# 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 wit 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
  - ¾ point
- Shadow
  - Right and bottom

**Tables**

- Label
  - Table Title
- Style

What preferences do you have?

Other?

# Update Methodology
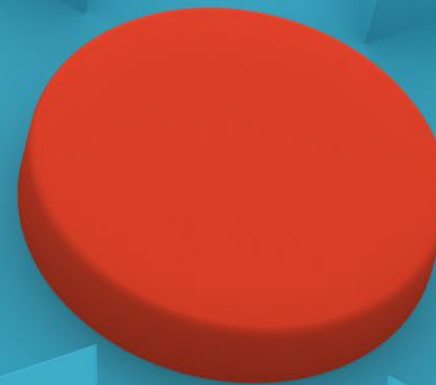
# Text Review

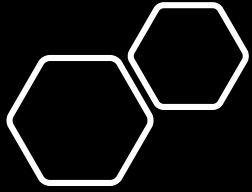| | | |
|---|---|---|
| Editorial review for standardization | Updating – NOT re-writing | Freshening up information |
| Consistent formatting | "XX" is a placeholder for items like figure numbers | The very last review will be for final formatting and numberin |

# Image Review

- Updating if older than 1 year

- Border: Black; ¾ point

- Shadow: Right and Bottom
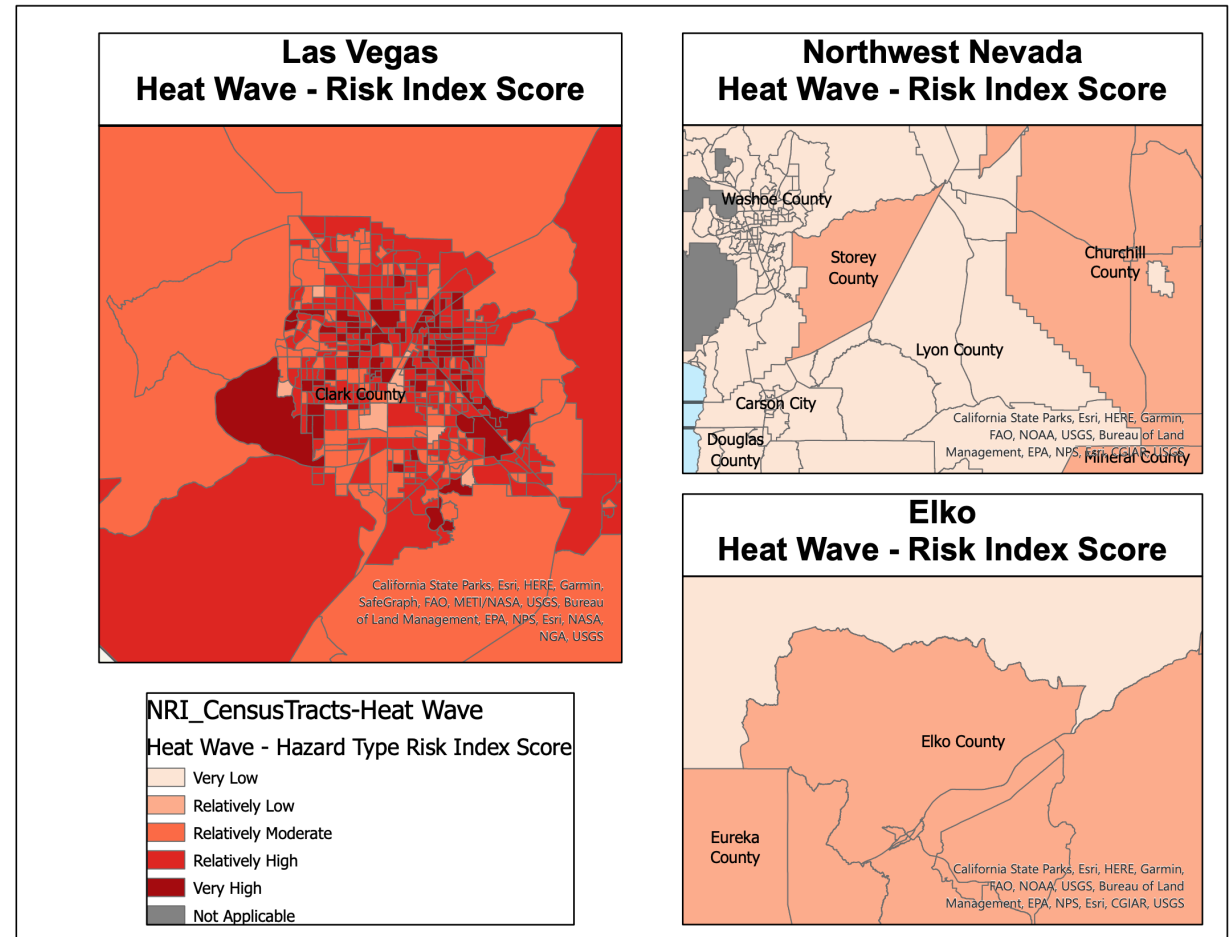
# Table Review

