



# Sagebrush Ecosystem Adaptive Management

2019

Opportunities for Conservation Actions  
& Annual Report







# Sagebrush Ecosystem Program

## Adaptive Management

### 2019

#### Overview:

1. Adaptive Management Overview (sprint)
2. Trigger Decision Process
  1. Population
  2. Habitat
3. Local involvement process
4. Questions

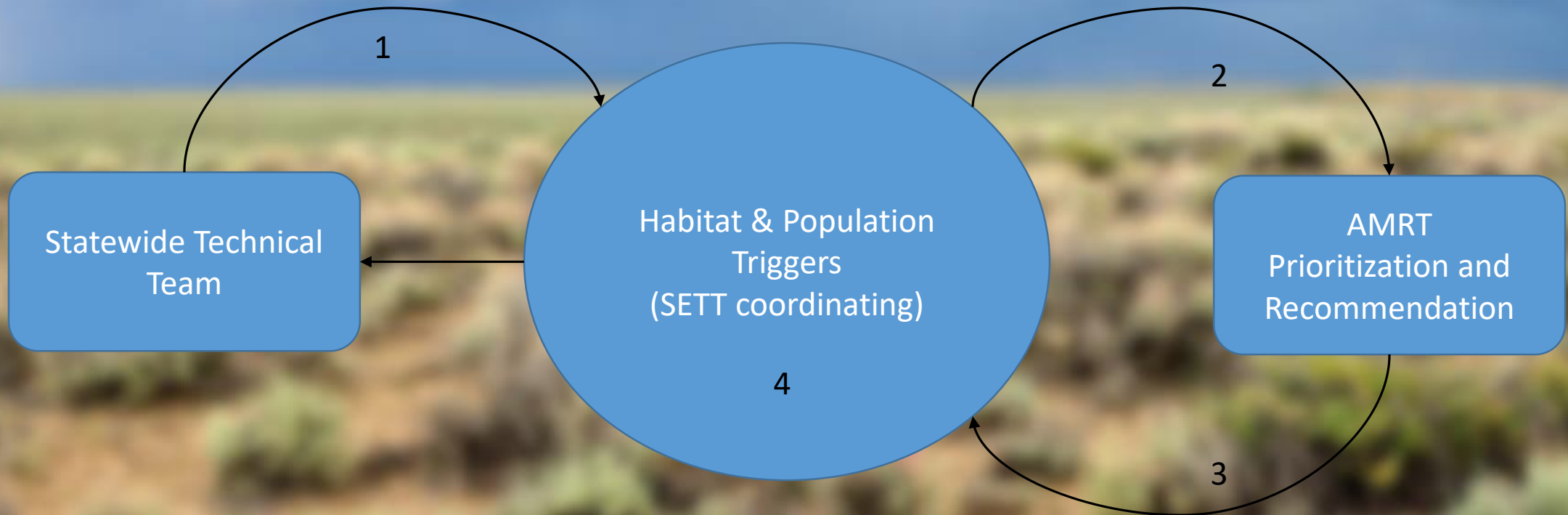


# Adaptive Management Overview

1. Statewide Technical Team moves identifies triggers:
  - Habitat warnings are habitat loss from:
    - Fire > 1000 acres
    - New anthropogenic disturbance
    - Natural disturbance
    - Fire risk
  - Population triggers supplied by USGS
2. Determine causal factor for both population and habitat triggers (Adaptive Management Response Team: AMRT)
3. AMRT identifies appropriate management responses & submit to SETT
4. SETT submits to relevant agencies
5. Monitor



