



Climate Change Vulnerability and Adaptation Strategies for Natural Communities

Piloting methods in the Mojave and Sonoran deserts



September 2012

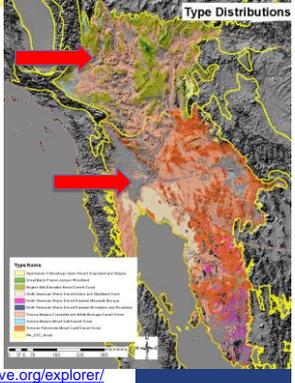
<https://connect.natureserve.org/publications/hccvi>

Advisory Committee

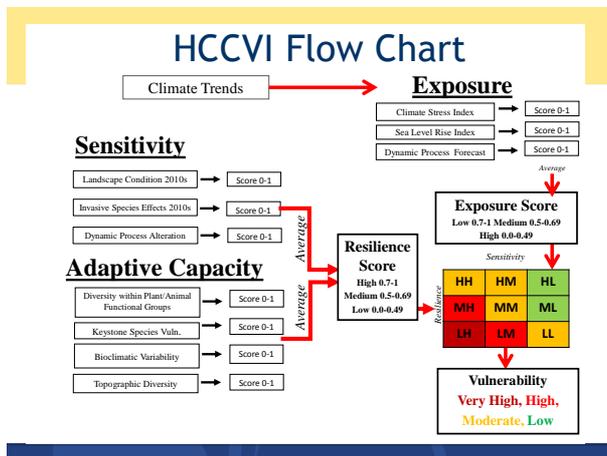


Focal Natural Communities

1. Great Basin Pinyon-Juniper Woodland
2. Mojave Mid-Elevation (Joshua Tree-Blackbrush) Mixed Desert Scrub
3. Sonora-Mojave Creosotebush-White Bursage Desert Scrub
4. Sonoran Paloverde-Mixed Cacti Desert Scrub
5. Apacherian-Chihuahuan Semi-Desert Grassland and Steppe
6. Sonora-Mojave Mixed Salt Desert Scrub
7. North American Warm Desert Active and Stabilized Dune
8. North American Warm Desert Riparian Woodland and Shrubland and Stream
9. Mojave-Sonoran Desert Springs and Seeps
10. North American Warm Desert Mesquite Bosque

