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F R O M: Yuki Lei K. Sugimura, Councilmember

SUBJECT: TRANSMITTAL OF DOCUMENT RELATING TO FERAL ANIMAL

MANAGEMENT ON MAUI (PAF 20-153)

The attached document pertains to Item 24 on the Committee's agenda.

paf:nas:20-153a

Attachment

### Development of a Comprehensive Ungulate Management Plan for Maui

# Background.

Ungulate animals are a wide range of hoofed species that includes both farmed and wild animals, such as cows, sheep, pigs, goats, and deer. When left unmanaged, feral ungulates are detrimental to Maui County's native ecosystem, cause extensive property damage, and expose residents to health and safety risks. The scope of the problem is extensive, and a resolution requires a collaborative effort by the entire community. A comprehensive ungulate management plan will provide a roadmap to mitigating the negative impacts caused by these animals.

Committee Report 20-50, recommending passage of the Fiscal Year 2021 includes the following:

"Your Committee further agreed to address the negative impacts to native species and watersheds caused by feral animals by providing up to \$1 million total for the development of a feral animal management plan designed for each populated island in the County, which includes \$100,000 for a feral animal management assessment study. Your Committee felt it was important for the Department of Housing and Human Concerns, Animal Management Program, to conduct a study on the most effective manner to expend money for feral animals."

Below is a draft roadmap for the development of a comprehensive ungulate management plan on Maui. It is not a complete plan; rather, it is a draft of select plan components that incorporates strategies for control measures. This draft was developed in conjunction with the Trevor Lu, Darrin Phelps, and Howard Phillip of the United States Department of Agriculture's Animal and Plant Health Inspection Service. They are available for discussion of this draft.

#### Goals.

### Conduct a Wildlife Damage Assessment:

- Assessment to be used as the management plan benchmark.
- o Identify test sites such as Kula Agricultural Park and surrounding farms.
- o Determine assessment period and note seasonal considerations.
  - Site visits annually, semiannually, or quarterly.
- Establish a census or damage data collection protocol.
- o Include historical and trend data analysis.

- Define successful management based on presented scenarios, including how to measure and achieve success.
  - Define a baseline and metrics to be quantified.
    - How metrics are quantified.
    - Use of data to identify priorities.
- o Incorporate community partners.
- o Provide for baseline quantification that differs depending on the situation.
  - Establish acceptable crop damage reduction levels.
    - Crop values versus crop losses due to direct and indirect ungulate exposure.
    - Define direct and indirect ungulate exposure.
      - Direct ungulate exposure includes crops consumed, trampled, uprooted, or otherwise physically compromised as to render crops unmarketable.
      - o Indirect ungulate exposure includes fecal matter within or on crops, rendering unmarketable.
- o Identify existing programs, like private hunting programs, that aid in ungulate management.
- o Recommendations.

## Develop Pilot Crop Damage Management Plan:

- o Based on assessment data and recommendations.
- o Follow Basic Wildlife Hazard Management Plan structure.
  - Section 1: Introduction.
  - Section 2: Authority and Responsibility.
    - o Determine stakeholders and associated responsibilities.
      - County of Maui plan administration and coordination.
      - Wildlife Services implementation and oversight.
      - o **Farmers and adjacent landowners** authorize property access, provide damage data, assist in determining control acceptance levels.
        - Pivotal in determining realistic acceptable damage reduction levels.
        - Majority of ungulates reside on adjacent properties and are only on park property during hours of darkness.

- Major public and private landowners and non-governmental organizations to identify the scope of problem and create collaborative partnerships.
- Possible example:
  - Maui County partners with the USDA to conduct pilot damage management program within set geographic boundaries adjacent to and encompassing the Kula Agricultural Park.
- Private landowners determine the scope of problems on their property and offer solutions, with potential County funding assistance based on verified damage data and valuation by Countydesignated entities per standard well-defined protocol.
- Hawaii National Parks, Maui Humane Society, and various watershed partnerships – can be included as stakeholders.
- Section 3: Management Actions.
  - o Select safe, effective, and efficient control methods and techniques.
  - Allow for limited research and development of new methods and techniques as field conditions change.
- Section 4: Wildlife Control Permits and Regulations.
- Section 5: Identification of Resources.
  - o Identify resources for long-term sustainable management plan.
    - How will it be funded and monitored?
    - County-funded project.
- Section 6: Procedures for Implementing the Plan.
- Section 7: Procedures for Review and Evaluation of the Plan.
  - o Plan results provided to public for review and comment.
  - o Create mechanism for communication and reporting between partnerships.
  - o Public engagement in plan creation and implementation.
- Section 8: Training Program Requirements

The below items can be written into the plan, left as footnotes, or be decided upon by the administrative entity.

- Determine plan lifespan.
- Determine maximum and minimum acceptable plan implementation levels.
- Ensure contingency planning for plan longevity across administration changes.
- Determine plan public acceptance.
- Consider County Public Notice and Comment mechanism.
- Revise and resubmit plan for further public review and comment, as necessary and if fits within funding time constraints.

paf:nas:20-153b