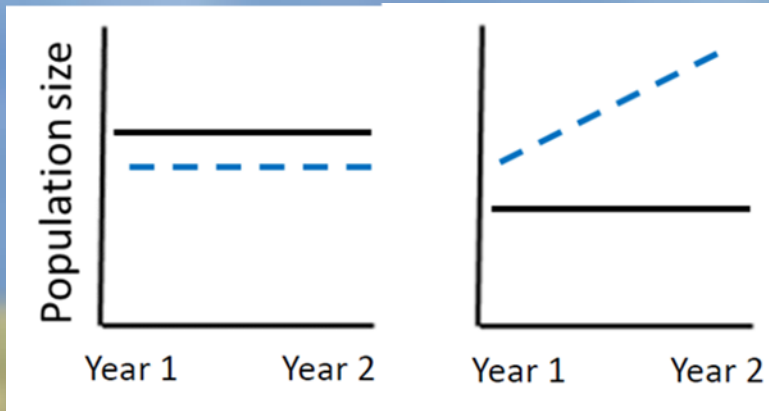
# Adaptive Management Overview





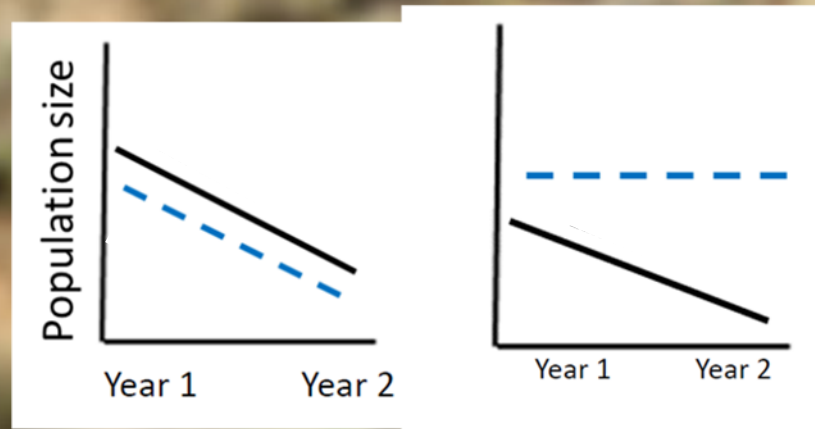


# Trigger Decision Process: *Population*



Stable: Yes  
Decoupled: No  
No Warning

Stable: Yes  
Decoupled: Yes  
No Warning



Stable: No  
Decoupled: No  
No Warning

Stable: No  
Decoupled: Yes  
**Warning**

Each PMU is analyzed against the local trend

Triggers are reached when populations decline beyond local trends

SETT receives list of triggers from USGS, automatically goes on trigger list.

This analysis is done using NDOW data, and supplied by USGS, periodically.



# Trigger Decision Process: *Habitat*

- All habitat warnings and triggers evaluated at PMU scale
  - Statewide Technical team is developing an initial, transparent ranking process
    - Importance of PMU to total population
    - Average Habitat Suitability Index score
    - Average R&R score
    - % affected by fire
    - Genetic connectivity
- } Final Score





# Trigger Decision Process

Example:

Gollaher PMU:

- 30% burned (10 yr) in a genetically important and dense area.
- Were the fires beneficial? Has the recovery been sufficient?
- AMRT may suggest no additional actions, and Statewide group will not trigger again.





# Local Group Involvement: Adaptive Management Response Team







# Local Group Involvement: AMRT

## Regional Adaptive Management meetings:

- Elko – October 8<sup>th</sup>
- Battle Mountain – October 22<sup>nd</sup>
- Winnemucca – October 23<sup>rd</sup>
- Ely – October 29<sup>th</sup>
- Reno – October 30<sup>th</sup>



# Local Group Involvement: AMRT

PMU Name	Trigger Type & Causal Factor*	Management Recommendations
<p><i>Please list the PMU name for which the management recommendations should be applied</i></p>	<p><i>List the Trigger type associated with the listed PMU and <b>if possible</b>, for each trigger type please list a hypothesis for the root cause of the trigger (habitat triggers may involve simply listing the acreages of wildfire, population triggers may be complex to explain)</i></p>	<p><i>Please list appropriate, realistic, and targeted responses for each causal factor. <b>Please limit/prioritize to a maximum of 5 actions per/PMU.</b> Actions need not be restricted to federal agencies (i.e., BLM/Forest Service), they may involve other governmental organizations (e.g., NDOW, County, State, etc.). Please identify which agencies the recommendations are meant for.</i></p>
<p><b>Virginia/Pahrah</b></p>	<p>Habitat Trigger</p> <p>Multiple wildfires in 2018 (1), 2017 (1), and 2016 (6) have contributed to habitat declines (~147,000 acres)</p>	<p>The following actions are recommended:</p> <ol style="list-style-type: none"> <li>1. Increased funding for re-vegetation efforts in Tule and Anderson fire footprints. Efforts should be directed towards the Little Valley and Mahogany Flat, projects in Spanish Flat are ongoing. (BLM)</li> <li>2. Wild horse levels should be reduced to AML (BLM)</li> <li>3. Annual invasive grass levels are extremely high around Winnemucca Ranch Rd in the vicinity of upper dry valley. Consider increased funding for weed treatment and targeted grazing. (BLM, Washoe County)</li> </ol>
<p><b>Massacre</b></p>	<p>Population Trigger</p> <p>Extreme drought conditions have contributed to population-level stress. Combined with drought conditions, animal use of late brood-rearing areas have led to wet meadow habitat declines which is a limiting factor for sage grouse recruitment.</p>	<p>The following is recommended:</p> <ol style="list-style-type: none"> <li>1. Provide infrastructure for limited wet meadow use in the Cherry and Lost creek areas. Fencing that allows for more control of animal use and funding for alternate water sources are what is needed in these areas. (BLM)</li> </ol>