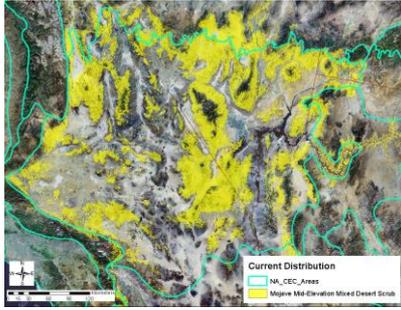


See type descriptions on <http://www.natureserve.org/explorer/>



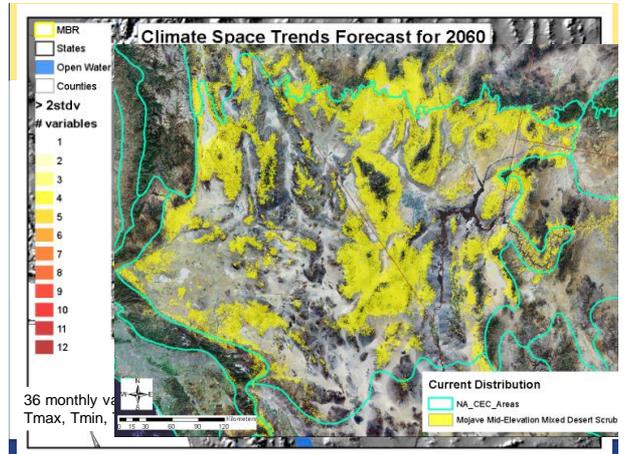
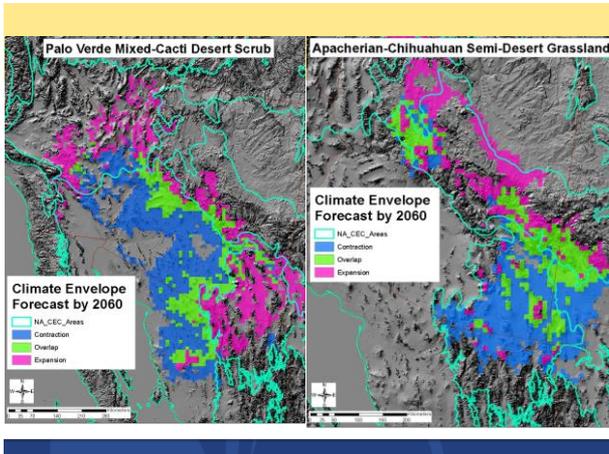
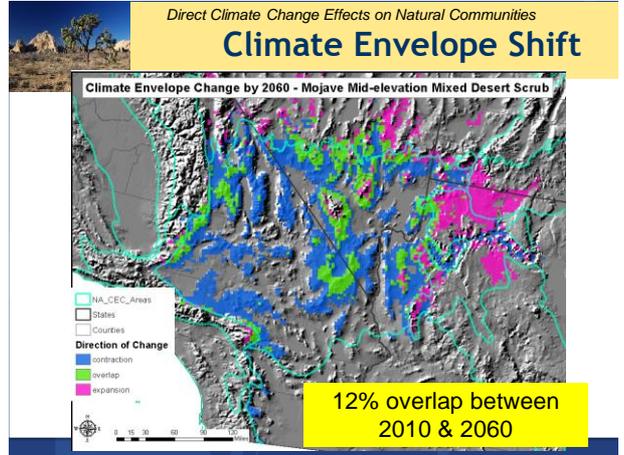
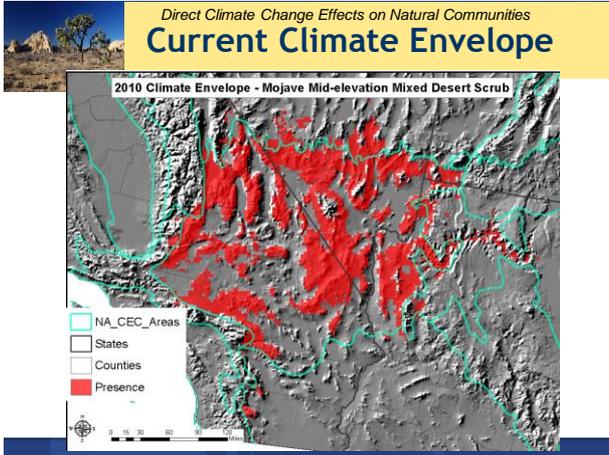
Direct Climate Change Effects on Natural Communities

