

# Free-Roaming Horse and Burro Fertility Control Workshop



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# Why do we need a workshop?

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Despite decades of research on fertility control in wild horses, its use in management is still limited

- 1982: Kirkpatrick, Turner & Perkins. Reversible chemical fertility control in feral horses. *Journal of Equine Veterinary Science* 2: 114-118
- Three National Academy of Science reports since the early 1980s have recommended research into and implementation of fertility control for wild horse and burro population management
- But those recommendations for implementation have for the most part not been put into practice

# Timeline for Wild Horse and Burro Protection and Management

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1971: Wild Horse and Burro Act passed

- Provides specific protections to “all unbranded and unclaimed horses and burros on public land of the United States” and makes it a crime for anyone to harass or kill these animals on federal land

1978: Adoption program started for horses gathered from the range



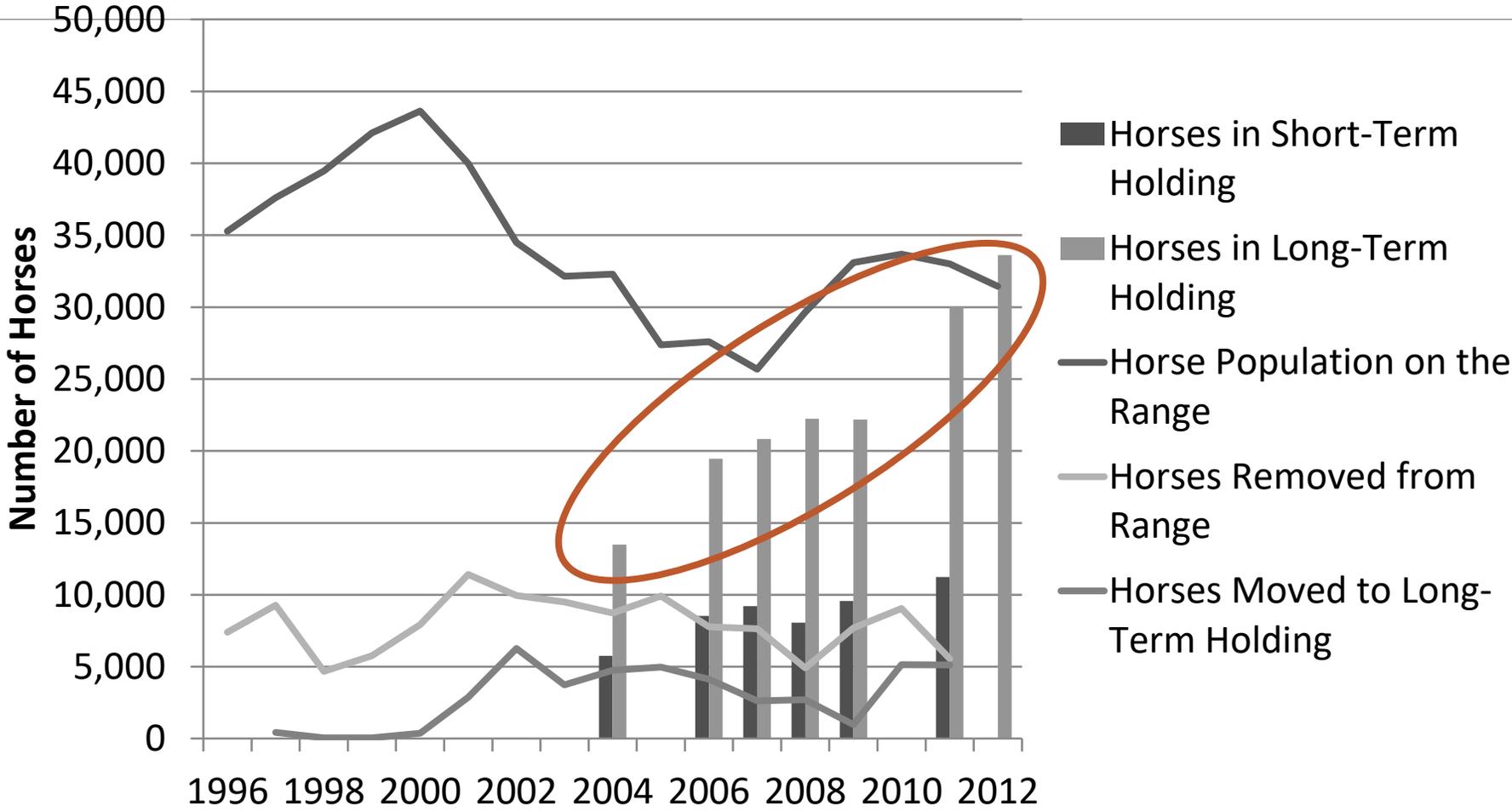
# National Academy of Science Committee Reports