# Local Group Involvement: AMRT

What happens to the information?

- BLM Integrated Program of Work Prioritization & Management
  - Need to be received by February
- Forest Service
- Will help the FS prioritize areas for management.
- Will help inform compliance with land management plan direction.
- Will provide information that can be used to compete for potential special funding sources.
- Grant applications
  - Group diversity can help justify funding opportunities



# Local Group Involvement: AMRT

- Responses to management recommendations will be listed in annual trigger summary report.
- No action, triggers remain highlighted.
- If a local group determines a habitat trigger is no longer warranted due to recovery or management actions, it may be removed from the list in consultation with the Statewide Technical Team and as reviewed by the SEC.
- If a local group can't determine a plausible causal factor, or potentially effective management actions for a population trigger, it may be lowered in priority through consultation with the Statewide Technical Team and as reviewed by the SEC.

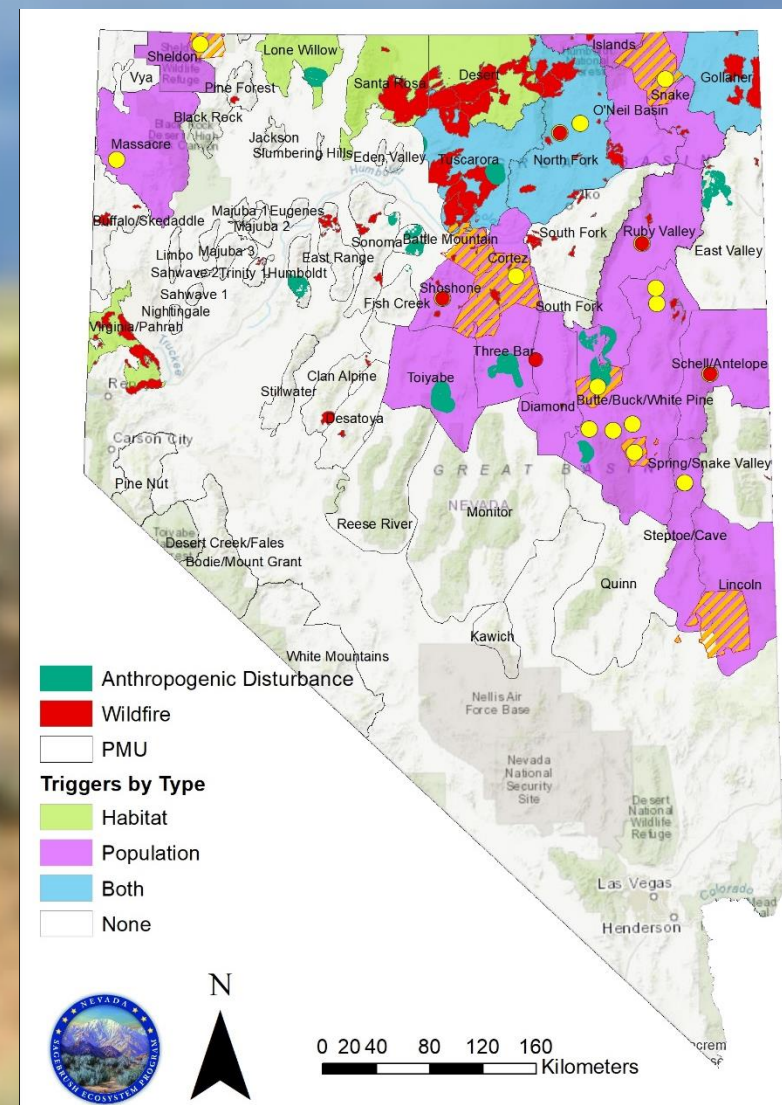




# Nevada Trigger Summary



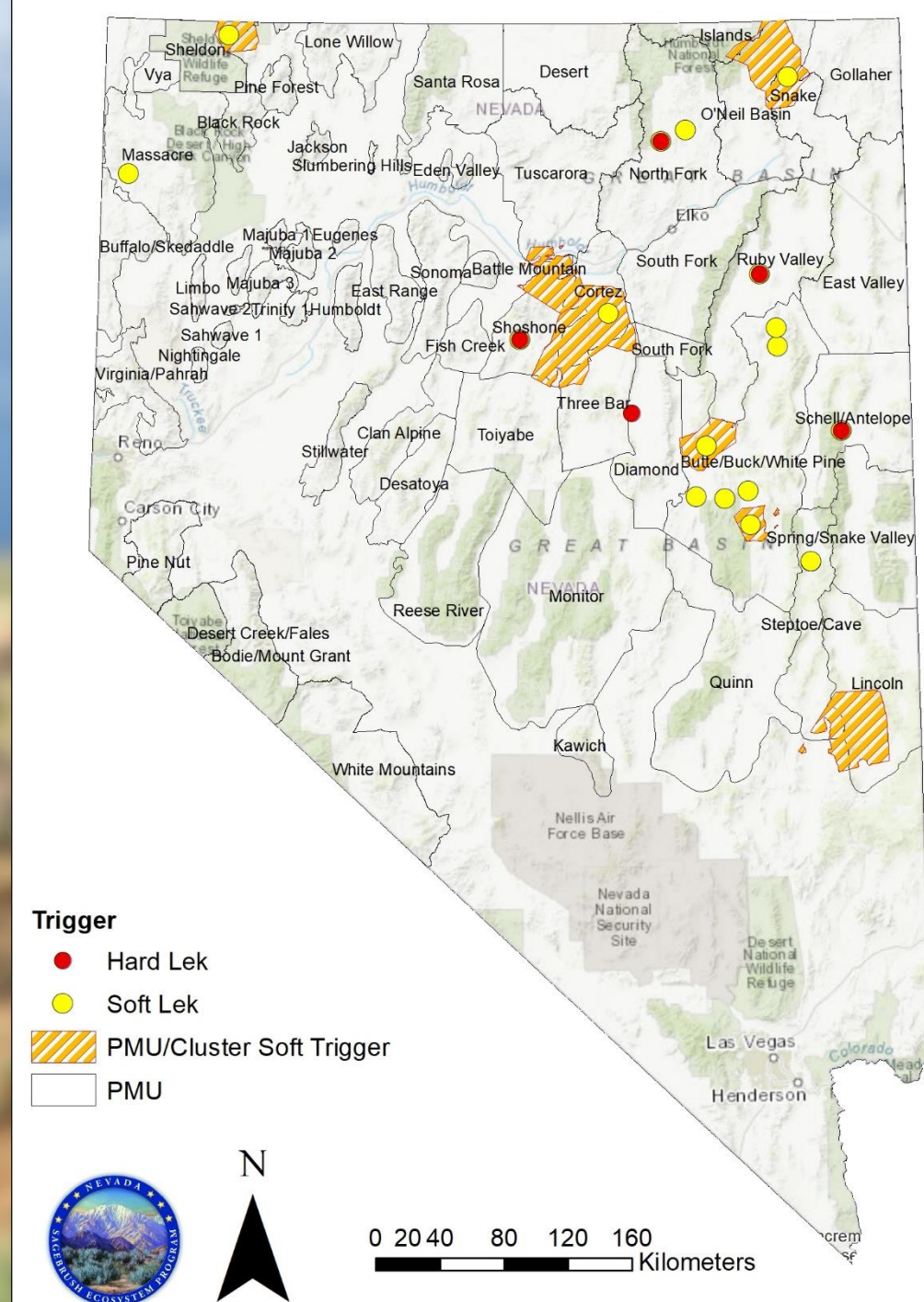
- 22 Total PMUs affected
- Population
  - 17 Lek Triggers
  - 7 Cluster/PMU Triggers
  - 18 PMUs affected
- Habitat
  - 7 Habitat Triggers
  - 7 PMUs affected





