

# **USDA**

# **Agricultural Research Service**

National Program 216

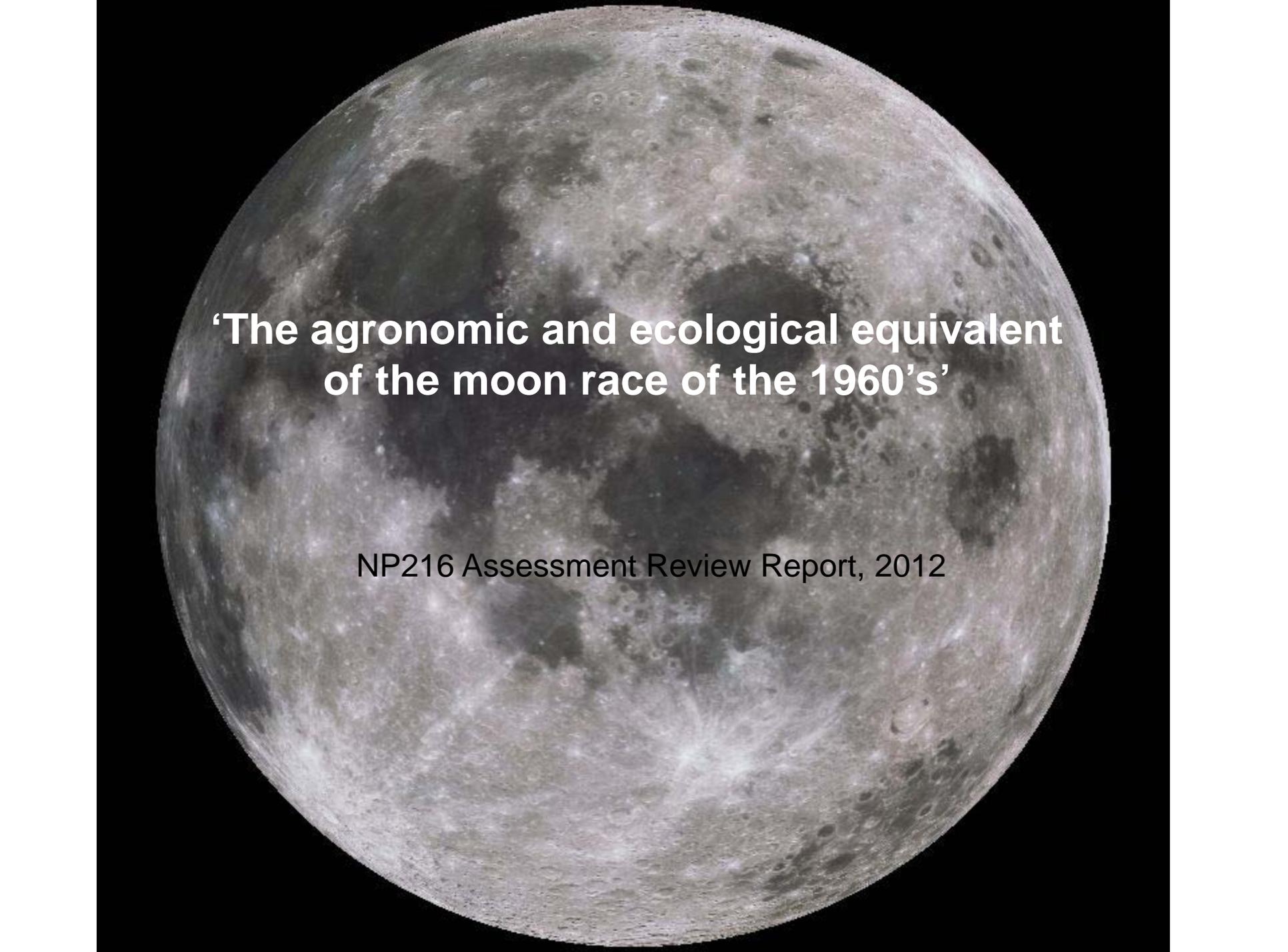
Agricultural Systems Competitiveness and  
Sustainability

