HUC 120901 Middle Colorado-Concho

USDA Forest Service
Northern Research Station
Landscape Change Research Group
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	sq. km	sq. mi	FIA Plots
Area of Region	39,423	15,221	245

Species Information

The columns below provide breif summaries of the species associated with the region and described in the table on the next pages. Definitions are provided in the Excel file for this region.

Genus	Species
Ash	0
Hickory	1
Maple	0
Oak	6
Pine	0
Other	11
18	

Abundance	
Abundant	2
Common	3
Rare	13
Absent	1
19	

Model Reliability		Adaptability
High	4	4
Medium	6	12
Low	8	4
FIA	2	
20		**20**

Potential Change in Habitat Suitability

	Scenario RCP45	Scenario RCP85
Increase	3	3
No Change	2	2
Decrease	11	11
New	1	1
Unknown	3	3
	20	**20**

Capability to Cope or Persist

	Scenario RCP45	Scenario RCP85
Very Good	1	1
Good	2	2
Fair	3	3
Poor	2	2
Very Poor	7	7
FIA Only	2	2
Unknown	1	1
	18	**18**

Migration Potential

	SHIFT RCP45	SHIFT RCP85
Likely	1	1
Infill	2	2
Migrate	0	0
	3	**3**

Potential Changes in Climate Variables

Temperature (°F)

	Scenario	2009	2039	2069	2099	
Annual	CCSM45	59.2	60.3	61.6	62.2	
Average	CCSM85	59.2	60.8	62.4	64.6	
	GFDL45	59.2	62.0	62.8	64.3	
	GFDL85	59.2	61.7	64.2	67.4	
	HAD45	59.2	61.0	63.0	63.6	
	HAD85	59.2	61.5	64.4	66.7	
Growing	CCSM45	70.5	71.4	72.7	73.3	
Season	CCSM85	70.5	72.2	73.7	76.2	
May—Sep	GFDL45	70.5	73.8	74.9	77.1	
	GFDL85	70.5	73.9	76.8	80.9	
	HAD45	70.5	72.2	73.8	74.1	
	HAD85	70.5	72.7	75.7	77.8	
Coldest	CCSM45	42.2	44.1	44.6	45.1	
Month	CCSM85	42.2	43.9	44.6	45.8	
Average	GFDL45	42.2	44.9	45.0	45.0	
	GFDL85	42.2	43.2	44.0	44.3	
	HAD45	42.2	42.7	44.2	44.4	
	HAD85	42.2	45.1	46.3	47.5	
Warmest	CCSM45	74.5	75.4	76.3	76.4	
Month	CCSM85	74.5	76.2	76.7	78.1	
Average	GFDL45	74.5	78.7	79.0	80.4	
	GFDL85	74.5	79.1	80.4	83.5	
	HAD45	74.5	76.3	77.0	77.3	
	HAD85	74.5	77.0	78.5	79.4	

Precipitation (in)

	Scenario	2009	2039	2069	2099	
Annual	CCSM45	22.3	24.1	22.8	21.7	
Total	CCSM85	22.3	22.1	24.4	23.3	
	GFDL45	22.3	21.7	25.4	20.3	
	GFDL85	22.3	21.3	22.7	20.6	
	HAD45	22.3	23.3	22.5	24.4	
	HAD85	22.3	22.1	20.4	23.3	
Growing	CCSM45	11.6	13.4	11.5	11.5	
Season	CCSM85	11.6	12.2	12.7	11.6	
May—Sep	GFDL45	11.6	11.4	13.2	10.5	
	GFDL85	11.6	11.5	11.8	10.6	
	HAD45	11.6	11.6	11.7	13.1	
	HAD85	11.6	11.1	9.9	11.8	

NOTE: For the six climate variables, four 30-year periods are used to indicate six potential future trajectories. The period ending in 2009 is based on modeled observations from the PRISM Climate Group and the three future periods were obtained from the NASA NEX-DCP30 dataset. Future climate projections from three models under two emission scenarios show estimates of each climate variable within the region. The three models are CCSM4, GFDL CM3, and HadGEM2-ES and the emission scenarios are the 4.5 and 8.5 RCP. The average value for the region is reported, even though locations within the region may vary substantially based on latitude, elevation, land-use, or other factors.

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Common Name	Scientific Name	Range	MR	%Cell	FIAsum	FIAiv	ChngCl45	ChngCl85	Adap	Abund	Capabil45	Capabil85	SHIFT45	SHIFT85	SSO	N
live oak	Quercus virginiana	NDH	High	49.6	935.3	37.9	No change	No change	Medium	Abundant	Good	Good			1	1
ashe juniper	Juniperus ashei	NDH	High	41.5	529.1	25.0	Sm. inc.	Sm. inc.	Medium	Abundant	Very Good	Very Good			0	2
post oak	Quercus stellata	WDH	High	18.2	226.9	23.4	Sm. dec.	Sm. dec.	High	Common	Fair	Fair			1	3
cedar elm	Ulmus crassifolia	NDH	Medium	22.4	116.8	18.5	Sm. inc.	Sm. inc.	Low	Common	Fair	Fair			1	4
blackjack oak	Quercus marilandica	NSL	Medium	6.8	52.8	20.8	Sm. dec.	Sm. dec.	High	Common	Fair	Fair	Infill +	Infill +	1	5
sugarberry	Celtis laevigata	NDH	Medium	9.2	45.0	11.5	No change	No change	Medium	Rare	Poor	Poor			1	6
hackberry	Celtis occidentalis	WDH	Medium	5	11.1	4.4	Sm. dec.	Sm. dec.	High	Rare	Poor	Poor	Infill +	Infill +	1	7
cittamwood/gum bumelia	Sideroxylon lanuginosum ssp.	NSL	Low	13.9	10.5	3.3	Lg. inc.	Lg. inc.	High	Rare	Good	Good			1	8
American elm	Ulmus americana	WDH	Medium	3.9	6.8	12.0	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	9
black oak	Quercus velutina	WDH	High	0.1	5.6	2.2	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	10
black walnut	Juglans nigra	WDH	Low	0.5	4.5	17.8	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	11
eastern redcedar	Juniperus virginiana	WDH	Medium	0.5	3.4	13.3	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	12
pecan	Carya illinoinensis	NSH	Low	1.3	3.2	6.1	Sm. dec.	Sm. dec.	Low	Rare	Very Poor	Very Poor			0	13
eastern redbud	Cercis canadensis	NSL	Low	0.5	1.9	7.3	Very Lg. dec.	Very Lg. dec.	Medium	Rare	Lost	Lost			0	14
durand oak	Quercus sinuata var. sinuata	NSL	FIA	0.1	1.1	0.5	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	15
wild plum	Prunus americana	NSLX	FIA	0.5	0.4	1.5	Unknown	Unknown	Medium	Rare	FIA Only	FIA Only			0	16
pin oak	Quercus palustris	NSH	Low	0.5	0.4	1.4	Sm. dec.	Sm. dec.	Low	Rare	Very Poor	Very Poor			0	17
slippery elm	Ulmus rubra	WSL	Low	2.1	0.1	2.1	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	18
sycamore	Platanus occidentalis	NSL	Low	0	0	0	Unknown	Unknown	Medium	Modeled	Unknown	Unknown			0	19
black willow	Salix nigra	NSH	Low	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat	Likely +	Likely +	3	20