



# **ERCLC**

# **Team 6 Presentation**

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- STANISLAUS LANDSCAPE PROJECT

History of project and location

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- FIREBREAKS AND SHADED FUEL BREAKS

What they are, and how they are used in the SIP

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- MAINTENANCE METHODS

Discussing the pros and cons of different methods

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- MAINTENANCE FLOWCHART

A flowchart used for finding the right maintenance methods

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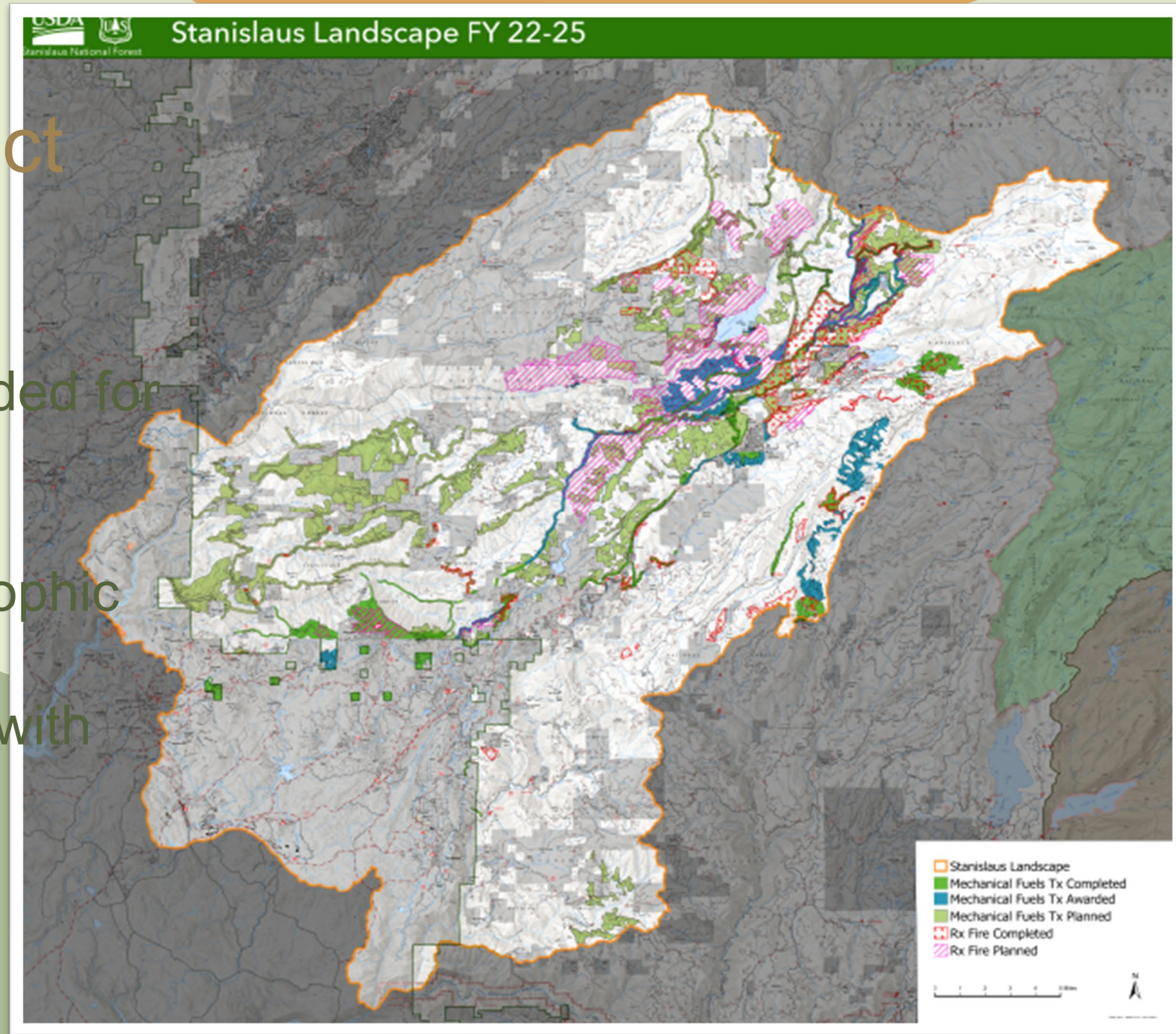
- Applying the Chart

Our final thoughts



# The Stanislaus Landscape Project

2021 Wildfire crisis  
1 of 10 Landscaped funded for fuel reduction  
Chosen because of fire and potential for catastrophic fires.  
300,000 getting treated with fuel breaks.

