

Rio Rico to Harshaw 138kV Transmission Line Project

OPEN HOUSE MEETING #4

NOVEMBER 17, 2022



November 2022

Purpose and Need

- Respond to a service request to serve the Hermosa Project, a mine exploration project currently in the pre-feasibility phase.
- Address service reliability for all electric customers in the San Rafael Valley, Washington Camp, and Lochiel areas of Southern Arizona.
- New, higher-voltage facilities would reduce potential reliability issues associated with inadequate voltage support.
- Provide additional capacity that could allow interconnections with future renewable energy projects while supporting economic development in the area.

Project Overview

138kV transmission line between a planned switchyard in Rio Rico and the planned Harshaw Substation.

Approximately 20-30 mile, single-circuit 138 kV transmission line mounted on steel monopole structures.



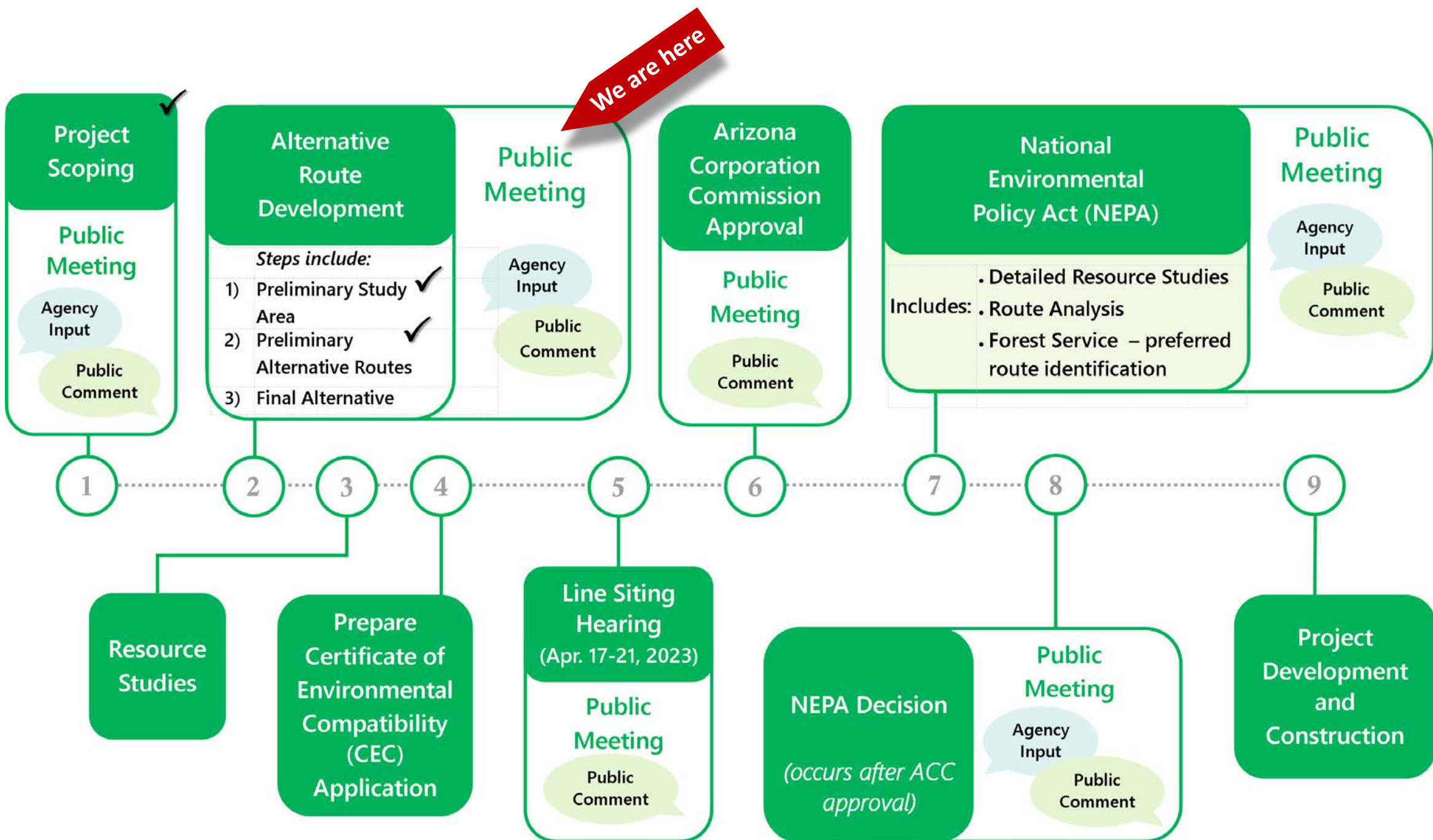
Project Details: Example Switchyard in the TEP system



