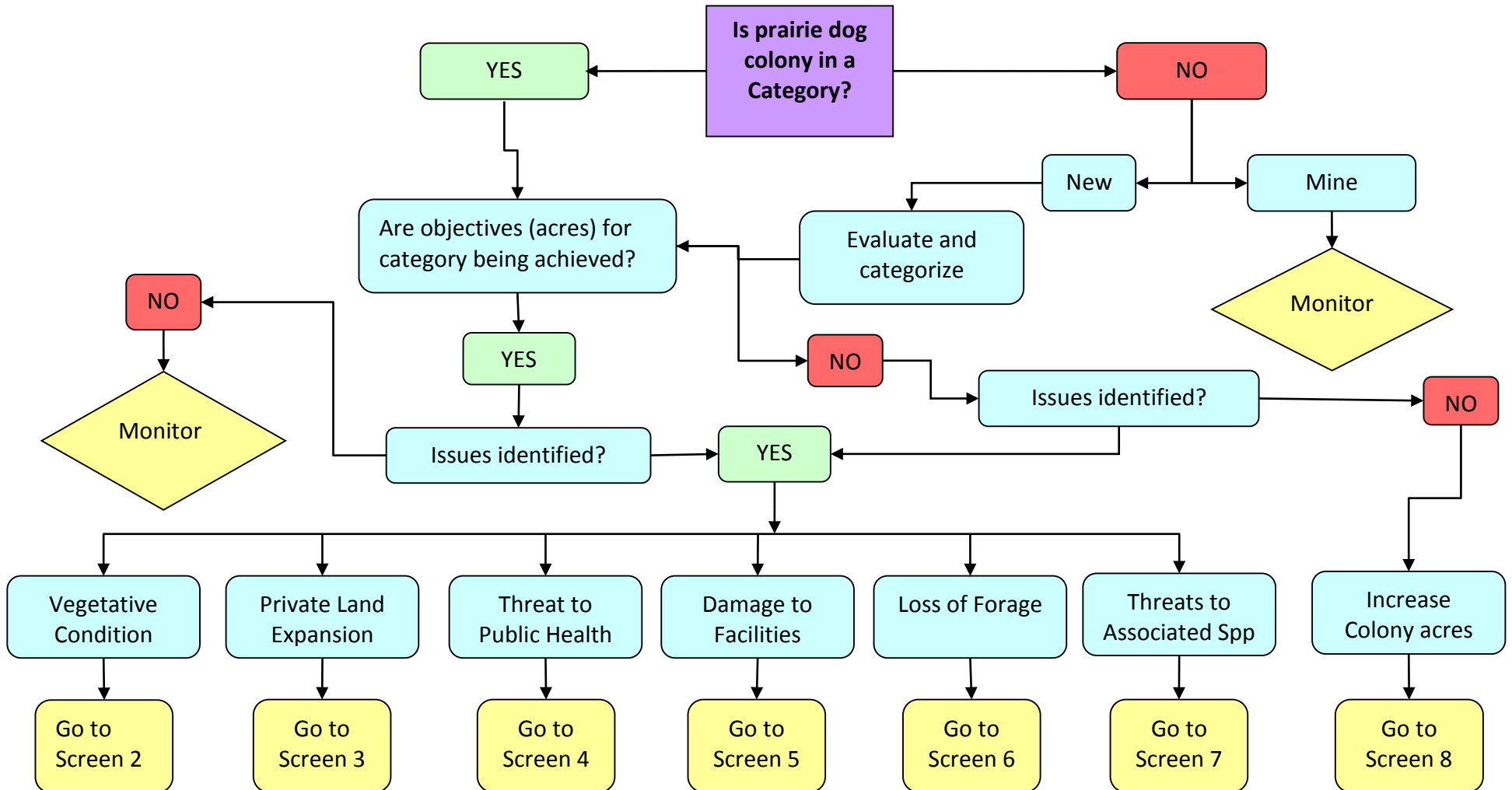


### Appendix A: Decision Screens for the Thunder Basin Prairie Dog Strategy

#### GENERAL- SCREEN 1



**Explanatory Notes for Screen 1**

- **Issues** – refers to the screens 2-8:
  - Screen 2, Vegetative Condition: This screen is meant to address vegetation management direction in the LRMP (Land and Resource Management Plan) for Thunder Basin National Grassland.
  - Screen 3, Private Land Expansion: This screen is meant to address prairie dog dispersal to private lands from National Forest System (NFS) land or to NFS land from private land.
  - Screen 4, Threat to Public Health: This screen is meant to address concerns with public health and proximity to prairie dog colonies that could potentially develop plague.
  - Screen 5, Damage to Infrastructure: This screen is meant to address proximity of prairie dog colonies to buildings and other structures. These are defined in the explanatory notes of Screen 5.
  - Screen 6, Loss of Forage: This screen is meant to address the loss of forage to permitted livestock grazing on NFS lands.
  - Screen 7, Threats to Associated Species: This screen is meant to address the need to protect associated species of conservation concern such as burrowing owl, mountain plover, swift fox, ferruginous hawk, or others.
  - Screen 8, Manage to Increase Acres: This screen is meant to address the need to reach population goals established with the prairie dog strategy.
- **Evaluate and Categorize:**
  - Determine if colonies are within approximately ½-mile of adjacent non-federal lands. Evaluate to determine their potential for causing unwanted encroachment.
  - Designate to appropriate category.
  - Evaluate for potential management as a new Category 2 Area

