CUSP State Status Update
Nevada

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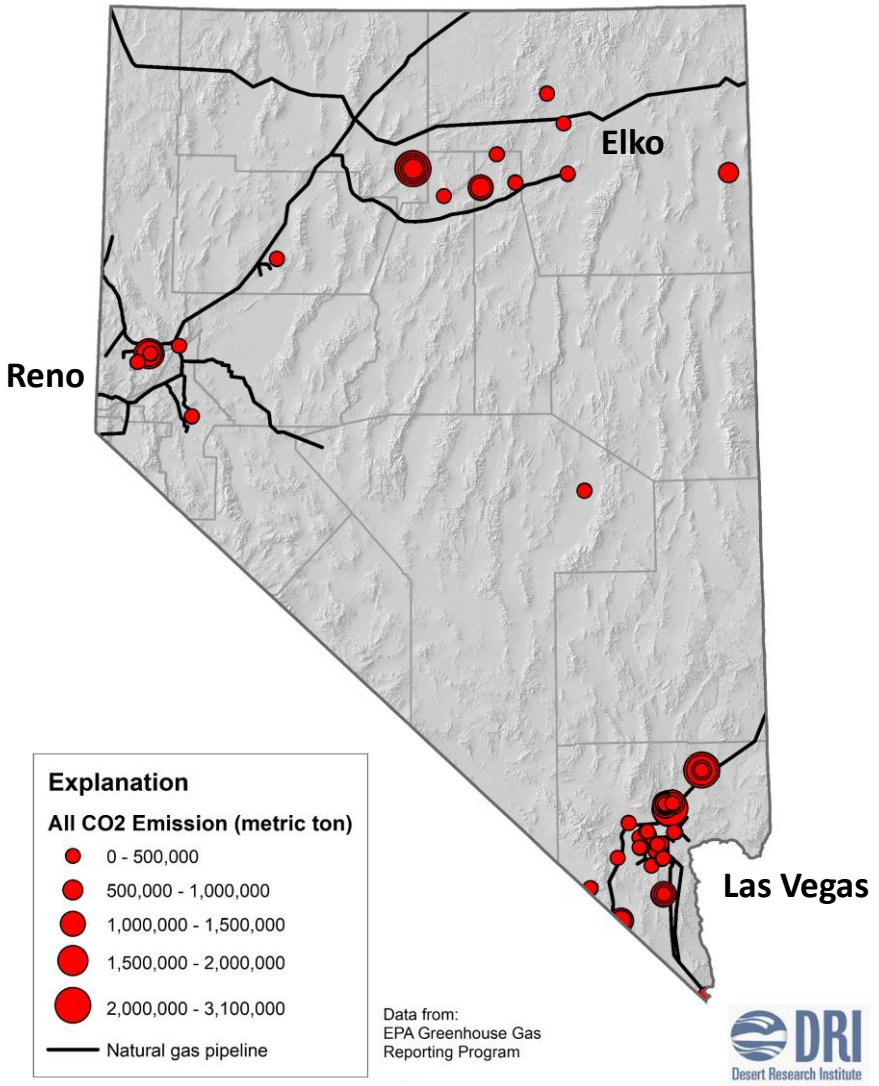
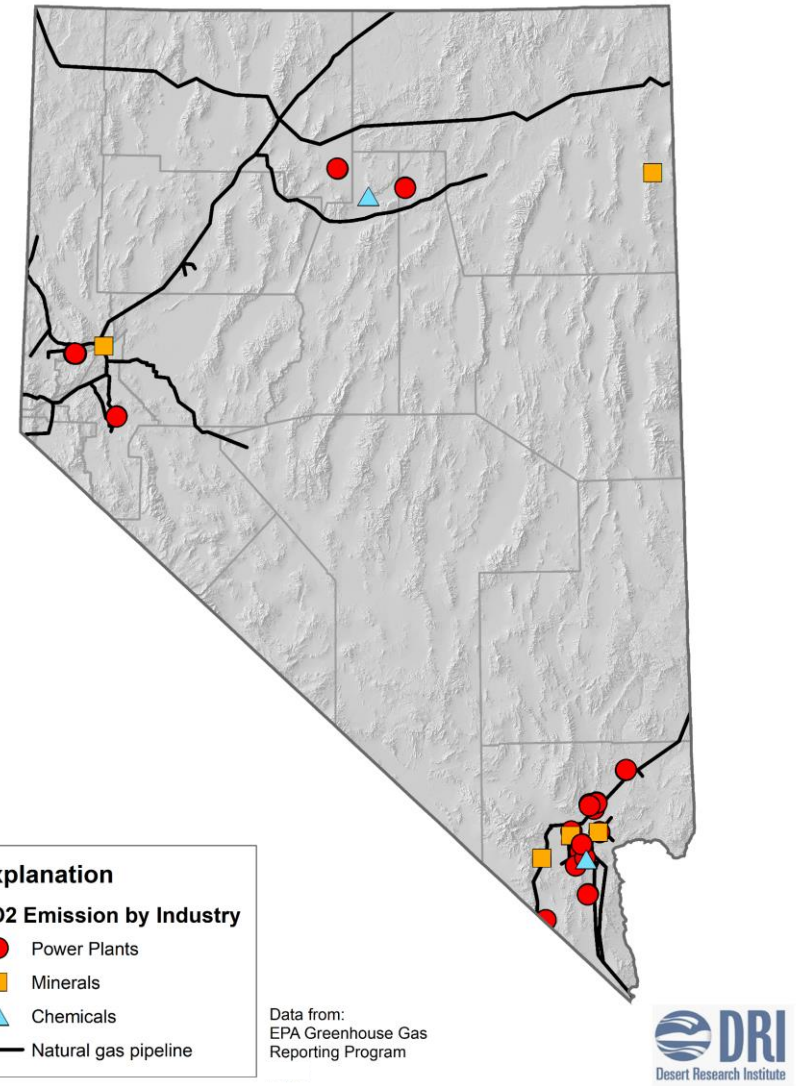
CO_2 Stationary Point Sources