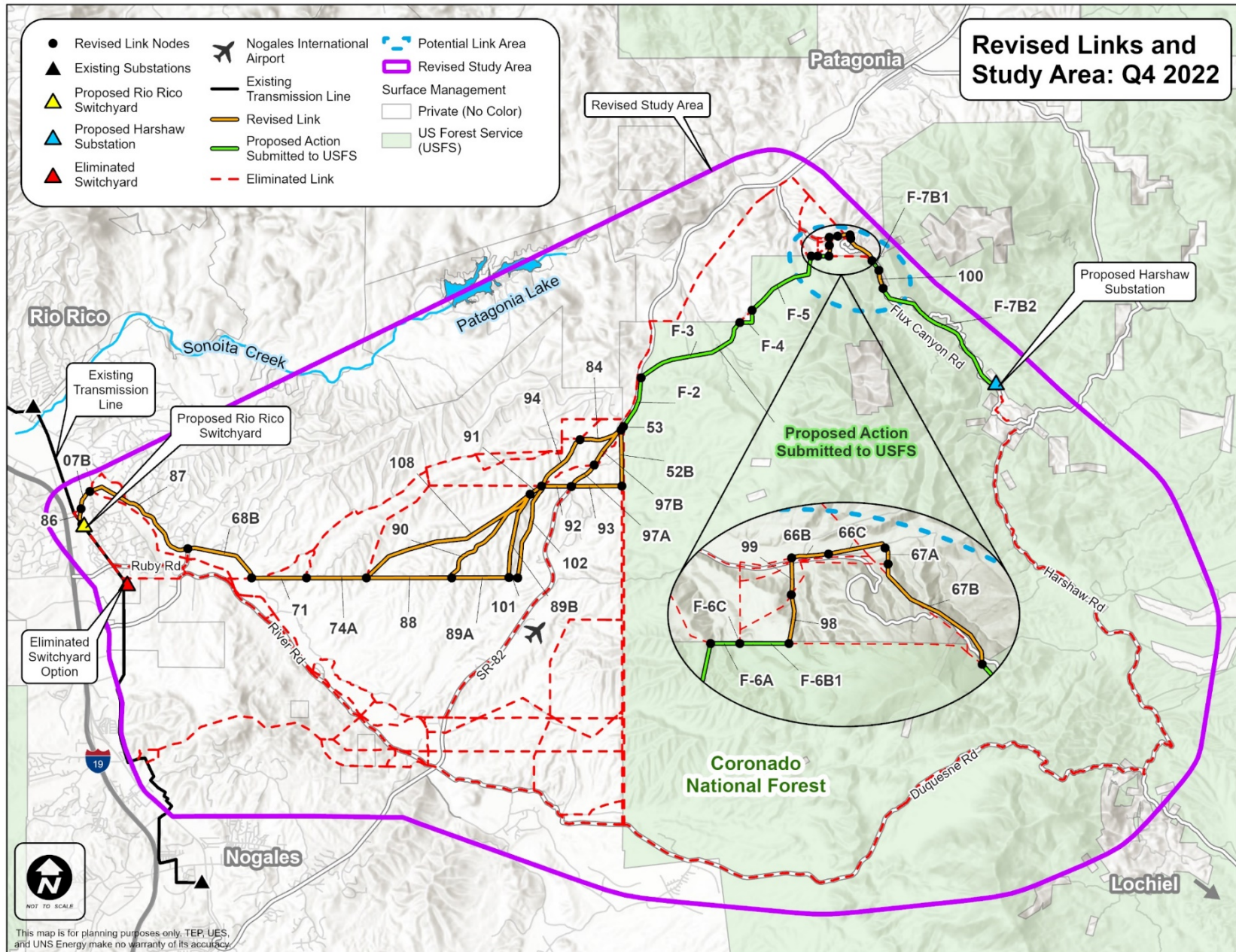
Project Details: Transmission Line

- Self-weathering steel monopoles 75-110 feet tall.
- Up to 100-foot-wide right-of-way when not in road right-of-way.





Line Siting – Revised Links



Routing Criteria

UNSE analyzes specific criteria in developing and selecting alternative routes.

These criteria include:

1. Total environment (fish, wildlife, plants)
2. Existing state, local government, and private development plans including residential use
3. Noise
4. Recreational impacts
5. Scenic areas, historic sites & structures, archaeological sites
6. Interference with communication facilities
7. Technical aspects
8. Cost
9. Other applicable federal and state laws