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1980, 1982, and 1991 reports from NAS committees that were asked to develop and evaluate specific research programs and activities relating to wild horse and burro management



# Horse Populations in BLM Wild Horse and Burro Program



Source: Population-size estimates and numbers of animals removed and in holding facilities provided by BLM

## Due to increasing, unsustainable cost of the program

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2009: Senate Committee on Appropriations instructed BLM to prepare “a new comprehensive long-term plan and policy.”

2011: BLM published a proposed strategy for future management

- Strategy included commissioning a National Academy of Science report to “review earlier reports and make recommendations on how the BLM should proceed in light of the latest scientific research.”

# Most recent NAS committee analysis & report

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- NAS committee convened in 2011 was not asked to design or review specific research projects
- Instead, it was directed to use the previous reports and any subsequent research to inform an independent evaluation of the science, methods, and technical decision-making approaches of BLM's management program

# Committee conducted independent evaluation of:

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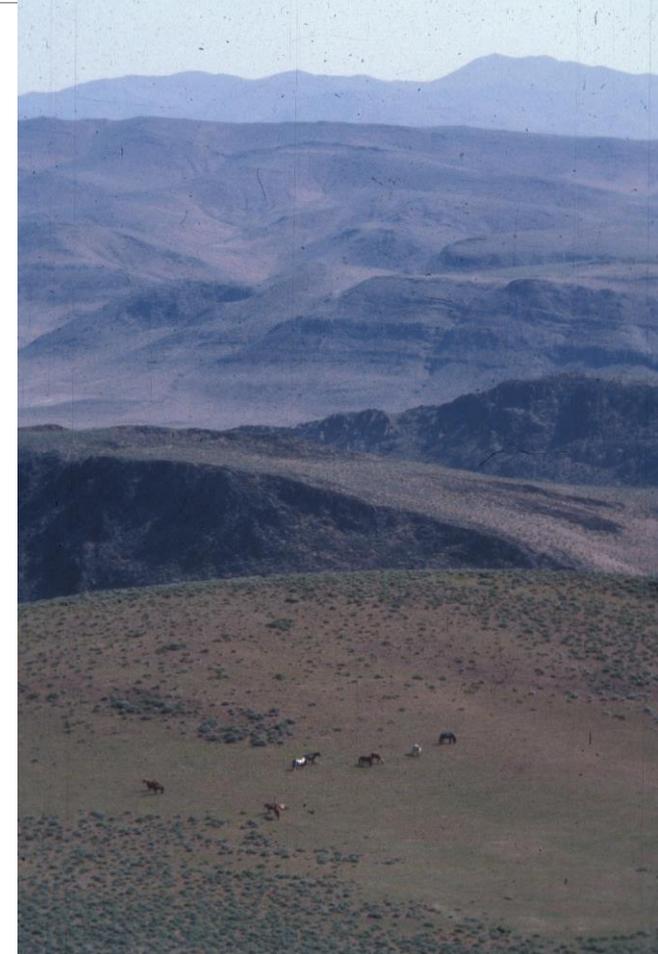
- Population Size and Growth Rates
- Population Assessment Processes
- Fertility Management
- Genetic Diversity
- Population Modeling
- Social Considerations
- Methods for Establishing and Adjusting Appropriate Management Levels (AMLs)



# Criteria considered for assessing the most promising Fertility Control methods

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- Efficacy
- Duration of effect
- Availability
- Delivery method
- Side effects
  - Must be safe
  - Preserve behavioral system



## Methods that met the most Criteria

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### Female-Directed

- PZP products
- GonaCon

### Male-Directed

- Chemical vasectomy



Since the report, even more potential methods have been identified

# Main Committee Conclusions

Business-as-Usual practices will continue to move more horses into long-term holding

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- Horse fecundity combined with gathers and removals (which maximize “harvest”) results in continued growth rates of 15-20%
- With those growth rates, BLM cannot balance removals with adoptions

