

Climate Vulnerability

Assessment and Adaptation

What do you think of as vulnerable to
climate change?

What do you feel is already
threatened/disrupted by climate
change?

Vulnerability is about key items of concern



Cultural Resources



Ecosystems



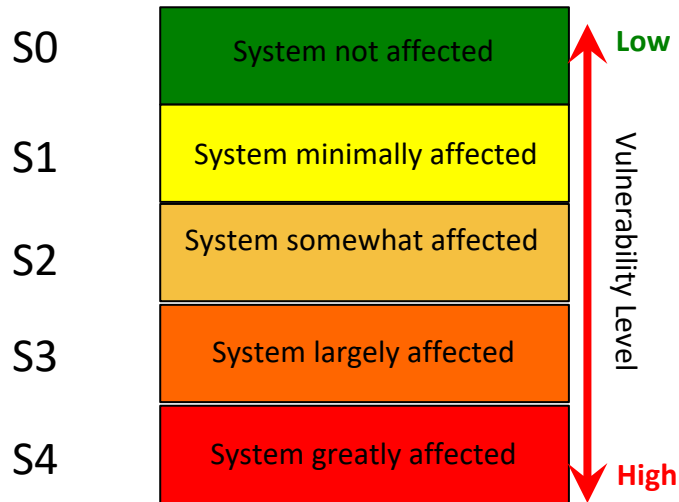
Species



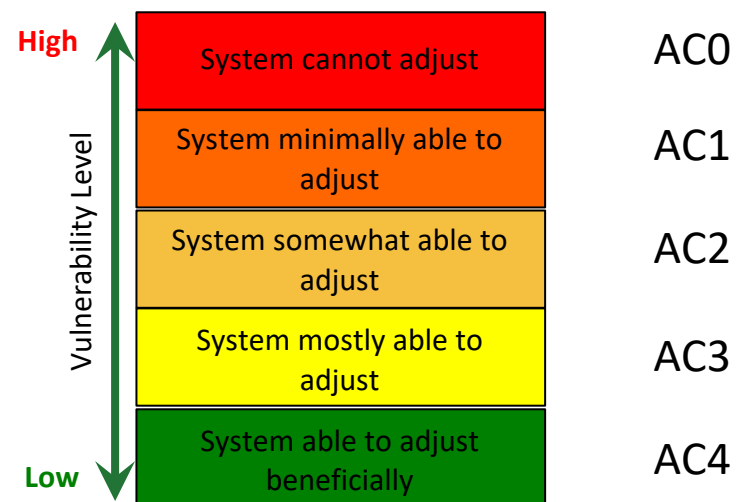
Infrastructure

Some things are less vulnerable than others

Sensitivity Level



Adaptive Capacity



Navajo Vulnerability Assessment Report



More Vulnerable

	Golden Eagle
Man-made barriers	Red
Dispersal Ability	Green
Temperature	Green
Precipitation	Yellow
Habitat requirements	Yellow
Interspecies interactions	Green
Diet	Green
Population/Genetics	Red
Human interactions	Red

