

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



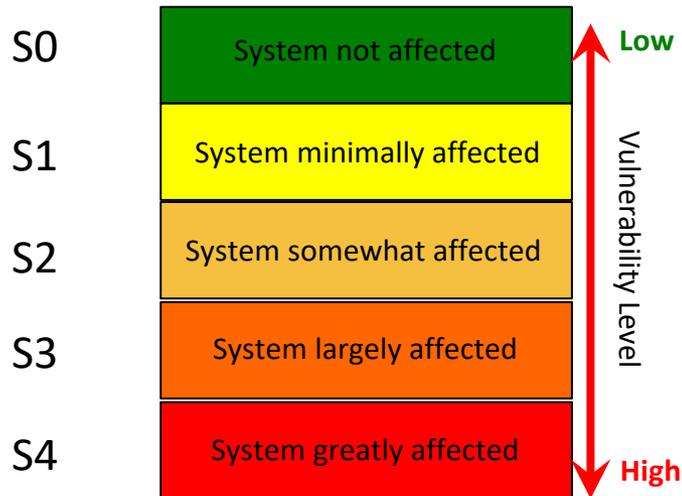
Species



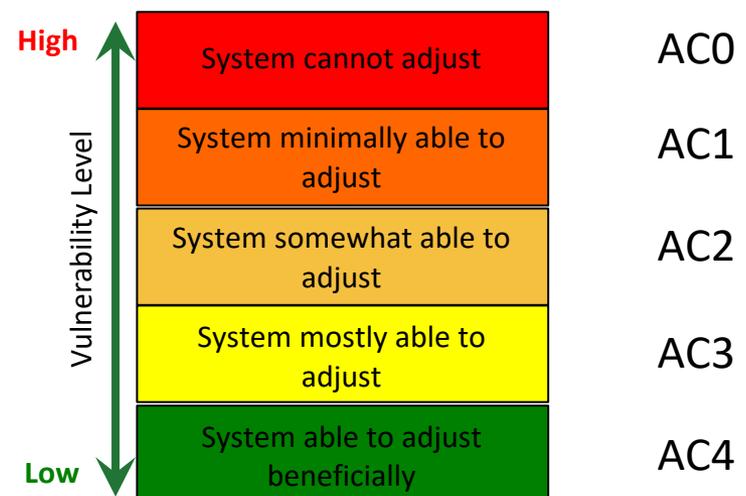
Infrastructure

Some things are less vulnerable than others

Sensitivity Level



Adaptive Capacity



Blue Crab



Tidal Emergent Marsh

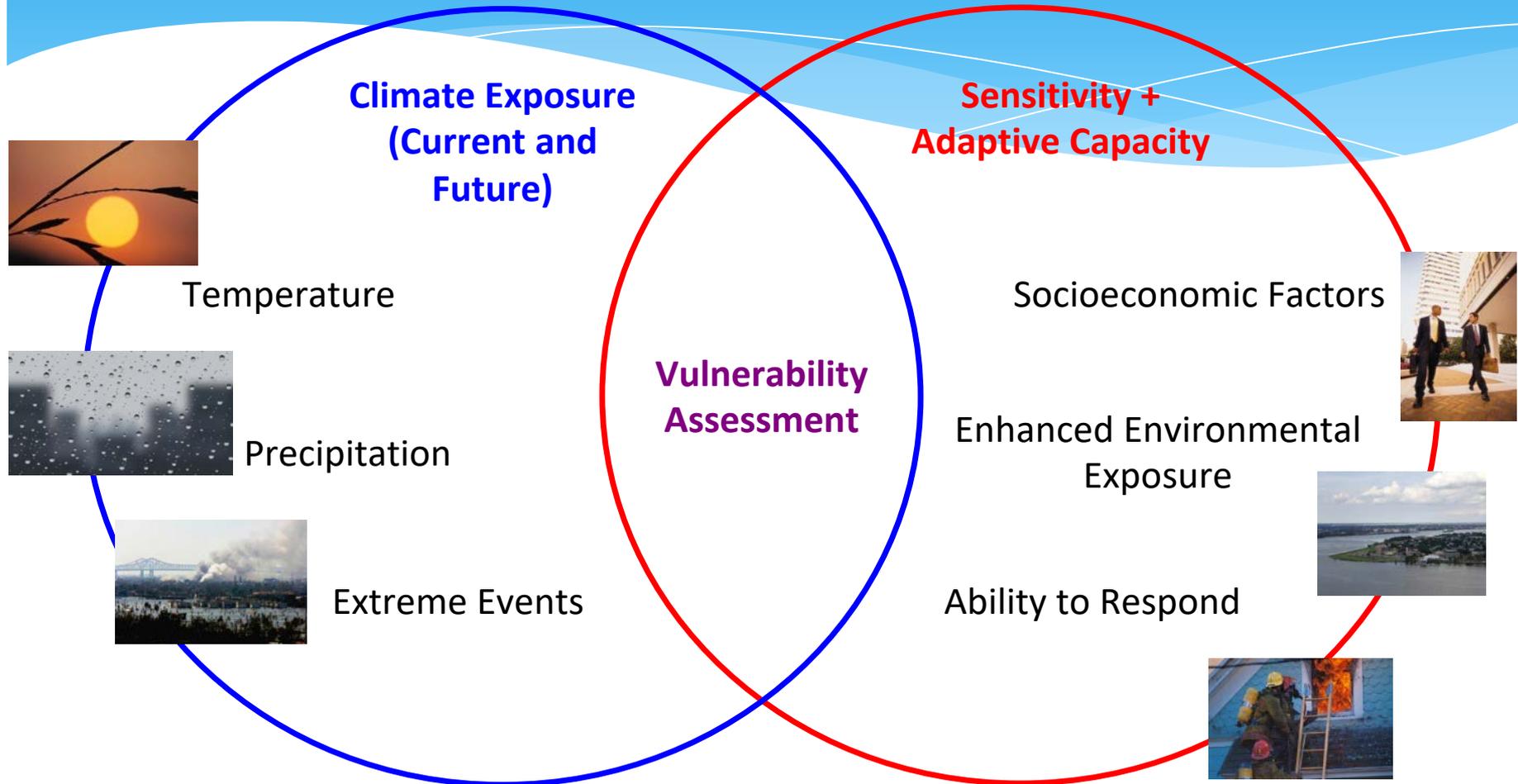


Clapper Rail



Gulf Coast
Vulnerability
Assessment 2015

Vulnerability assessments examine many factors



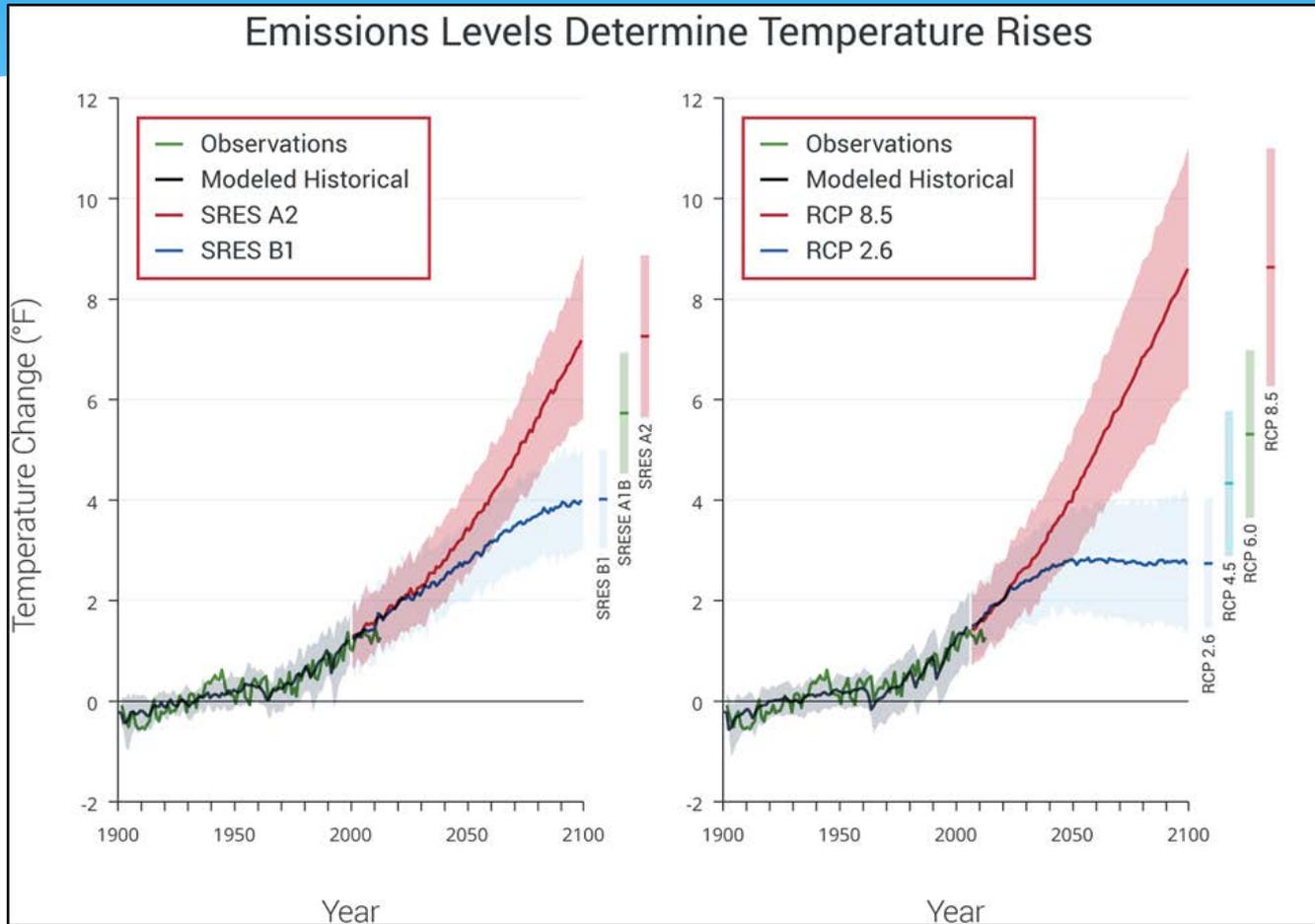
Assessments include planning