# Nevada Trigger Summary: Population

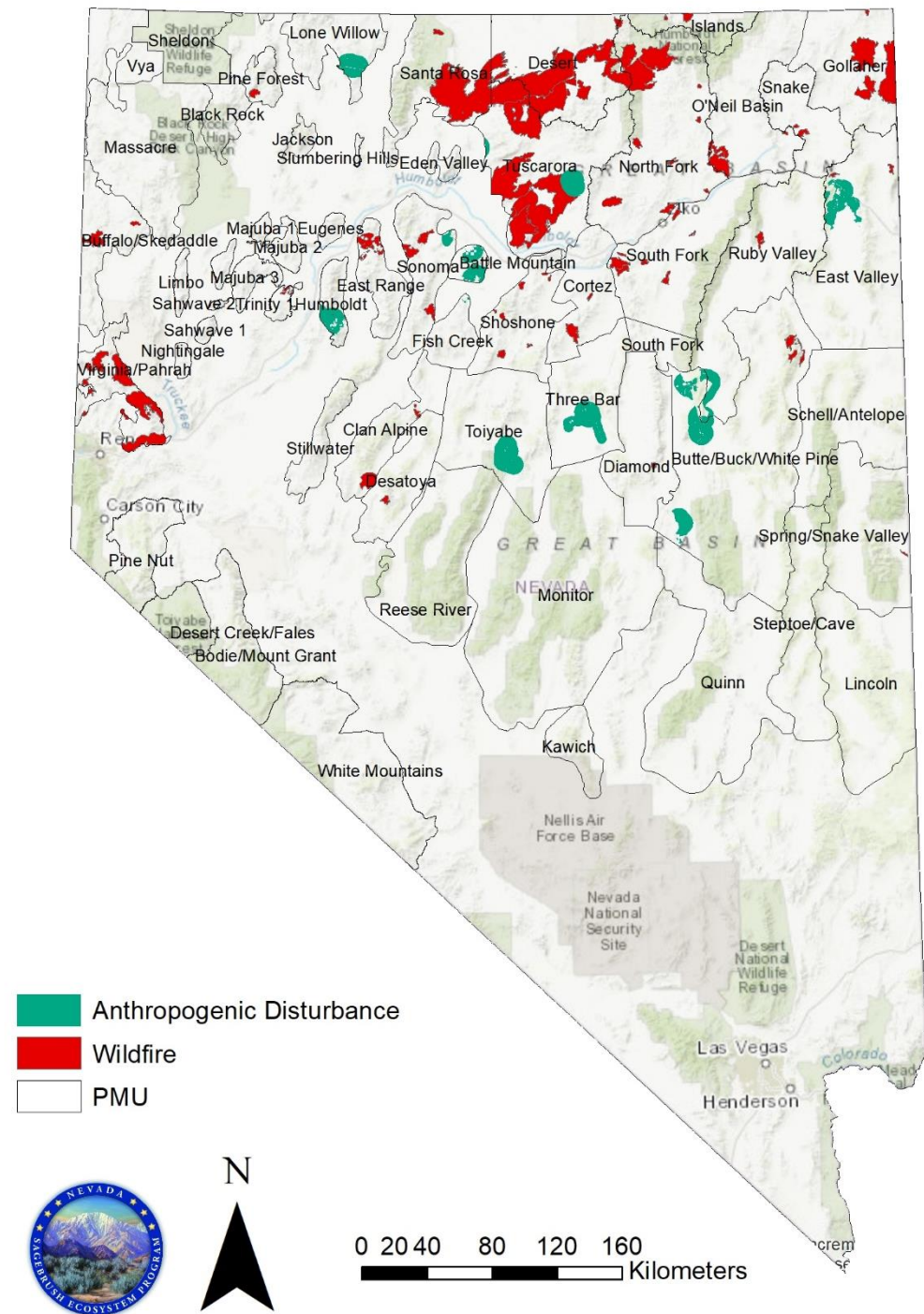
- 12 Soft Lek Triggers
- 5 Hard Lek Triggers
- 7 Soft Cluster/PMU Triggers
- 18 PMUs affected