● **List of Tools:**

Lethal

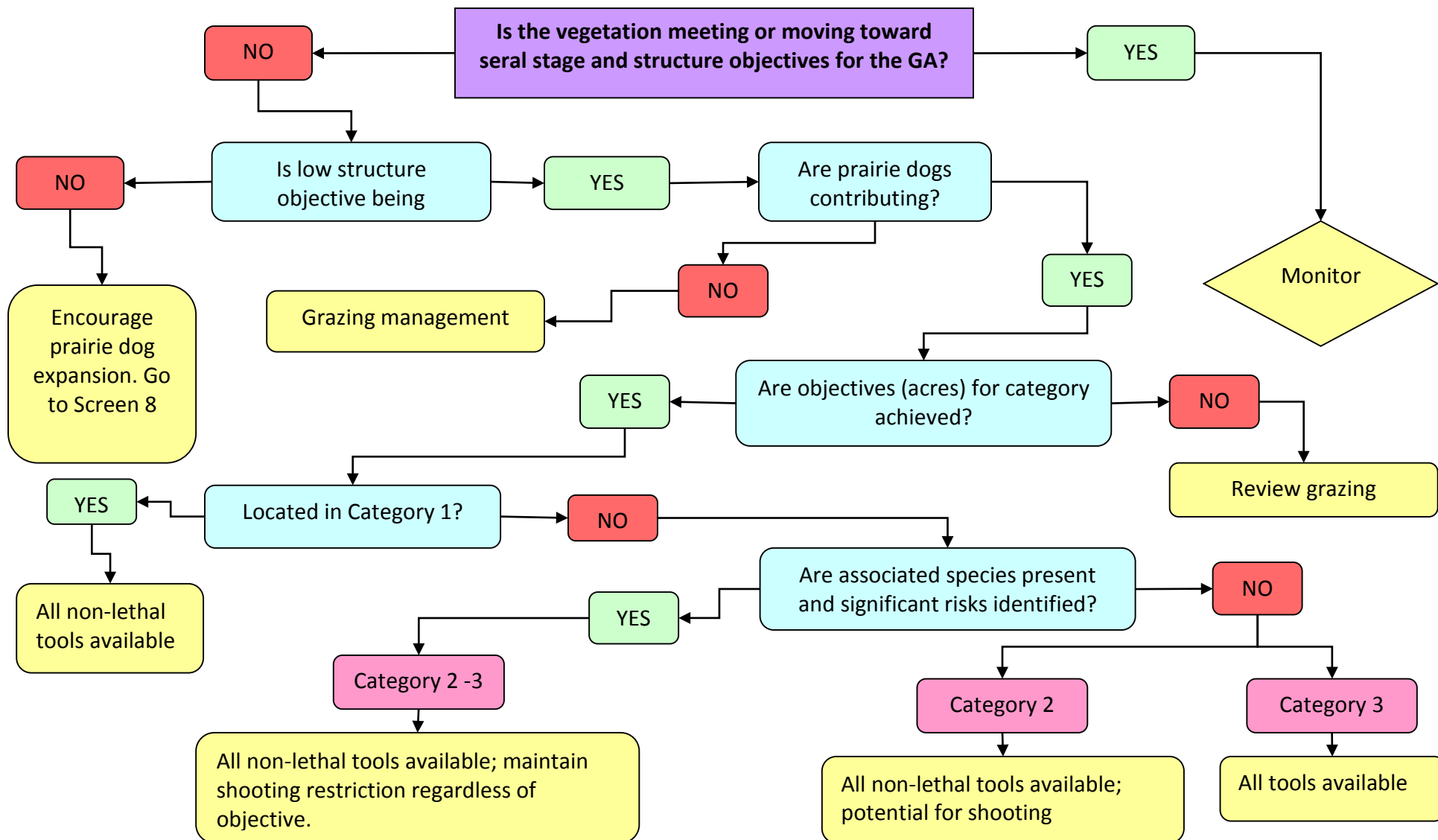
Approved rodenticides – Zinc Phosphide (only one currently approved)  
Approved rodenticides – Anticoagulants  
Approved rodenticides – Others  
Shooting

Non-Lethal

Land exchanges or Land Acquisitions  
Land use trade  
Third-party solutions – Financial incentives,  
Conservation agreements and easements  
Translocation-manual or passive  
Dusting  
Vegetation Management – mowing, burning,  
Livestock management  
Fencing  
Vegetative barriers  
Visual barriers

