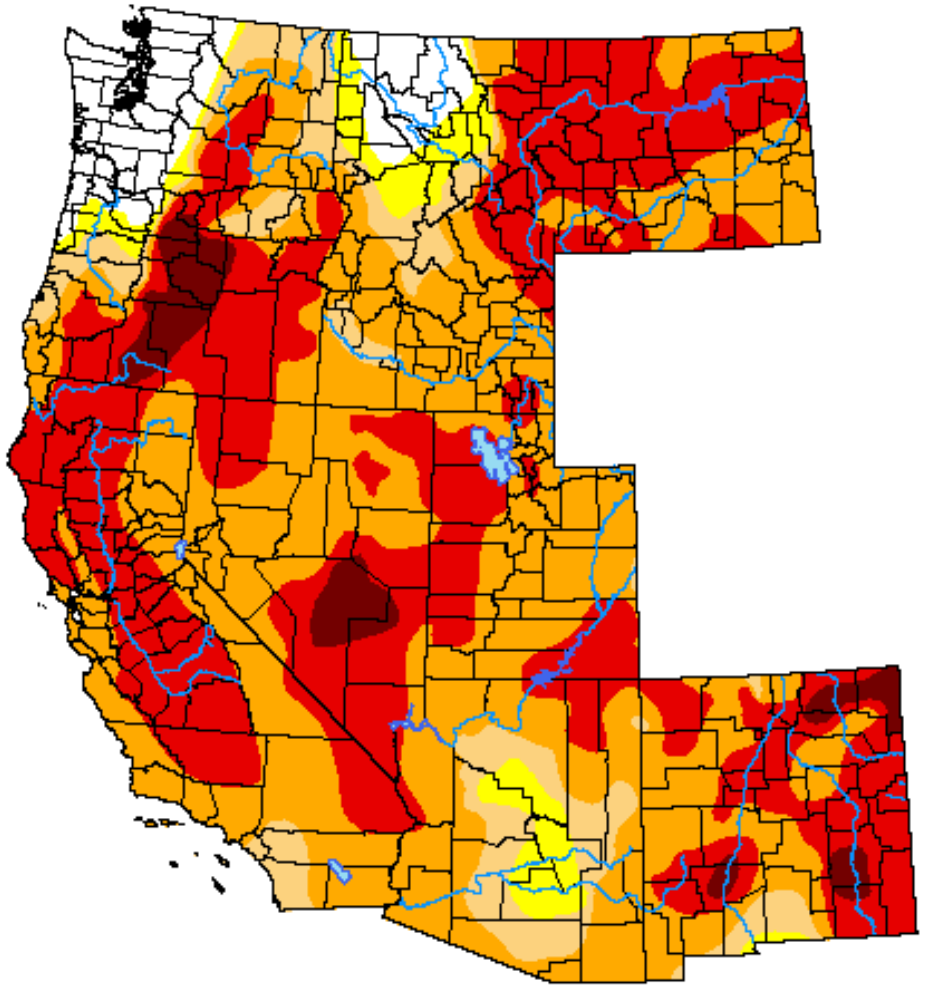
Author:

Adam Hartman
NOAA/NWS/NCEP/CPC

droughtmonitor.unl.edu



U.S. Drought Monitor
West



April 12, 2022

(Released Thursday, Apr. 14, 2022)

Valid 8 a.m. EDT

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

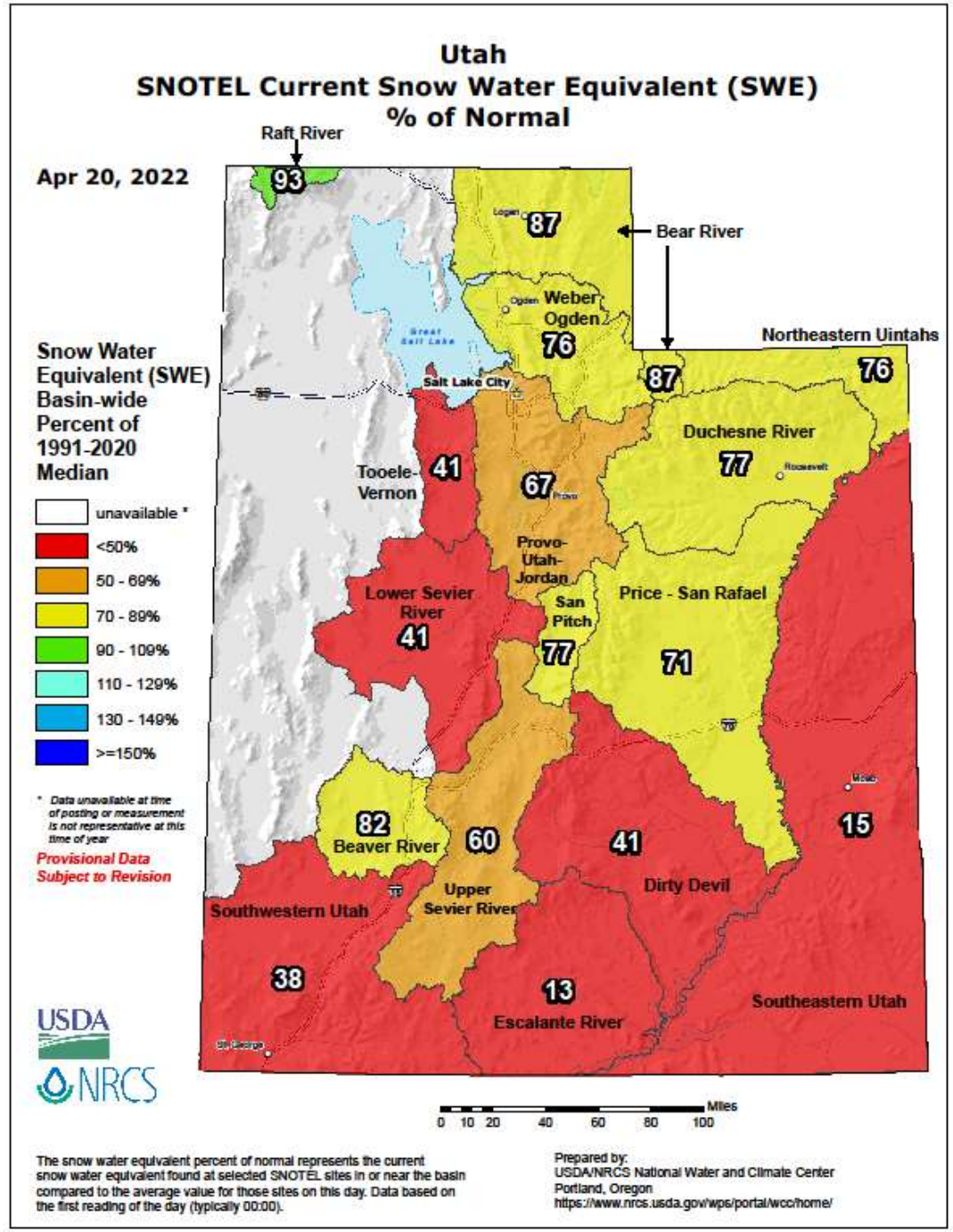
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

Author:

