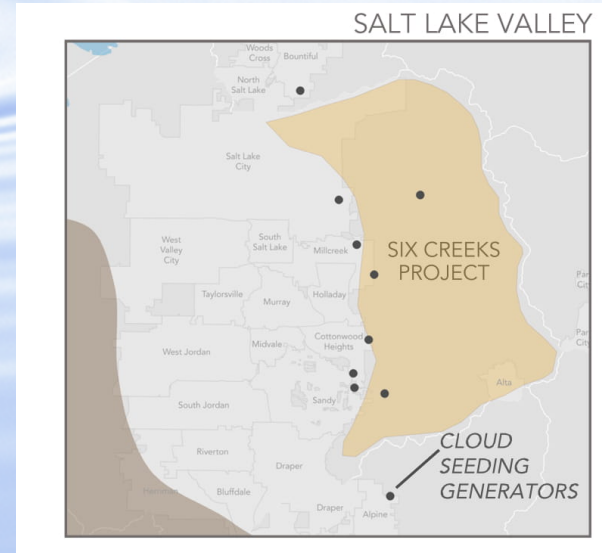
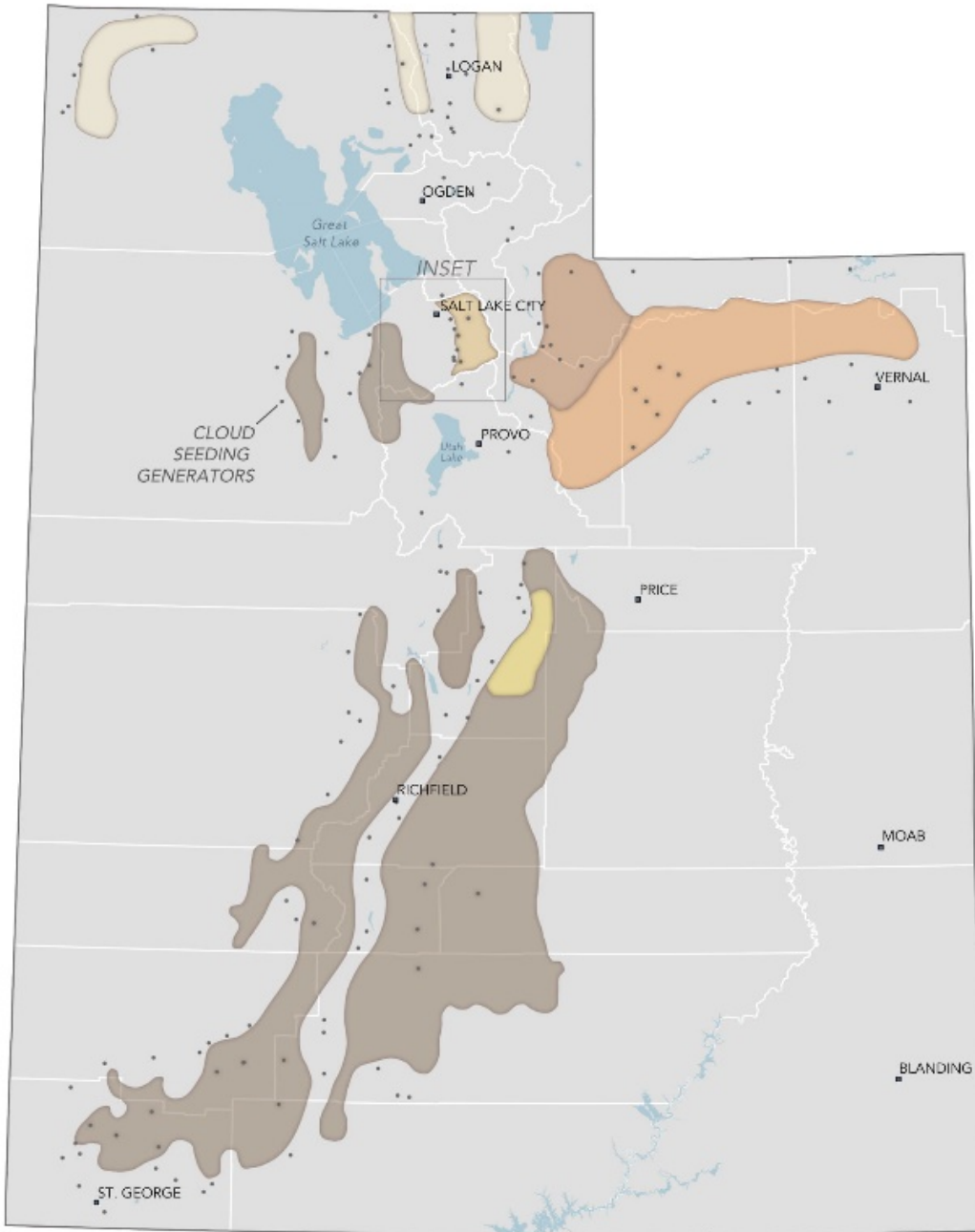