- 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 |

| 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<br>• Emerging Disease with Epidemic or Pandemic Potential;<br>• 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<br>• Alluvial Fan Flooding<br>• Flash Flood<br>• Riverine | Riverine Flooding | |
| Hail & Thunderstorms | Severe Weather<br>• Microburst<br>• Straight-Line Winds<br>• Thunderstorms & Lightning | • Hail<br>• Lightning<br>• Strong Wind | Do we want to Make this section "Severe Weather" or change to "Thunderstorm & Lightning" or leave it as is? |

| Legacy HMP | Nevada Threat & Hazard Guide | FEMA NRI | Comment / Question |
|---|---|---|---|
| Infestation | N/A | N/A | |
| Land Subsidence and Ground Failure | Geohazards<br>• Fissures and Subsidence | N/A | |
| Landslide | Floods, Landslides & Debris Flow<br>• Landslides & Debris Flow | Landslide | |
| Severe Storm and Extreme Snowfall | Extreme Weather<br>• Winter Storms & Extreme Cold | • Cold Wave<br>• Ice Storm<br>• 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<br>• Wildland Fire<br>• Wildland Urban Interface | Wildfire | |

| Legacy HMP | Nevada Threat & Hazard Guide | FEMA NRI | Comment / Question |
|---|---|---|---|
| Hazardous Materials | Chemical, Biological, Radiological, Nuclear & Explosives (CBRNE)<br>• Chemical<br>• Biological<br>• Radiological<br>• Nuclear<br>• 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<br>• 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<br>• Flash Flood | N/A | Do we want to out flooding along ditches from "Natural Hazards" and putting it into a "Technological Hazards" section |
| ??? | Infrastructure<br>• Natural Gas Pipeline Incident | | Do we want to add Natural Gas Pipeline Incident? |
| ??? | Infrastructure<br>• Power Outage | | Do we want to add Power Outage? |

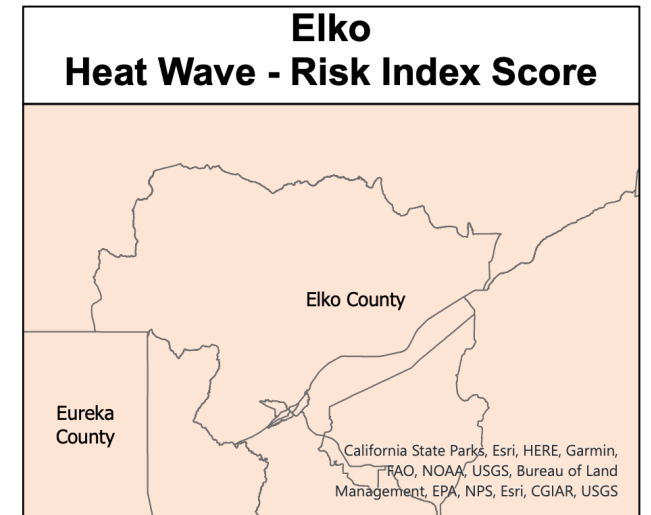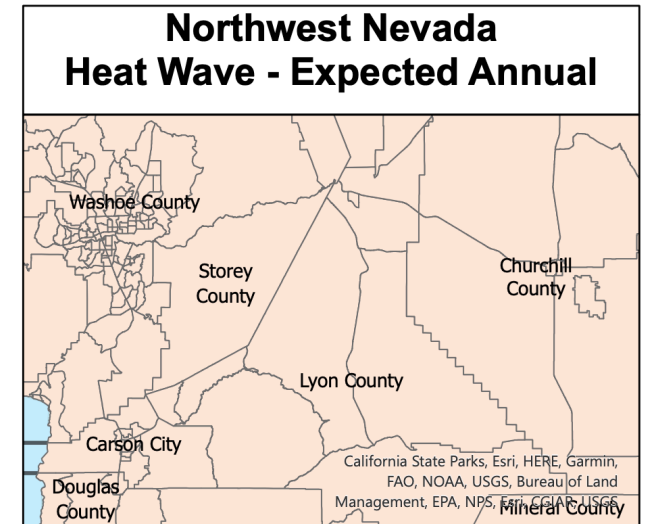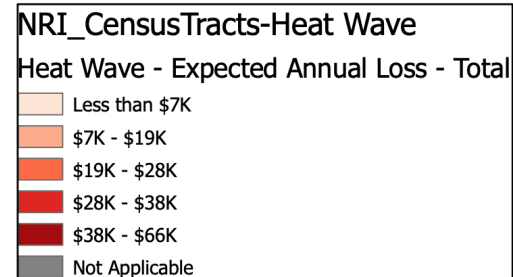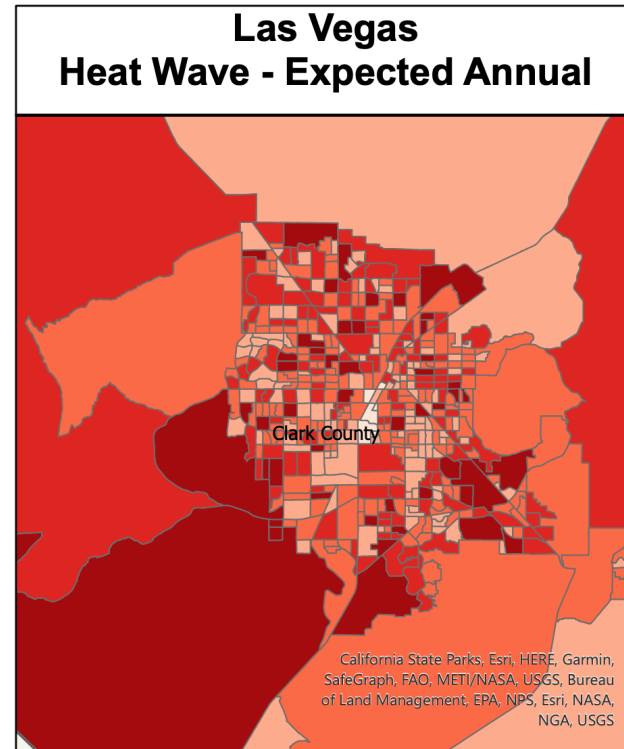# Baseline: FEMA's National Risk Index

