

2023 State of Nevada Enhanced HMP Update

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Why Engage in Hazard Mitigation Planning?

- Mitigation is good for us – increases resilience for our communities
- “Reduces loss of life and property by minimizing the impact of disasters”
- FEMA requires a HMP to receive all categories of public assistance
- It saves us money – every \$1 of mitigation saves \$6
- It makes us money
 - \$2B - \$10B in post disaster hazard mitigation
 - \$2.295B in 2022 pre-disaster Building Resilient Infrastructure and Communities
- You have the local knowledge / perspective
 - We can pull from databases, but you have the insight for your community
- Expectations
 - Review shared documents
 - Provide your input

Overview

- Wise Oak Support
- Administrative
- Update methodology
- Progress
- Future Actions

Wise Oak Support



GENERAL PROJECT
MANAGEMENT
ASSISTANCE



RESEARCH AND
ANALYSIS



GIS



TECHNICAL WRITING



OTHER ESSENTIAL
ACTIVITIES ON
REQUEST



Major Actions to Date

Developed / developing text style guide

Developed / developing image style guide

Developed / developing FEMA National Risk Index maps

- Hazards Risk Index
- Expected annual loss
- Social vulnerability
- Community resilience

Aligned hazards with national/state standards

- National Risk Index hazards
- State of Nevada Threat and Hazards Guide

Working with FEMA on potential new hazard assessment process

Administrative



Style Guide - Text

Text

- Font
 - Body: Times New Roman, 12 pt.
 - Figure and table labels: Figure/Label; Arial, 10 pt.
- General:
 - Alignment: Justified
 - Outline Level: Body Text
 - Special: none
 - Unselect: mirror indents
 - Select: “Automatically adjust right indent when document grid is defined.”
- Line Spacing
 - Single: 6 pt. before and after; justified; Body Text; 0 indentation;
 - Unselect - “Don’t add space between paragraphs of the same style”
 - Select - Snap to grid when document grid is defined

Outline

- X
- X.X
 - Heading 1: Times New Roman; 13 pt.; bold
- X.X.X
 - Heading 2: Times New Roman; 13 pt.; bold
- X.X.X.X
 - Heading 3: Times new Roman; 12 pt.; Bold; Italics

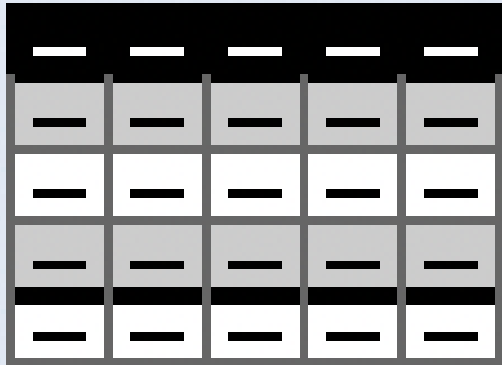
Style Guide - Graphics

Figures

- Label
 - Figure/Table
- Black border
 - Black
 - $\frac{3}{4}$ point
- Shadow
 - Right and bottom