Richard Tinker
CPC/NOAA/NWS/NCEP

droughtmonitor.unl.edu

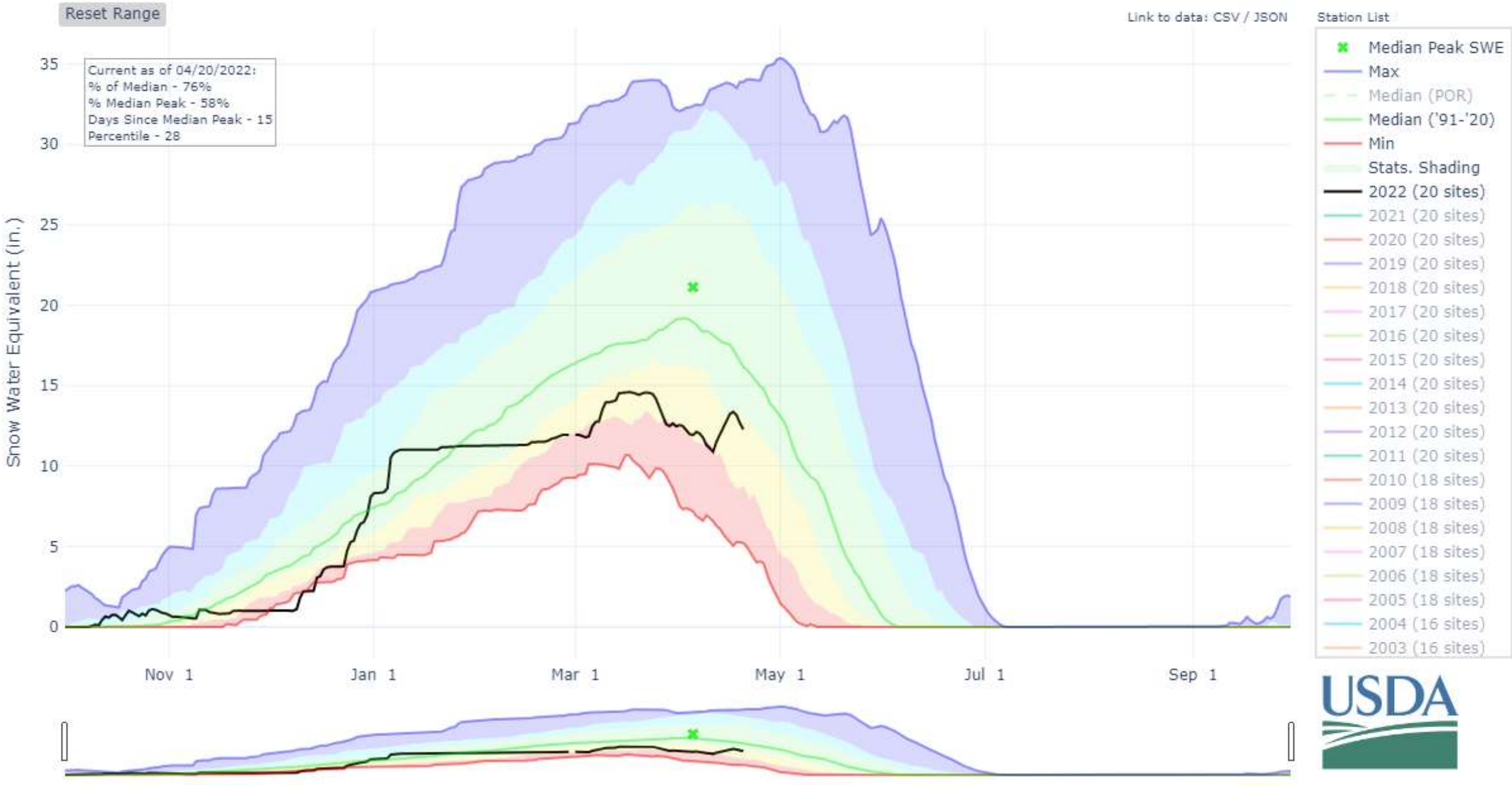
Utah
SNOTEL Current Snow Water Equivalent (SWE)
% of Normal



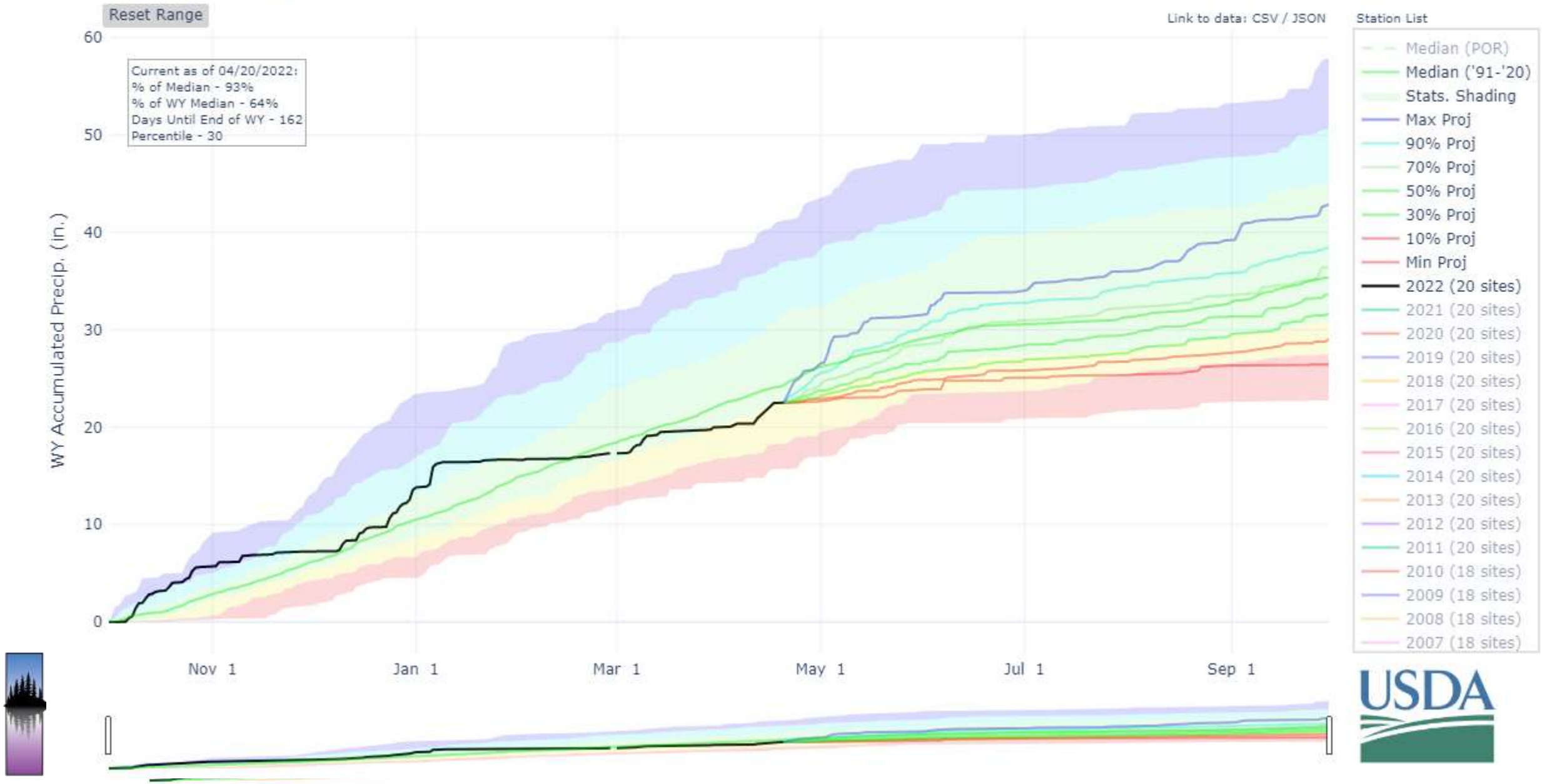
The snow water equivalent percent of normal represents the current snow water equivalent found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).