Warehousing horses in long-term holding is not economically sustainable or acceptable to segments of the public

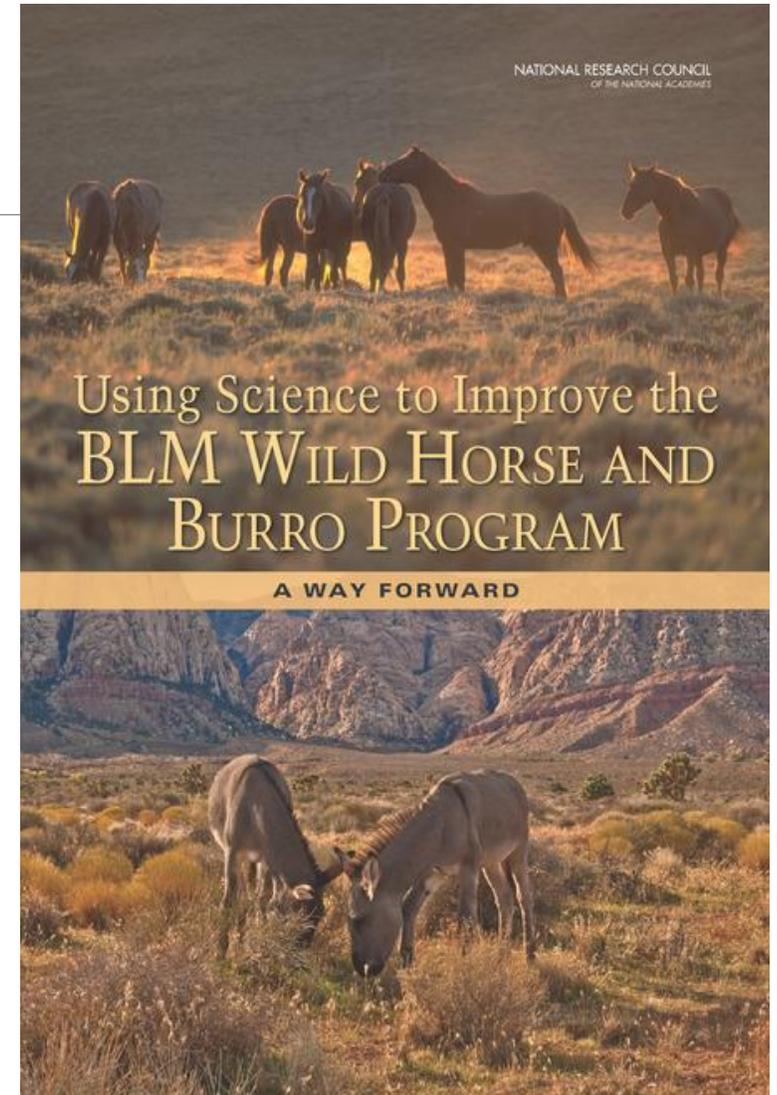
- About half of FY2012 Wild Horse and Burro Program budget was spent on horses in long-term holding
- Public discontent was expressed at Committee information-gathering meetings and in written comments

# 2013 NAS Committee Report

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- Fertility-control research and implementation were recommended for management of free-roaming horses and burros
- Methods to improve wild horse and burro management practices are available

The report is online at [www.nap.edu](http://www.nap.edu)



# What is missing?

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- Waiting for a “magic bullet”?
- Delivery/application challenges?

## **This Workshop will present:**

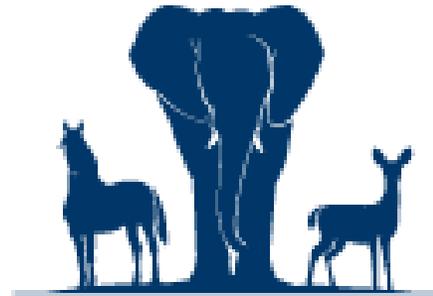
- Updates on methods of fertility control
- Strategies for implementation
- Directions for research and development



# Botstiber Institute for Wildlife Fertility Control

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Part of the mission of the Institute is to support workshops that bring together wildlife managers, policy-makers and the public to disseminate information and encourage collaboration



**BOTSTIBER INSTITUTE**  
FOR WILDLIFE FERTILITY CONTROL