Tables

- Label
 - Table Title
- Style



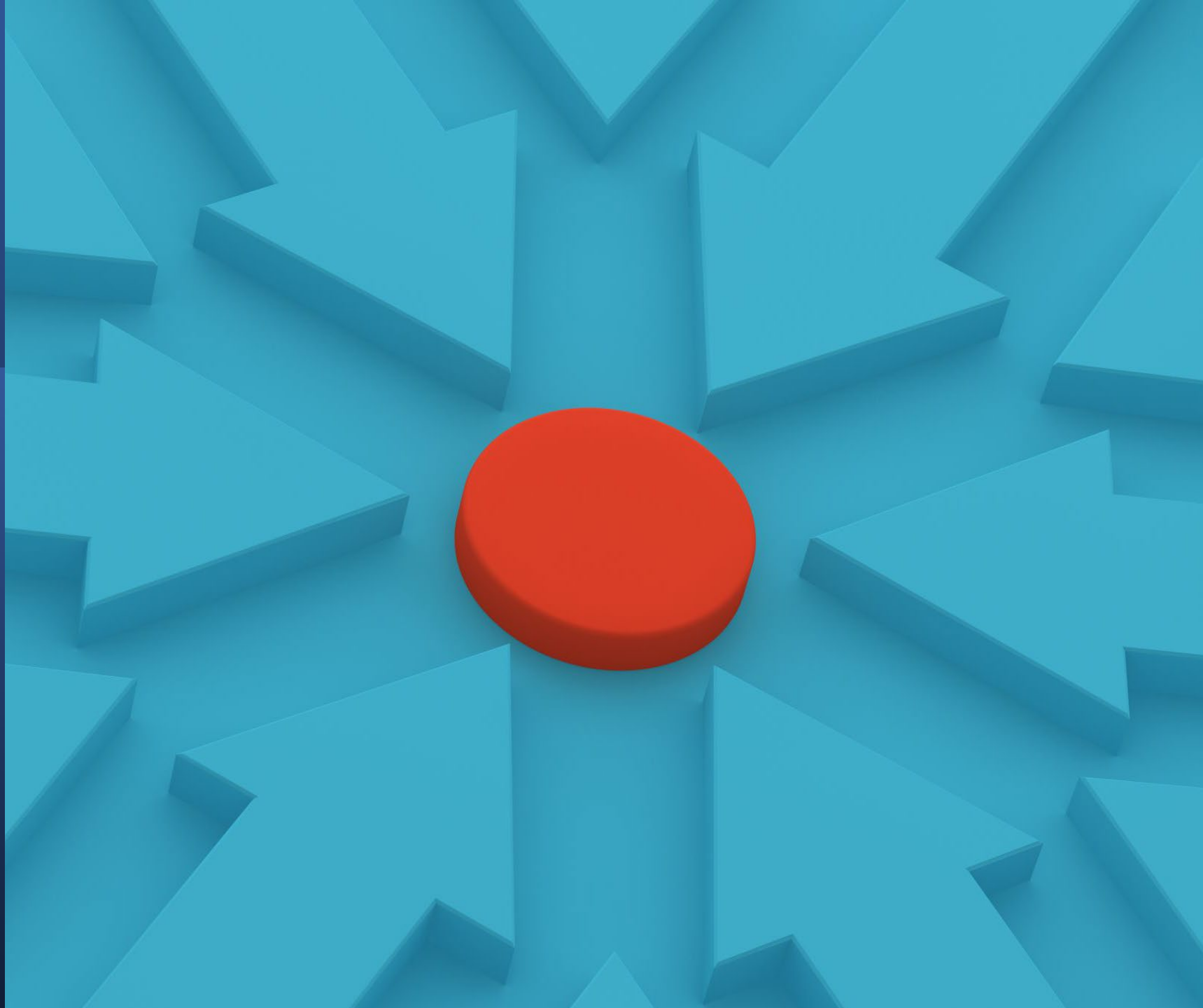
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What preferences do you
have?

Other?



Update Methodology



Text Review

Editorial review for
standardization

Updating – NOT
re-writing

Freshening up
information

Consistent
formatting

“XX” is a
placeholder for
items like figure
numbers

The very last
review will be for
final formatting
and numberin

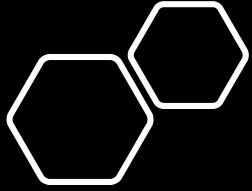


Image Review

- Updating if older than 1 year
- Border: Black; ¾ point
- Shadow: Right and Bottom