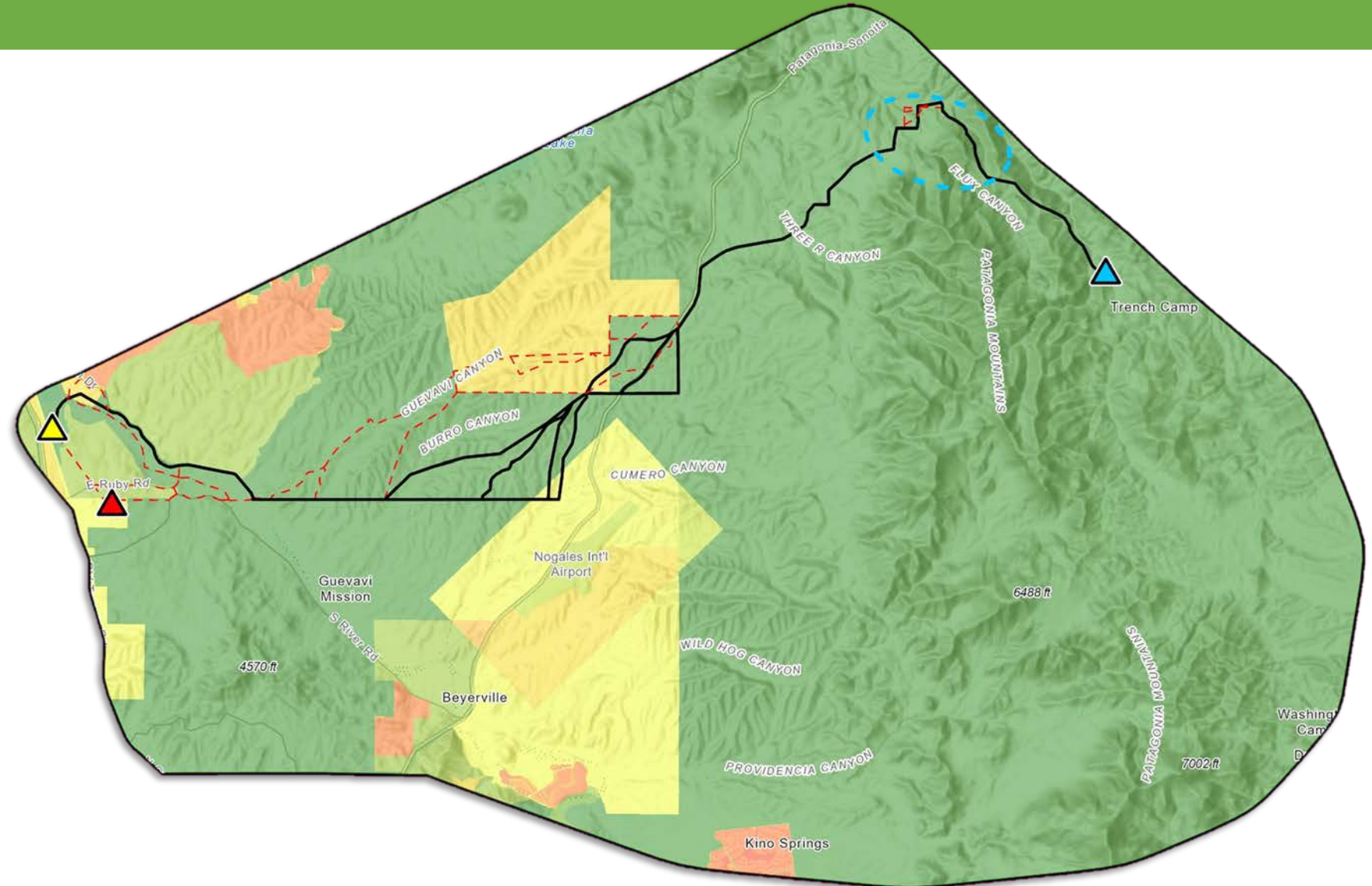
Criteria 1 – Existing Plans

LEGEND

- Proposed Rio Rico Switchyard
- Proposed Harshaw Substation
- Eliminated Switchyard
- Revised Link
- Eliminated Link
- Potential Link Area