**Significant Threats to Associated Species:** refer to screen 7

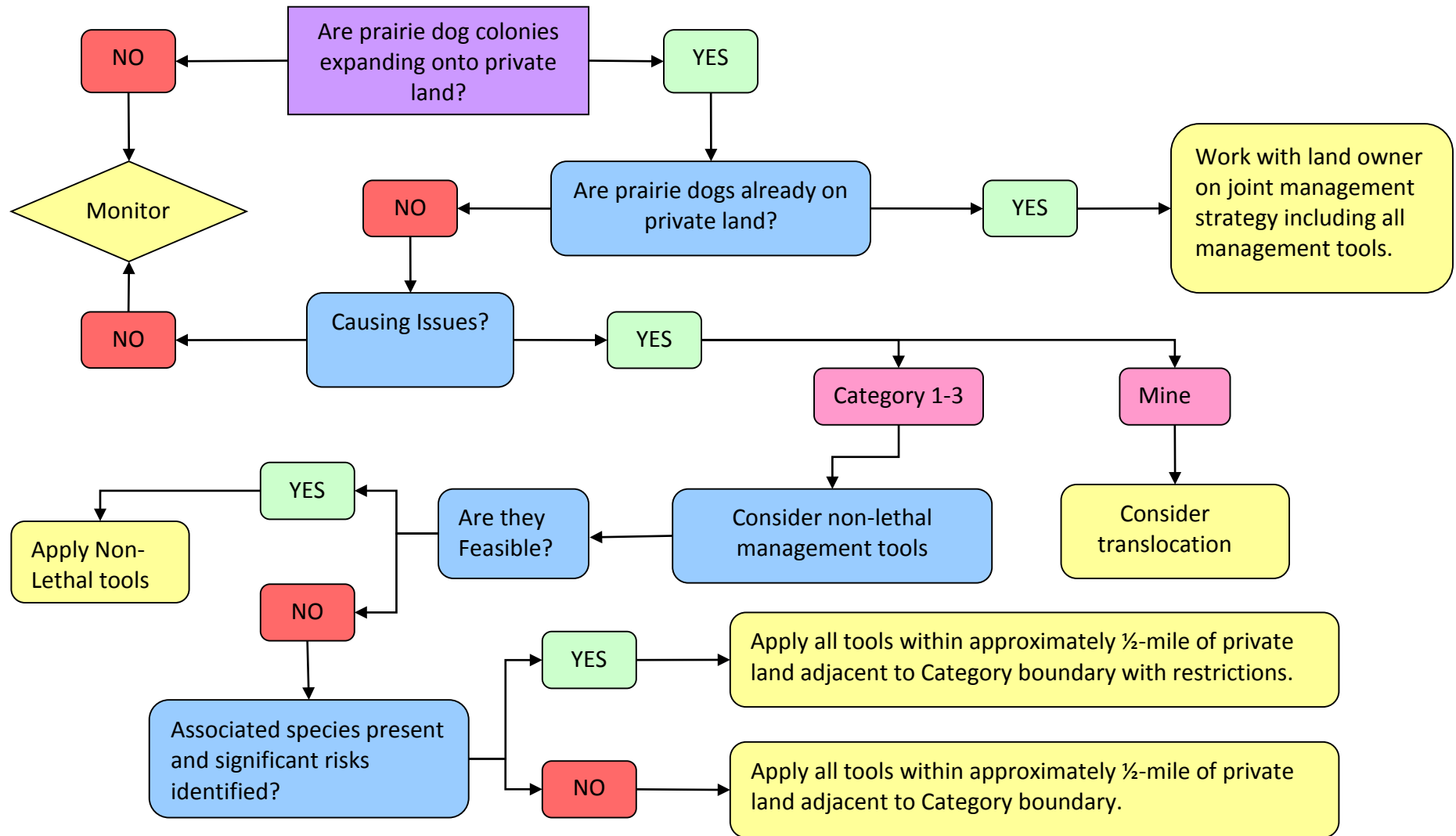
**DECISION SCREEN FOR THUNDER BASIN PRAIRIE DOG STRATEGY**  
**VEGETATIVE CONDITION - SCREEN 2**



**Explanatory Notes for Screen 2**

- **Seral Stage and Structure:** Refer to the LRMP by Geographic Area for explanation and direction on vegetation management objectives by seral stage and structure.
- **Contribution of prairie dogs to low structure:** prairie dogs may or may not help contribute to low structure objectives. It can be especially important that prairie dogs are contributing to low structure objectives for areas being managed for mountain plover habitat and populations. For example, livestock grazing may be able to meet low structure objectives, but not meet habitat needs for mountain plover.
- **Review Grazing Management:**
  - Could include not only grazing by domestic livestock, but also wildlife populations as coordinated with the Wyoming Game and Fish Department.
- **Significant Threats to Associated Species:** refer to screen 7
- **Tools:** Refer to explanatory notes from screen 1.