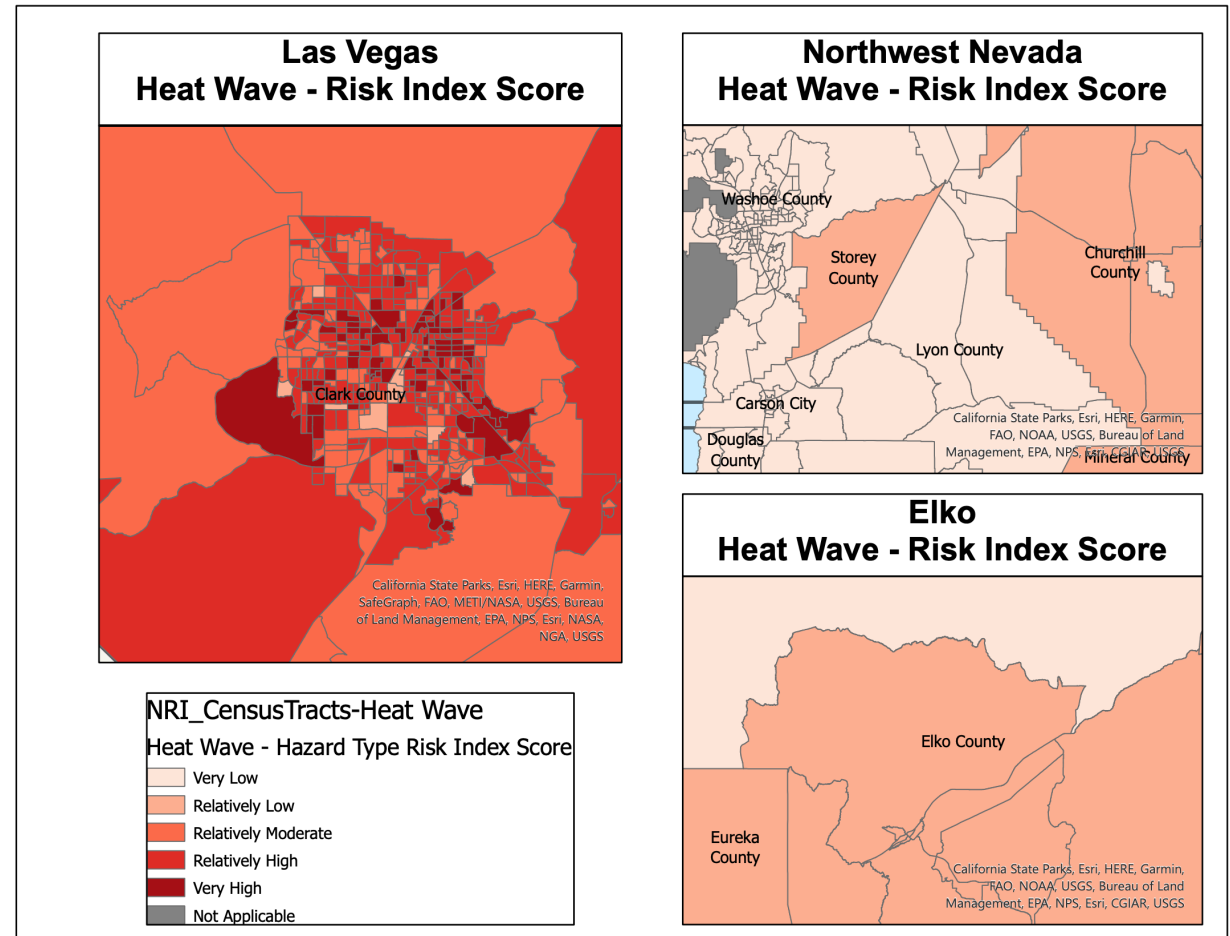


Table Review

- General: Times New Roman 11 point
 - Adjust as required
- Black Heading
- Alternating grey and white

Table 3-4. Risk Categories Assigned to Nevada Hazards		
High Risk	Medium/Significant Risk	Low Risk
Earthquake	Heat Wave	Tsunami
Wildfire	Hazardous Materials	Hail
Riverine Flooding	Drought	Avalanche
Pandemic	Strong Wind	Landslide
		Tornado
		Infestation
		Land Subsidence and ground failure
		Volcanic Activity
		Expansive Soil

HMP Hazards vs. State vs. FEMA NRI (1 of 3)

Legacy HMP	Nevada Threat & Hazard Guide	FEMA NRI	Comment / Question
Avalanche	Geohazards - Avalanche	Avalanche	
Drought	Drought	Drought	
Earthquakes	Geohazards - Earthquake	Earthquake	Do we want to change to Earthquake?
Epidemic	Infectious Disease - Emerging Disease with Epidemic or Pandemic Potential; - Respiratory Virus with Epidemic or Pandemic Potential	N/A	Do we want to go more general with something like Infectious Disease?
Expansive Soils	N/A	N/A	
Extreme Heat	Extreme Heat	Heat Wave	
Floods	Floods, Landslides & Debris Flow - Alluvial Fan Flooding - Flash Flood - Riverine	Riverine Flooding	
Hail & Thunderstorms	Severe Weather - Microburst - Straight-Line Winds - Thunderstorms & Lightning	- Hail - Lightning - Strong Wind	Do we want to Make this section "Severe Weather" or change to "Thunderstorm & Lightning" or leave it as is?

