

November 6, 2013

# **PINE NUT LAND HEALTH PROJECT**

# WHAT THIS PROJECT DOES NOT DO

- Authorize the use of herbicides in the Pine Nut Mountains.
- Change the management of wild horses in the Pine Nut Mountains.

# PUBLIC INVOLVEMENT TO DATE

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- A 30-day public scoping period was held from April 3 to May 2, 2013.
- A public workshop was held on April 11, 2013 with 14 people in attendance.
- The BLM received 12 comments to consider.

# RESOURCE ANALYSIS

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The BLM reviewed 35 resource categories ranging from environmental justice to vegetation.

Twelve resources “may be affected” by the Project and were analyzed in the environmental assessment.

Two alternatives were evaluated, No Action (No Change) and the Proposed Action.

# PURPOSE AND NEED

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# PURPOSE

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- Restore and maintain sagebrush habitat;
- Restore and maintain riparian plant communities;
- Restore and maintain wet meadows and springs;
- Protect and enhance historic pinyon-juniper woodland habitat;

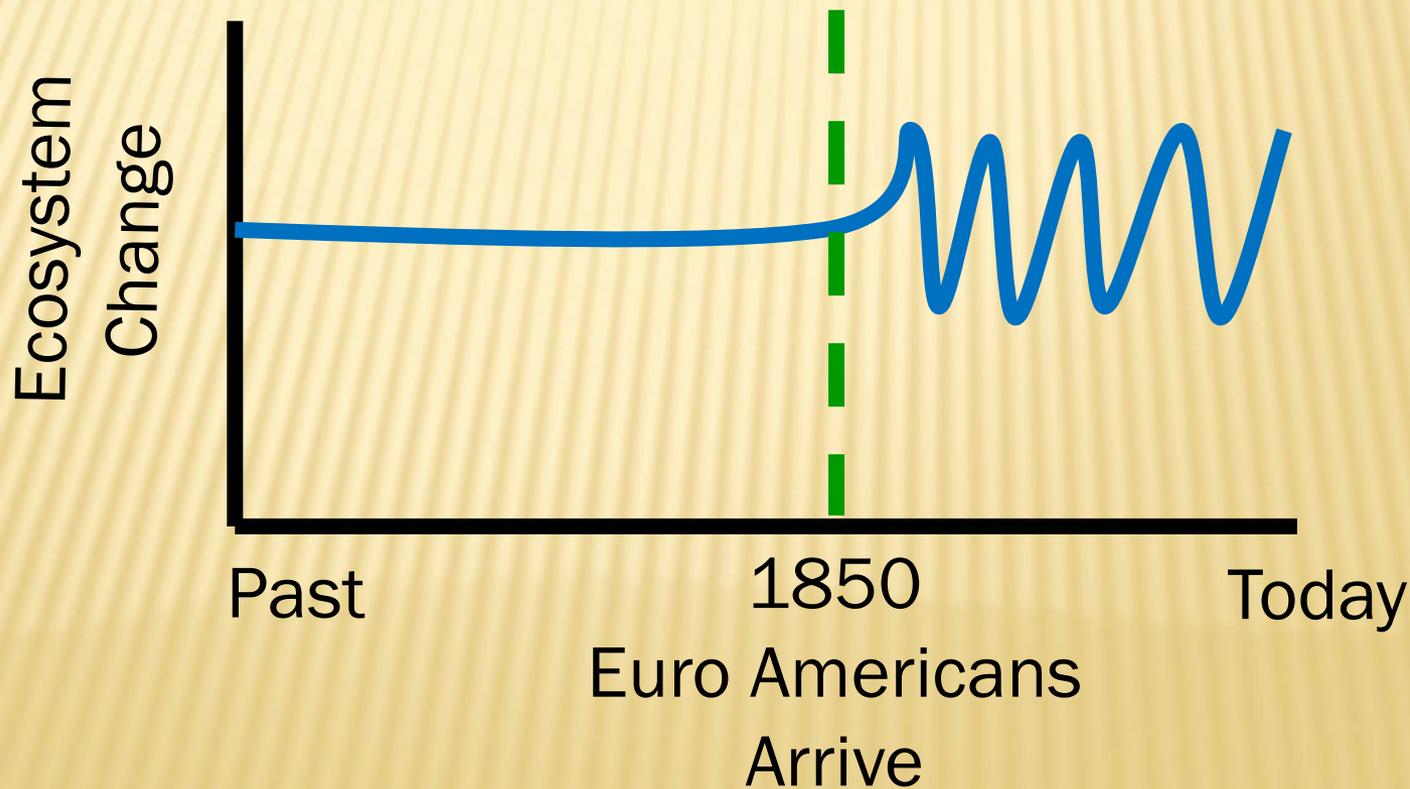
# PURPOSE

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- Reduce the potential of large-scale high severity wildland fire;
- Provide for public and firefighter safety and protection of property and infrastructure; and
- Provide woodland products to the public, Tribes and commercial entities.

# Ecosystem Dynamics

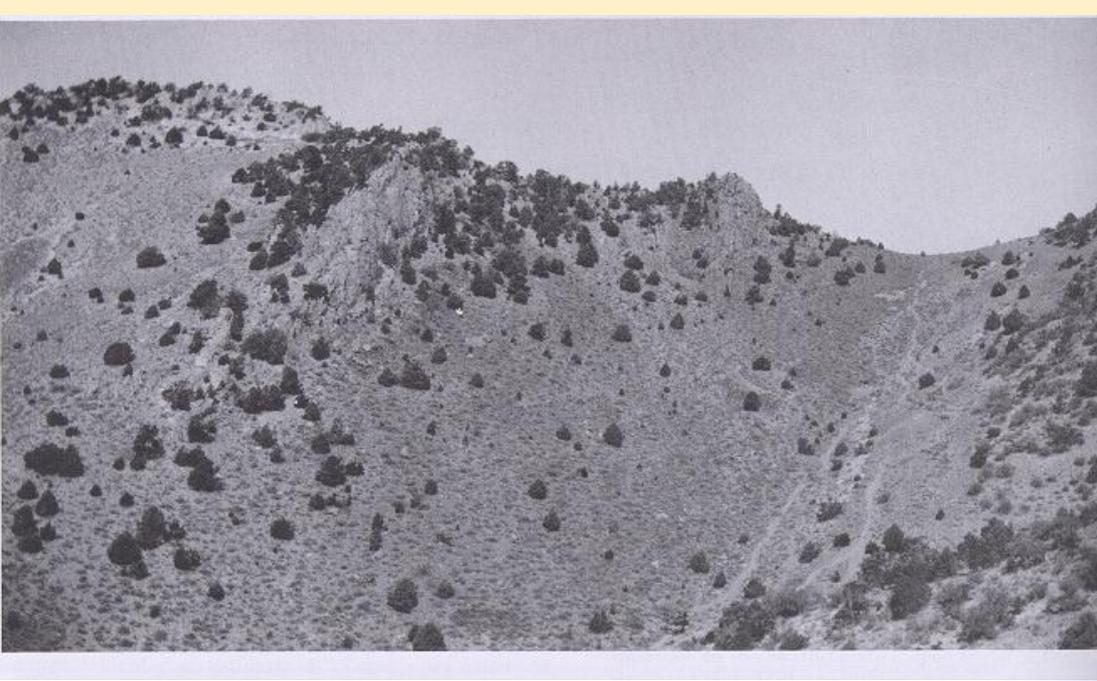
- Ecosystems have always been dynamic.
- Euro American settlement brought with it new causes of change.



An aerial photograph showing a landscape after a wildfire. The ground is covered in dark, charred soil and ash. A dirt road winds through the area. In the center, there is a small house with a brown roof and a red barn. A stream flows through the lower part of the image. The trees are mostly dead or charred, with some green trees remaining. The overall scene is one of devastation and recovery.

