

**Proposed Mars 2020 Mission
NEPA Scoping Meetings
October 9 and 10, 2013**

George Tahu, NASA Program Executive:
Overview of the Proposed Mars 2020 Mission

Tina Norwood, NASA NEPA Manager:
Overview of the NEPA Process for the Proposed Mars 2020
Mission

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**OVERVIEW OF THE PROPOSED
MARS 2020 MISSION**

George Tahu, NASA Program Executive

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Why Mars?

- Mars holds the greatest potential to answer the broadest range of questions in Planetary Science
 - “Mars has a unique place in solar system exploration: it holds the key to many compelling planetary science questions, and it is accessible enough to allow rapid, systematic exploration....Mars represents an excellent opportunity to investigate the major question of habitability and life in the solar system”
 - Vision and Voyages, NRC 2011 Decadal Survey (Planetary Sciences)

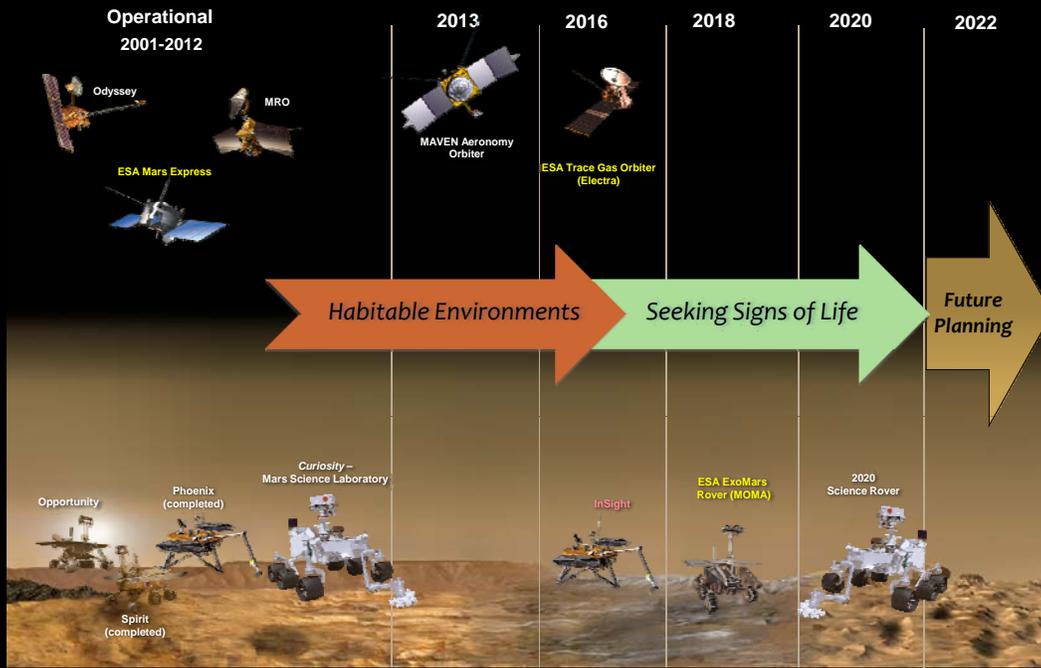
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Why Mars?

- Mars is the ultimate destination for human exploration in this half-century
 - “It is the planet most similar to Earth, and the one on which permanent extension of human civilization, aided by significant in-situ resources, is most feasible. Its planetary history is close enough to that of the Earth to be of enormous scientific value, and the exploration of Mars could be significantly enhanced by direct participation of human explorers”.
 - Seeking a Human Spaceflight Program Worthy of a Great Nation. Review of U.S. Human Spaceflight Plans Committee. 2009

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Mars Exploration in this Decade



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Mars 2020 Mission Summary

- **Conduct Rigorous In Situ Science**
 - Geologic Context and History sophisticated and coordinated measurements to characterize the geology of the landing site
 - In Situ Astrobiology Explore a potentially habitable environment, identify rocks with the highest chance of preserving signs of ancient Martian life if it were present, and seek the signs of life
- **Enable the Future**
 - Sample Return Place carefully-selected samples in a returnable cache in order to make technical progress toward a possible future Mars sample return mission
 - Human Exploration Conduct Mars-surface technology demonstration(s) to prepare for eventual human exploration of Mars
 - Technology Demonstrate technology required for future Mars exploration
- **Respect Current Financial Realities**
 - Utilize 2011 Mars Science Laboratory (MSL) heritage design and a moderate instrument suite to stay within budget constraints