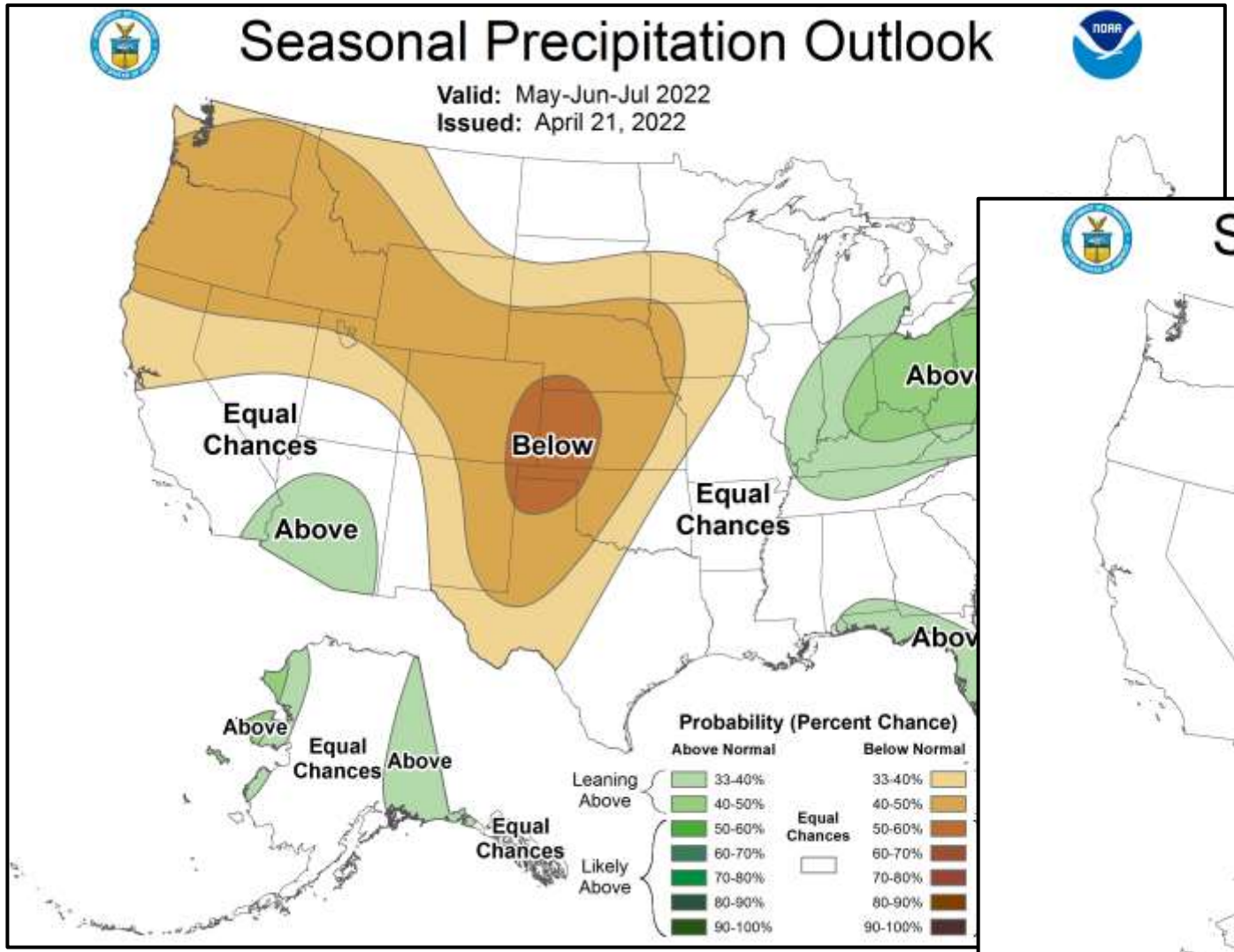
Prepared by:
USDA/NRCS National Water and Climate Center
Portland, Oregon
https://www.nrcs.usda.gov/wps/portal/wcc/home/