Sometimes an ecosystem  
changes occur overnight...

Ray May Fire (2011)

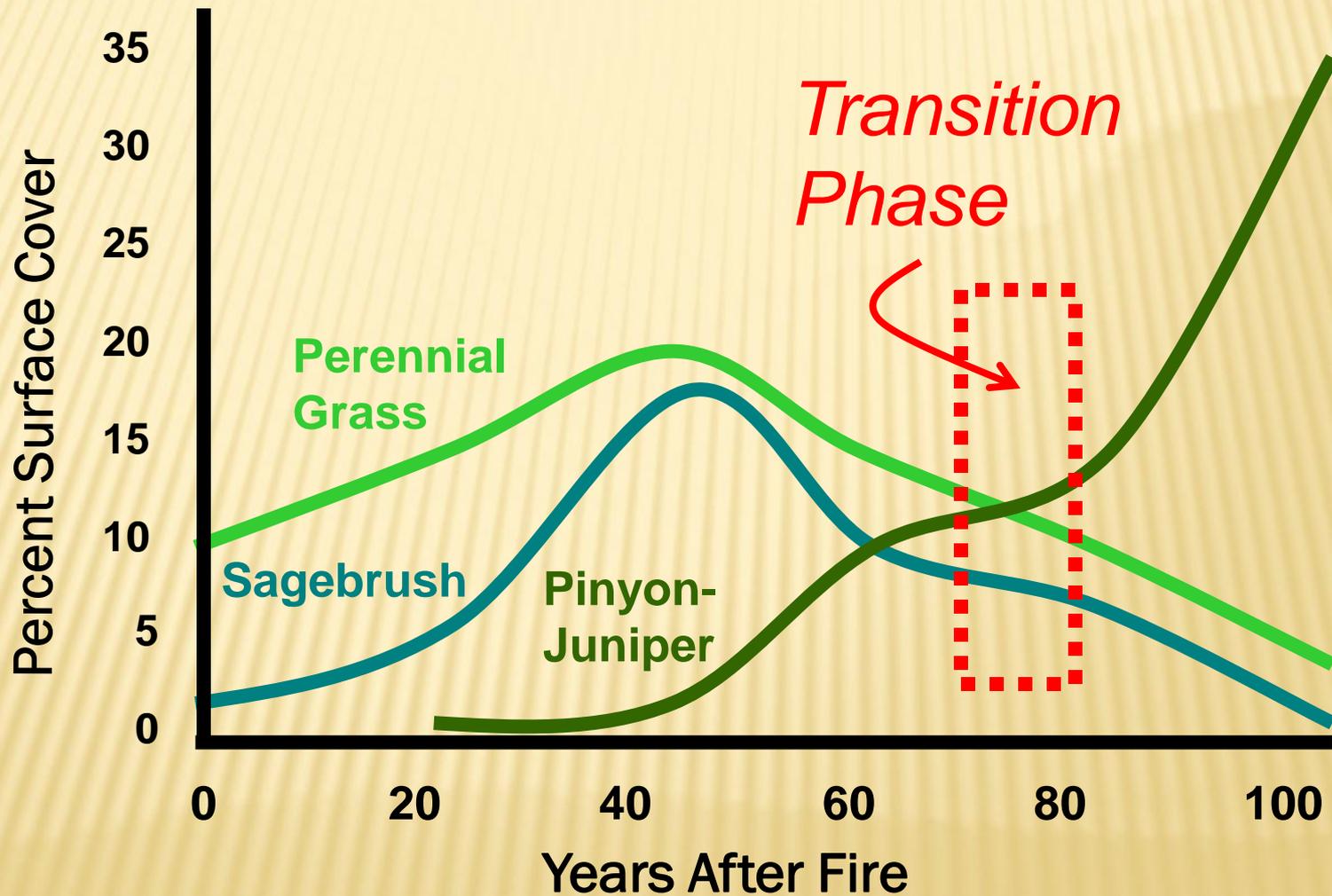


Sometimes  
they are  
subtle, taking  
many years to  
detect ...