# Nevada Trigger Summary: Habitat

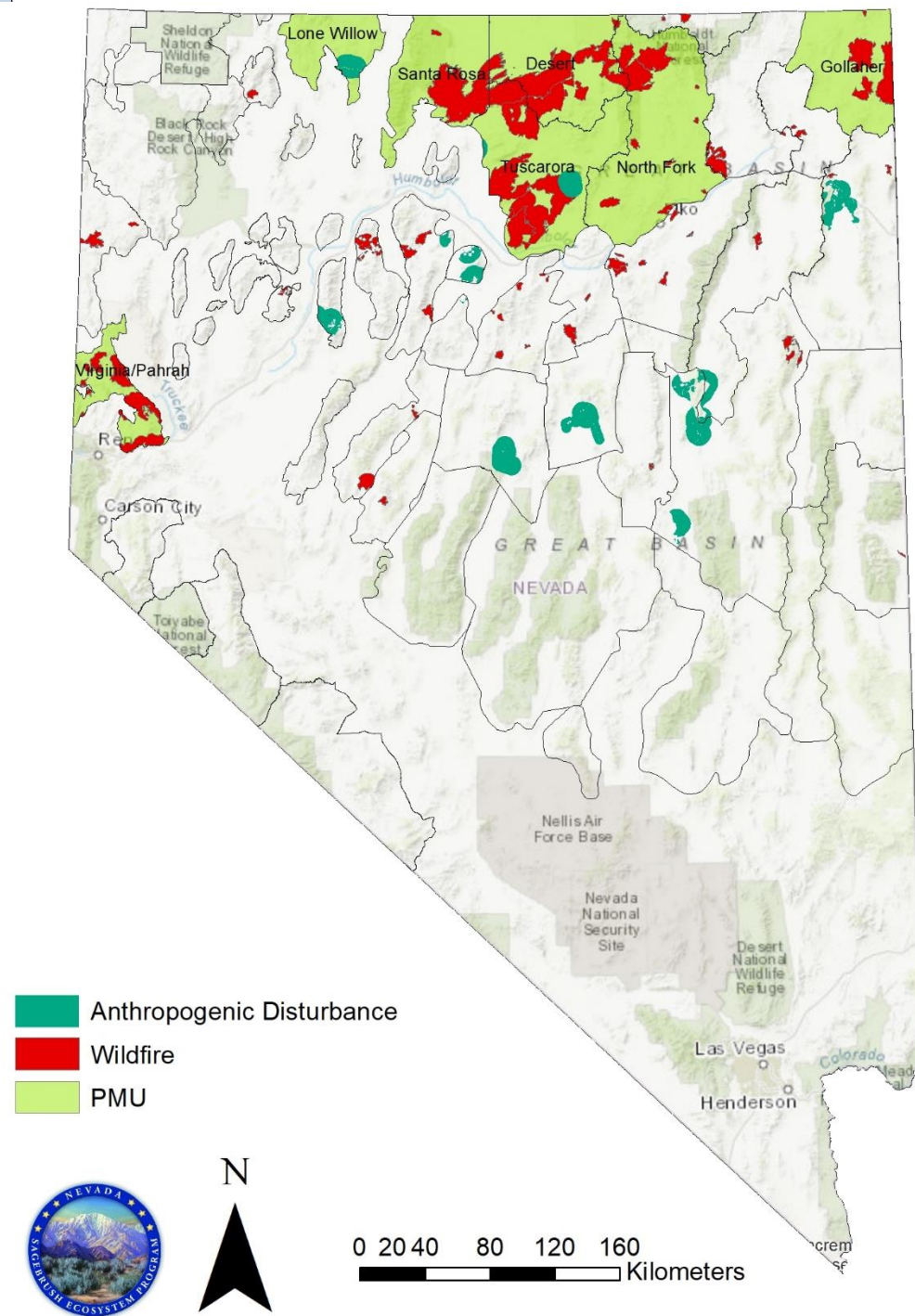
- Many Habitat Warnings
  - Wildfires 2016-2018
  - New CCS analyzed anthropogenic disturbance