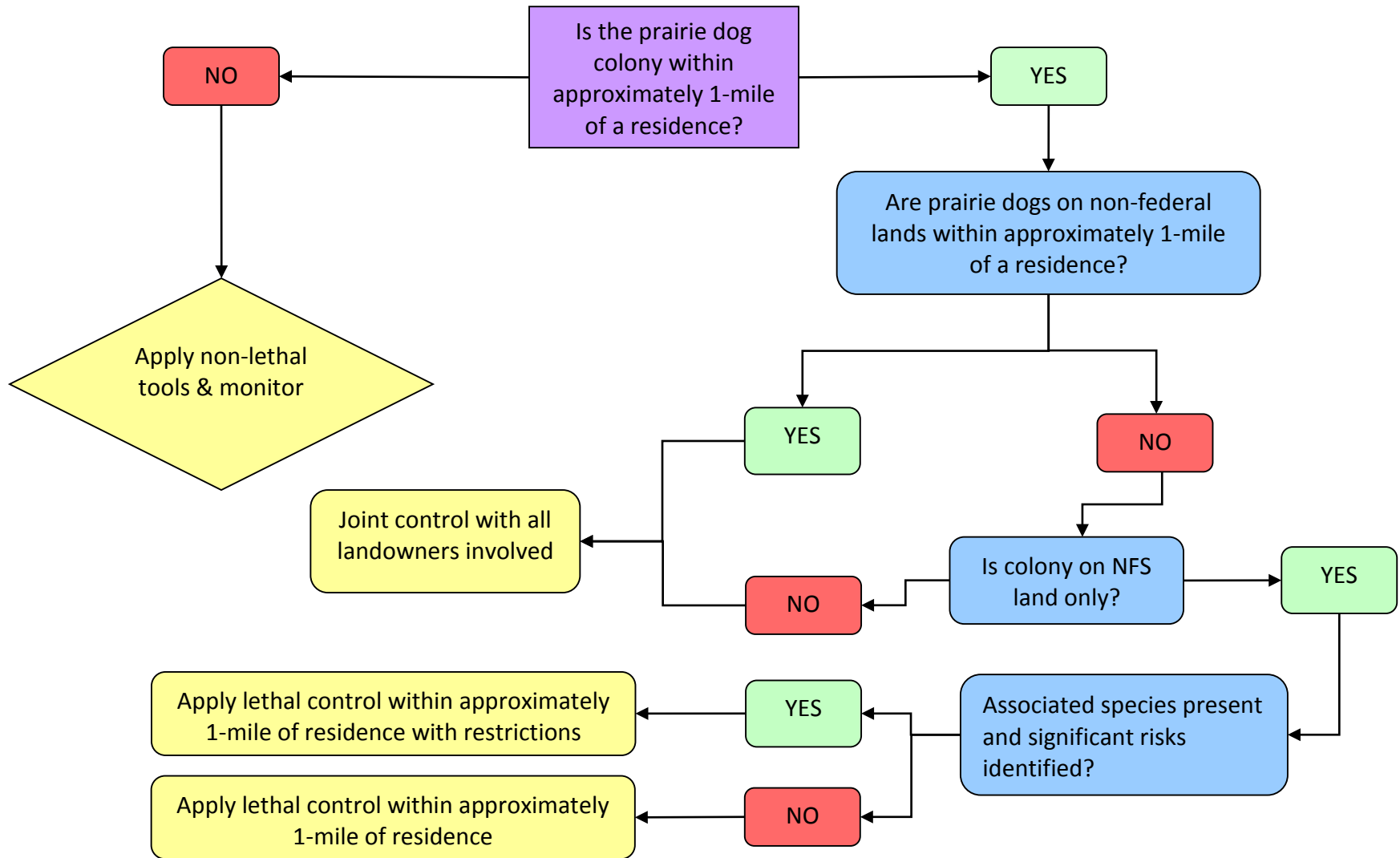
**DECISION SCREEN FOR THUNDER BASIN PRAIRIE DOG STRATEGY  
PRIVATE LAND EXPANSION - SCREEN 3**



### **Explanatory Notes for Screen 3**

- **Issues:** These are generally defined as undesirable prairie dog expansion from NFS land to private or state land, and in some cases from private or state to NFS land. It is the expectation that the USFS will receive notification from a landowner when a prairie dog town has expanded from NFS lands onto private or state land. The USFS will be expected, as time and budget allows, to monitor any dispersal of prairie dog expansion from private or state lands to NFS land through prairie dog mapping.
  - Conflicts or encroachment onto private or state land.
- **New Colonies:**
  - Will be designated within the appropriate category.
  - New colonies within approximately ½-mile of adjacent non-federal lands will be evaluated to determine their potential for causing unwanted encroachment.
  - New colonies will be evaluated for potential management as a new Category 2 Area.
- **Notification:** Private landowners or permitted users will need to officially notify the USFS of undesirable expansion onto private land. The USFS will notify adjoining landowners when a colony on NFS land is approved for control.
- **Lethal Control in Category 1:** Only the use of rodenticides is allowed.
- **Significant Threats to Associated Species:** refer to screen 7
- **Restrictions to Lethal Control:** Some restrictions to lethal control may apply in order to protect Migratory Birds and/or USFS Sensitive Species that are associated with prairie dog colonies, or occupy habitat near prairie dog colonies. Some restrictions could include: timing limitations, partial control of a colony, reduction in prairie dog density rather than removal, and using non-lethal and lethal tool together.