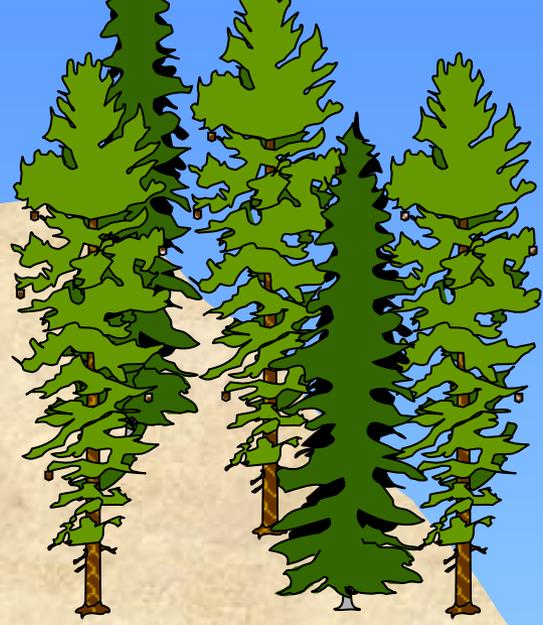


Same scene,  
100 years apart

# VEGETATION RESPONSE FOLLOWING FIRE



Adapted from Barney and Frischknecht 1974

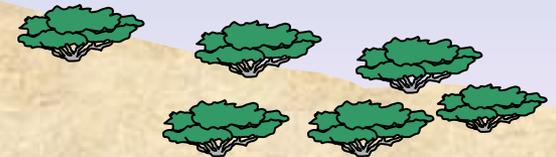


Jeffrey Pine - White Fir Forest  
7 to 17 years

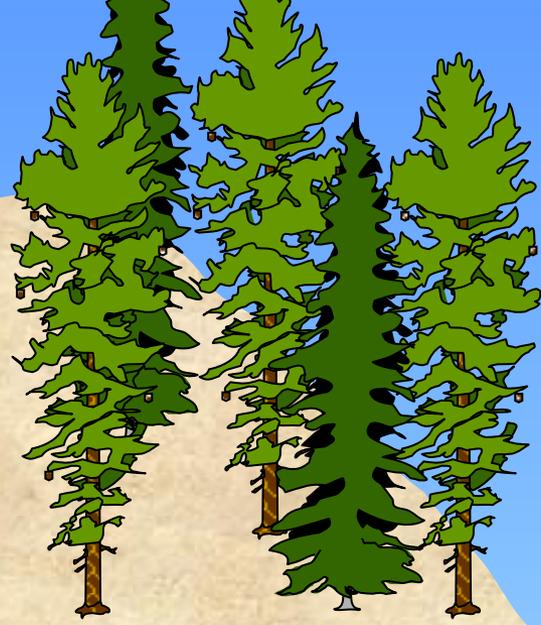


Pinyon - Juniper Woodland /  
Mtn Big Sage  
12 to 25 years

Wyoming Big Sagebrush  
+50 years



Presettlement  
Mean Fire Intervals



Jeffrey Pine - White Fir Forest

7 to 17 years

No Fire Since 1870



Pinyon - Juniper Woodland /  
Mtn Big Sage

12 to 25 years

Fire Return Intervals

Greatly Increased

Wyoming Big Sagebrush

+50 years

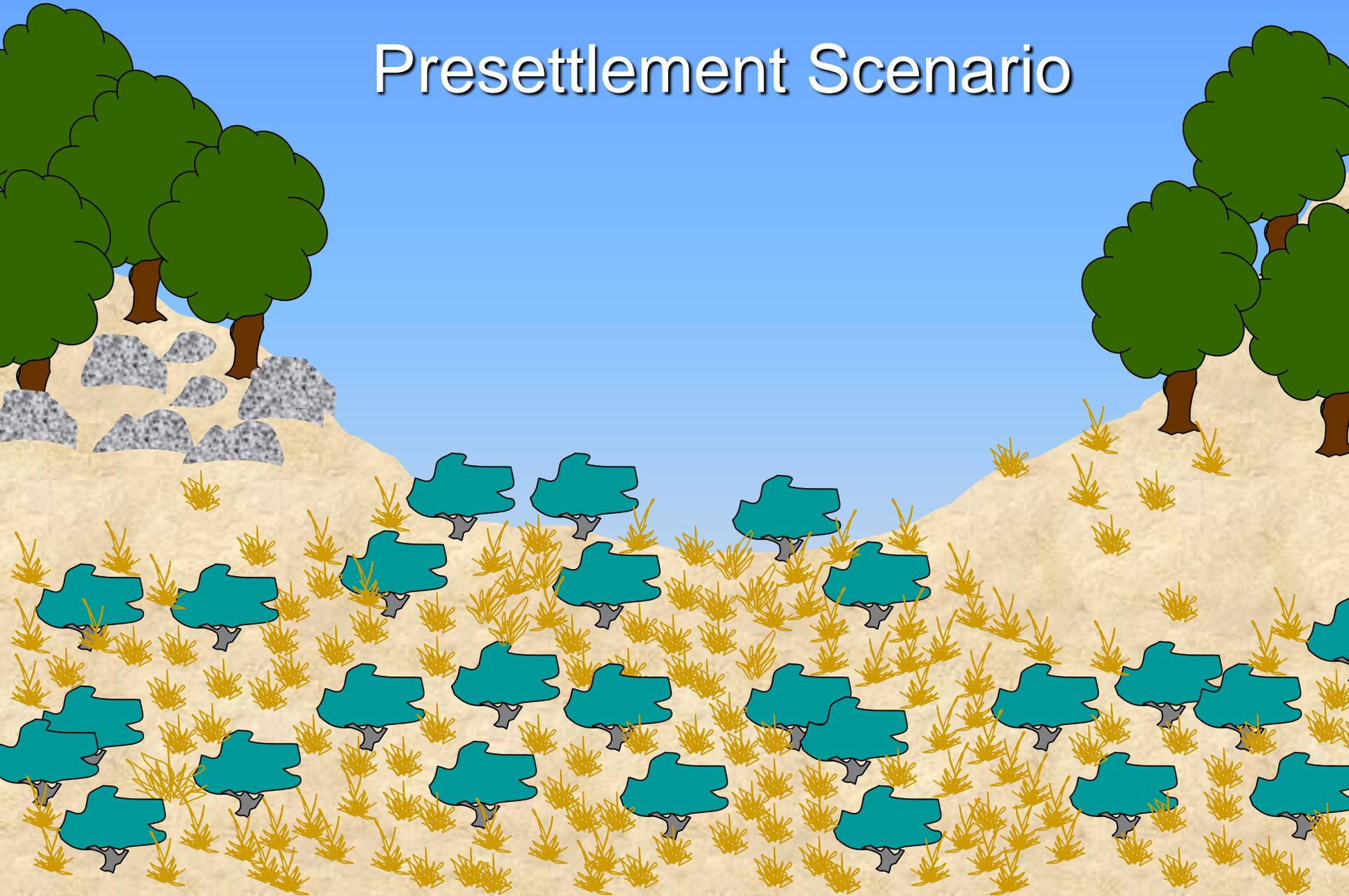
Fire Return Intervals

Greatly Shortened

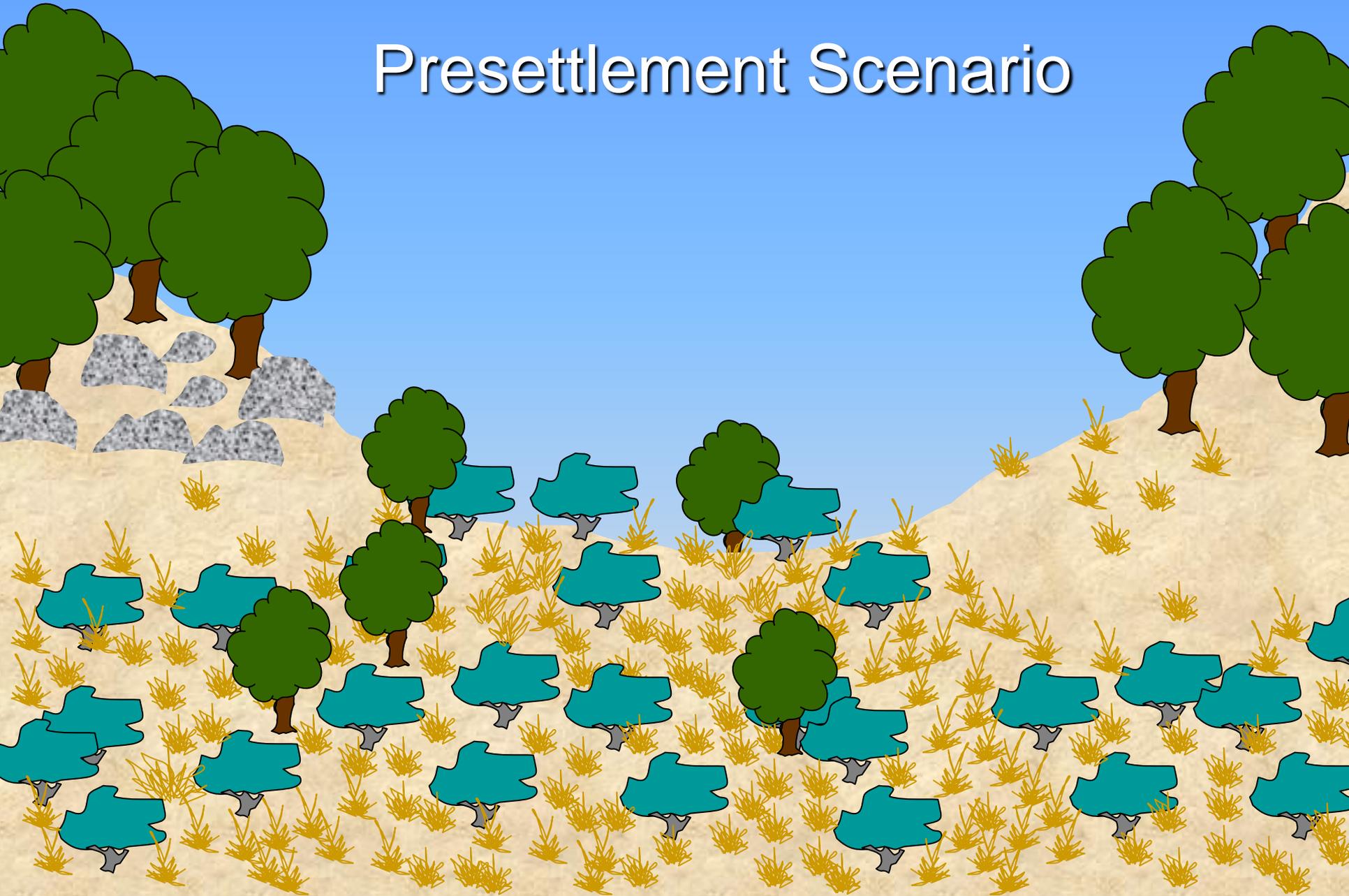
Contemporary  