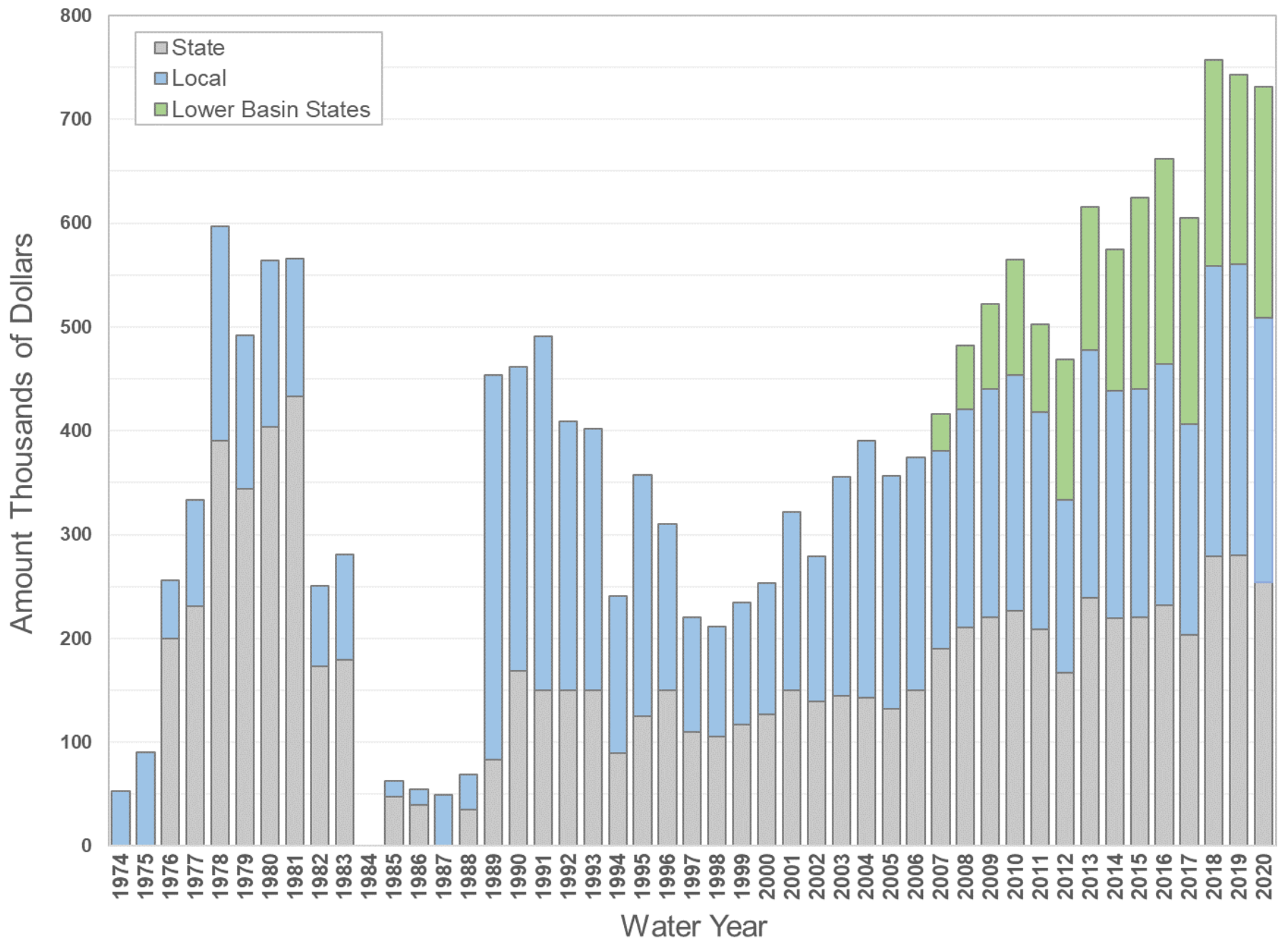


2019-2020 Cloud Seeding Activities

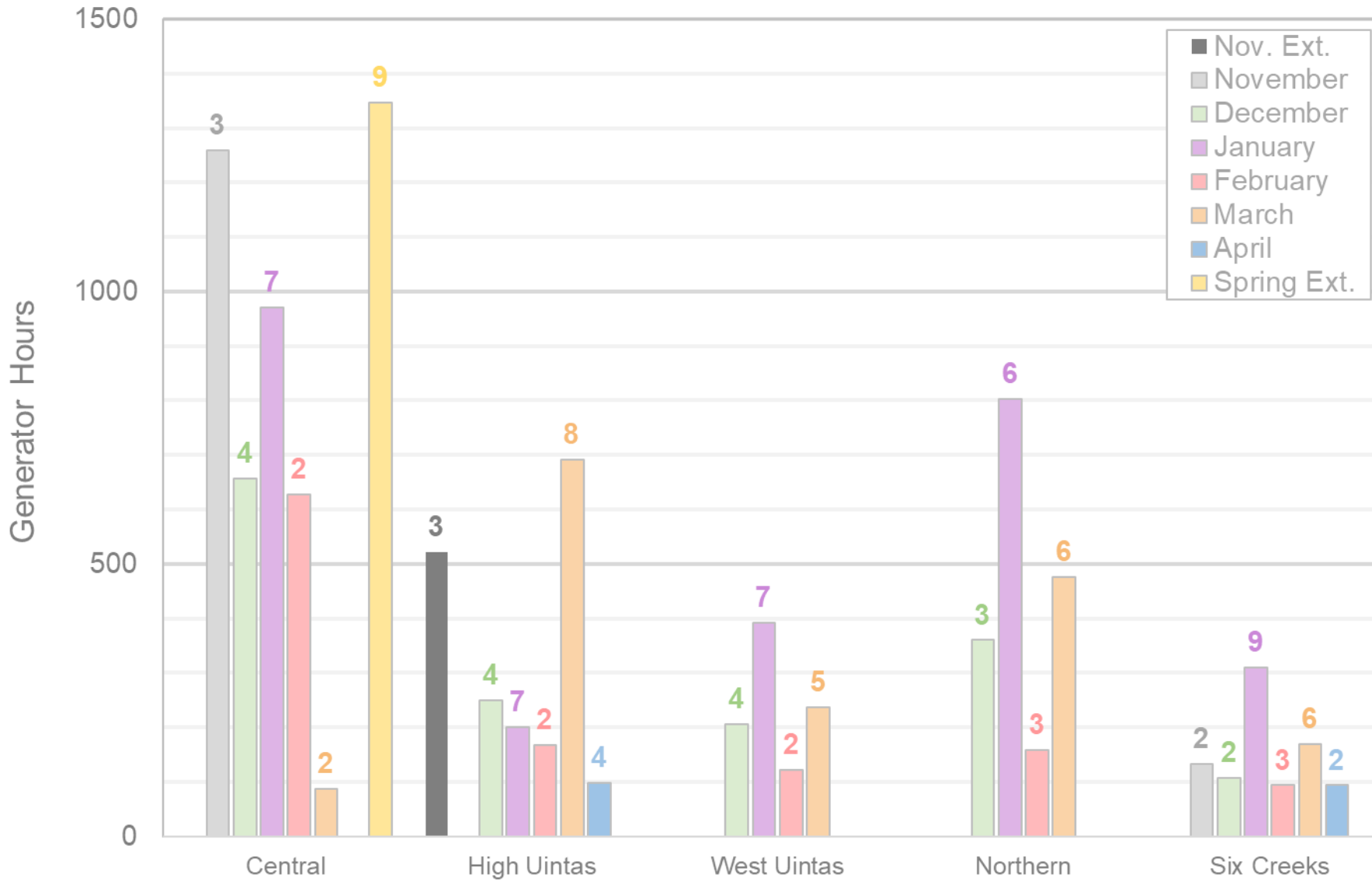
October 8, 2020

Cloud Seeding Project Areas





2019-2020 Generator Hours and Number of Storms Seeded



2019- 2020 Cloud Seeding evaluation

Program Areas	Seasons Seeded	April 1 SWE Increase	
		2019 - 2020	All Seasons
Central/Southern Utah	43	21%	4%
Tooele County	36	8%	10%
East Box Elder/Cache County	30	-2%	7%
*West Box Elder County	28	7%	13%
West Uintas	25	-3%	4%
South Slope Uinta Mountains	31	3%	1%
Six Creeks Program	1	25%	8%
Statewide		8%	7%