# Nevada Trigger Summary

- 7 Identified Habitat Triggers
- 7 PMUs affected

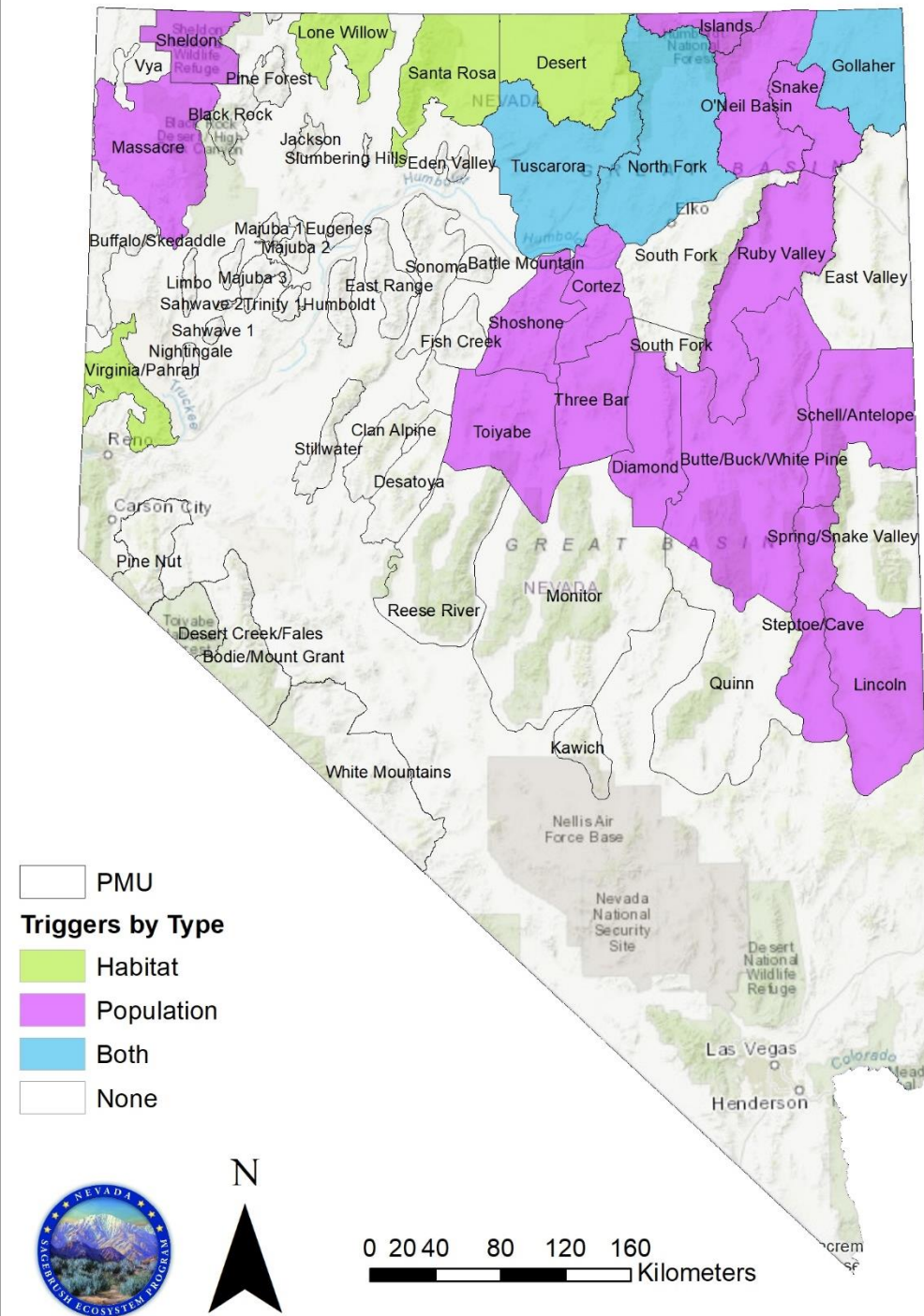




# Nevada Trigger Summary

- PMU Triggers by Type

- 4 Habitat only
- 15 Population only
- 3 both Habitat and Population





# Nevada Trigger Summary