Mean Fire Intervals



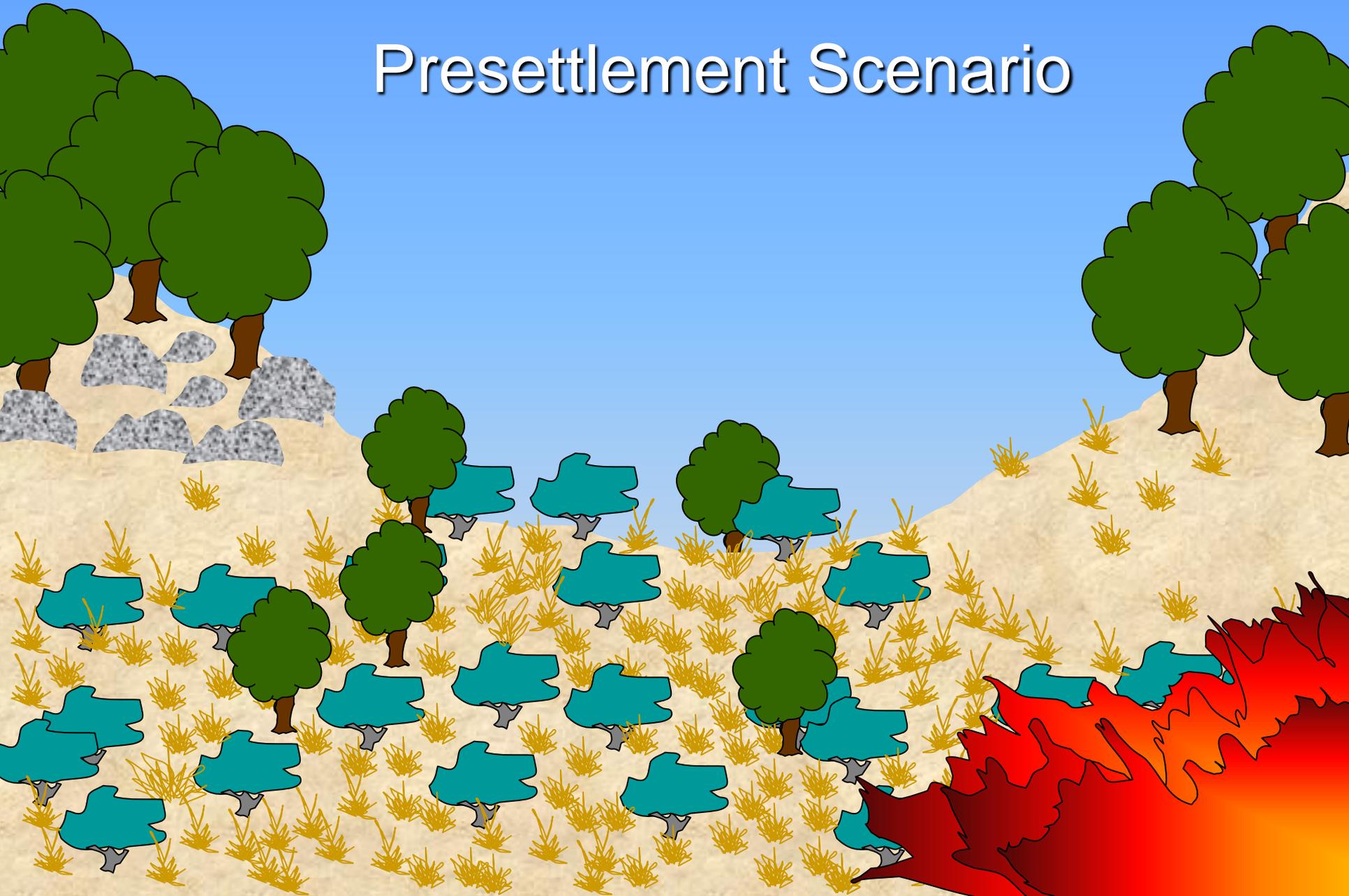
# Presettlement Scenario



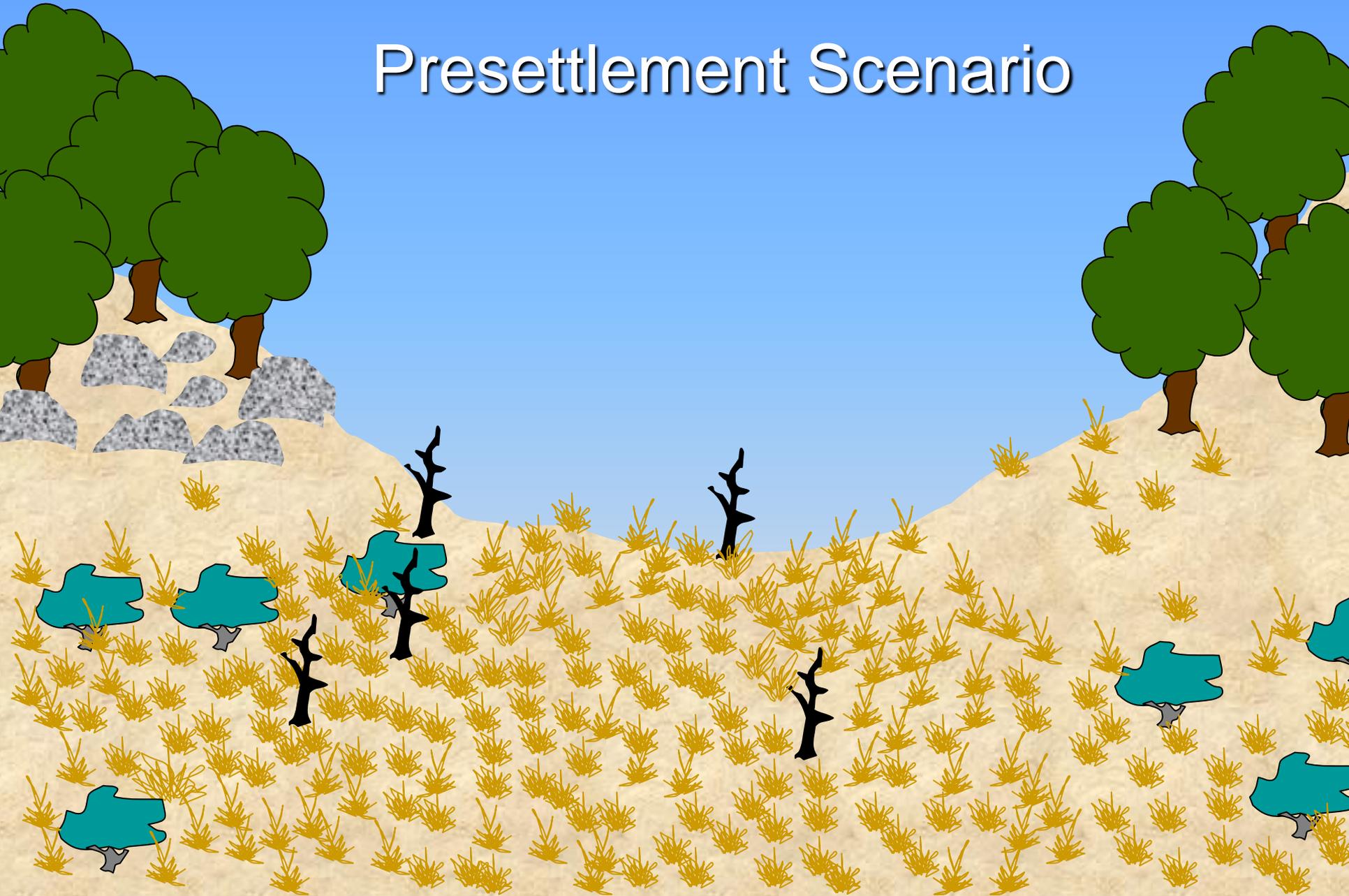
# Presettlement Scenario



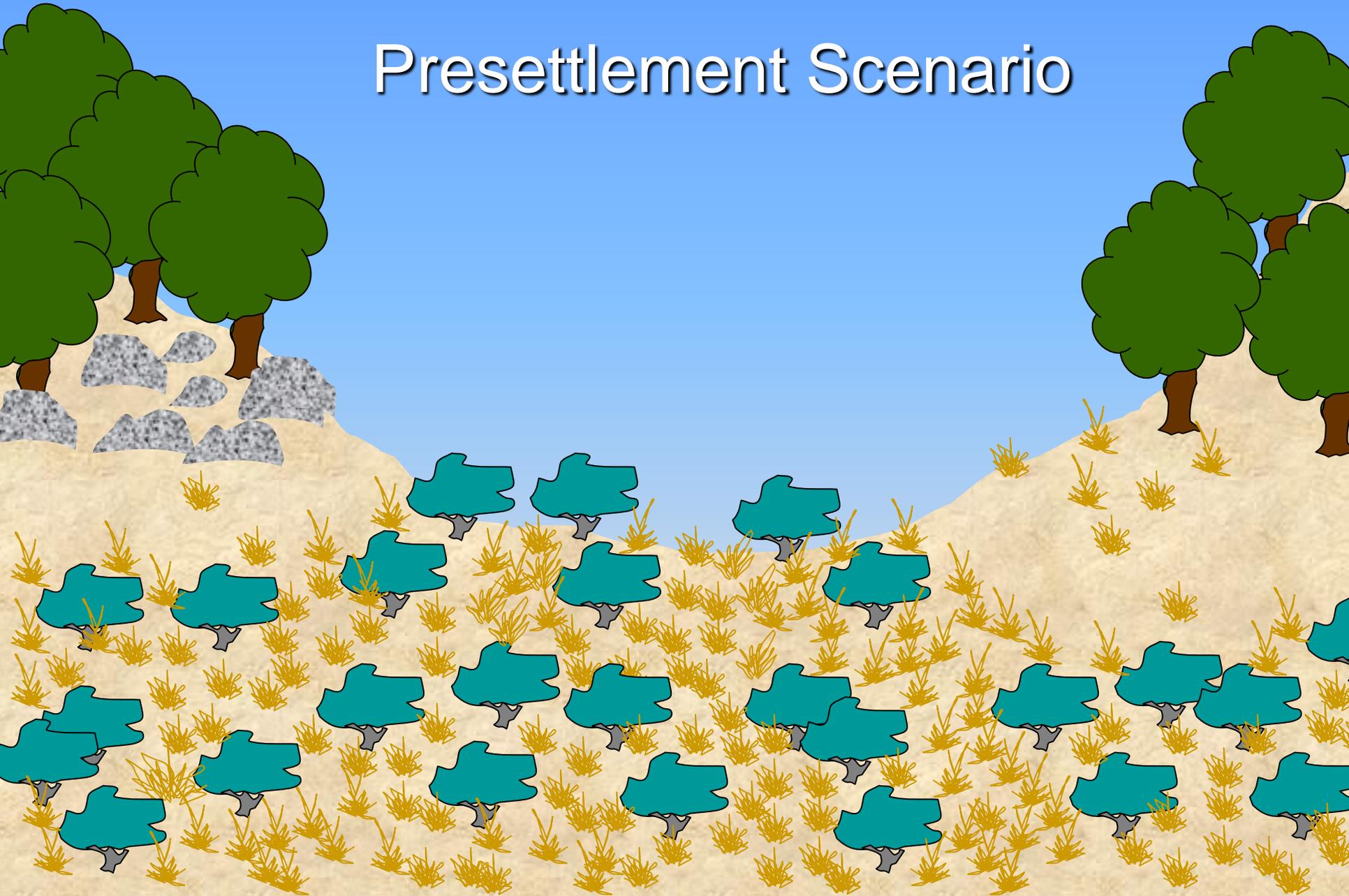
# Presettlement Scenario



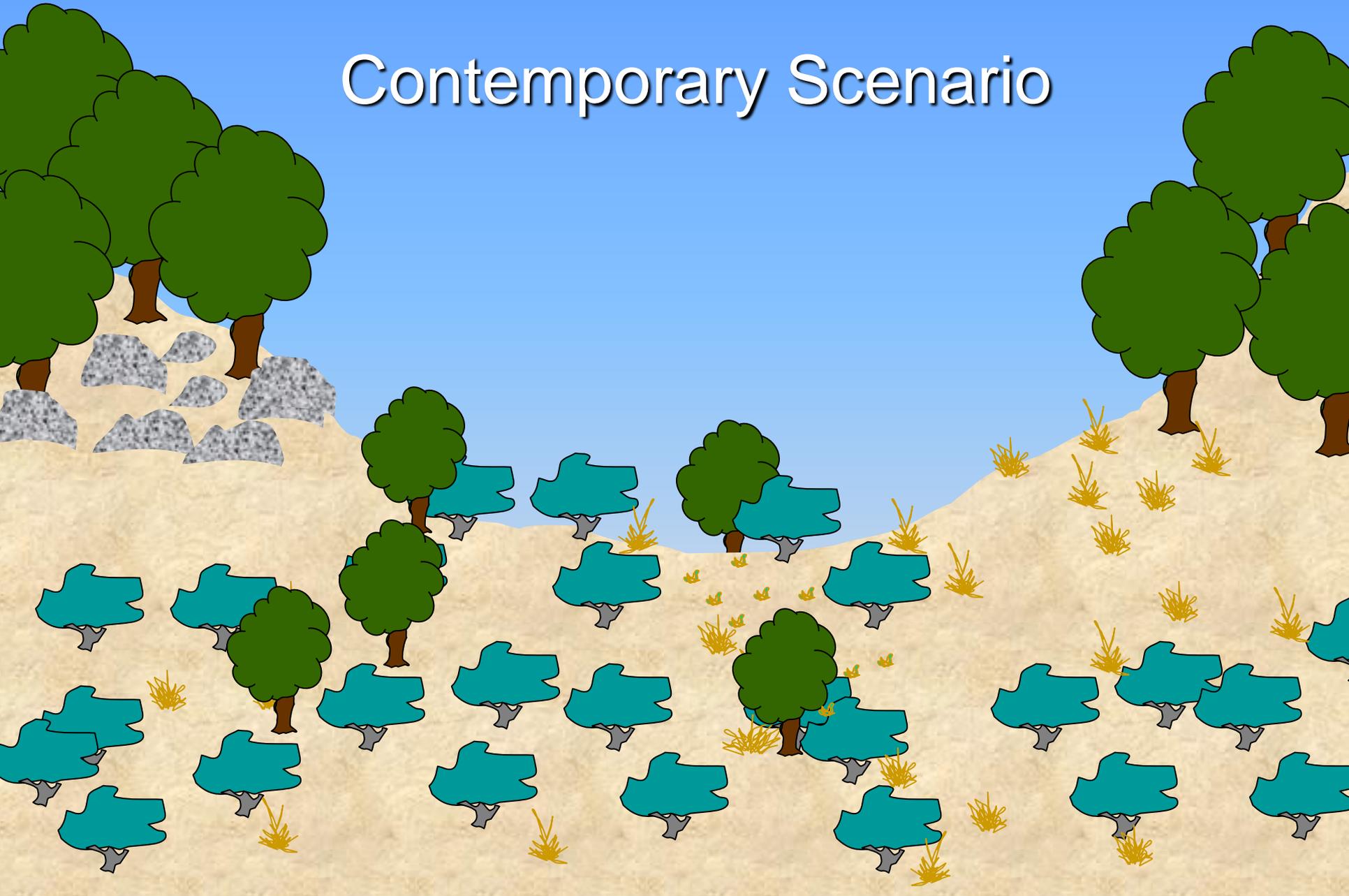
# Presettlement Scenario



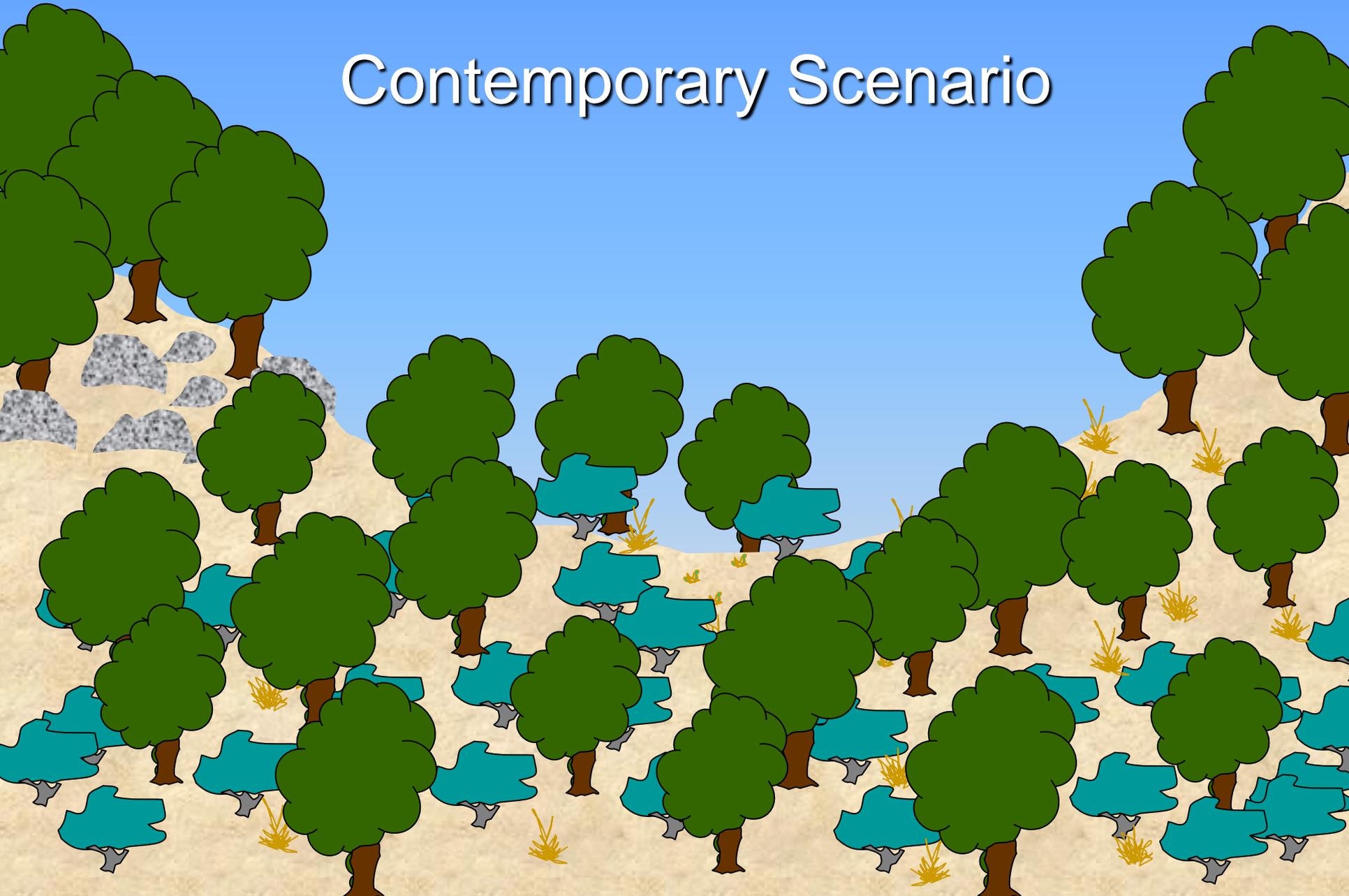
# Presettlement Scenario



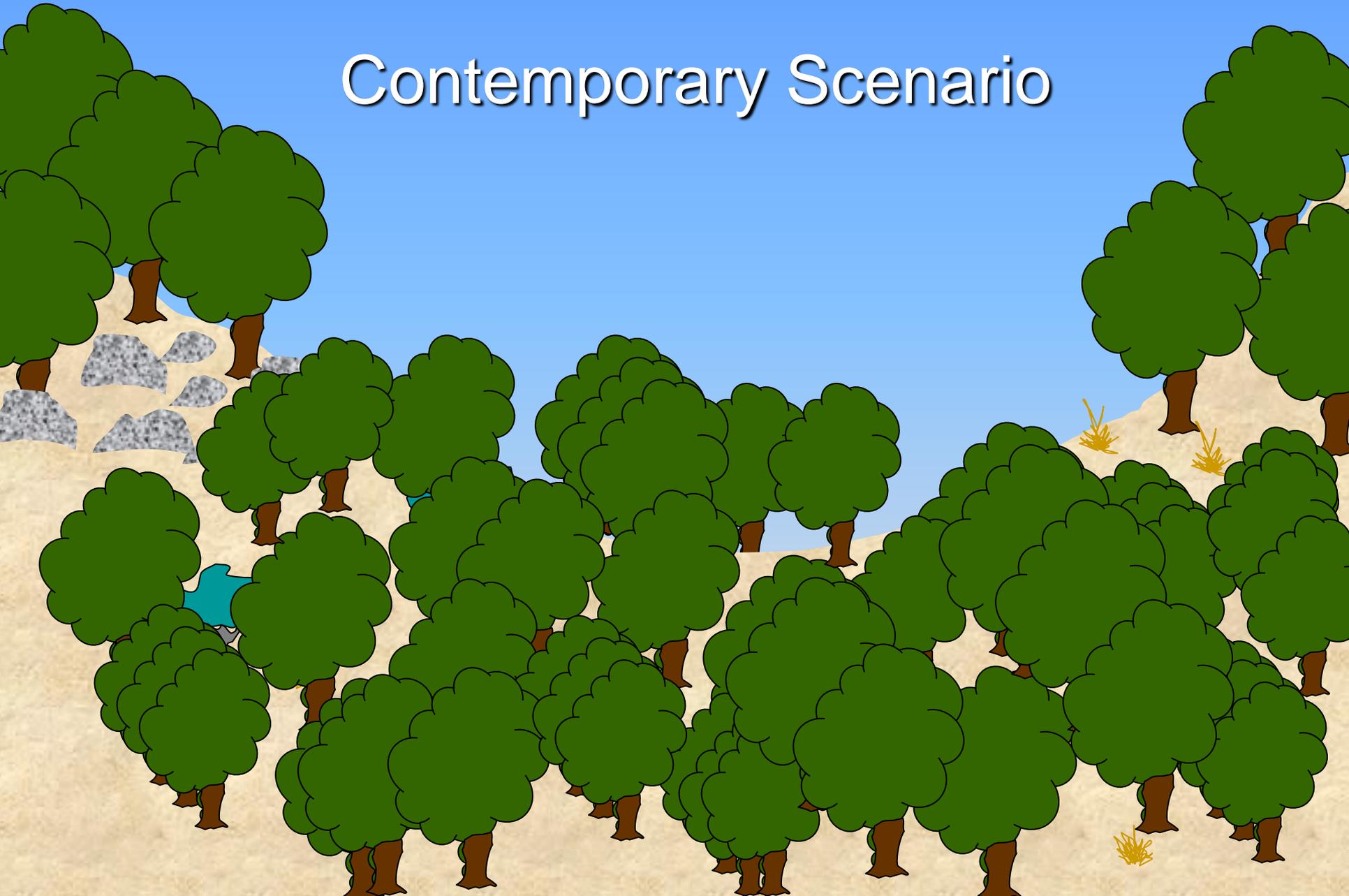
# Contemporary Scenario



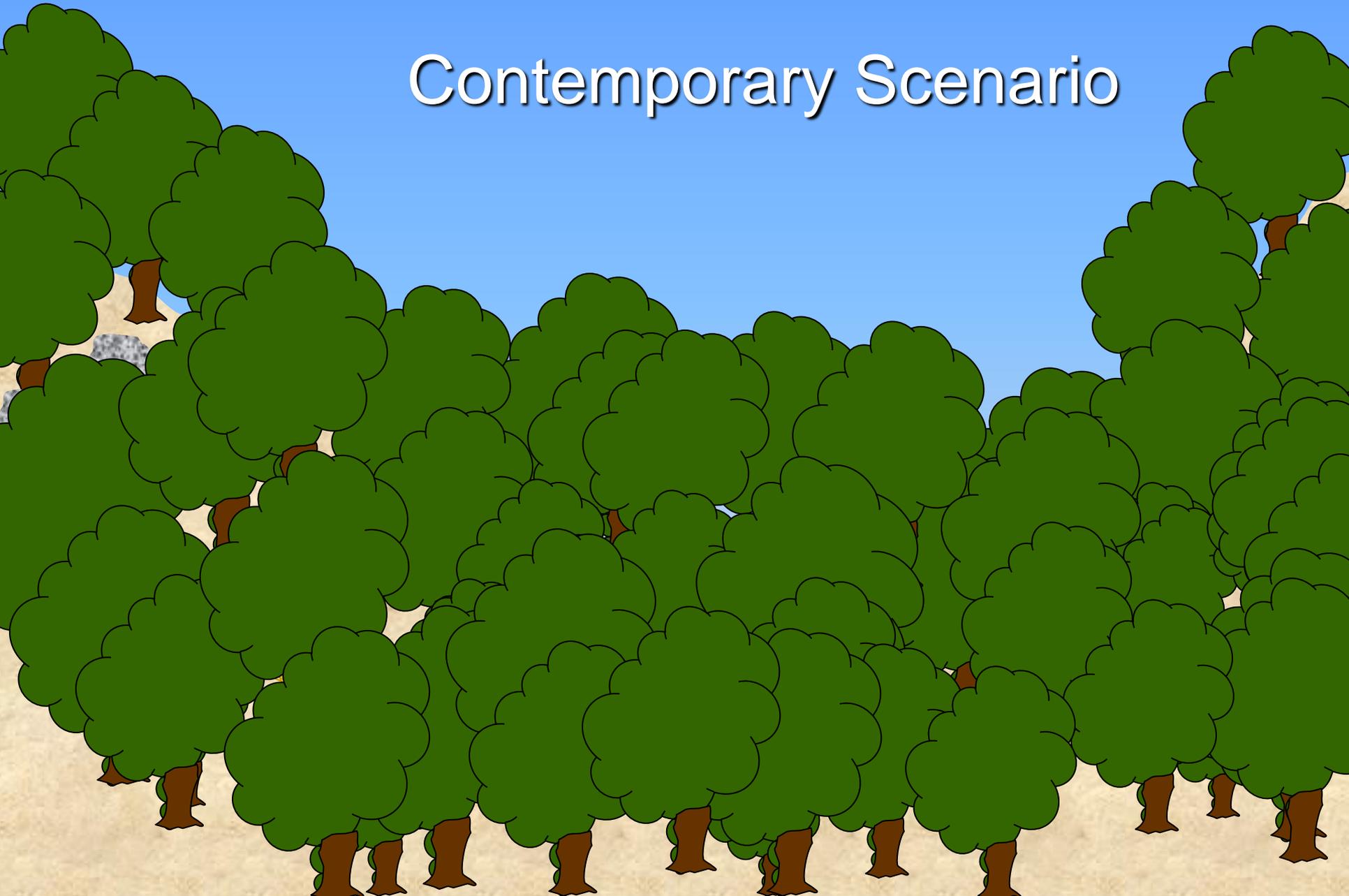
# Contemporary Scenario



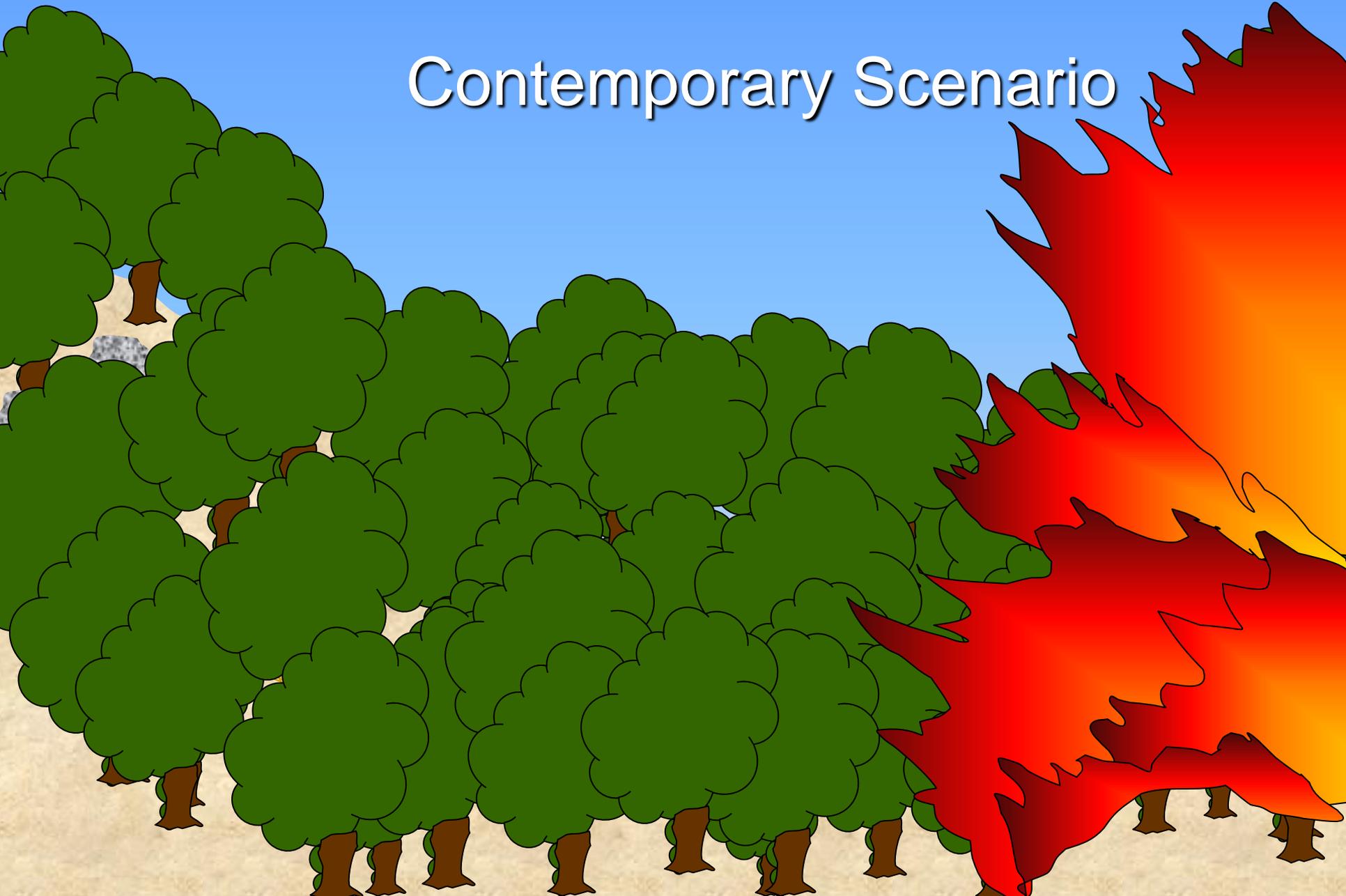
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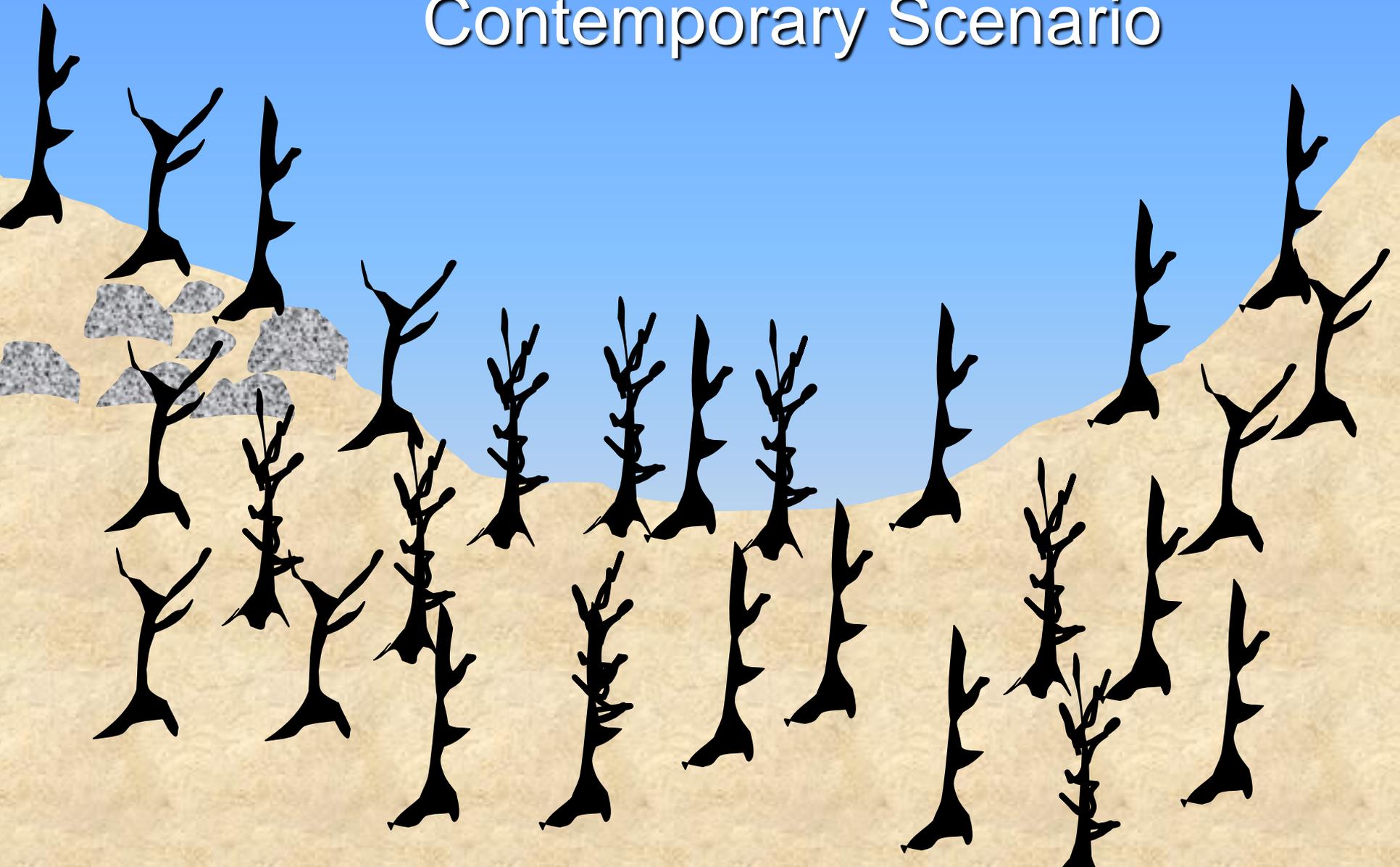
# Contemporary Scenario



# Contemporary Scenario



# Contemporary Scenario



# PROPOSED ACTION

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- Hand Thinning (Selective Cutting)