**DECISION SCREEN FOR THUNDER BASIN PRAIRIE DOG STRATEGY**  
**THREAT TO PUBLIC HEALTH – SCREEN 4**

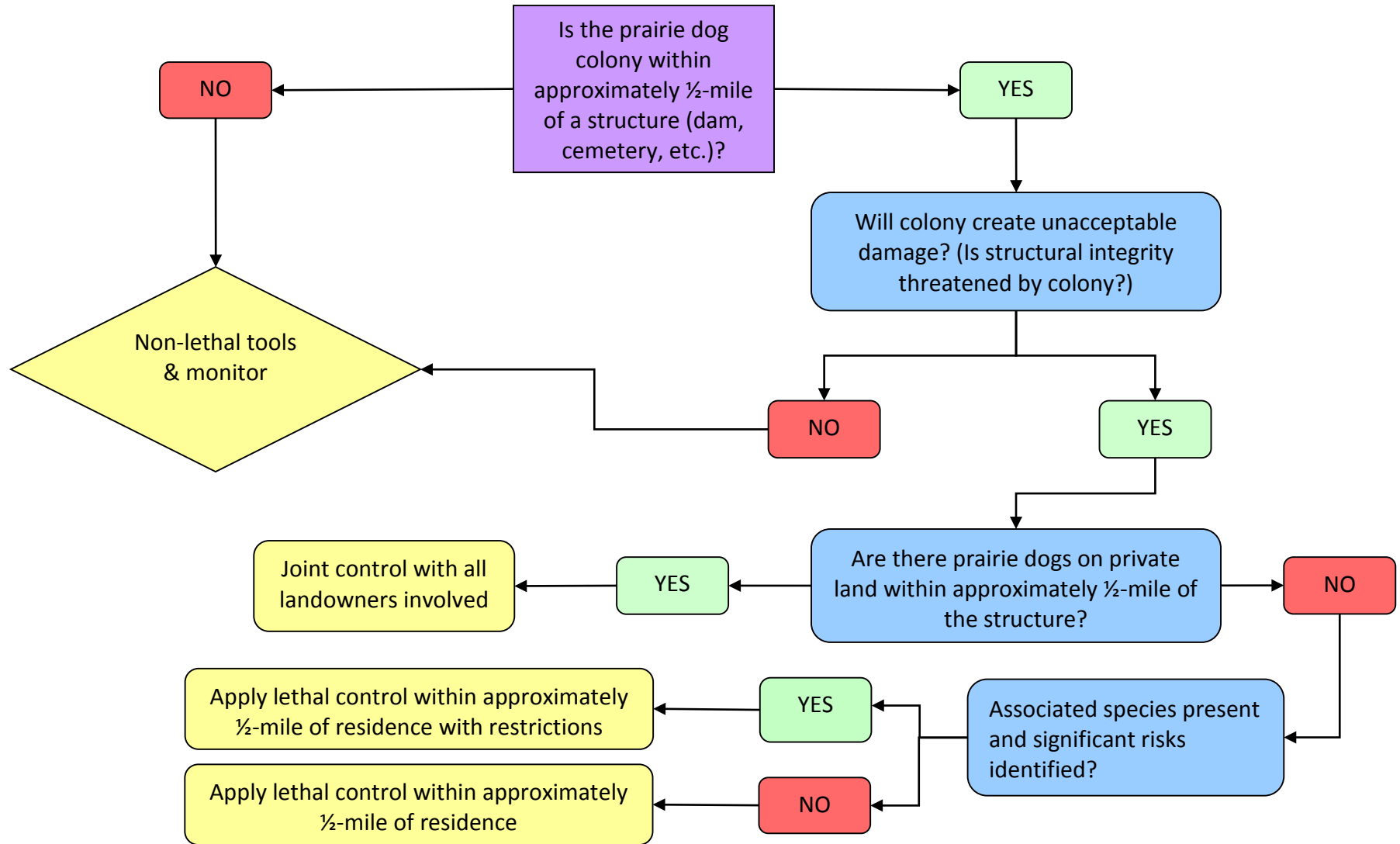


#### Explanatory Notes for Screen 4

- **Threat to Public Health:** This screen is meant to help address the potential threat of plague transmission from potentially affected prairie dog colonies to humans, using an approximate 1-mile radius around residences to identify colonies that may need to be addressed to reduce the possibility of transmission. Control methods and schedules will be determined on a case by case basis in attempt to address short-term and long-term issues.
- **Rodenticide Use During Plague Event:** The USFS will not apply rodenticides during a plague event because of the increased risk of exposure to plague carrying fleas. By killing the host prairie dog, fleas will be looking for a new host to attach to, and poisoning will increase the opportunity for human exposure.
- **Notification:** Private landowners or permitted users will need to officially notify the USFS of undesirable expansion onto private land. The USFS will notify adjoining landowners when a colony on NFS land is approved for rodenticide use.
- **Area of Control:** The purpose of the approximate 1-mile radius from a residence is to help the USFS and private landowner prioritize, focus, and coordinate control efforts to help manage the potential threat to human health. Rodenticide use is typically limited to the portion of the colony that is deemed necessary to achieve the objective within approximately 1-mile of the residence. Exceptions could be considered for colonies where the bulk of the colony is within the approximate 1-mile radius.
- **Note:** This screen does not automatically mean use of rodenticides. The use of rodenticide becomes ineffective if poisoning only occurs on NFS lands, and prairie dogs persist on state and private lands within the immediate area.