Climate Envelope Modeling

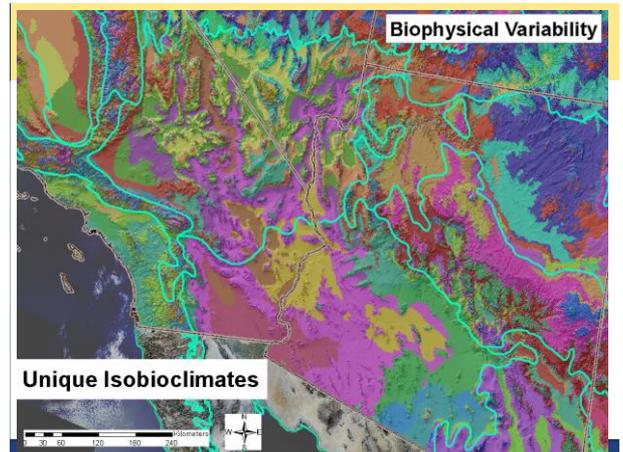
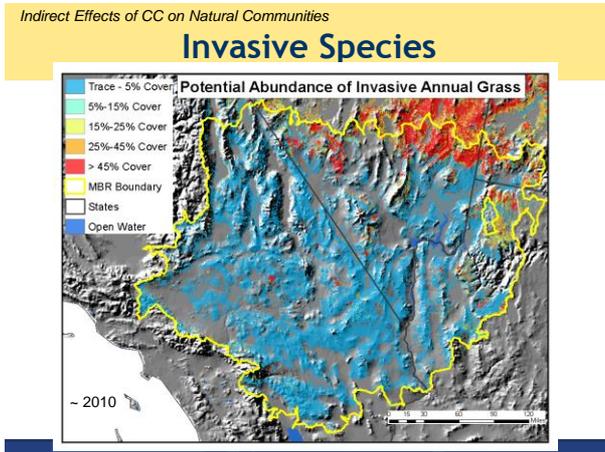
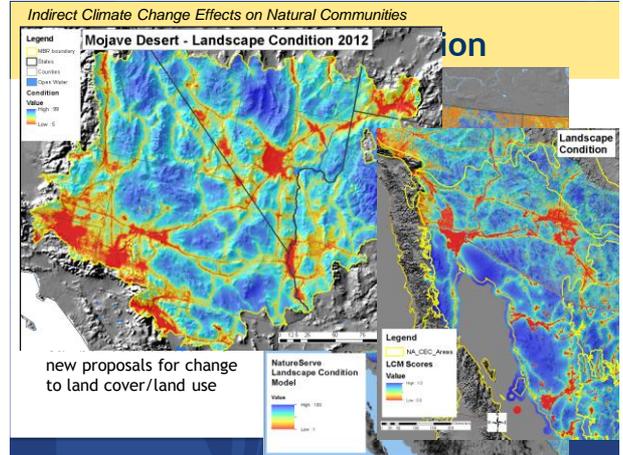


Current Distribution

- NA_CEC_Areas
- Mojave Mid-Elevation Mixed Desert Scrub



Tabular Summary	Variable (Month, 2050 forecast)	% of Area with Value >2 stdev departure	Pixels > 2 Stdev departure forecast 2050s			
			Mean Departure from Baseline (degrees F, Precip in Inches)	Min	Max	stdev
	January Min Temp	3.7%	5.9	5.3	7.1	0.3
	May Min Temp	6.2%	4.8	4.1	5.9	0.4
	June Min Temp	57.2%	5.7	4.4	8.4	0.6
	June Max Temp	17.1%	6.2	5.2	9.1	0.4
	July Min Temp	96.4%	6.4	4.9	9.0	0.6
	July Max temp	91.1%	5.5	3.9	8.7	0.6
	August Min Temp	95.9%	6.9	5.1	9.6	0.6
	August Max Temp	93.8%	5.9	4.5	8.6	0.6
	August Tot. Precip	11.3%	0.9	0.3	3.0	0.4
	Sept. Min Temp	91.6%	6.6	4.6	8.8	0.6
	Sept. Max Temp	7.1%	5.7	5.0	7.5	0.3
	October Max Temp	4.7%	7.2	6.6	8.5	0.3
	October Min Temp	81.3%	6.5	4.9	8.3	0.4
	November Min Temp	8.3%	5.4	4.3	7.1	0.6
	December Min Temp	0.2%	5.3	4.8	6.1	0.2



Adaptation Strategies

- **“No-regrets”** actions to take within the next 5 years. *(mostly resistance and resilience strategies; invest in targeted monitoring networks)*
- **“Anticipate Actions”** over the coming 5-15 years. *(mostly resilience strategies)*
- **“Wait and Watch”** or potential actions to anticipate over the 15-30 year timeframe, with indicators to monitor and inform those future decisions. *(mostly resilience, some transformation strategies; much prioritized research)*