“...oyster reefs with marginal water quality could be targeted for habitat restoration to promote future population growth or recruitment in extreme years when isohalines have moved up or down estuary.”

– Gulf Coast Vulnerability Assessment 2015, p.80, Adapted from Stein et al. 2014, emphasis added

Adaptation is the goal



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

Jamestown S'Klallam

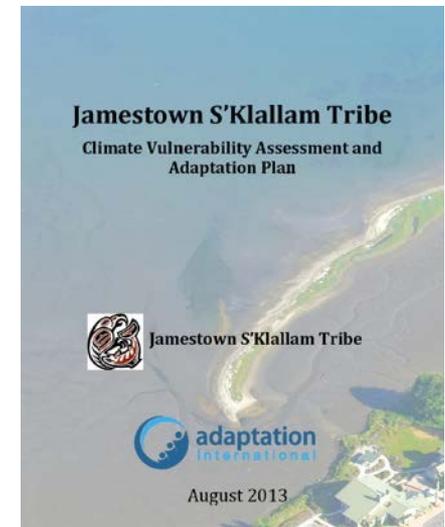
Resulted from a two day workshop where they identified the most important climate impacts to the community:

- 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-1qqgd7e.pdf



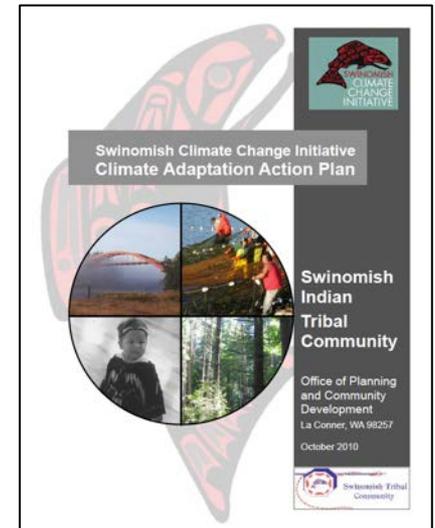
Swinomish Climate Change Initiative

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



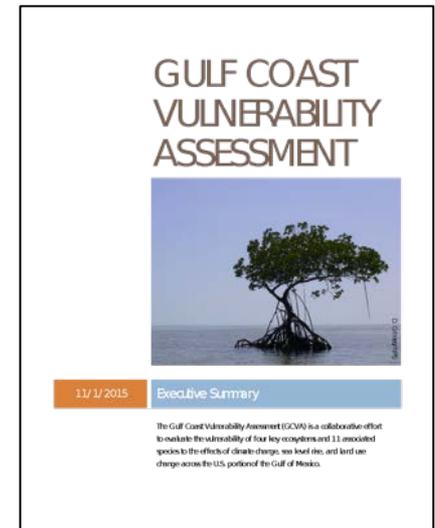
Gulf Coast Vulnerability Assessment

Result of cooperative effort between government agencies, universities, NGOs, and land managers.

Qualitative evaluation of four ecosystems:

- Barrier Islands
- Mangrove
- Tidal Emergent Marsh
- Oyster Reefs

<http://gulfcoastprairielcc.org/science/scienceprojects/gulf-coast-vulnerability-assessment/>



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