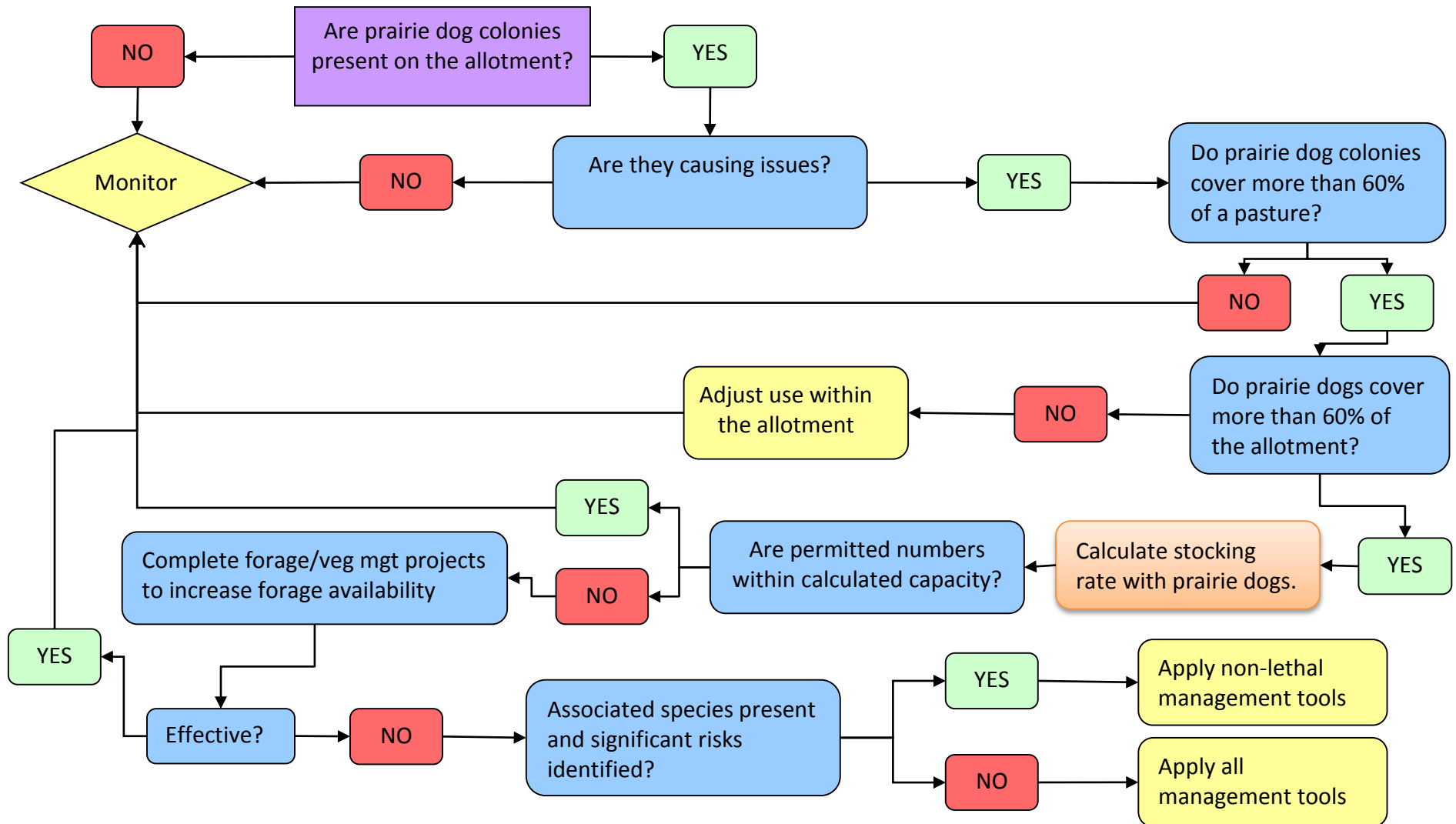
**DECISION SCREEN FOR THUNDER BASIN PRAIRIE DOG STRATEGY  
DAMAGE TO PUBLIC AND PRIVATE FACILITIES – SCREEN 5**



**Explanatory Notes for Screen 5**

- **Infrastructure:**
  - Dams
  - Ditches
  - Cemeteries
  - Identified grave sites
  - Buildings (houses, barns, shops)
  
- **Notification:** Private landowners or permitted users will need to officially notify the USFS of damage to infrastructure. The USFS will evaluate the damage complaint prior to treatment in coordination with the landowner or permitted user.

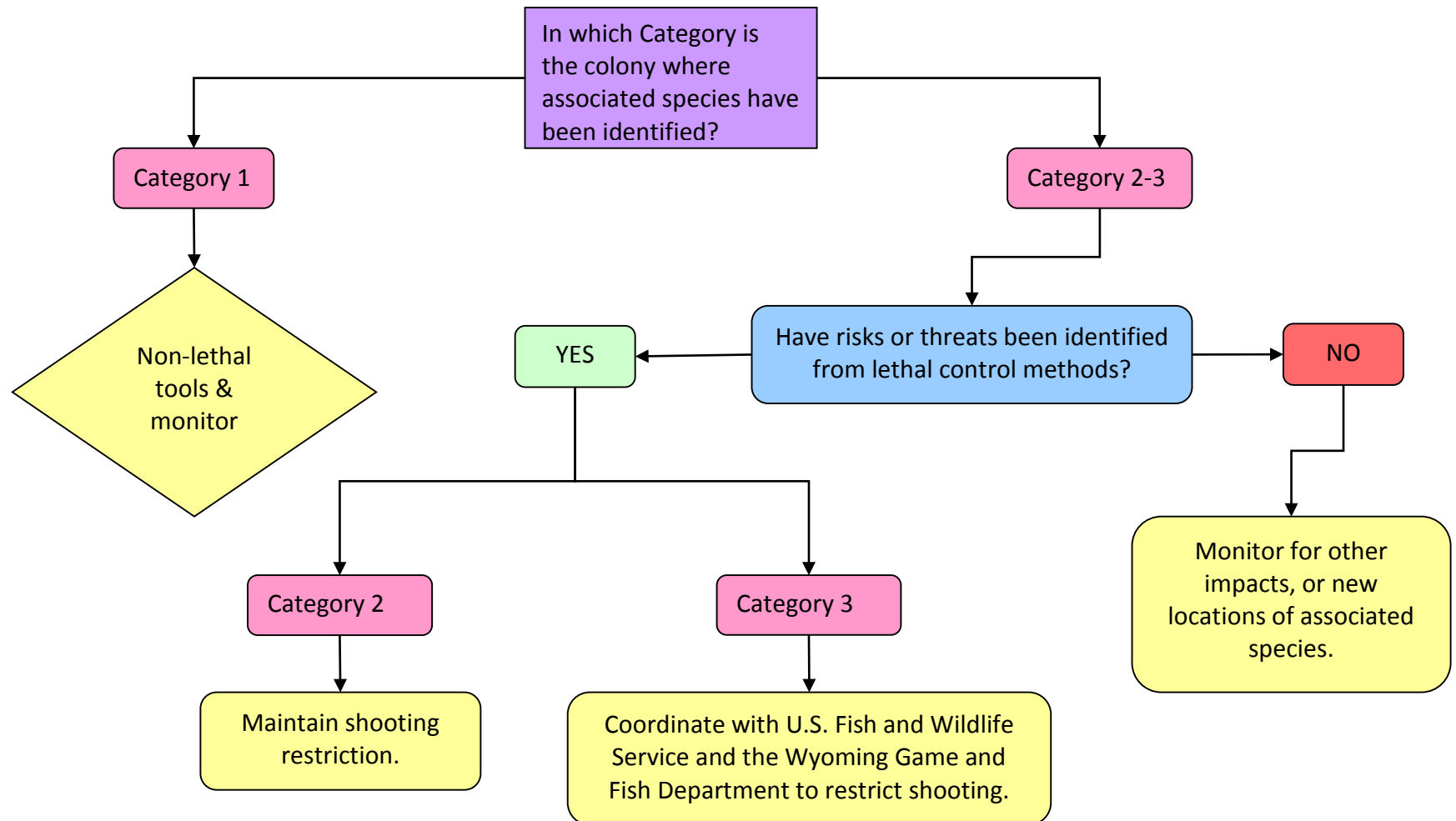
**DECISION SCREEN FOR THUNDER BASIN PRAIRIE DOG STRATEGY**  
**LOSS OF FORAGE – SCREEN 6**