Suitability Analysis

- High Compatibility
- Low Compatibility
- Exclusion Area






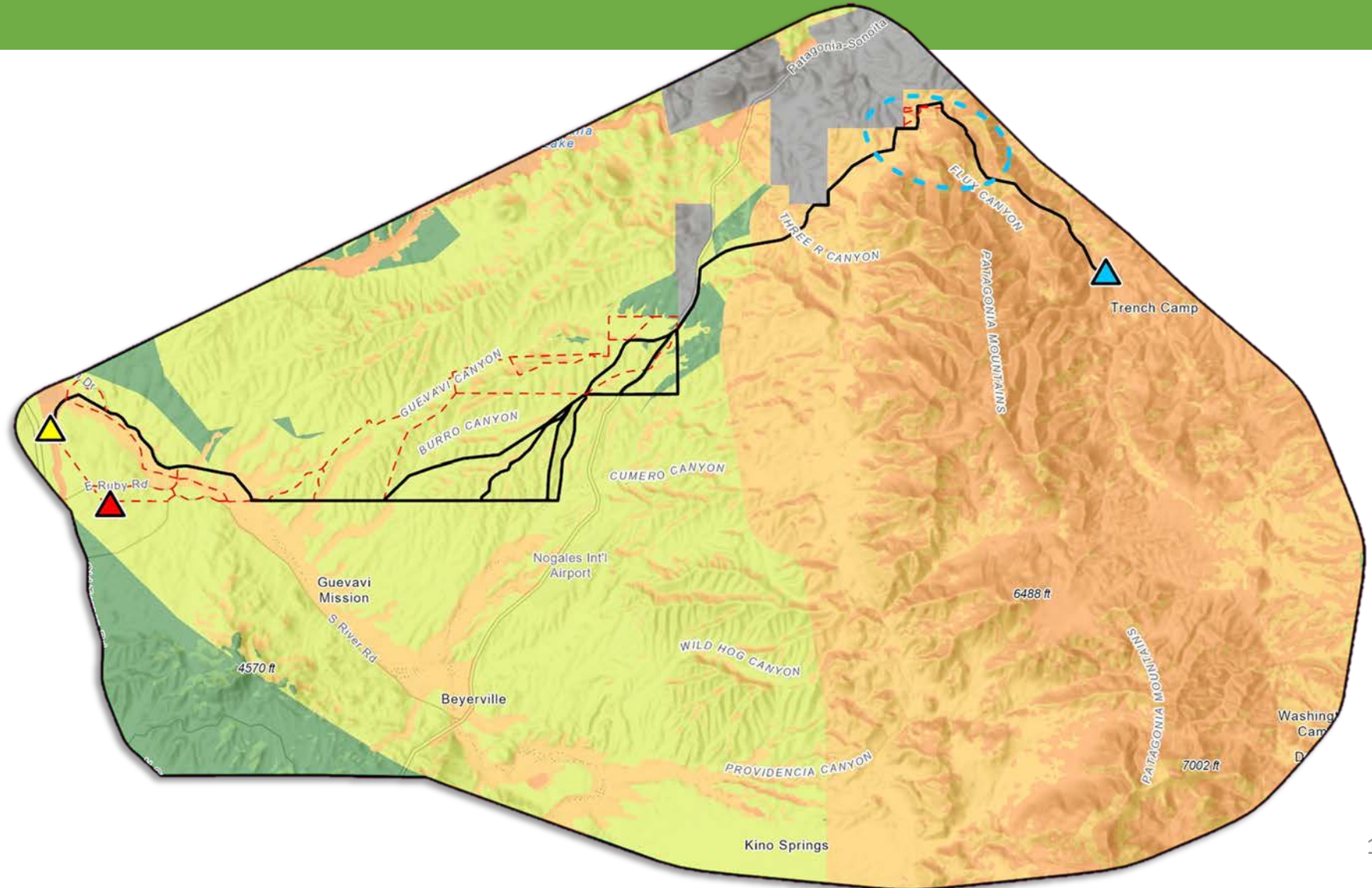
Criteria 2 – Biological Resources

LEGEND

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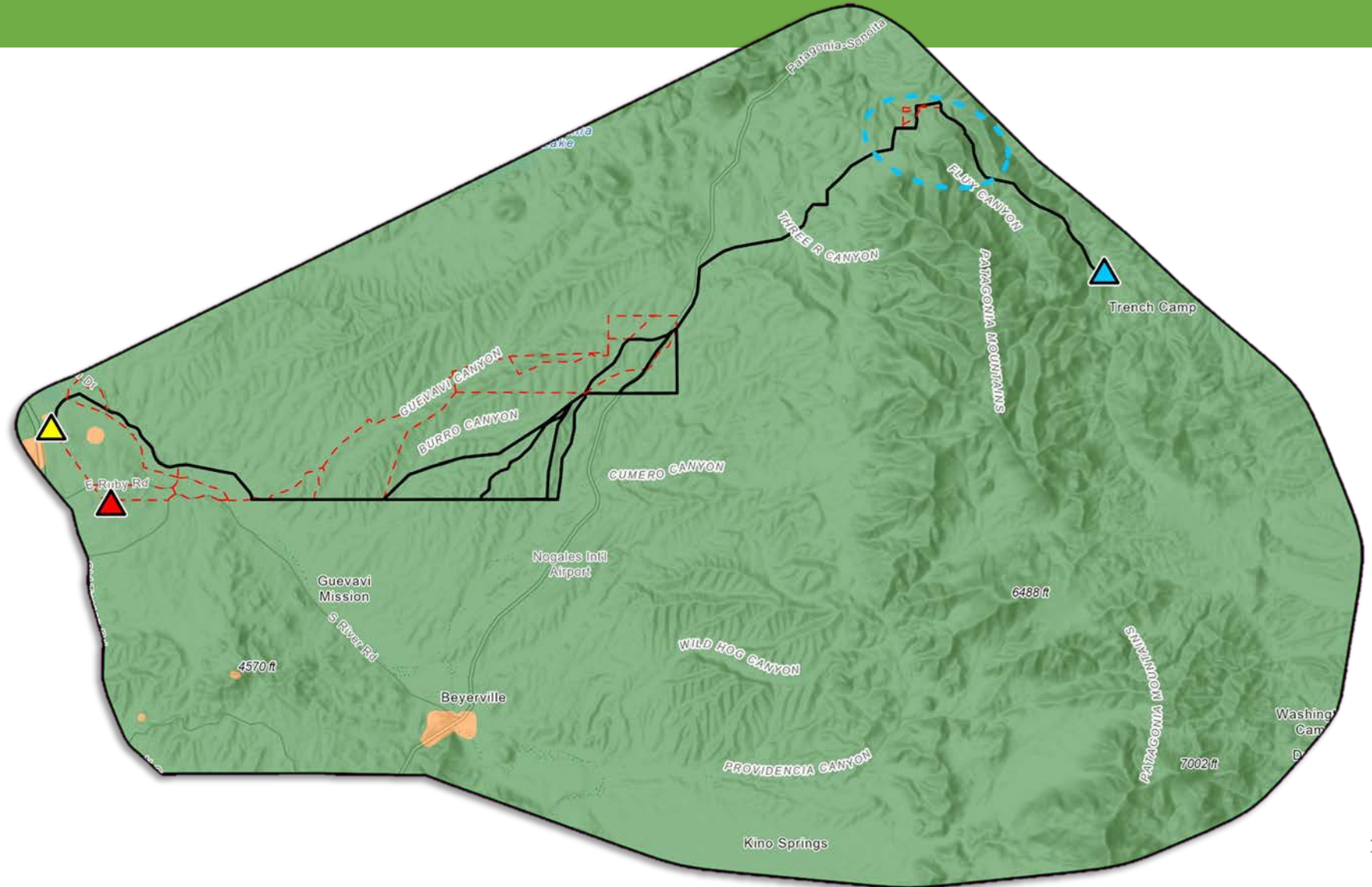
Criteria 3 – Noise & Communication