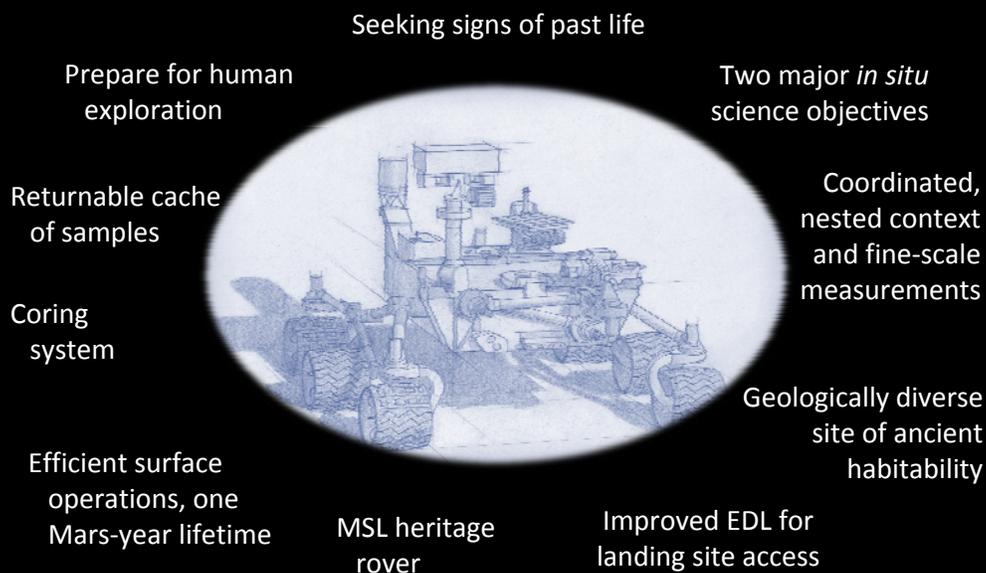
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Mars 2020 Mission Assumptions

1. Proposed Launch in Late Summer 2020
 - Launch Vehicle competitively selected under the NASA Launch Services (NLS) Program launch vehicle procurement process
2. Utilize MSL Sky Crane EDL flight systems and Curiosity-class roving capabilities
 - Address potential value and cost for improving access to high-value science landing sites
3. Mission lifetime of one Mars year (~690 Earth days)

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Mars 2020 Science Definition Team's Vision



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OVERVIEW OF THE NEPA PROCESS FOR THE PROPOSED MARS 2020 MISSION

Tina Norwood, NASA NEPA Manager

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National Environmental Policy Act (NEPA)

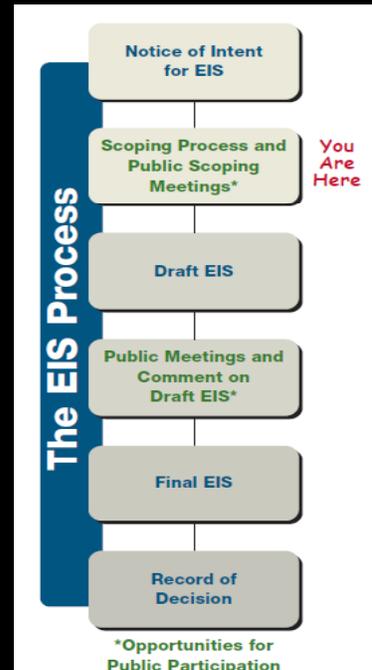
- The National Environmental Policy Act (NEPA) was enacted by Congress in 1969.
- Requires all Federal agencies to consider potential environmental impacts of proposed programs and projects.
- Requires public disclosure of proposed activities and consideration of public's environmental concerns.
- Allows Federal agency to develop their own NEPA implementing procedures.

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NASA EIS PROCESS OVERVIEW

NASA NEPA regulations require an EIS for proposed missions considering the use of a nuclear power system

- NOI published in Federal Register 09/11/13
- Scoping Period ends 10/30/2013
- Scoping Meetings October 9-10, 2013
- Draft EIS planned for Spring/Summer 2014



What is an Environmental Impact Statement?

- A NEPA document that:
 - Describes the purpose and need of the program or project.
 - Assesses potential environmental impacts that would result from implementation of a proposed action and alternatives.
 - Informs the public and NASA decisionmakers about the environmental impacts of the proposed action and reasonable alternatives
- The EIS process is designed to solicit public input.
- All comments received during the scoping process will be considered in preparing the EIS.

Mars 2020 EIS Scoping Period

- Scoping Period extends to October 30, 2013.
- NASA is requesting comments on environmental impacts of concern to the public and alternatives to the proposed action.
- Comments will be accepted at this meeting both orally and on the provided comment forms.
- Additional comments may be submitted in writing or via e-mail at any time during the scoping period.

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Draft EIS Public Comment Period

- After DEIS is published, there will be a second opportunity to provide written comment by:
 - Hardcopy letters
 - Electronic mail
- Oral comments may be presented at any Public Comment Meetings held during the Draft EIS public comment period.
- All comments should be submitted with the understanding that NASA will publish them in the Final EIS.

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Final EIS

- Will contain:
 - Text changes, as appropriate, to reflect new information and comments on the Draft EIS.
 - An Appendix with:
 - Copies of written comments and NASA's responses
 - Summaries of concerns expressed orally and NASA's responses
- Will be sent to those on the mailing list and also available on the Internet at:
www.nasa.gov/agency/nepa/mars2020eis

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Record of Decision (RoD)

- Will be issued no sooner than 30 days after issuance of the Final EIS.
- Will be sent to those who have requested a copy and will be available on the Internet.
- Will contain:
 - NASA's decision
 - All alternatives considered
 - The environmentally preferable alternative
 - The factors that entered into the decision
 - The mitigation measures adopted, if any

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Ways You Can Track Progress of the EIS

- Request to be added to the mailing list
- Access the active website
www.nasa.gov/agency/nepa/mars2020eis
- Look for announcements of the availability of the Draft EIS
Federal Register and local media
- Look for announcements of the availability of the Final EIS
Federal Register and local media

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Thank you for participating in the public scoping process for the Mars 2020 mission.

We appreciate your time and input.

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