- Hand Cutting (Non-Selective Cutting)
- Mechanical Mastication
- Mechanical Thinning/Removal
- Prescribed Fire (Pile Burning)
- Seeding (Aerial and Ground Based Broadcast)

# Tree Thinning (Selective)

Pre-Treatment (2004)  
Pine Nut Road  
Douglas County



Post-Treatment (2009)  
Pine Nut Road  
Douglas County



# Tree Thinning (Selective)

Pre-Treatment (2004)  
Brunswick  
Carson City



Post-Treatment (2010)  
Brunswick  
Carson City



# Tree Thinning (Selective)

Pre-Treatment (2008)  
Bluebird  
Douglas County



Post-Treatment (2010)  
Bluebird  
Douglas County



# Tree Cutting (Non-Selective)

Pre-Treatment (2008)  
Mill Canyon  
Lyon County



Post-Treatment (2010)  
Mill Canyon  
Lyon County



# Tree Cutting (Non-Selective)

Pre-Treatment (2008)  
Mill Canyon  
Lyon County



Post-Treatment (2010)  
Mill Canyon  
Lyon County



# Prescribed Fire - Seeding

Prescribed Fire  
(Pile Burning)



Seeding



# BI-STATE SAGE-GROUSE

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- Project is in the Pine Nut Population Management Unit (PMU)
- One known active lek, estimated population of 50-331 birds
- Project addresses threats identified in the Bi-State Action Plan ([http://www.ndow.org/Nevada\\_Wildlife/Sage\\_Grouse/](http://www.ndow.org/Nevada_Wildlife/Sage_Grouse/))
  - Wildfire
  - Pinyon-juniper encroachment
  - Invasive species – cheatgrass
- Project treatment units are based on telemetry data