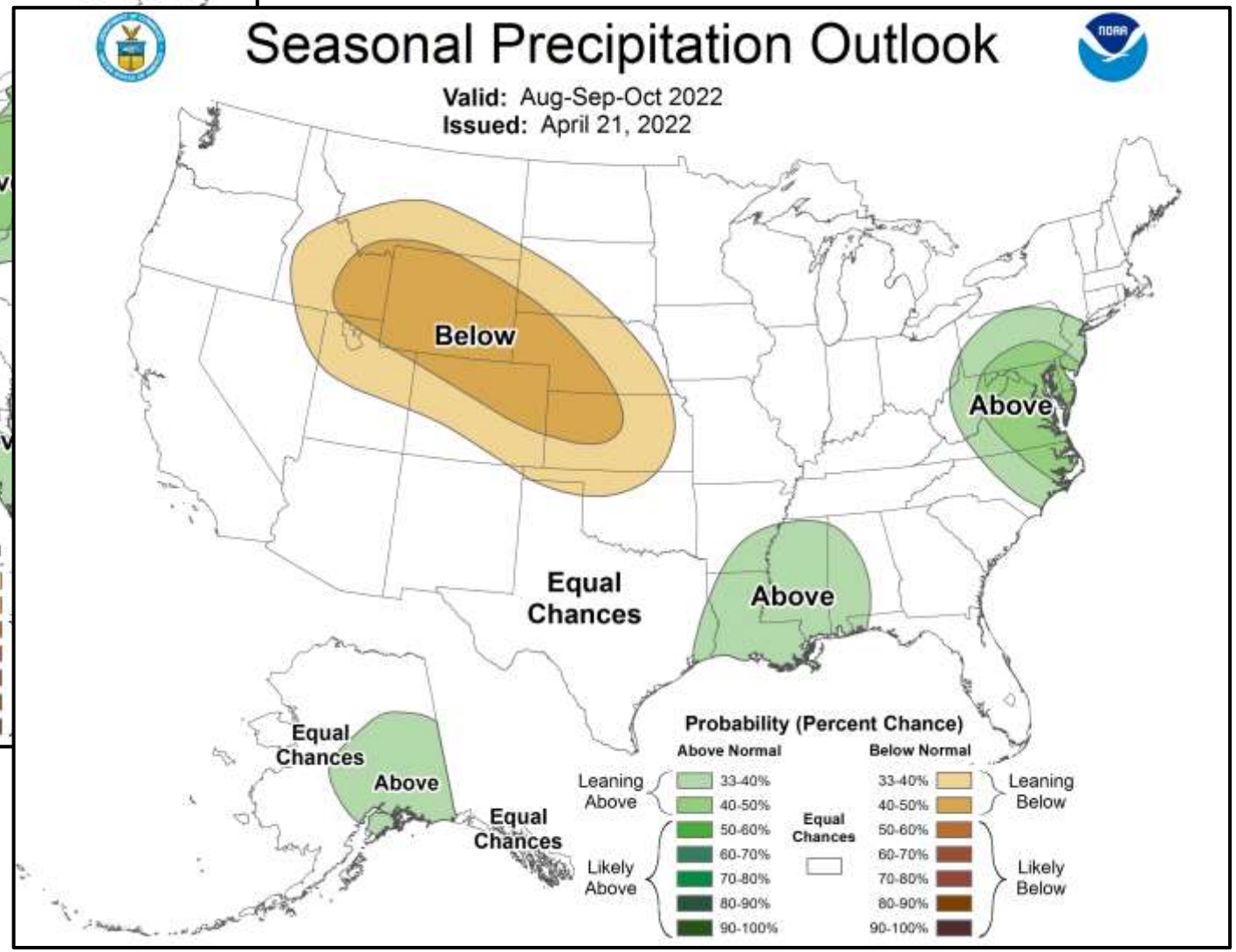
SNOW WATER EQUIVALENT IN WEBER-OGDEN



PRECIPITATION PROJECTIONS IN WEBER-OGDEN

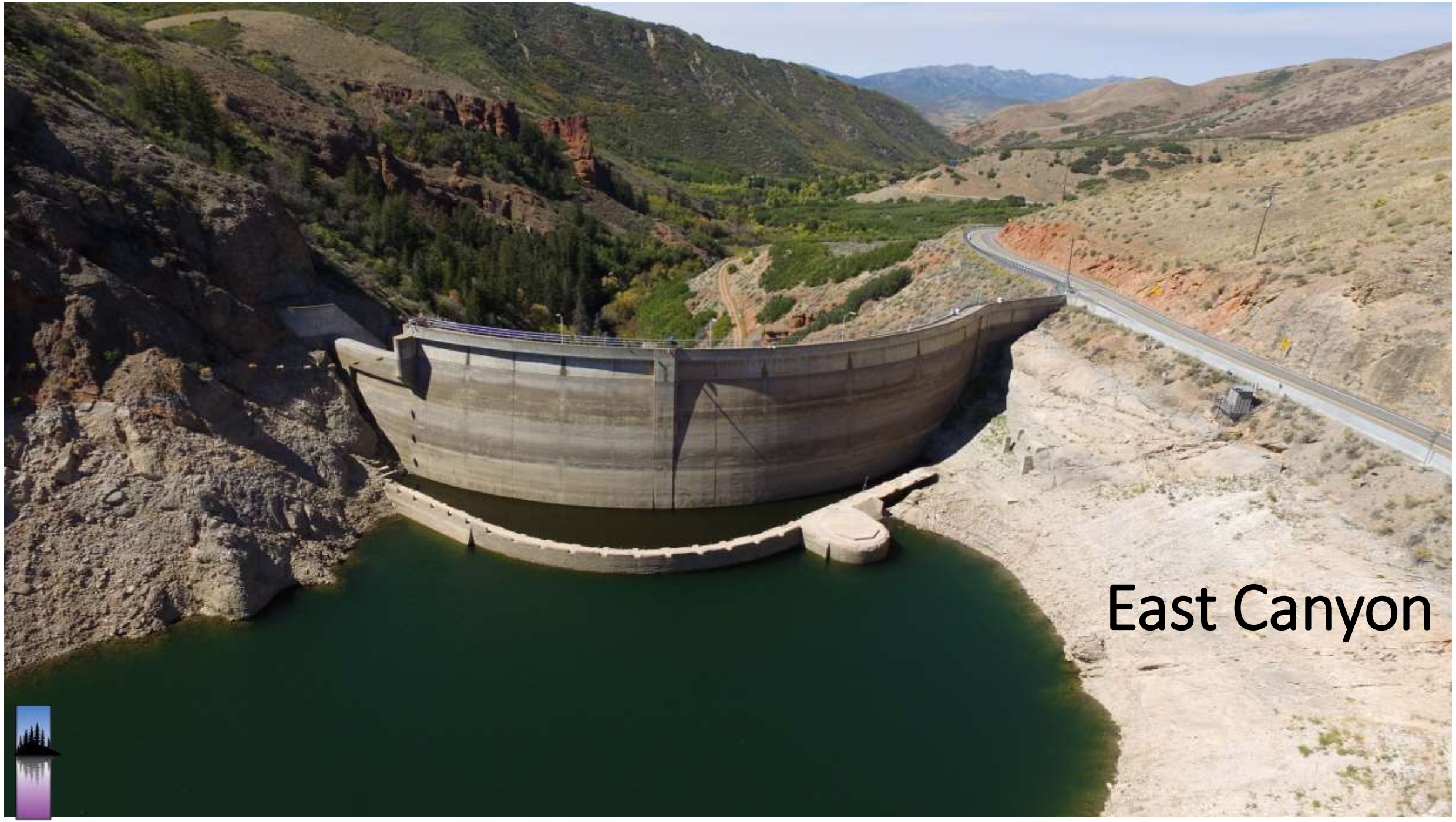



Seasonal Precipitation Outlook
Valid: May-Jun-Jul 2022
Issued: April 21, 2022
Equal Chances
Below
Above
Equal Chances
Above
Above
Equal Chances
Above
Equal Chances
Probability (Percent Chance)
Above Normal
Below Normal
Leaning Above
33-40%
40-50%
Likely Above
50-60%
60-70%
70-80%
80-90%
90-100%
Equal Chances


Seasonal Precipitation Outlook
Valid: Aug-Sep-Oct 2022
Issued: April 21, 2022
Below
Above
Equal Chances
Above
Equal Chances
Above
Probability (Percent Chance)
Above Normal
Below Normal
Leaning Above
33-40%
40-50%
Likely Above
50-60%
60-70%
70-80%
80-90%
90-100%
Equal Chances
Leaning Below
Likely Below


Echo


Echo


East Canyon


Rockport


Pineview

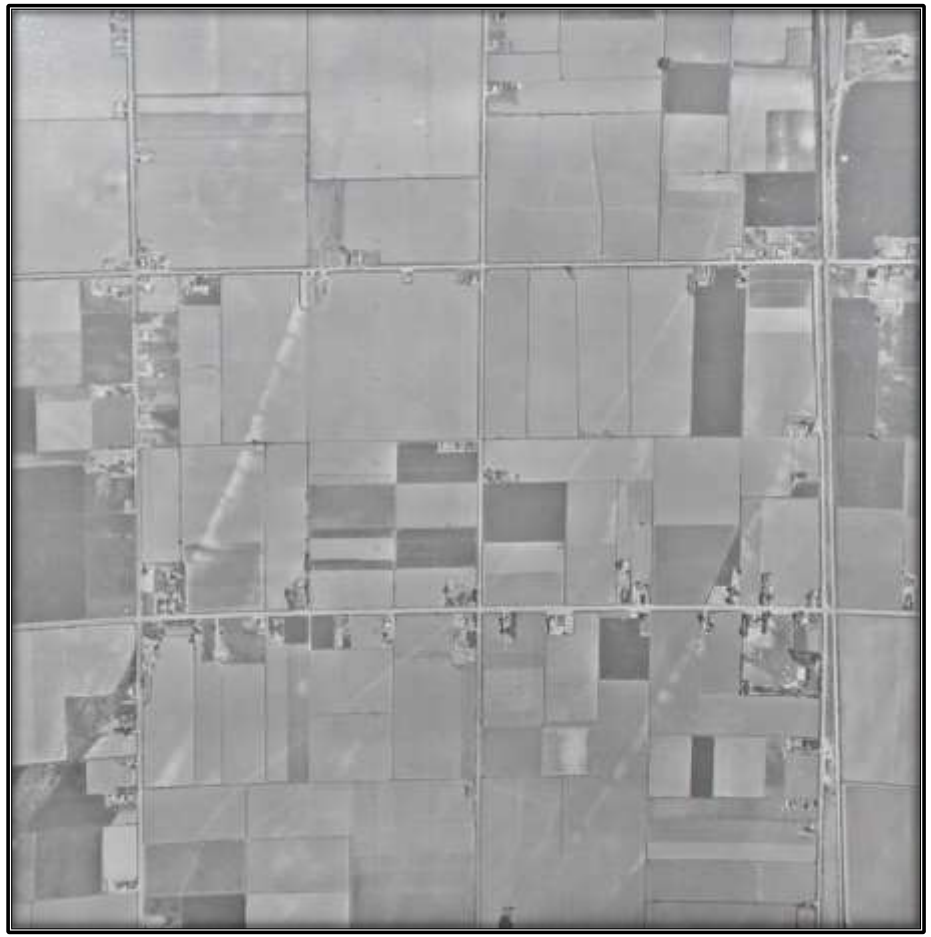
Local Water Uses/ Priorities

- Municipal (potable water for all indoor uses)- Life sustaining
- Agriculture -Food supply/ Economics
- Industrial and Manufacturing
- Environment/Wildlife/Recreation with normal in stream flows.
- Landscapes- Aesthetics, Value, Function, Etc.

Commercial or industrial

Agriculture

Clinton Utah



1958

2019

Landscape Water Use

Examples of Water Waste

Water, Water, Everywhere

“Zero-scape” or Xeriscape

Examples of Water-Efficient Landscapes


JUNCTION VIEW DR
7225 SOUTH


9232


1203
H
M
E

So Why Does it Matter. Who Cares?

- Water use issues on the rise
- For Utah, population growth will create additional water demands
- Water users, site managers (landscapers) need to take the initiative and be proactive not reactive in taking care of this resource.
- You may not pay the bill but the industry may be legislated into doing things that you otherwise don't want if we are not proactive in bringing solutions and good management practices into everyday work.
- *Improving outdoor irrigation will achieve the greatest water savings in our current water situation. All other conservation practices are good, and are still encouraged but landscape irrigation has greatest potential for efficiency and over all water use reductions.*

Who Should Care about water efficiency in the landscape?

- Landscape/irrigation contractors
- Municipal planners
- Water system managers
- All water users (res. and com.)
- Our society as a whole needs to
  think more about water resources
  -use and value

- Sprinkler system design, physical installation and operation should not be completely left to “whatever” mindset. Things have to improve and can improve while keeping nice landscapes.