HMP Hazards vs. State vs. FEMA NRI (2 of 3)

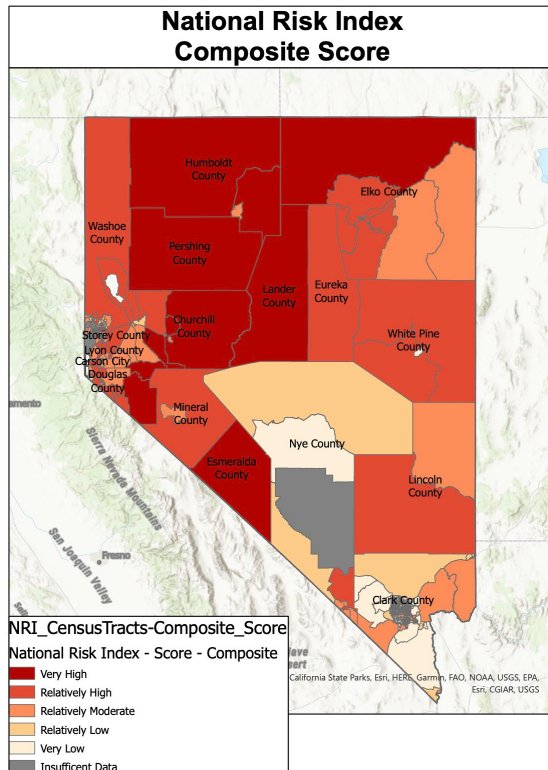
Legacy HMP	Nevada Threat & Hazard Guide	FEMA NRI	Comment / Question
Infestation	N/A	N/A	
Land Subsidence and Ground Failure	Geohazards Fissures and Subsidence	N/A	
Landslide	Floods, Landslides & Debris Flow Landslides & Debris Flow	Landslide	
Severe Storm and Extreme Snowfall	Extreme Weather Winter Storms & Extreme Cold	- Cold Wave - Ice Storm - Winter Weather	
Tornado	Tornado	Tornado	
Tsunami/Seiche	Seiche	Tsunami	Do we want to change to Seiche?
Volcano	Volcanoes	Volcanic Activity	Do we want to change to Volcanoes?
Wildland Fire	Fire - Wildland Fire - Wildland Urban Interface	Wildfire	

HMP Hazards vs. State vs. FEMA NRI (3 of 3)