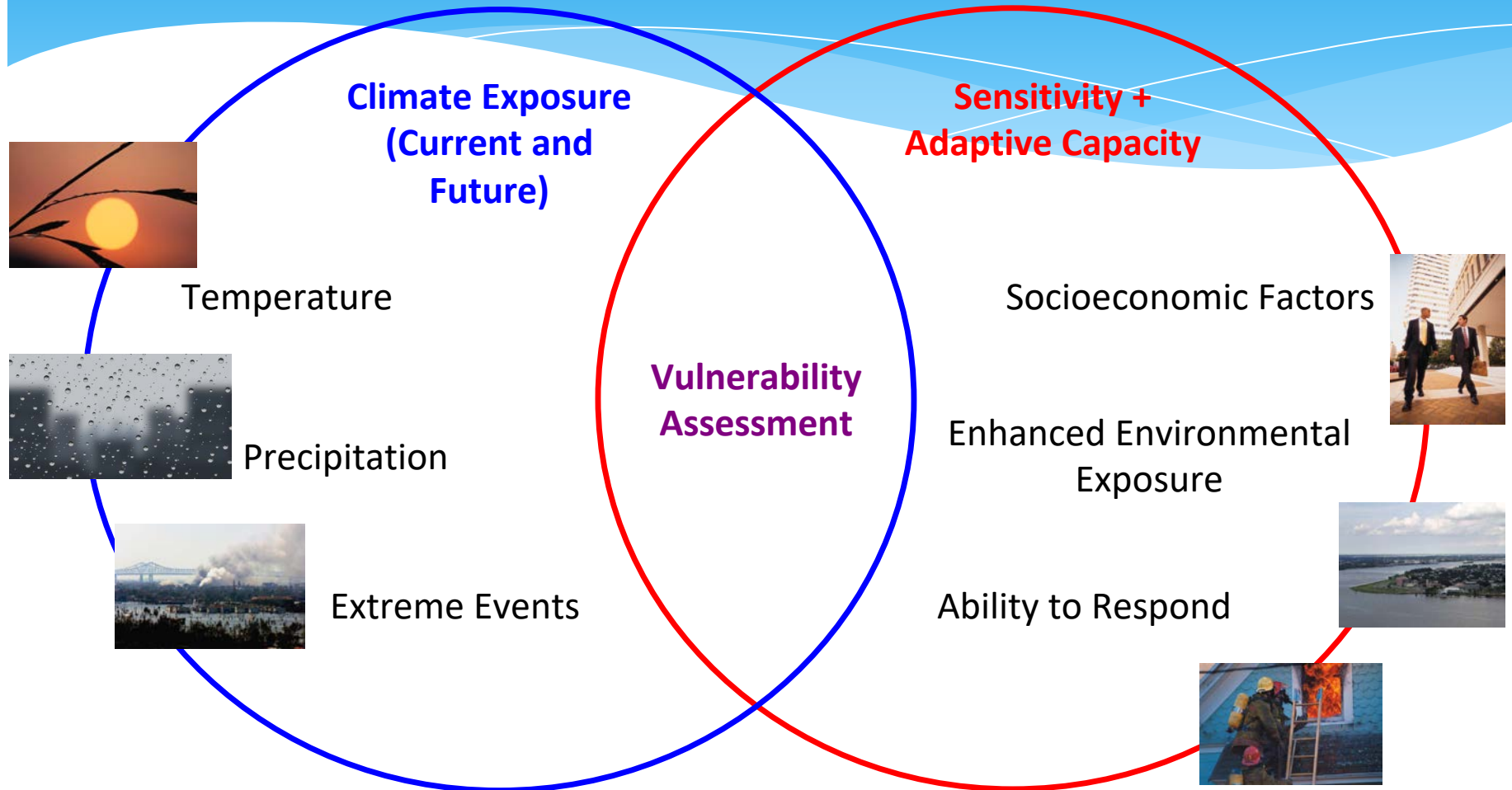


Less Vulnerable

	Mountain Lion
Man-made barriers	Green
Dispersal Ability	Green
Temperature	Green
Precipitation	Green
Habitat requirements	Yellow
Interspecies interactions	Green
Diet	Green
Population/Genetics	Yellow ?
Human interactions	Green

http://conbio.org/images/content_publications/Final_Navajo_Vulnerability_Assessment_Report_2.pdf