**Explanatory Notes for Screen 6**

- **Issues:** Issues could include potential forage loss, decreased rate of gain for livestock, loss of AUMs or carrying capacity.
- **Notification:** Private landowners or permitted users will need to officially notify the USFS of a complaint of expansion onto private land. The USFS will notify adjoining landowners when a colony is approved for control.
- **Allotment 60% impacts:** Derner et al, 2006, identifies 60% occupation of prairie dogs as a threshold for significant differences in livestock weight gain.
- **Forage or Vegetation Management Projects:** Projects could include noxious or invasive plant treatment (cheatgrass, cactus, etc), using temporary forage reserve pastures, grazing management practices, water developments
- **Significant Threats to Associated Species:** refer to screen 7
- **Lethal Control in Category 1:** Only the use of rodenticides is allowed.
- **Restrictions to Lethal Control:** Some restrictions to lethal control may apply in order to protect Migratory Birds and/or USFS Sensitive Species that are associated with prairie dog colonies, or occupy habitat near prairie dog colonies. Some restrictions could include: timing limitations, partial control of a colony, reduction in prairie dog density rather than removal, and using non-lethal and lethal tool together.

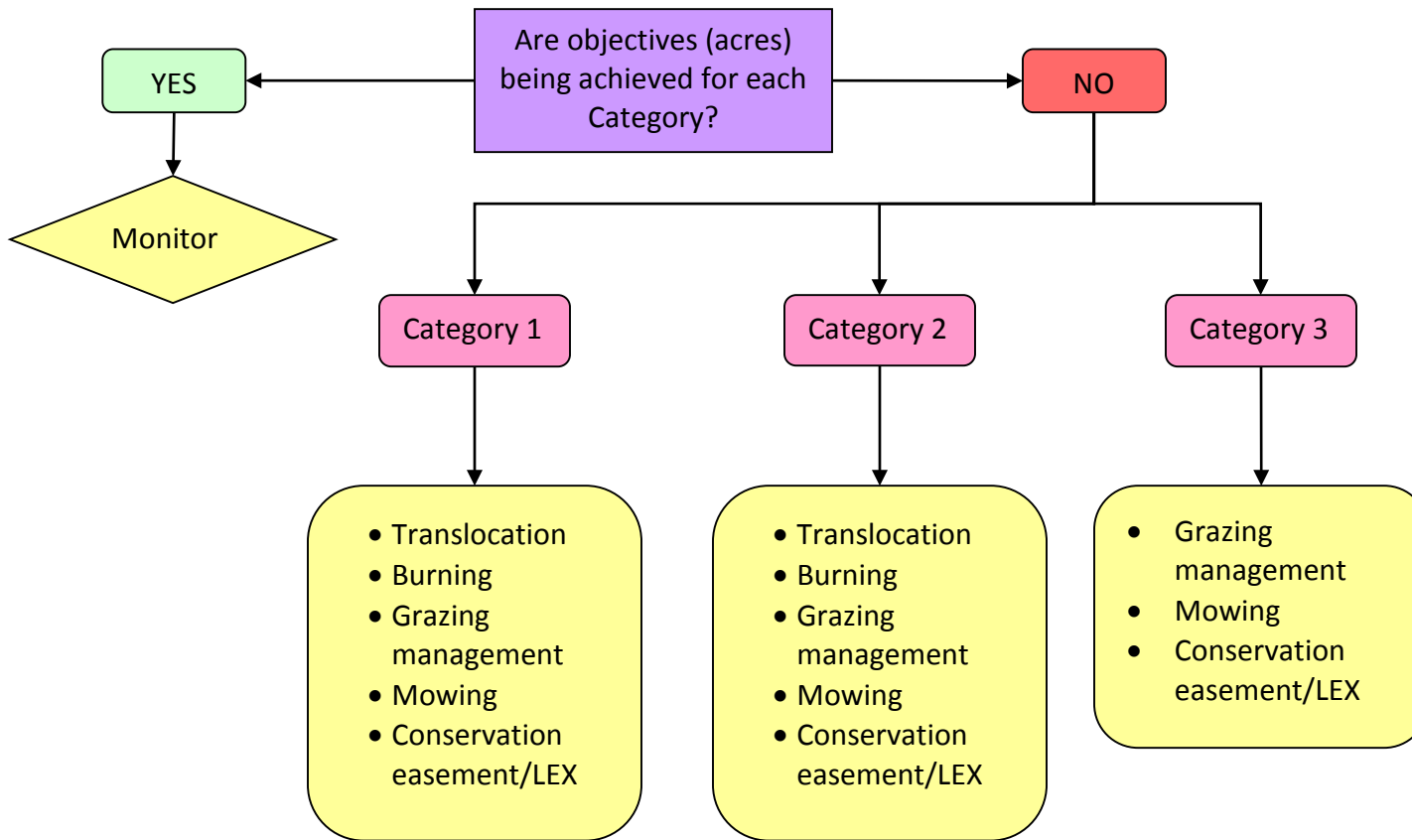
**DECISION SCREEN FOR THUNDER BASIN PRAIRIE DOG STRATEGY  
THREATS AND RISKS TO ASSOCIATED SPECIES – SCREEN 7**