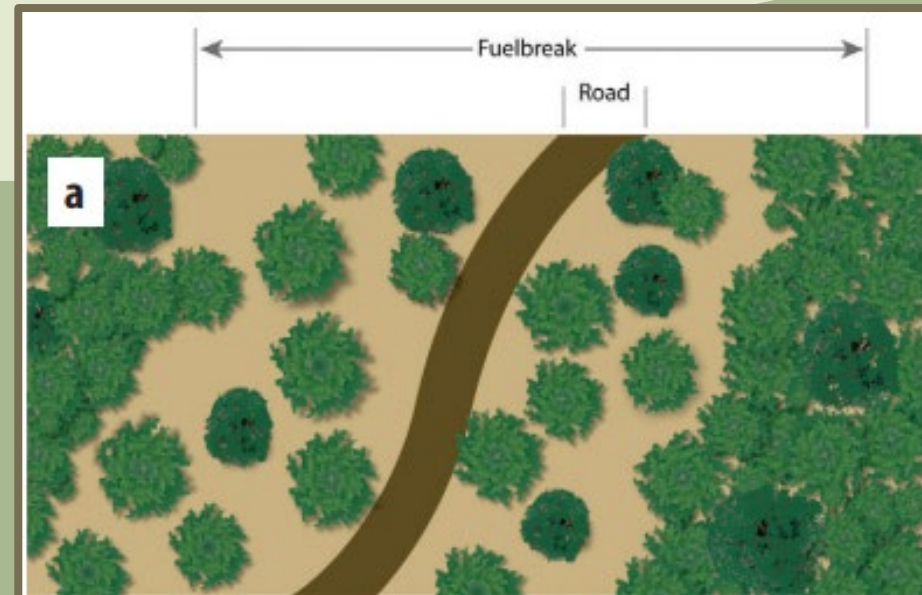


# Form and Function of Fuel Breaks in the SLP

- Removal of ground fuel to slow the spread of potential fire
- Thins trees to create space between the crowns
- Fuel breaks require maintenance to control vegetation regrowth in the years following their initial installation



**Figure 13a.** A perimeter dirt road serves as a fire-break. The area immediately to the left is a fuelbreak where young pine have been thinned and flammable shrubs have been mowed.



# Importance of Maintaining Fuel Breaks

- If fuel breaks are unmaintained for multiple years they will regrow
- Continuous maintenance keeps the area resistant to fire
- Fuel breaks must be maintained across different land ownerships to be effective



# Methods of Maintenance



## Mastication

### Pros:

- Soil benefits
- Wildlife use
- Large scale

### Cons:

- Leaves fuel on ground
- Weather conditions
- Can't access steep or rocky areas
- High cost
- Can damage soil

# Mastication Treatment



# Methods of Maintenance



## Hand Piling

### Pros:

- Precise work
- Fast work
- Can access any terrain

### Cons:

- High cost of labor
- Labor intensive
- Small scale
- Piles must be burned



# Hand Piling Treatment



# Methods of Maintenance



## Machine Piling

### Pros:

- Large scale

### Cons:

- Equipment cost
- Can't access steep terrain
- Will hurt sensitive soil
- Piles must be burned

# Machine Piling Treatment

**\*After Pile Burning**



# Methods of Maintenance



## Broadcast Burns

### Pros:

- Very cheap
- Clears large areas quickly
- Provides nutrients for soil

### Cons:

- Very risky
- Can't use around populated areas
- Needs a prescription
- Can only be done in certain weather conditions