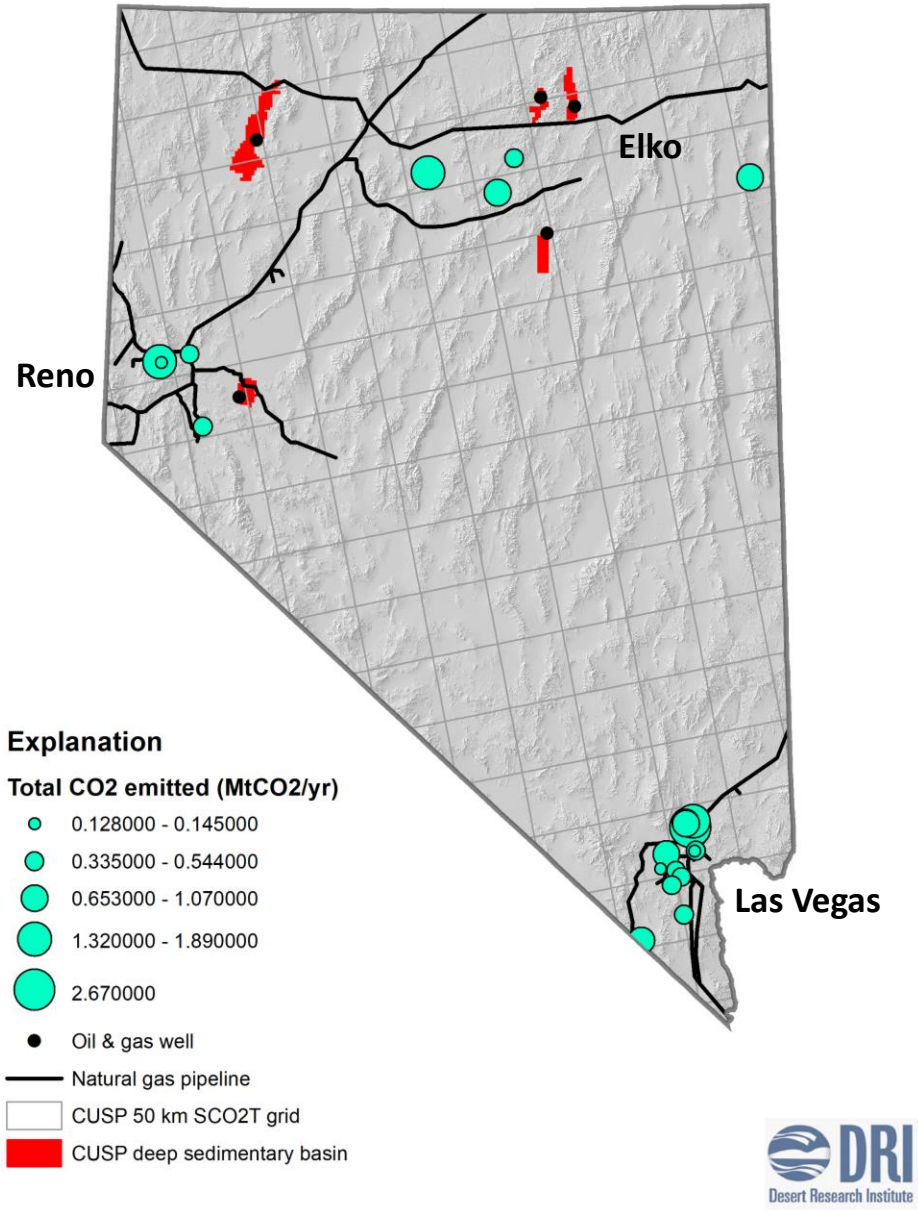




Candidate Geologic Storage Sites

Five sedimentary basins with stacked saline formations have been identified and are located near:

- CO_2 point sources, and
- Existing natural gas pipelines



50-km SCO_2T Database – Five Sedimentary Basins

ID50km	X_LON	Y_LAT	State	Reservoir Name	Depth	Depth Source	Pressure	Pressure Source	Net Thickness	Net Thickness Source	Permeability	Permeability Source	Porosity	Porosity Source	Temperatu
2013	-118.38900	41.24300	Nevada	Black Rock/Jackson Crk.	2,012	Top of reservoir based on combination of salinity >3000 mg/L and geologic rock type from driller mud log and analysis of geophysical logs	19.91	Pressure at top of reservoir from assumed 0.4375 psi/ft gradient of freshwater for intermontane region of U.S.	106.7	Thickness based on extent of salinity >3000 mg/L (range = 3500 – 23,600; mean = 11,350 mg/L) calculated from geophysical logs	1,090	Mean value for net thickness calculated from geophysical logs	0.265	Mean value for net thickness from neutron porosity log	110.5
2014	-117.80200	41.34200	Nevada	No reservoir											
2015	-117.21400	41.43700	Nevada	No reservoir											
2016	-116.62400	41.52900	Nevada	No reservoir											