LEGEND

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-  Proposed Harshaw Substation
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Suitability Analysis

-  High Compatibility (green) to Low Compatibility (red)
-  Exclusion Area





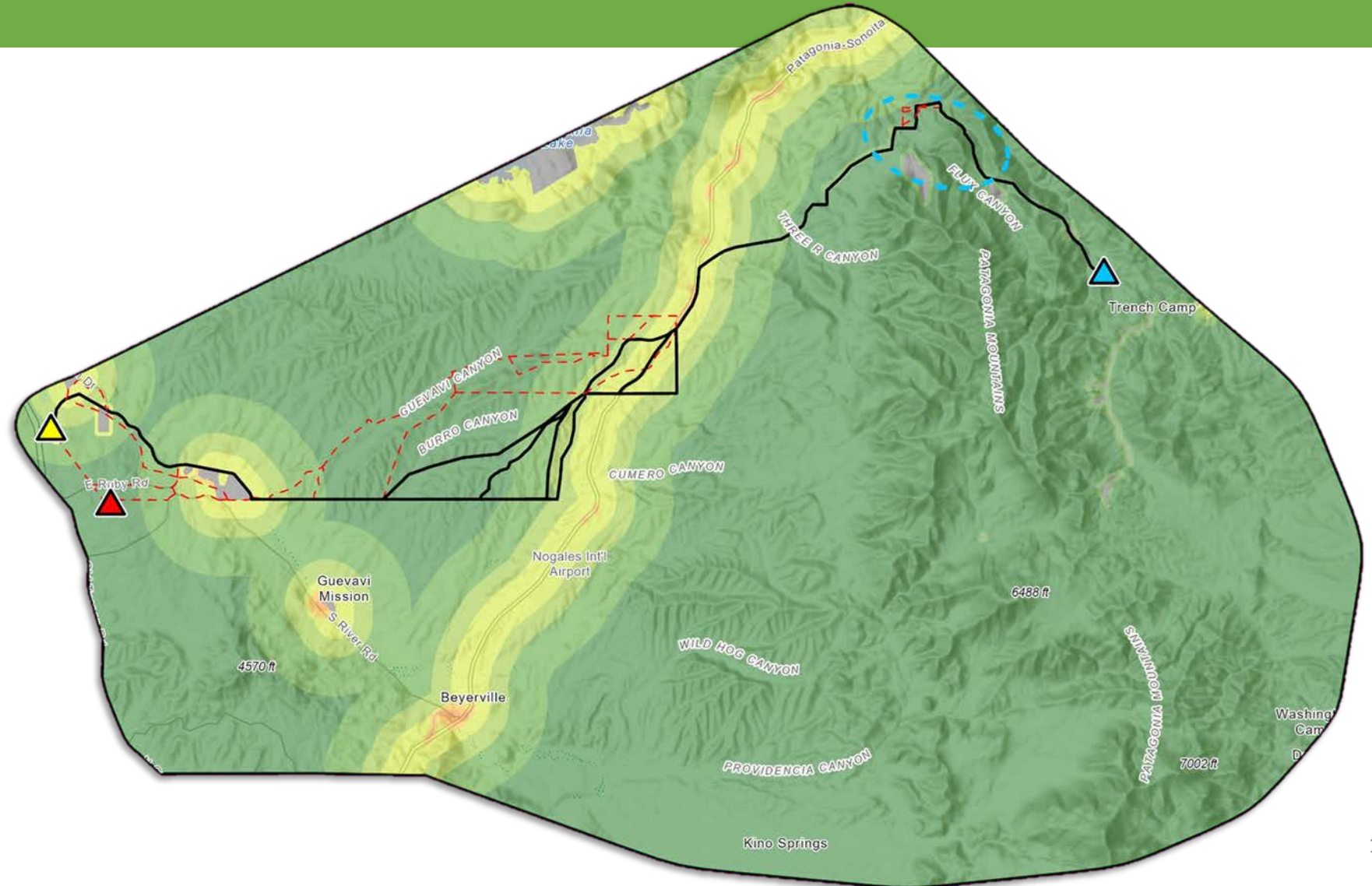
Criteria 4 – Scenic & Cultural Resources