A need to do better than this

Smart Technology still needs user input

Smart control will not fix poor design and requires smart input

Water-Efficient Landscaping

Principles to help achieve water efficiency and beauty

1. Planning and Design
2. Proper Soil Preparation
3. Plant Selection- The right plant for the right place
4. Practical Turf Areas (not fence to fence lawn as default)
5. Use Mulch in all Planter Areas
6. Efficient Irrigation- Hydrozones, proper products, proper scheduling
7. Keep it Maintained Properly

Garden Programs: Localscapes

Localscapes

Landscape Spectrum

Localscapes Range

Traditional Lawn-Dominant Landscape

Yard typical to many Utahns

Moderate approach advocated by Localscapes

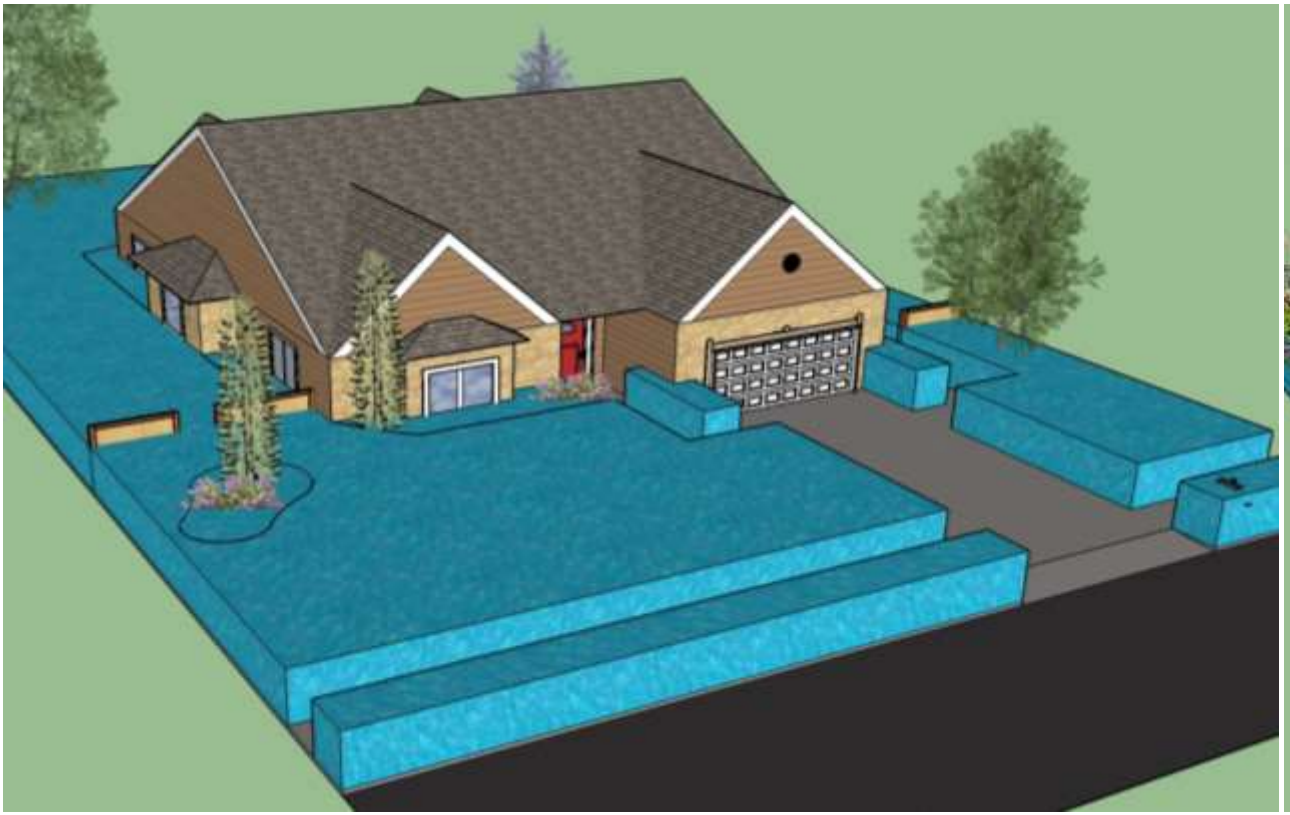
"Zeroscape"

Yard type many Utahns are **afraid** they'll be told to have

The Localscapes House

Details and planning matter

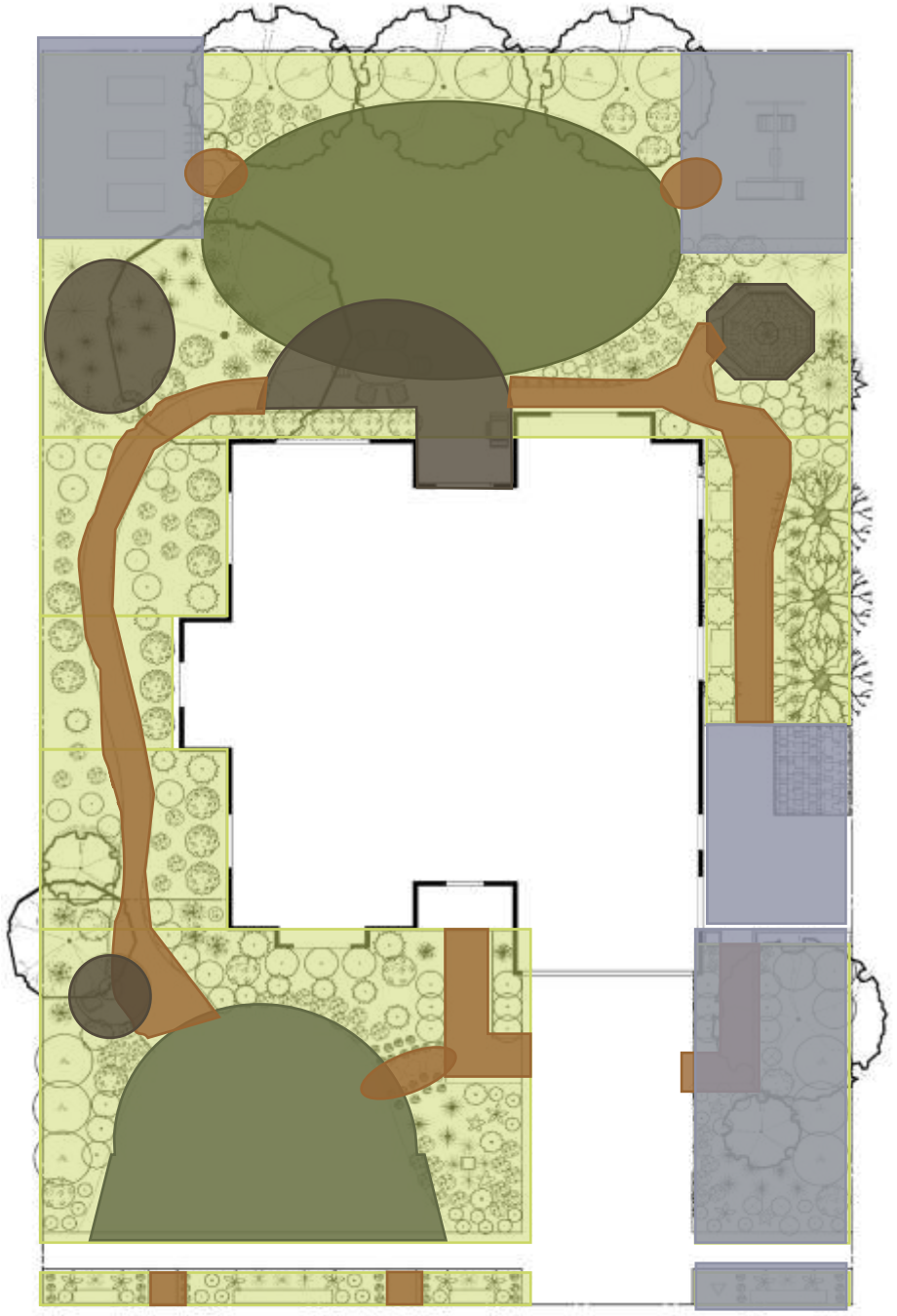
130,000 gallon annual water savings



Typical @ 40” per season= 196,250 Gal. Vs. **Designed for Utah Localscape = 64,766 Gal.**