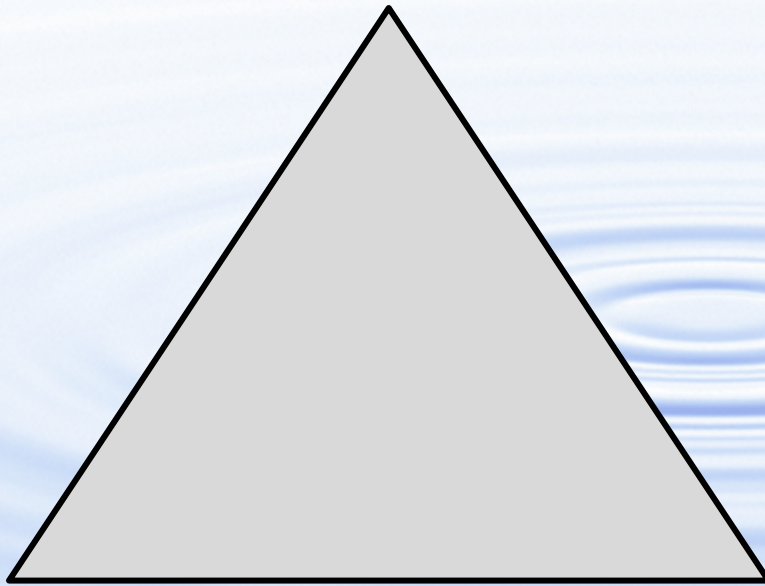
2019-2020 Suspension Summary

- Use of new criteria
- February: Six Creeks for avalanches



Public-Private-University Partnership

UDWRe



UCC

NAWC

- Forecast for cloud seeding
- Assessment of seeding opportunity
- Scientific journal article
- High Uinta program improvement feasibility study
- Cloud seeding impact study



WATER RESOURCES

2019-2020 CLOUD SEEDING PROGRAM EXPENSE

Program and Sponsor	Program Costs (\$)			Lower Basin States
	Sponsor	Board	Utah Total	
Central	83,230	83,230	166,460	41,670
Utah Water Resource Development Corp.				
Northern	42,130	42,130	84,250	
Cache County	21,065			
Bear River Water Conservancy District	21,065			
Western Uinta	35,620	35,620	71,240	
Weber Basin Water Conservancy District	17,810			
Provo Water Users Association	8,905			
Central Utah Water Conservancy District	8,905			
High Uinta	46,110	46,110	92,220	17,920
Central Utah Water Conservancy District	23,055			
Duchesne County Water Conservancy District	11,528			
Uintah Water Conservancy District	11,528			
Six Creeks	38,340	38,340	76,690	
Salt Lake Public Utilities				
Emery	8,910	8,910	17,830	9,060
Emery Water Conservation District				
SubTOTAL	254,340	254,340	508,690	68,650
Utah Climate Center Forecast Model				20,000
High Uinta Program Improvement Feasibility Study		15,000	15,000	25,000
Radiometer				51,000
Icing meters				35,000
SubTOTAL		15,000	15,000	131,000
TOTAL			523,690	199,650 723,340