# Broadcast Burn Treatment



# Methods of Maintenance



## Herbicides

### Pros:

- Lasts a very long time
- Requires little follow up
- Cheap

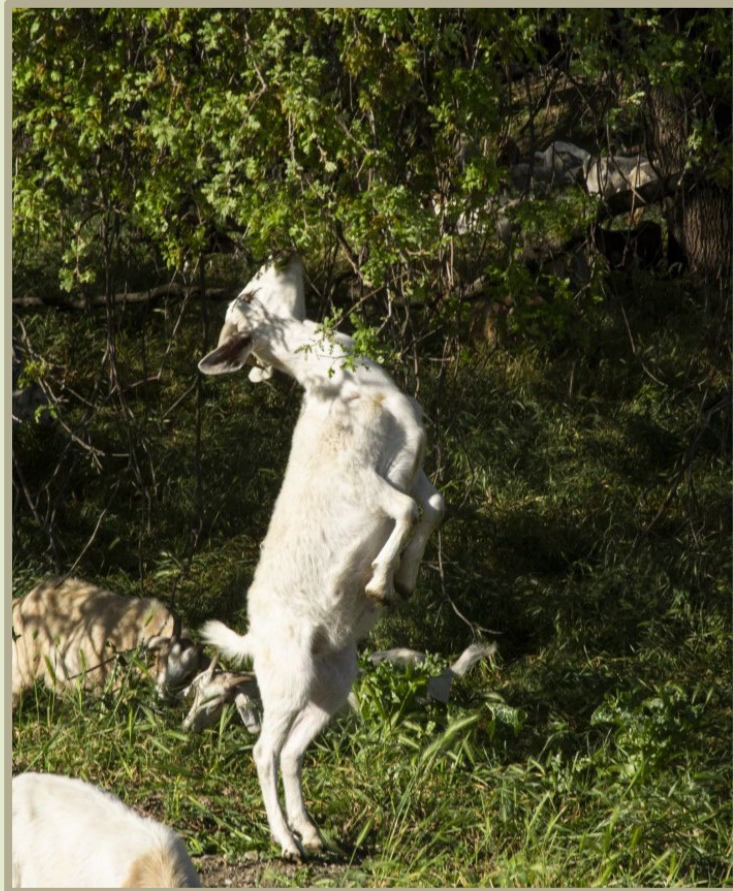
### Cons:

- Public perception\*
- Needs prior treatment

# Herbicide Treatment



# Methods of Maintenance



## Grazing

### Pros:

- Good for ecosystem
- Feeding livestock

### Cons:

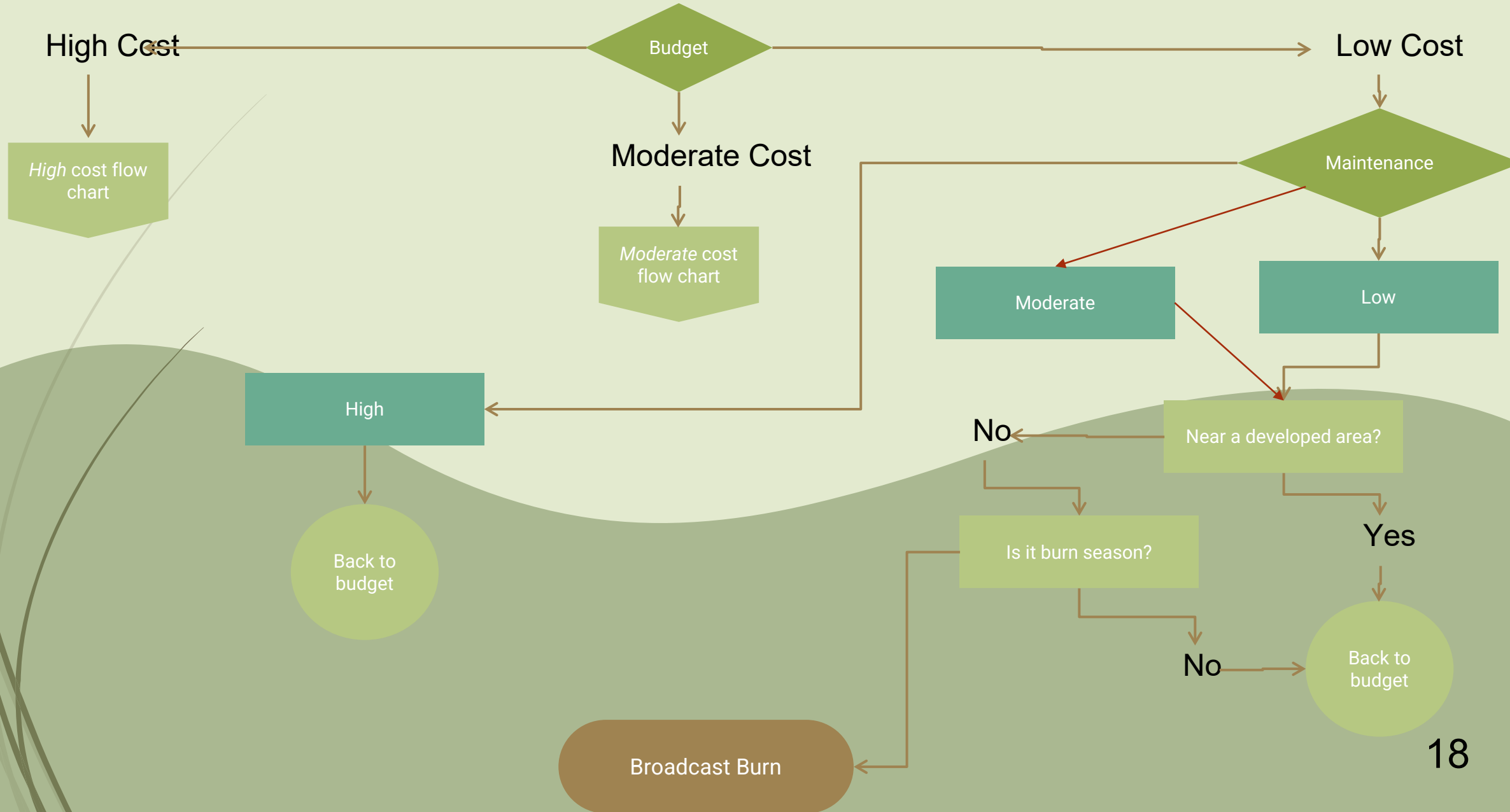
- Conditions can be particular
- Work required to transport and manage
- Bush needs to be low