Localscapes House Plan View

1. Central Open Shape
2. Gathering Areas
3. Activity Zones
4. Paths
5. Plantings

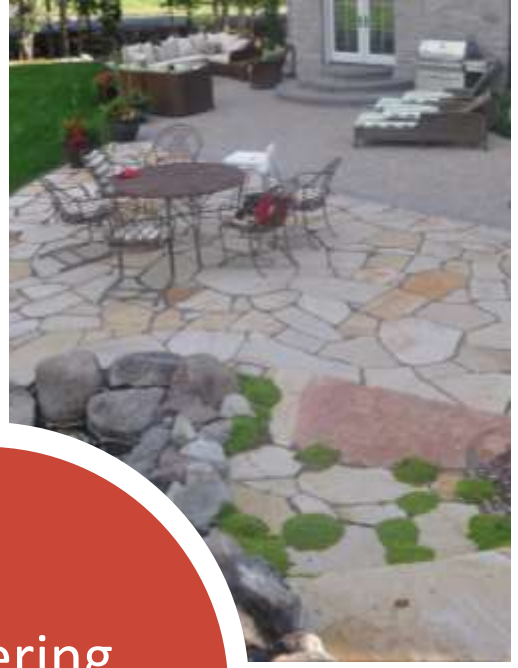


Reason We Love Lawn

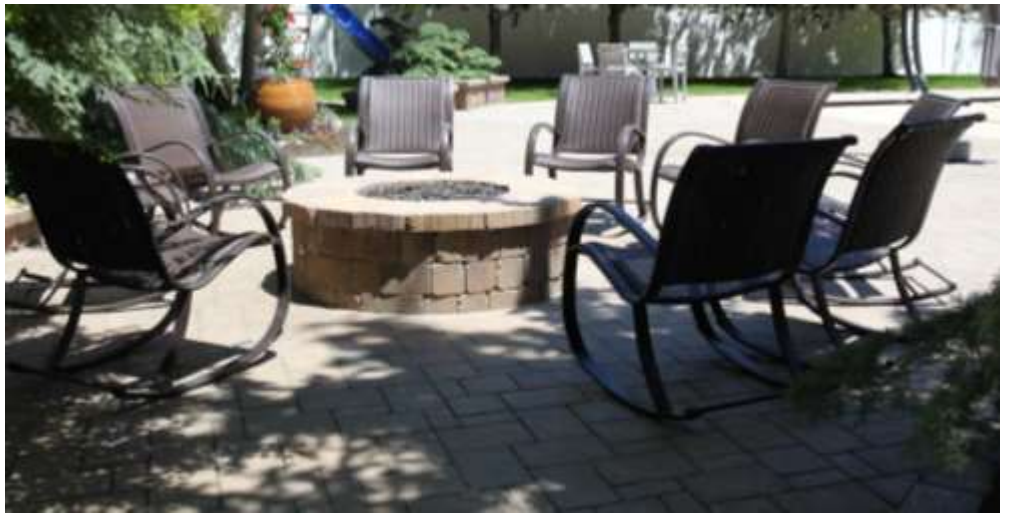
(That you may not realize)

Landscape installation by Aposhian Landscaping
Design by Conservation Garden Park staff

- Sea of Green rests the eye between busier plantings.
- Conveys calm.
- Visually demonstrates the power of positive/ negative space.
- **Organizes space.** When lawn is a defined shape, everything else APPEARS “cleaner”.



Gathering Areas



Gathering Area Examples

Front yard gathering spaces

Back yard gathering spaces

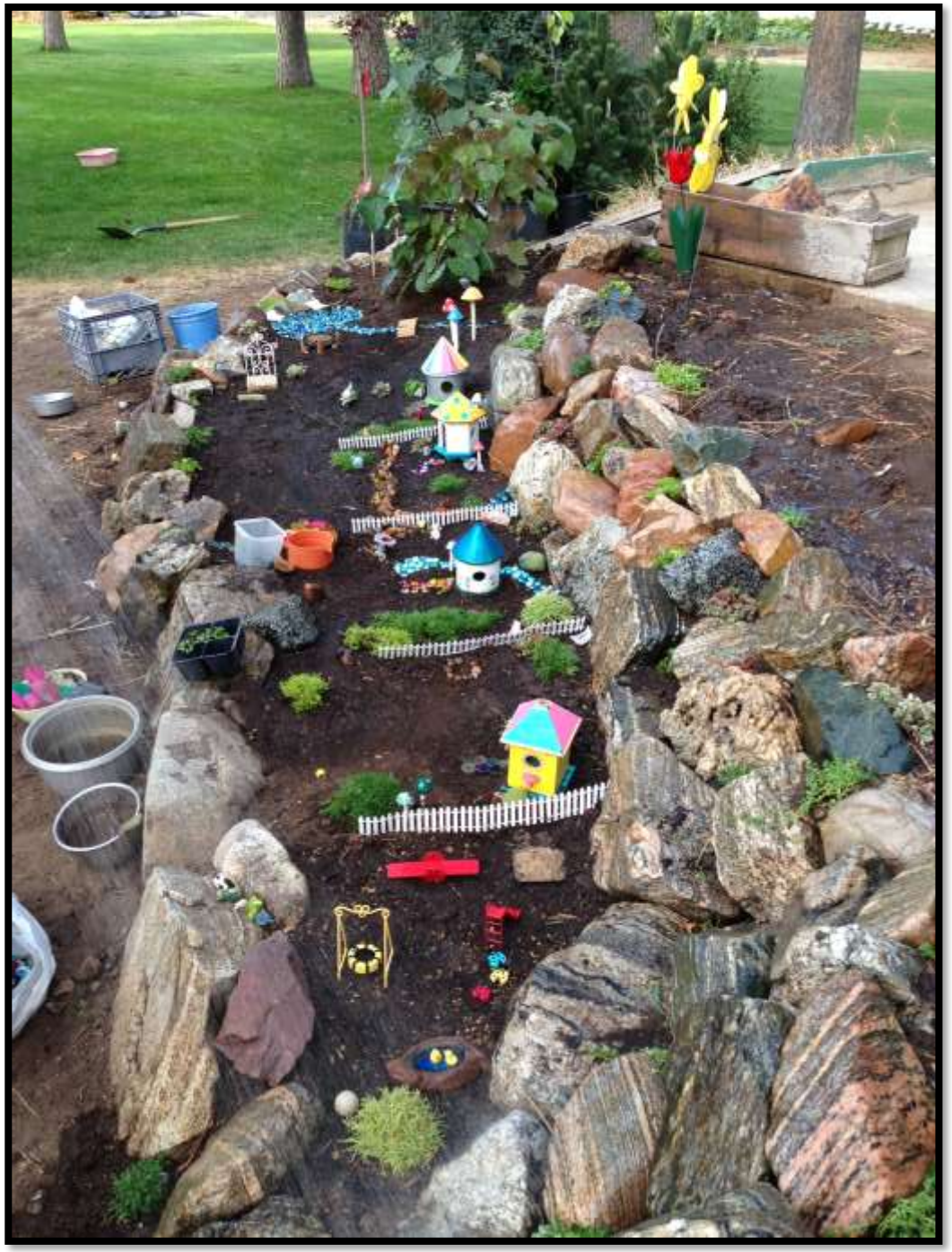
Landscape Design by R. Michael Kelly Consultants
Installation by Rollins Landscaping