**National Risk Index**
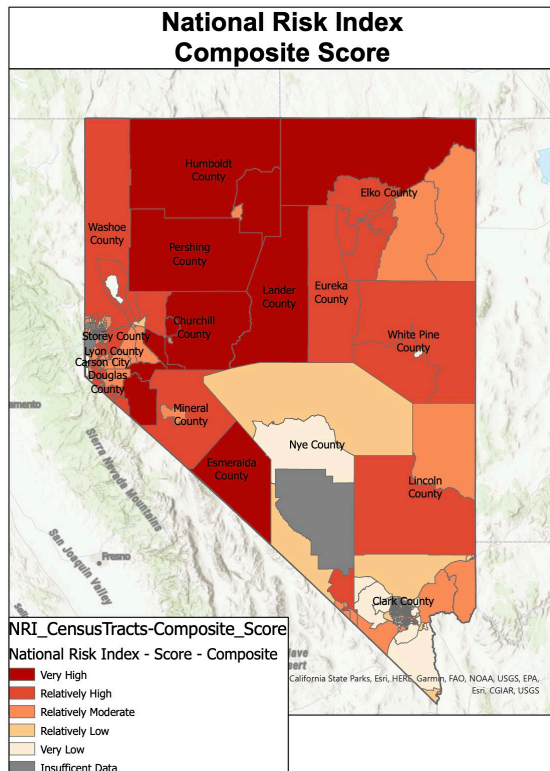
**Social Vulnerability Index**
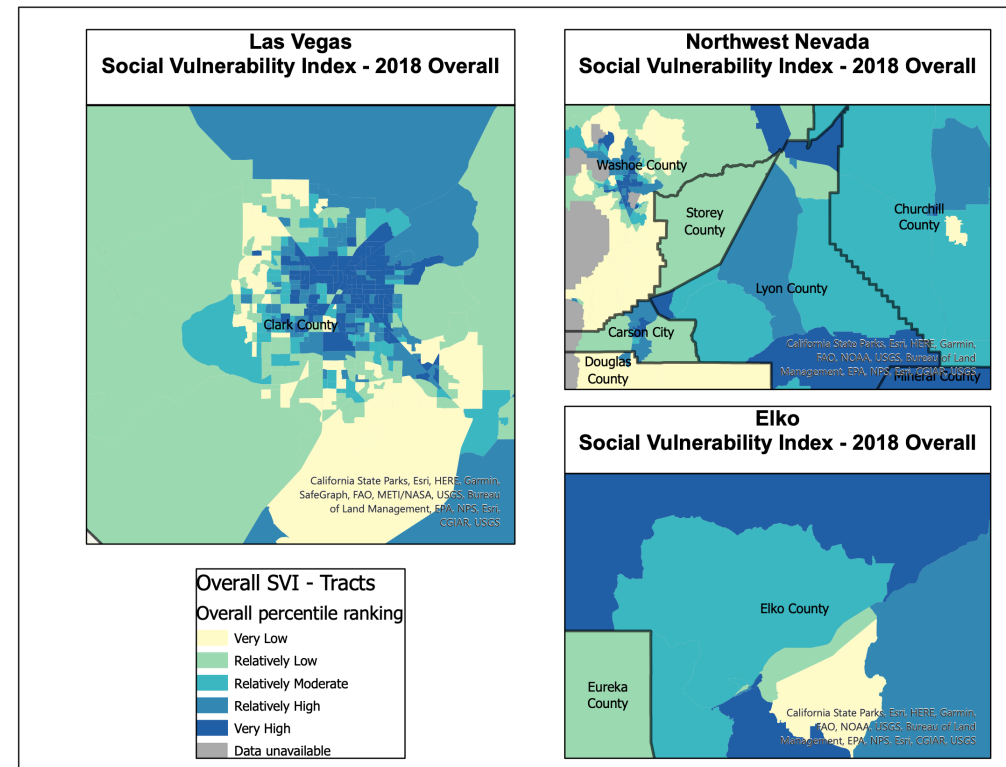
# Expected Loss

- 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?