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Suitability Analysis

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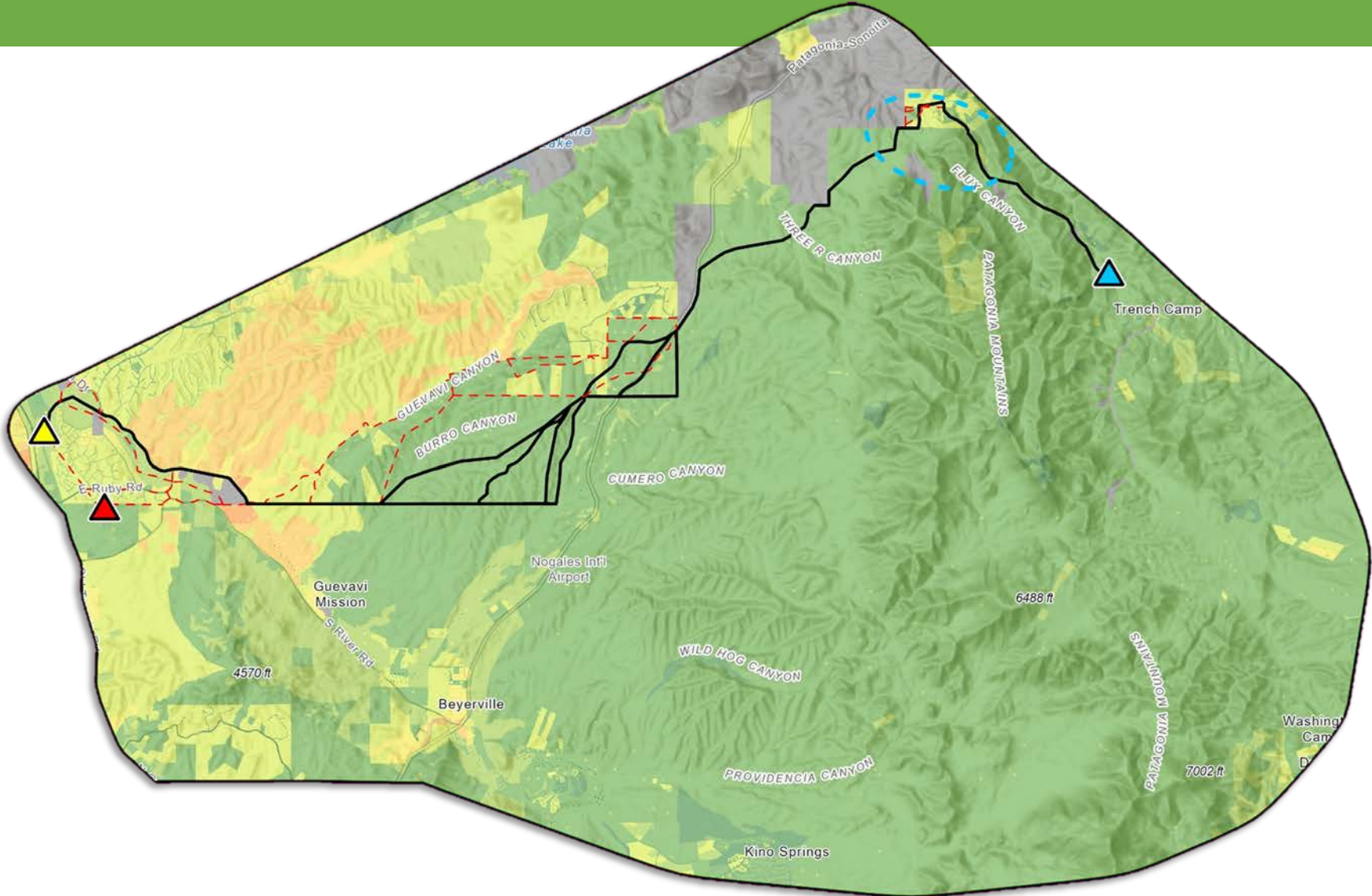
Criteria 5 – Total Environment