Activity Zone Examples

Faux Lawn
Putting Green

Ornamental,
Un-Mowed
Meadow Grass
around
Trampoline

Localscapes
Localscapes.com



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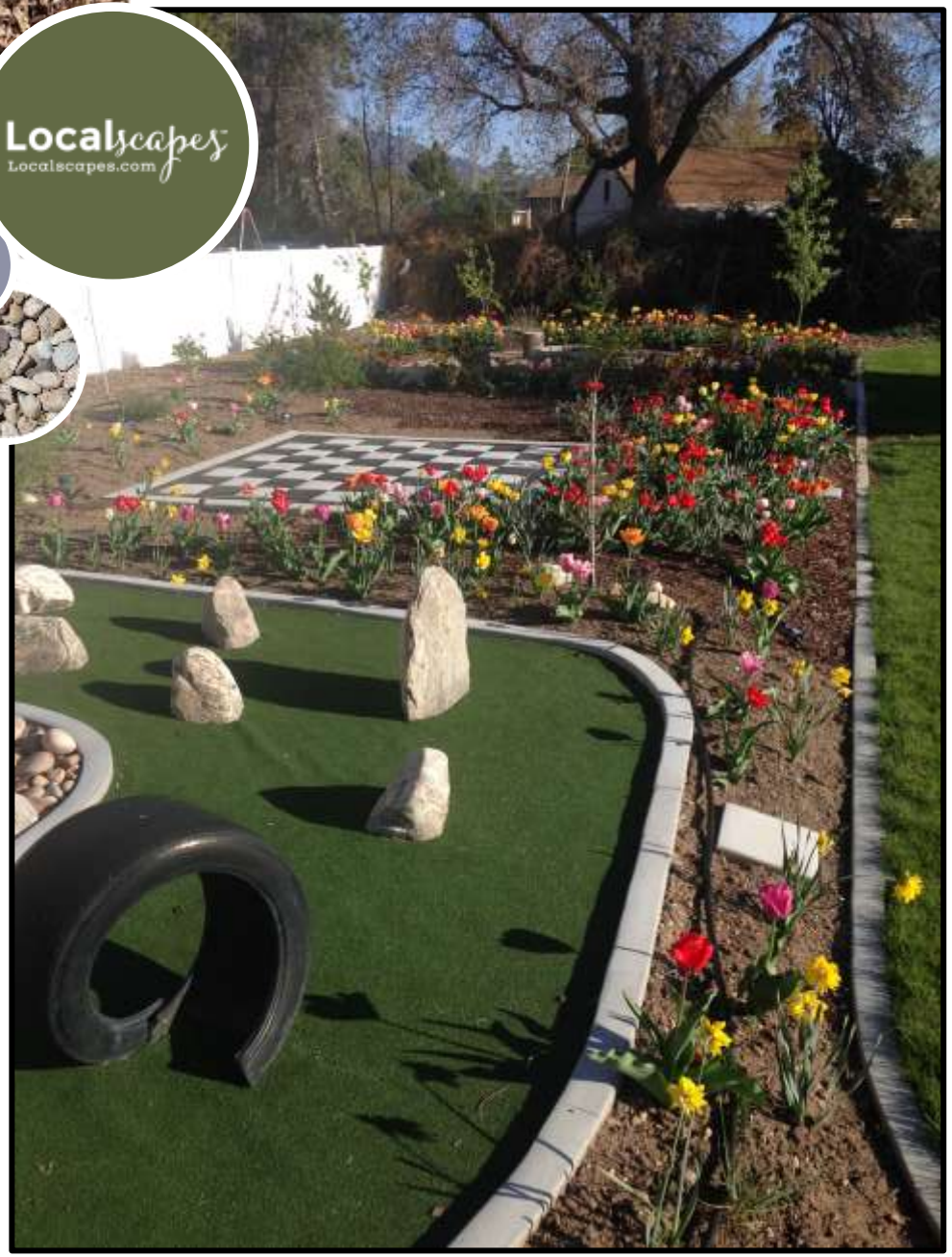
Localscapes.com




Paths

Path Examples







Pathway Surface Materials

Primary Paths

Primary paths are those which serve as a main artery to the home.

Secondary Paths

Secondary Paths are those which provide alternative routes or access to non-critical spaces.

Side Yard Solutions

Remove lawn from narrow spaces and instead create an inviting pass-through experience.

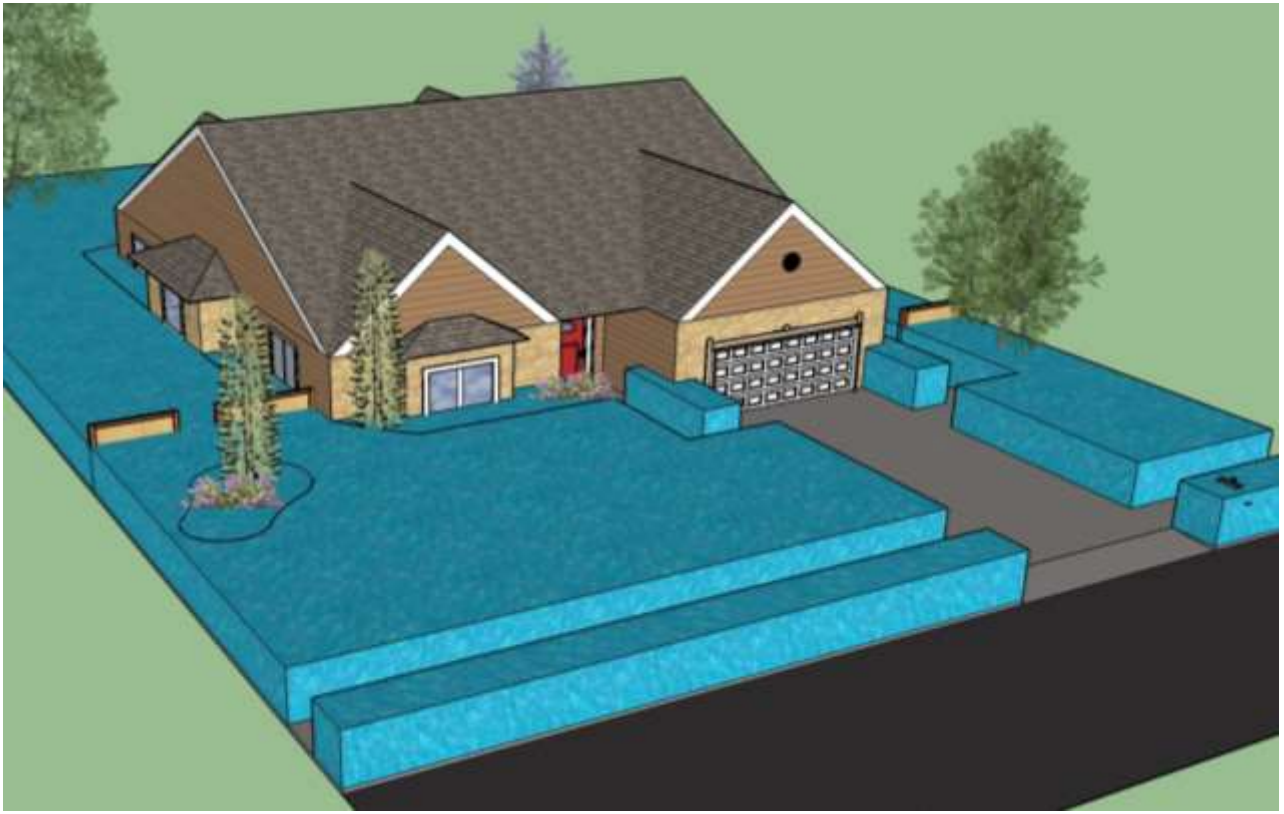
The Power of Foliage

Foliage

A mix of plants with colorful foliage is the secret to a designer landscape

Why do these details matter?