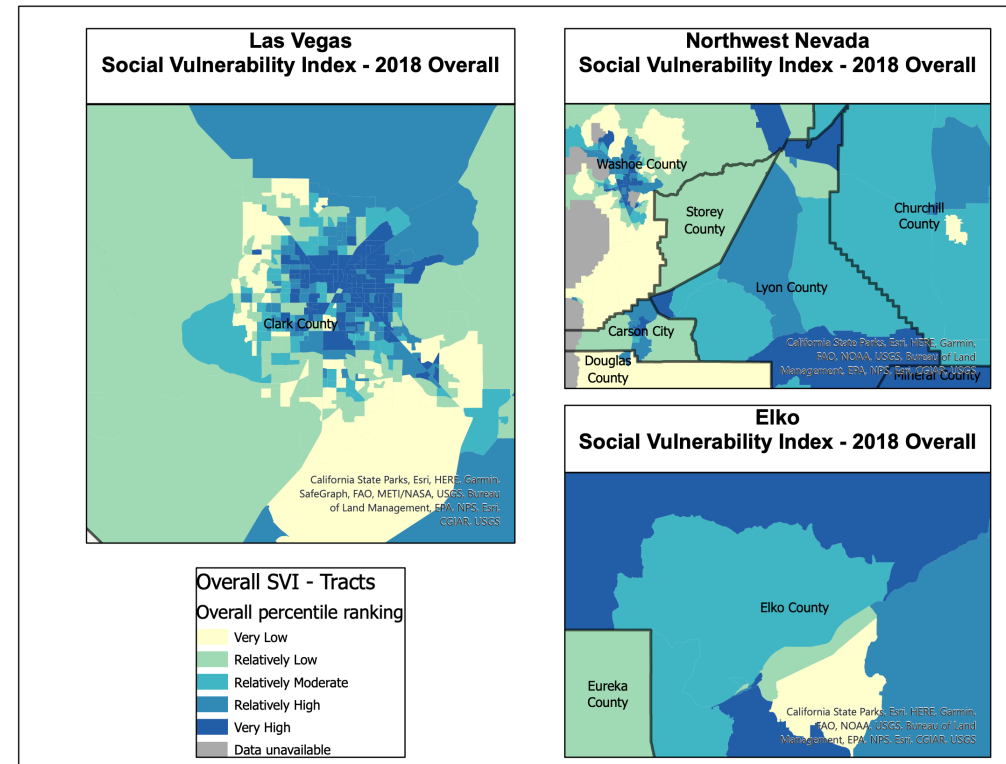
Legacy HMP	Nevada Threat & Hazard Guide	FEMA NRI	Comment / Question
Hazardous Materials	Chemical, Biological, Radiological, Nuclear & Explosives (CBRNE) - Chemical - Biological - Radiological - Nuclear - Explosives	N/A	Do we want to split dam failure out from “Natural Hazards” and putting it into a “Technological Hazards” section
Flooding due to Dam Failure	Infrastructure Dam Failure	N/A	Do we want to split dam failure out from “Natural Hazards” and putting it into a “Technological Hazards” section
Flooding Along Irrigation Ditches and Canals	Floods, Landslides & Debris Flow Flash Flood	N/A	Do we want to out flooding along ditches from “Natural Hazards” and putting it into a “Technological Hazards” section
???	Infrastructure Natural Gas Pipeline Incident		Do we want to add Natural Gas Pipeline Incident?
???	Infrastructure Power Outage		Do we want to add Power Outage?