Customer/Stakeholder Workshop

Ramada Spokane Airport,

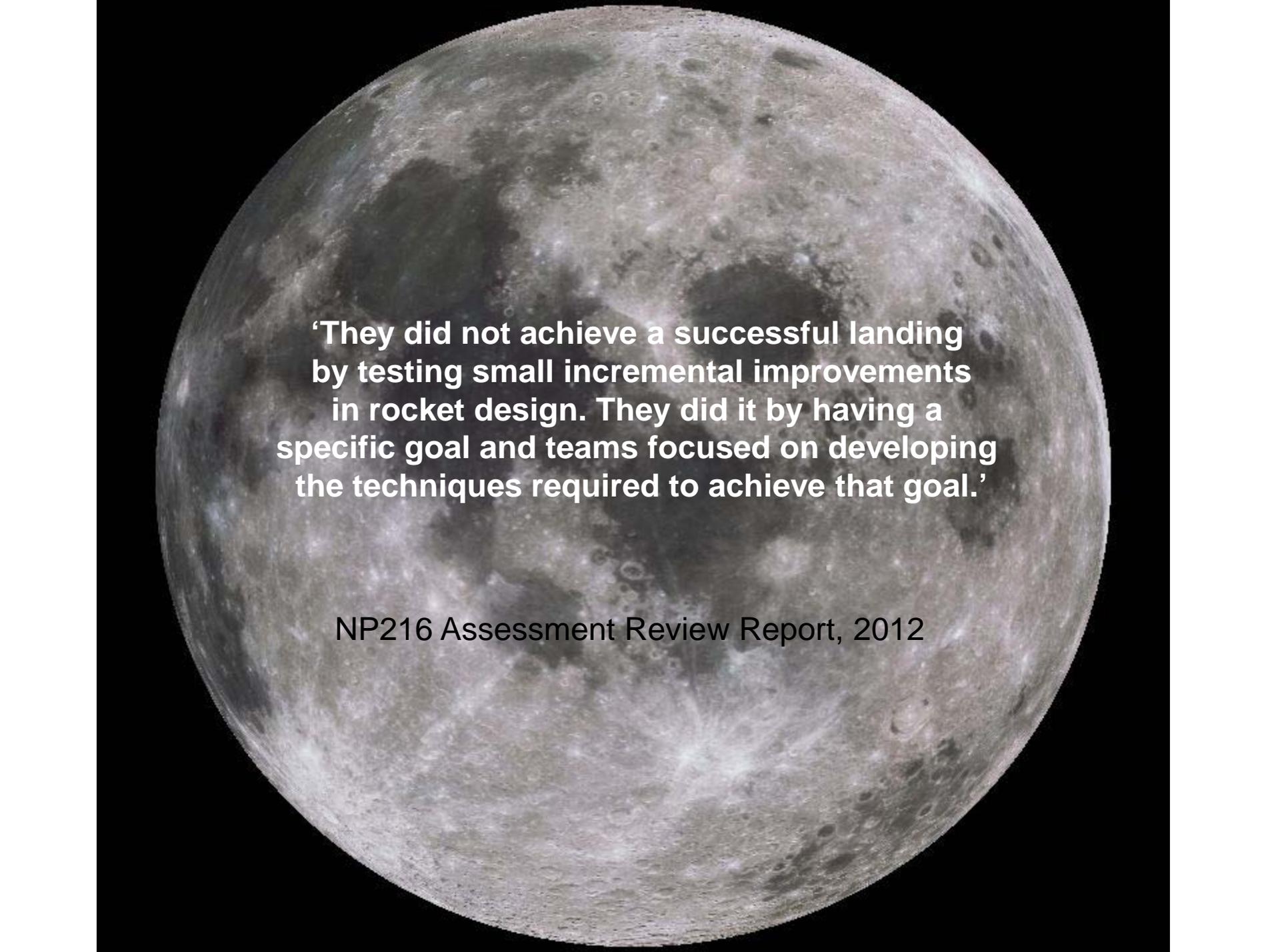
Spokane, WA

February 22, 2012



**‘The agronomic and ecological equivalent  
of the moon race of the 1960’s’**

NP216 Assessment Review Report, 2012



**‘They did not achieve a successful landing by testing small incremental improvements in rocket design. They did it by having a specific goal and teams focused on developing the techniques required to achieve that goal.’**

NP216 Assessment Review Report, 2012

# **National Program 216**

## **Agricultural Systems Competitiveness and Sustainability**

### **2011 Retrospective Assessment Panel**

land-grant university (3)

NRCS (1)

farmers (2)

# 2011 Retrospective Assessment Panel's Thanks to:

Steven Shafer

Jeff Steiner

Matt Smith

Colette Wood

Tracy Botelho-Havermann

# NP216 Action Plan

- Agronomic crop production systems
- Specialty crop production systems
- Integrated whole farm production systems, and
- Integrated technology and information to increase customer problem solving capacity

# ARS role in identifying production system tradeoffs

- ARS can play a critical role in helping to identify tradeoffs associated with production and ecosystem services
- Such as the environmental impacts of systems alternatives, and
- Act as a catalyst for bringing stakeholder consensus as to what the long-term goals of a given sustainable system really are

# **Use of appropriate metrics in evaluating production systems**

- Should integrate broad, long-term system goals,
- Provide principles and decision tools that apply to diverse regions and production environments
- Go from site-specific to synthesis, scaling-up and including collaboration with other ARS locations
- ARS decentralized organization provides unique opportunity

# **ARS meta-data transparency, storage and accessibility**

- Make available in transparent and easily retrievable manner
- The standard in genetics and journals
- Encourage an all-out effort to standardize collection, storage and accessibility of soil and plant data
- To allow for meta-data analyses to be conducted and research findings to be transparent, reproducible and verifiable

# Evidence of NP216 Outreach

- A broad, recurring need for insuring that knowledge and products generated by ARS are useful to farmers, other researchers, ag educators, and policy makers
- Encourage greater integration between ARS researchers and extension educators, NRCS colleagues, and land-grant universities

## The 'Long View'

- Take a much longer view to the NP216
- 'peer over the horizon'
- Seek a set of specific goals
- 'the agronomic and ecological equivalent of the moon race in the 1960's'

‘We greatly appreciate and respect the many examples of leading-edge research that ARS scientists contribute. We also understand and respect the often times sheer difficulties that are associated with conducting true ‘systems’ work as is clearly called for under NP216’s program mandate. Systems work is complex and often times quite difficult to develop, implement and maintain. But we recognize that in many truly critical ways for our nation’s future and indeed for the future of our planet, that it is ‘where it is at’ in many respects in terms of our ability to maintain productive capacity as well as environmental stability and quality. The work that is created and accomplished under this National Program is thus absolutely essential.’