**Explanatory Notes for Screen 7**

- **Significant Threats to Associated Species:** Some restrictions to shooting and other forms of control including rodenticides may need to apply in order to protect Migratory Birds and/or USFS Sensitive Species that are associated with prairie dog colonies, or occupy habitat near prairie dog colonies. Shooting may need to be limited to times of the year when associated species are not present to prevent nest abandonment and accidental shooting of non-target species. Shooting may also need to be restricted on colonies where there are foraging raptors to prevent lead poisoning (from ingesting carcasses with lead fragments). Rodenticides may be limited due to the presence of associated sensitive bird species, like burrowing owl and mountain plover, because the loss of habitat due to rodenticide use in prairie dog colonies could negatively impact these species and result in a negative population trend. In this way the FS remains in compliance with the Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act, and Forest Service laws and policy. The USFS will coordinate with the U.S. Fish and Wildlife Service, and the Wyoming Game and Fish Department when shooting restrictions are determined to be needed.

**DECISION SCREEN FOR THUNDER BASIN PRAIRIE DOG STRATEGY  
INCREASE IN PRAIRIE DOG POPULATION – SCREEN 8**



**Explanatory Notes for Screen 8**

- **Target Category Acres:** These are acreage goals established for each Category in the Prairie Dog strategy. They are meant to help determine management actions and which tools are best suited to meet objectives.



### SUMMARY

	ACTION	WEIGHT	SCORE
VEGETATIVE CONDITION - SCREEN 2		2	
PRIVATE LAND EXPANSION - SCREEN 3		6	
THREAT TO PUBLIC HEALTH - SCREEN 4		10	
DAMAGE TO PUBLIC AND PRIVATE FACILITITES - SCREEN 5		8	
LOSS OF FORAGE - SCREEN 6		4	
THREATS TO ASSOCIATED SPECIES - SCREEN 7		10	
INCREASE IN PRAIRIE DOG POPULATION - SCREEN 8		2	
<b>Lethal:</b> Was colony previously controlled with rodenticide? (Y=-1, N=0)			
<b>Lethal:</b> If Yes, when was the most recent? (1 year= -3, 1-2 years= -2, 2-3 years=-1, >3 years=0)			
<b>Lethal:</b> How many times has the colony been previously controlled with rodenticide? (Once= -1, Twice= -6, Three or more times=-8)			
<b>Lethal:</b> How much of the colony is on NFS lands? (0 to 15%=1, 16 to 75%=0, 75 to 100%=-1)			
<b>Lethal:</b> Is the landowner planning to use non-lethal control? (Y=0, N=-1)			
<b>Non-Lethal:</b> Have Non-lethal tools been used for control? (Y=-1, N=0) If Yes, which tools?			
<b>Non-Lethal:</b> If yes, when was the most recent? (1 year= -3, 1-2 years= -2, 2-3 years=-1, >3 years=0)			
<b>Non-Lethal:</b> How many times has the colony been previously controlled with non-lethal tools? (Once= -1, Twice= -2, Three or more times=-3)			
<b>TOTAL (Screens, Lethal and Non-Lethal)</b>			

## **Final Decision for Colony Control**

### Explanatory Notes for Summary

- **Screens: (only include screens where issued have been identified)**
  - **Action:** These are the tools or actions identified at the end of each decision screen. (Lethal, Non-Lethal or All).
  - **Weight:** This weight factor is applied to each action to emphasize importance of the issue that is being addressed.
  - **Score:** Score equals the action multiplied by the weight – All tools = ½ weight non-lethal, ½ weight lethal) (eg. Lethal x 10 = 10 lethal).
  - **Subtotal:** Sum of scores from all screens.
  
- **Lethal Tools Factors: (these scores will be negative numbers to be subtracted from the lethal tools score from above)**
  - Prairie dogs will exhibit bait shyness to grain baits. The more recent and the most frequent use of rodenticide will be less effective. (If a colony has been controlled with rodenticide for the last 3-years in a row, defer rodenticide treatment and use non-lethal tools).
  
- **Non-Lethal Tools Factors: (these scores will be negative numbers to be subtracted from the non-lethal tools score from above)**
  - Some non-lethal tools may not be effective in all areas, evaluate which tools may have already been tried and look at effectiveness. If a number of non-lethal tools have been tried, then effectiveness is likely reduced.