Potential 130,000 gallon annual water savings



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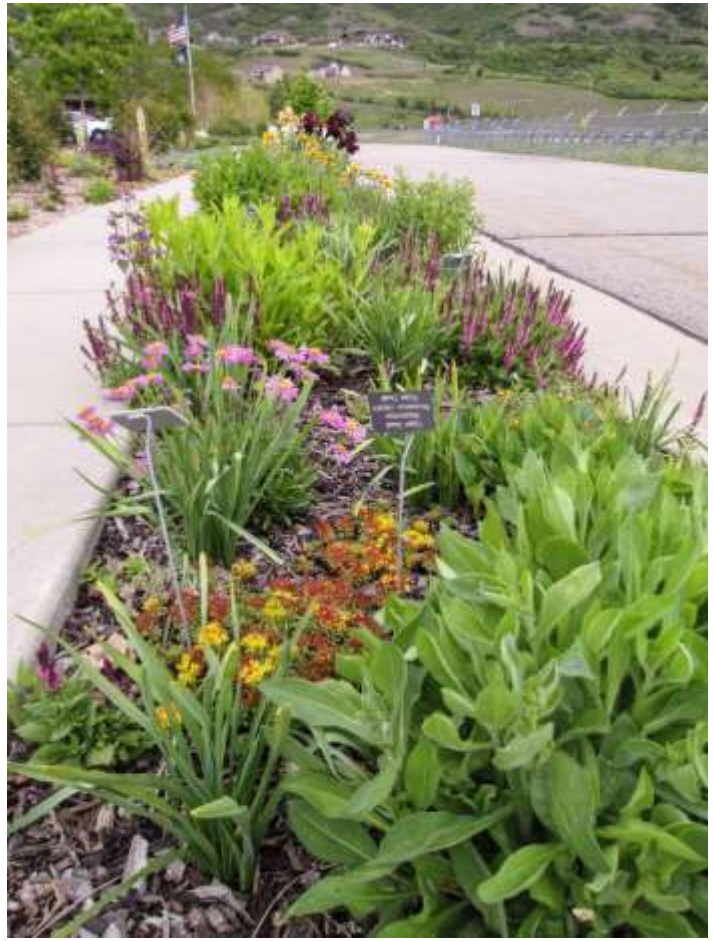
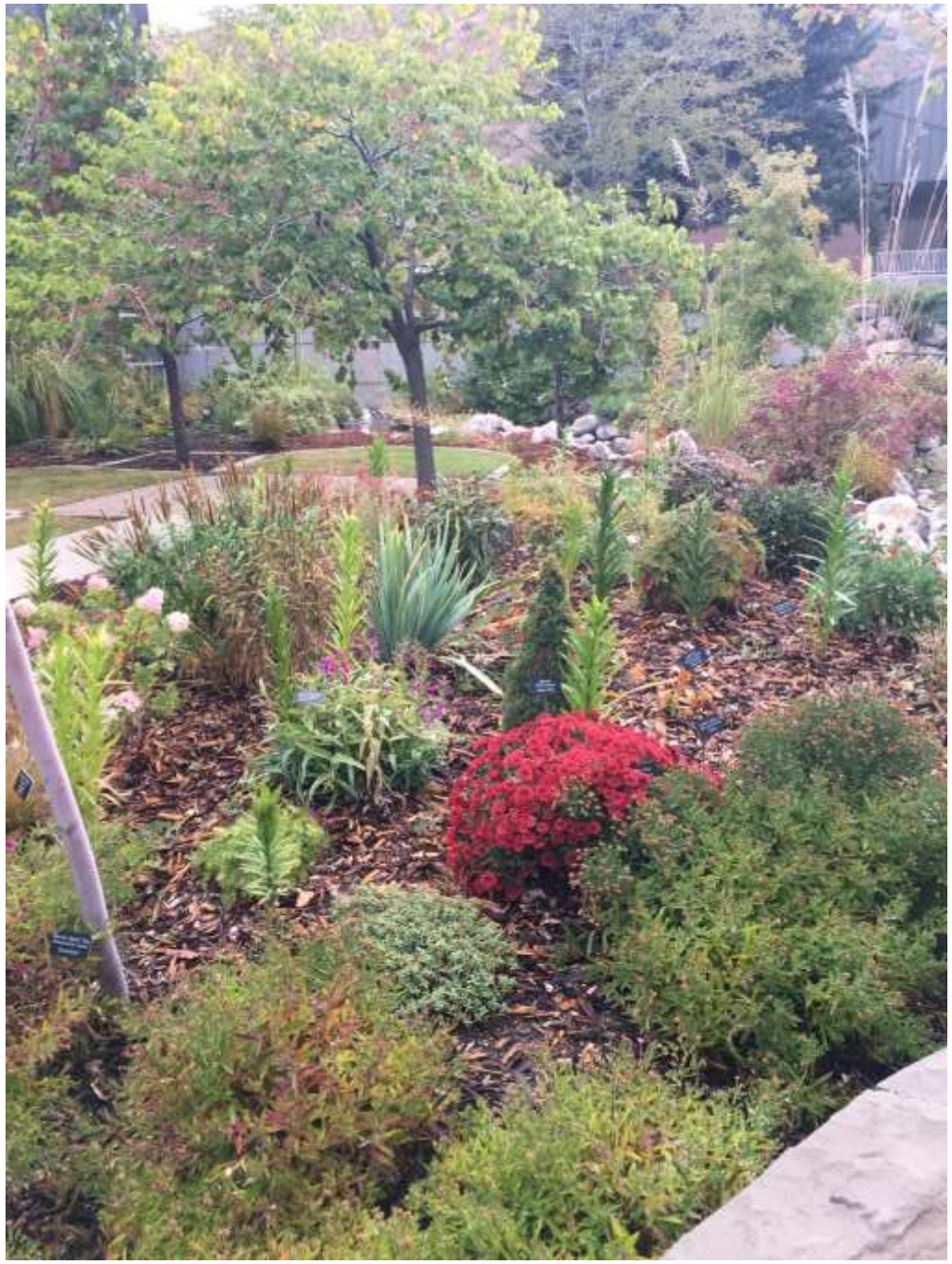
The Learning Garden



Weber Basin's
Water Conservation
Learning Garden



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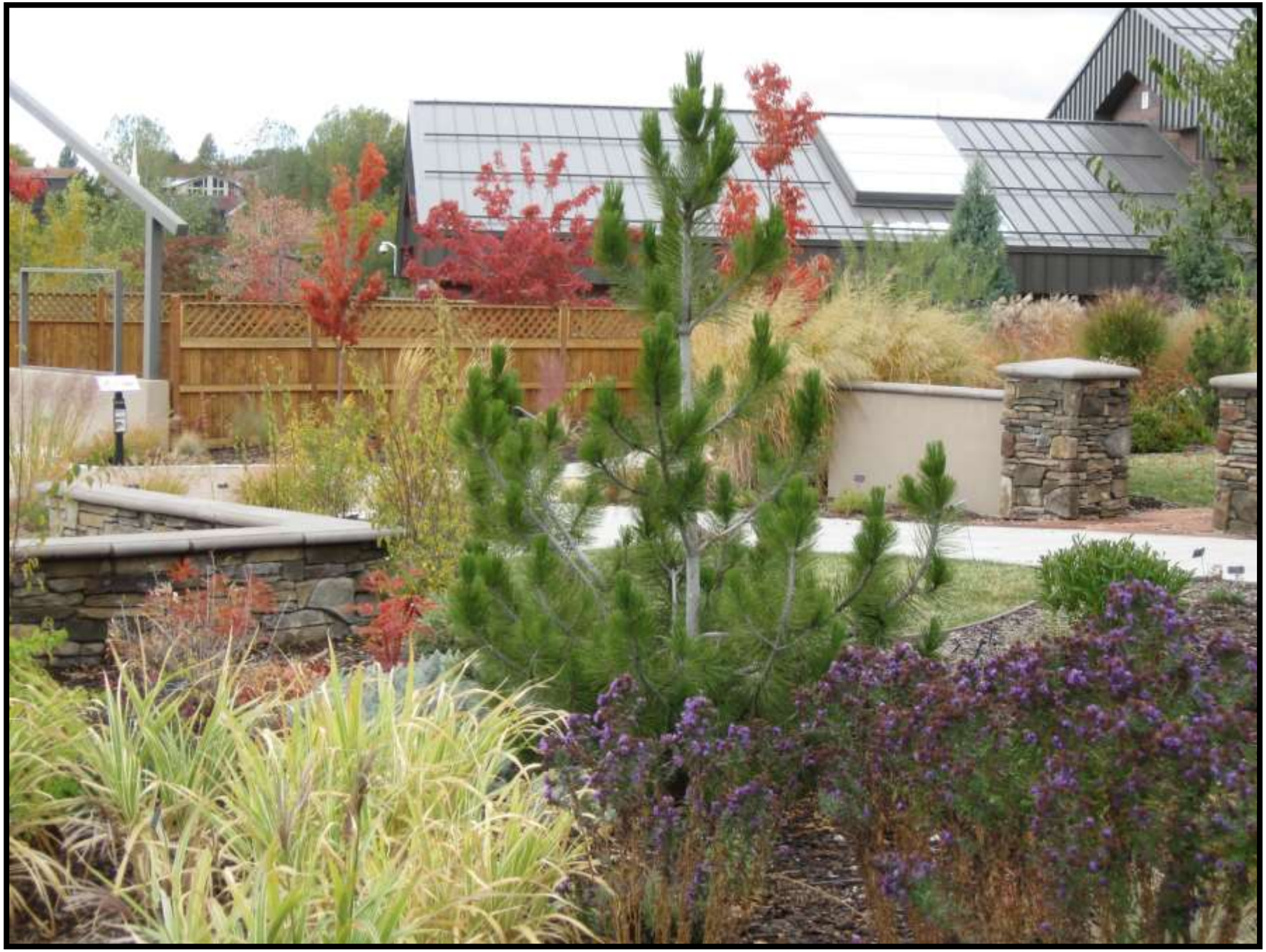

Weber Basin's
Water Conservation
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Questions?

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