Vulnerability assessments examine many factors



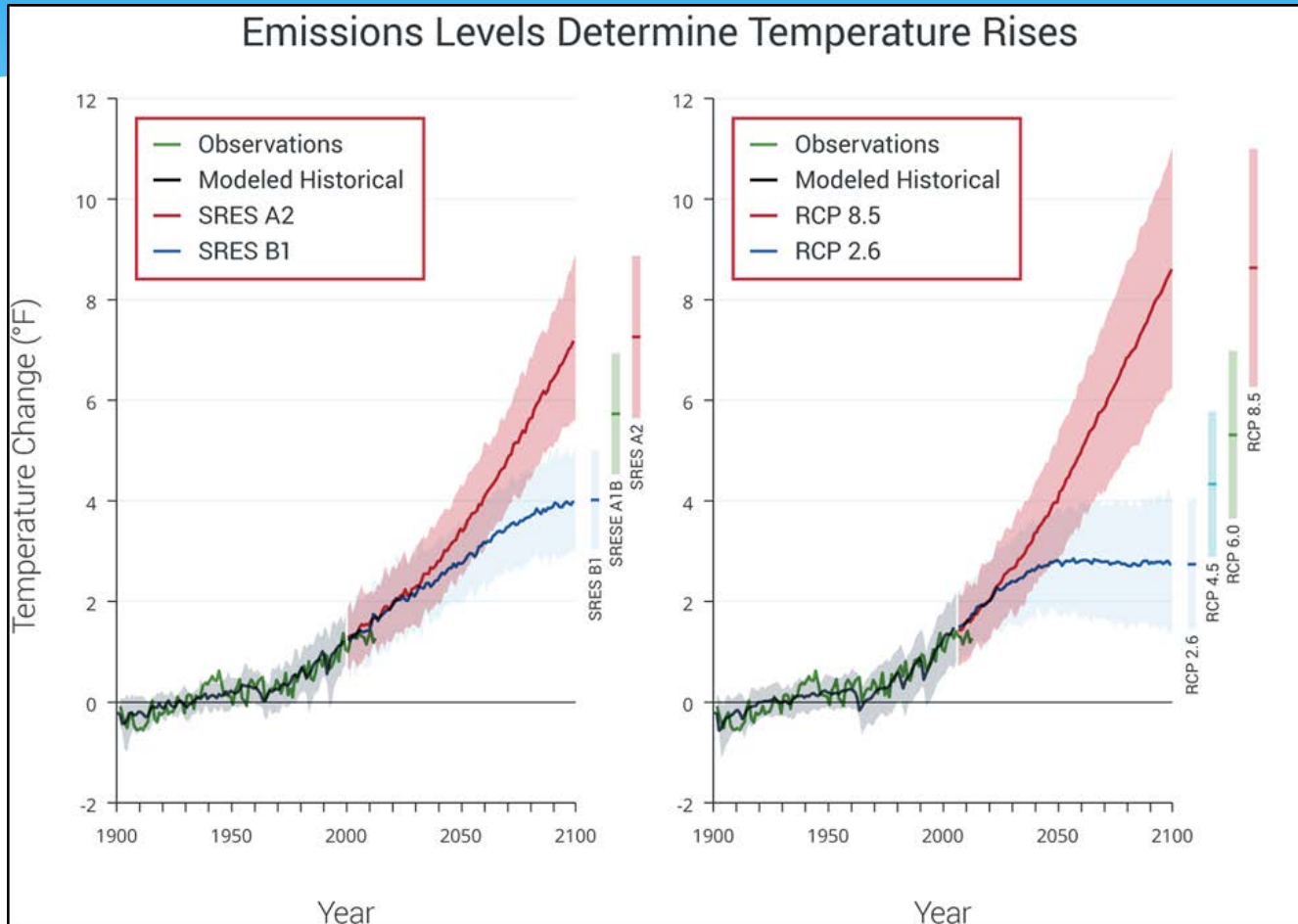
Assessments include planning

“One of the most important adaptation strategies for the Navajo landscape is the conservation of movement and migratory corridors for wildlife species such as the Desert Bighorn Sheep and the Black Bear. Conservation of these movement corridors, especially those along natural features such as riparian areas, has the potential to yield significant benefits for multiple wildlife species.”

pp. 39-40, *Climate Change Vulnerability Assessment for Priority Wildlife Species*
The Navajo Nation Department of Fish and Wildlife



Adaptation is the goal



<http://nca2014.globalchange.gov/report/our-changingclimate/future-climate-change>

Jamestown S'Klallam

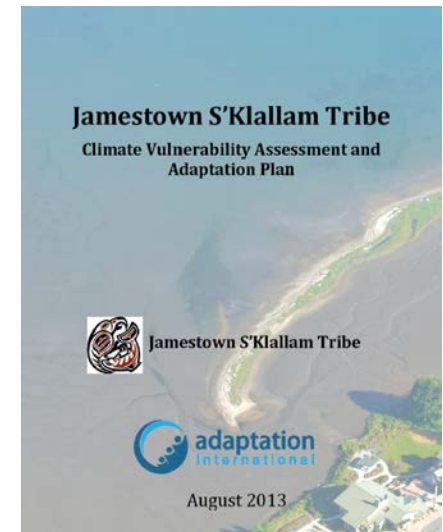
Resulted from a two day workshop where they identified the most important climate impacts to the community:

- Increasing temperatures and changing precipitation
- Sea level rise and coastal flooding

Additionally, identified key areas of concern, such as:

- Salmon
- Clams and Oysters
- Wildfires

http://tribalclimate.uoregon.edu/files/2010/11/Jamestown_Sklallam_Adaptation_Plan_Profile_FINAL-1qggd7e.pdf