2017	-116.03300	41.61800	Nevada	Humboldt Basin #1	1,052	Top of reservoir based on combination of salinity >3000 mg/L and analysis of geophysical logs	10.30	Pressure at top of reservoir from assumed 0.4375 psi/ft gradient of freshwater for intermontane region of U.S.	61.0	Thickness based on extent of salinity >3000 mg/L (range = 4352 – 38,533; mean = 14,062 mg/L) calculated from geophysical logs	10,232	Mean value for net thickness calculated from geophysical logs	0.384	Mean value for net thickness from neutron porosity log	52.9

Summary of saline formation data:

- Basin area – 136 to 912 km^2
- Depth – 1040 to 2010 m
- Reservoir thickness – 61 to 122 m
- Porosity – 0.22 to 0.38
- Salinity – >3,000 mg/L; average ~10,000 mg/L

State-Level Accomplishments

The State of Nevada has:

- Evaluated 30 oil and gas well logs to assess the potential for CO_2 storage in saline formations in northern Nevada.
- Identified 5 deep sedimentary basins with stacked saline formations for potential CO_2 storage sites.
- Completed the compilation of CO_2 point sources up to 2020 EPA data.
- Completed 50-km SCO_2T geology input database
- Expanded the assessment of CCUS technologies in Nevada by also focusing on assessing CO_2 Plume Geothermal (i.e., Focused project with Carbon Solutions).

Thank you