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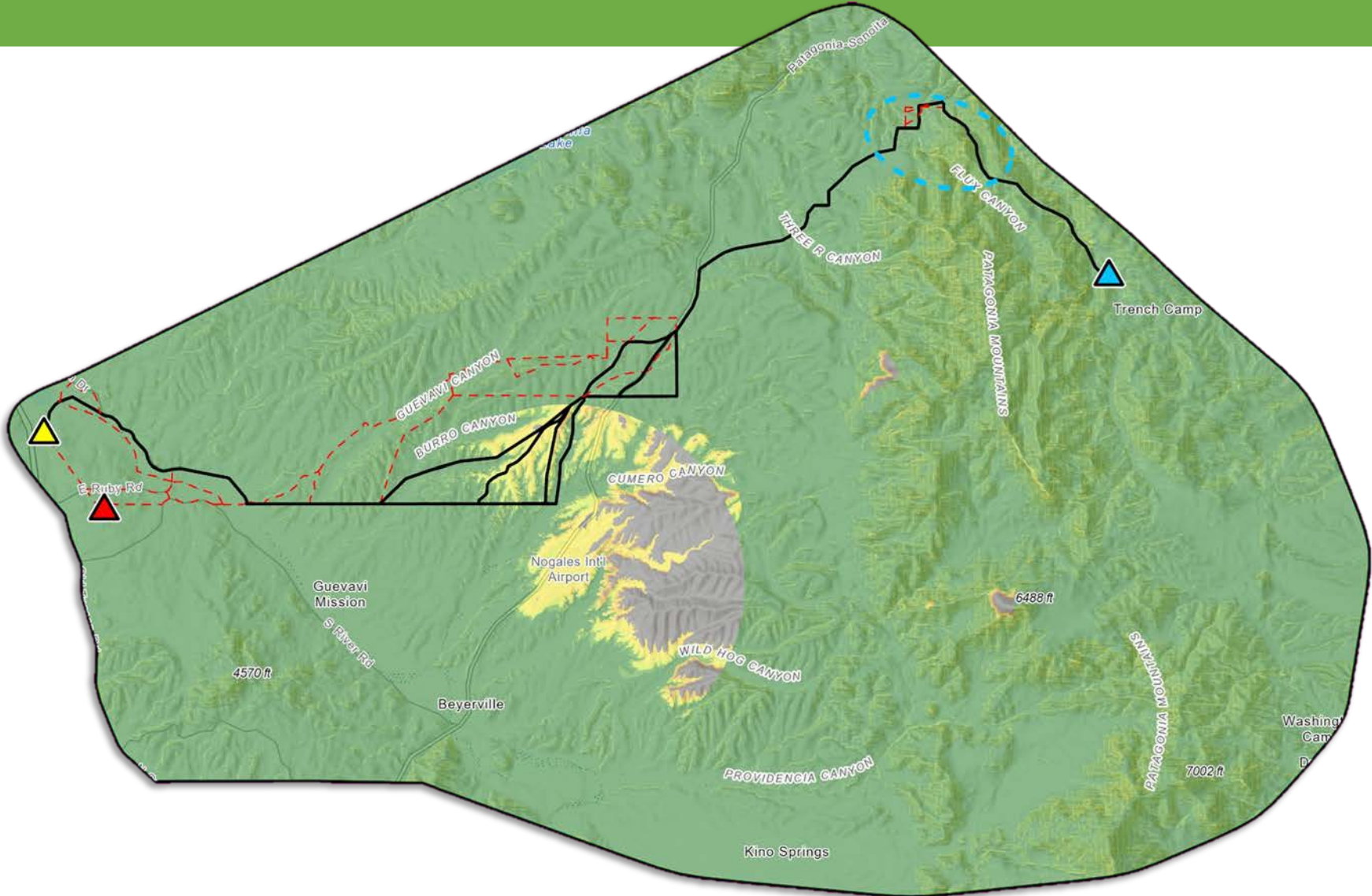
Criteria 6 – Construction & Maintenance

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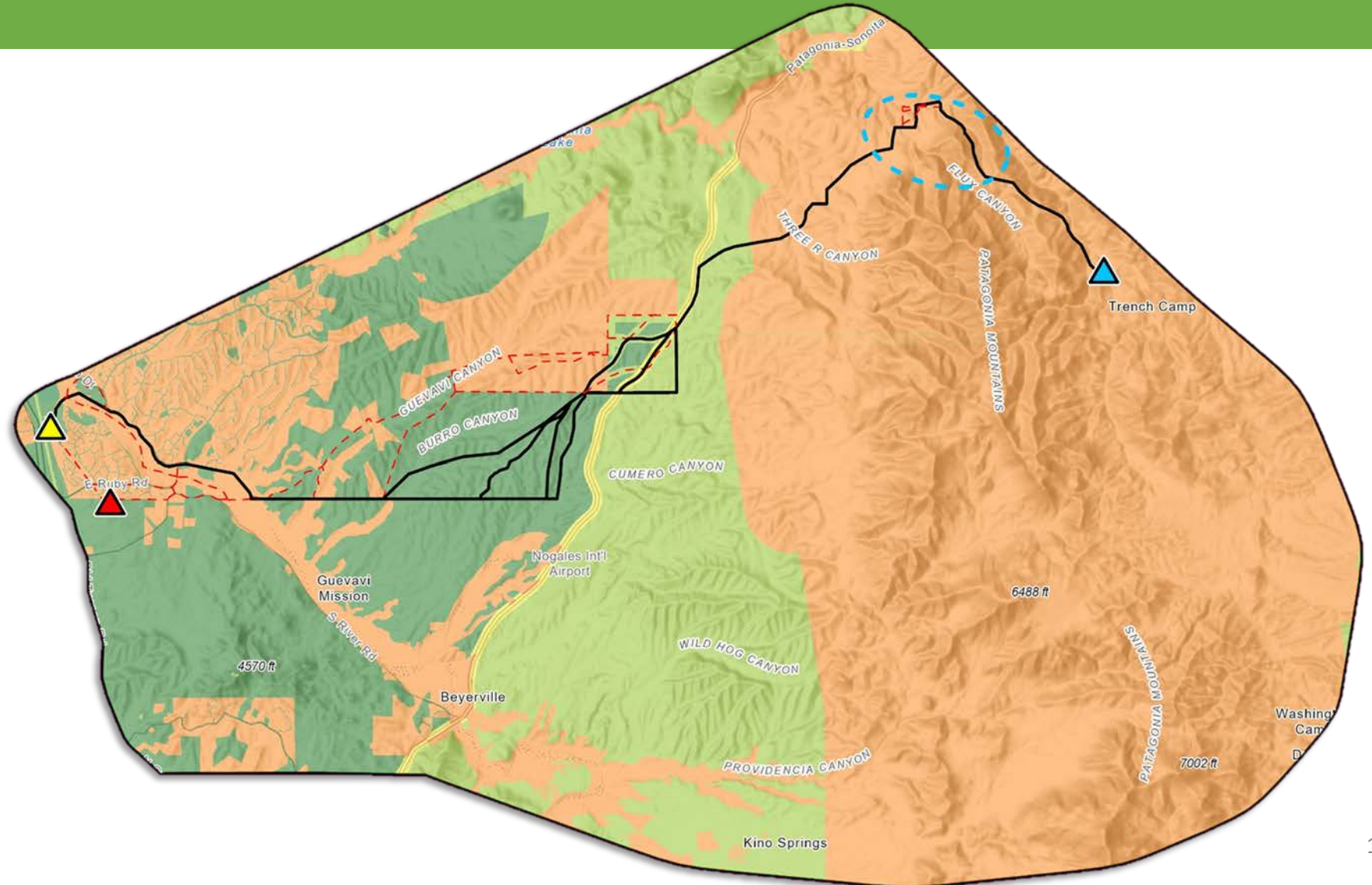
Criteria 7 – Outreach