# SAGE-GROUSE TELEMETRY STUDY

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- USGS and Carson BLM started a telemetry study in 2011
- 2011-2012 Findings
  - Put transmitters on 76 birds
  - Nest survival (13%) lower than populations range-wide, brood survival (65%) higher
  - Identified spring (March-May) and summer (June-July) utilization distributions (UD)
  - Identified movement corridors between seasonal habitat
  - Grouse avoided areas with trees (176 m versus 38 m)

# SAGE-GROUSE - TREATMENT UNITS

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- Five large treatment units totaling over 15,000 acres
- Mill Canyon – In breeding, nesting, and early brood-rearing habitat near the only known active lek. Includes as much of the spring UD as feasible.
- Crest, Slaters – In habitat that provides an important seasonal movement corridor. Units run north from breeding/nesting habitat down south to brood-rearing/summer habitat in the Mount Siegel and Bald Mountain areas.
- Mount Siegel, Bald Mountain – In brood-rearing/summer habitat. Includes as much of the summer UD as feasible.

# NEXT STEPS

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- The public review period ends on November 29, 2013.
- Substantive and relevant comments will be reviewed and categorized.
- As needed, the BLM would revise the environmental assessment.

# NEXT STEPS

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The BLM will conclude consultation with the Washoe Tribe of Nevada and California and Yerington Paiute Tribe.

Decision may be issued in winter 2013.