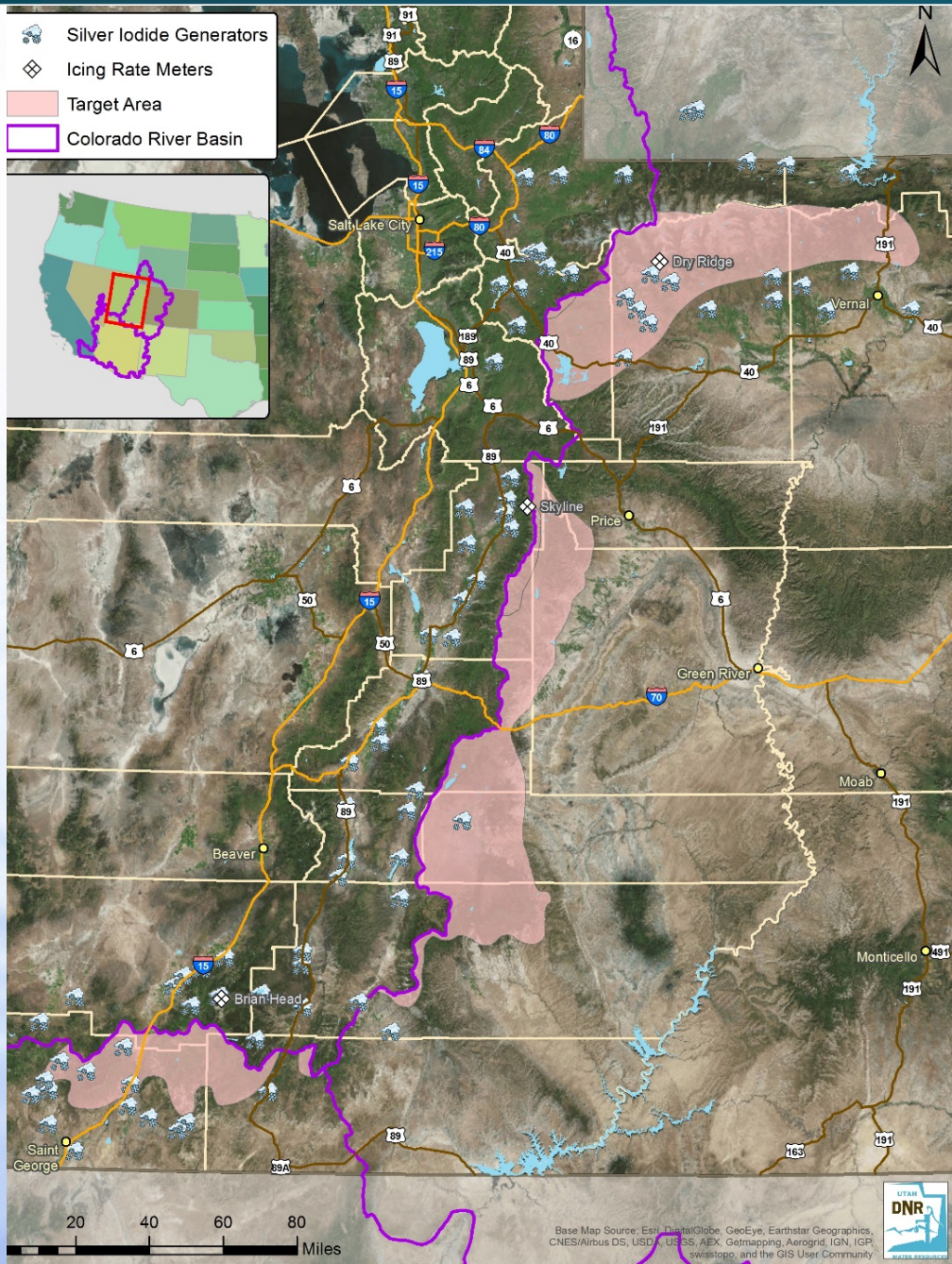
Program Support from the Lower Colorado River Basin

Central Arizona Water Conservation District

Six Agency Committee

Southern Nevada Water Authority





Colorado River Extensions



Colorado River Basin States Enhancement

- Extend the cloud seeding season
 - Nov. 1-15 & Mar. 15 – Apr. 15 Central
 - Nov. 1-30 High Uinta
 - Extra propane for Emery program
- 4 instruments: calibration, reporting and maintenance
- Utah Climate Center improvements to forecast tool
- High Uinta program improvement study



2020-2021 Lower Colorado River Basin State funding

PROGRAM ENHANCEMENT	LOWER COLORADO BASIN FUNDING	
Central and Southern Utah Project <i>(Add ½ November, ½ March, and ½ April)</i>	\$	59,000
High Uintas <i>(Add November)</i>	\$	20,000
Emery/Sanpete Water Conservancy Districts <i>(Extend seeding season with extra propane)</i>	\$	10,000
2 Icing Rate Meters <i>(analyses, reporting and maintenance)</i>	\$	38,000
Remote Generator for High Uinta	\$	86,125
TOTAL	\$	213,125.00

Board Action Requested

Staff recommends the board commit up to \$200,000 for the 2020-2021 Operational Cloud Seeding Program, with a maximum state cost-share of 50 percent with local sponsors.