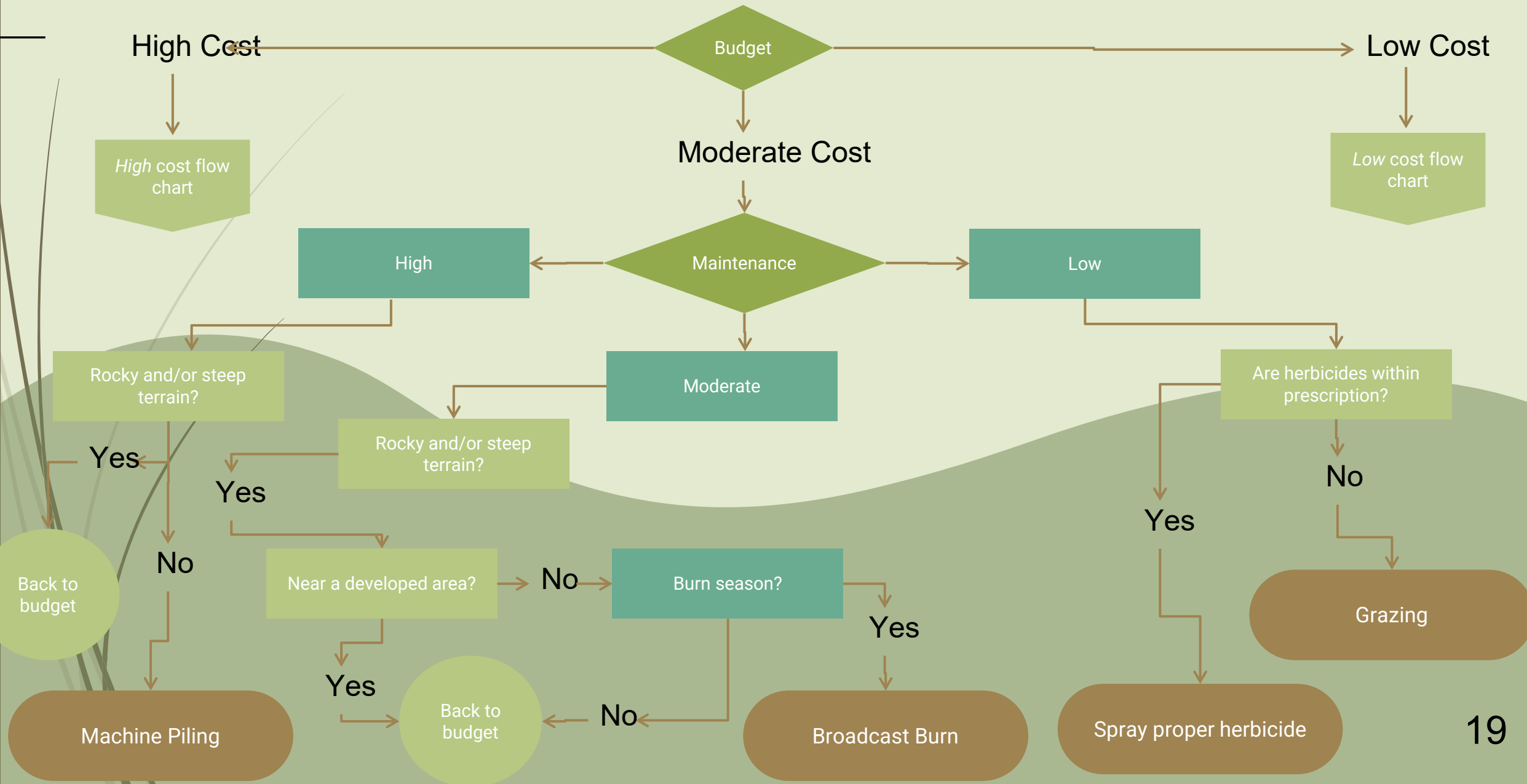
# Grazing Treatment



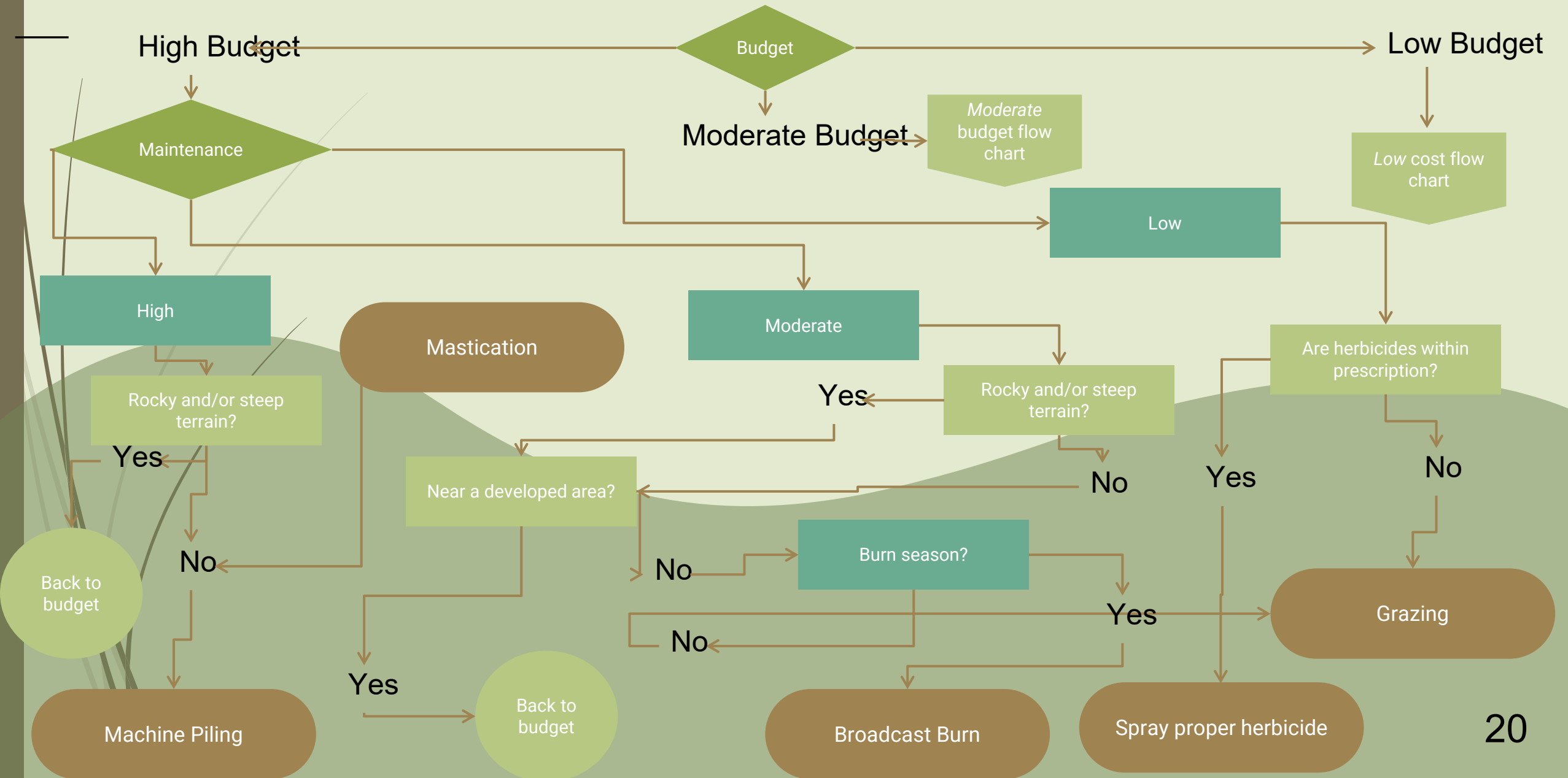
# Maintenance Method Flow Chart (low budget)



# Maintenance Method Flow Chart (moderate budget)



# Maintenance Method Flow Chart (high budget)



# Treating the Plot





*Any Questions?*



THANK YOU FOR  
LISTENING

-TEAM 6