Baseline: FEMA's National Risk Index

National Risk Index

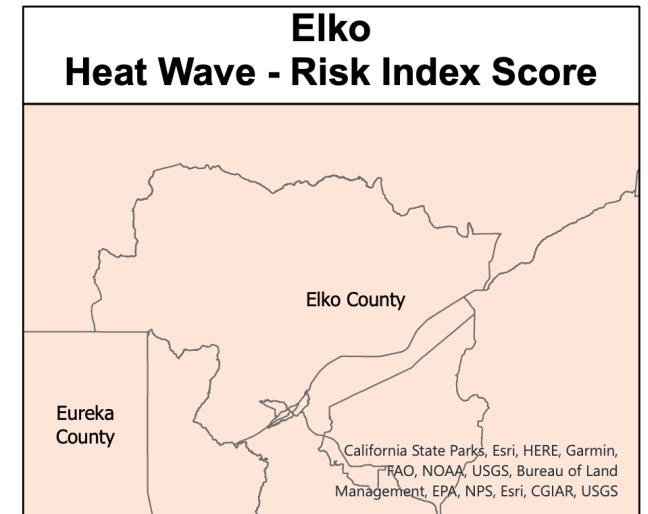
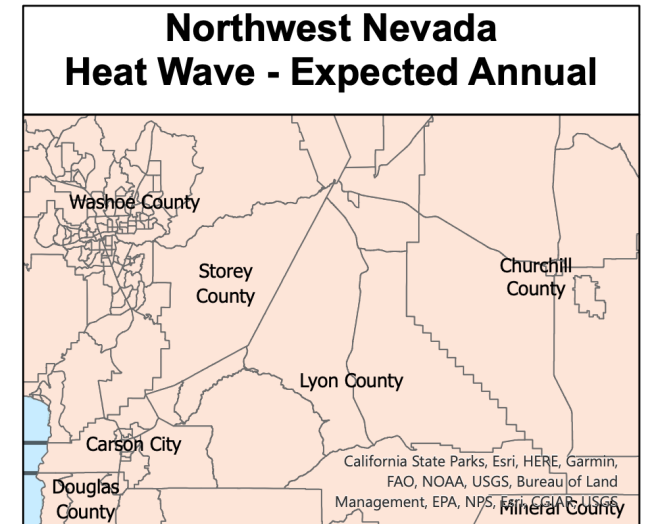
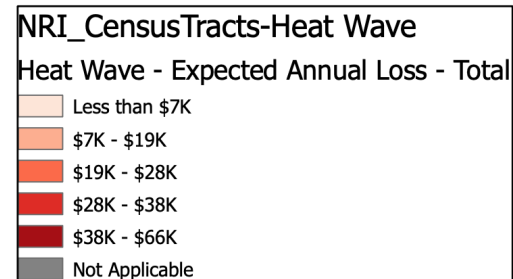
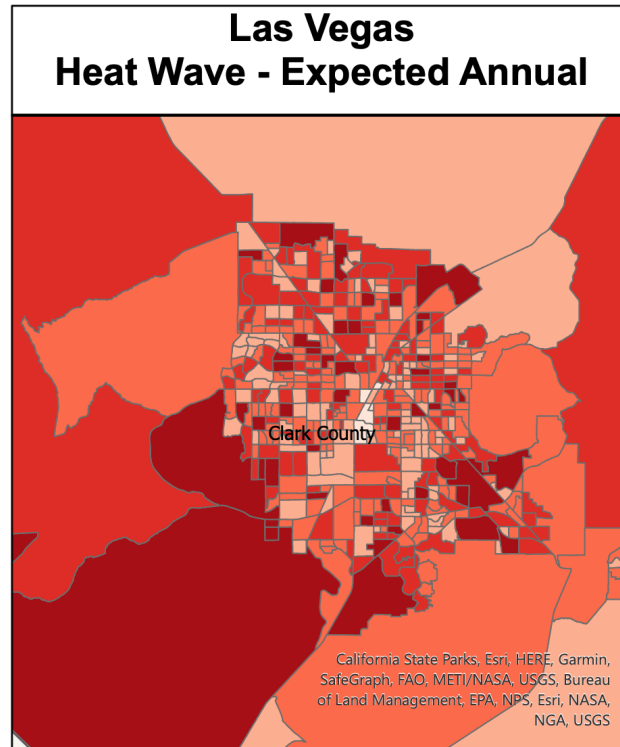


Social Vulnerability Index



Expected Loss

- From FEMA's National Risk Index database
- Request for FEMA to approve as “quantitative” expected loss – 2018 comment



Progress Update

First-Pass Reviews Complete

DOCUMENTS	OTHER ITEMS
Avalanche	NRI risk maps are in the Hazard folder as each is developed
Drought	Complete hazard profiles are in Working Documents folder
Epidemic	Updating HMP requirement boxes throughout Section 3
Expansive Soils	
Extreme Heat	
Hail & Thunderstorm	
Flood	
Land Subsidence & Ground Failure	
Landslide	
Severe Storm & Extreme Snowfall	
Tornado	
Tsunami / Seiche	
Volcano	
Wildland Fire	

Future Actions



**Complete hazard
profiles**

Submissions complete
by 2/13/2023

Follow-up with POCs
after updates



**Mitigation
Activity update –
2/13/23**



**Planning meeting
2 - 2/15/2023**



**Planning meeting
3 – 3/15/2023**



**Ranking of
hazards - TBD**



**Vulnerability and
loss assessment –
TBD**



**Build out section
3 - combine new
profiles**

Summary

Standardizing the style

- Based on existing style
- Capturing new style

Moving to national – level databases

- National Risk Index
- Social Vulnerability

Request for map-displayed quantitative losses

- FEMA requires quantitative impacts

3 of 19 hazard profile updates remain

- Earthquake
- HAZMAT
- Infestation

Look to wrap up hazard analysis in March

- Hazard Ranking
- New hazards such as pipelines and power failures?