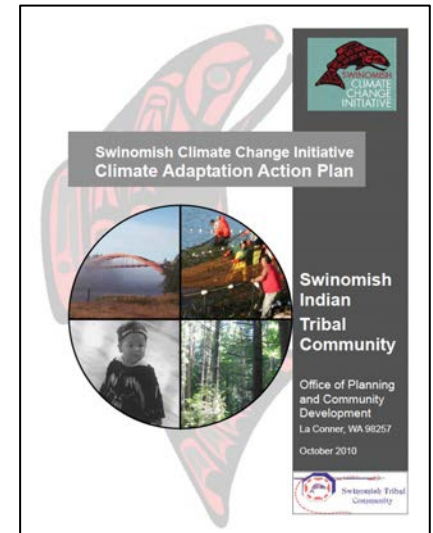
Swinomish Climate Change Initiative

Initially a two year study on the impacts of climate change on tribe resources, assets and community.

Plan also identified recommended actions relating to:

- coastal resources
- upland resources
- physical health
- community infrastructure and services.

http://www.swinomish-nsn.gov/climate_change/climate_main.html



Navajo Climate Change and Variability Adaptation Plan 2014

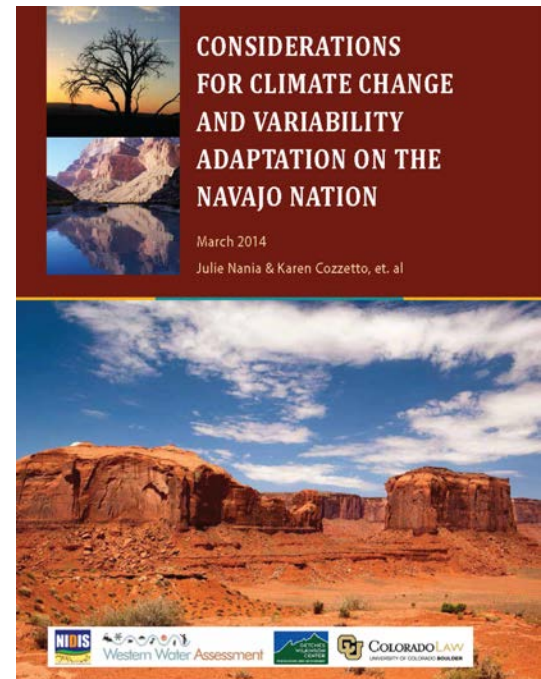
Formed out of collaboration between students, faculty, and tribal stakeholders

Includes impacts on Southwest US as a whole and specific needs of the Navajo nation.

Includes chapters on:

- Water Resources
- Farming
- Human Health

http://cires.colorado.edu/outreach/system/files/projects/tribes_eye.pdf



National Climate Assessment

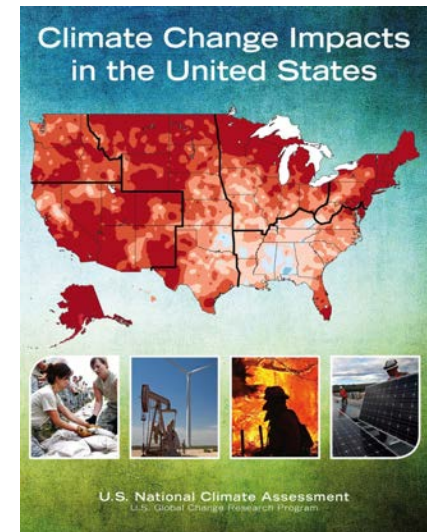
Federally sponsored and managed climate assessment.
Conducted nationwide every 4 years, most recent (3rd) in 2014.

Breaks assessment down across sectors and regions.

Includes a chapter on Indigenous Peoples.

http://s3.amazonaws.com/nca2014/high/NCA3_Climate_Change_Impacts_in_the_United%20States_HighRes.pdf?download=1

Now looking for people to participate in the next version!



Upcoming opportunities

October 18-22, 2016. [2016 Natural Areas Conference. Davis, CA.](#)

November 14-17, 2016. [2016 Office of Indian Energy Program Review. Denver, CO.](#)

February 14-16, 2017. [Conference: 2017 Climate and Health Summit in Atlanta, GA.](#)

May 9-11, 2017. [National Adaptation Forum. St. Paul, MN.](#)

<https://tribalclimateguide.uoregon.edu/events>



Activity: Assessing Vulnerability

“Business as Usual Scenario” (A2):

- Longer and hotter summer heat waves
- Increased frequency/severity of drought
- Decreased snowpack and stream flow
- Increased frequency/severity of fire
- Increased insect outbreaks