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Composite Suitability Models

Criteria models are weighted differently based on model and added together.

Criteria 7 x Weight



Criteria 6 x Weight



Criteria 5 x Weight



Criteria 4 x Weight



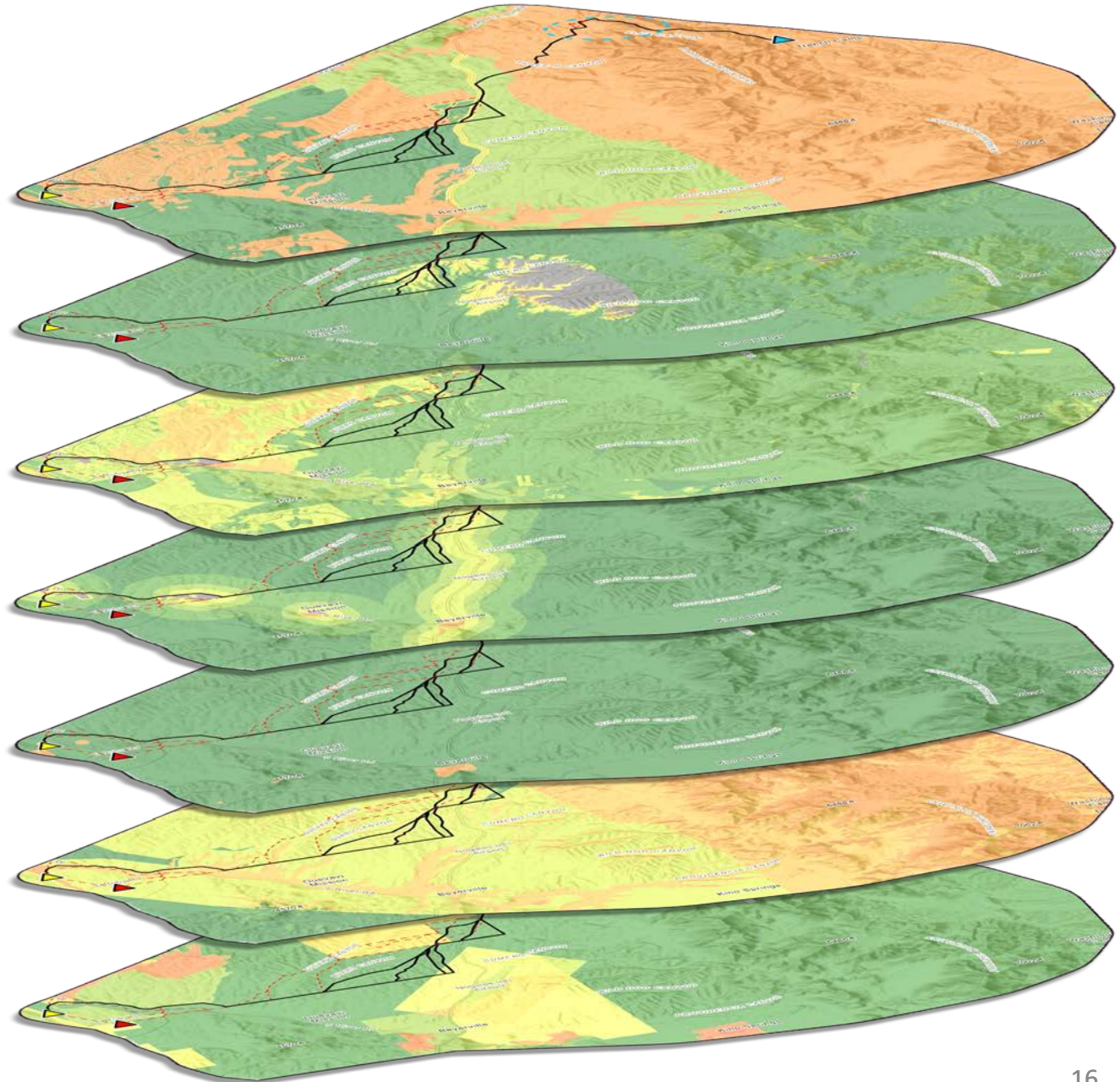
Criteria 3 x Weight



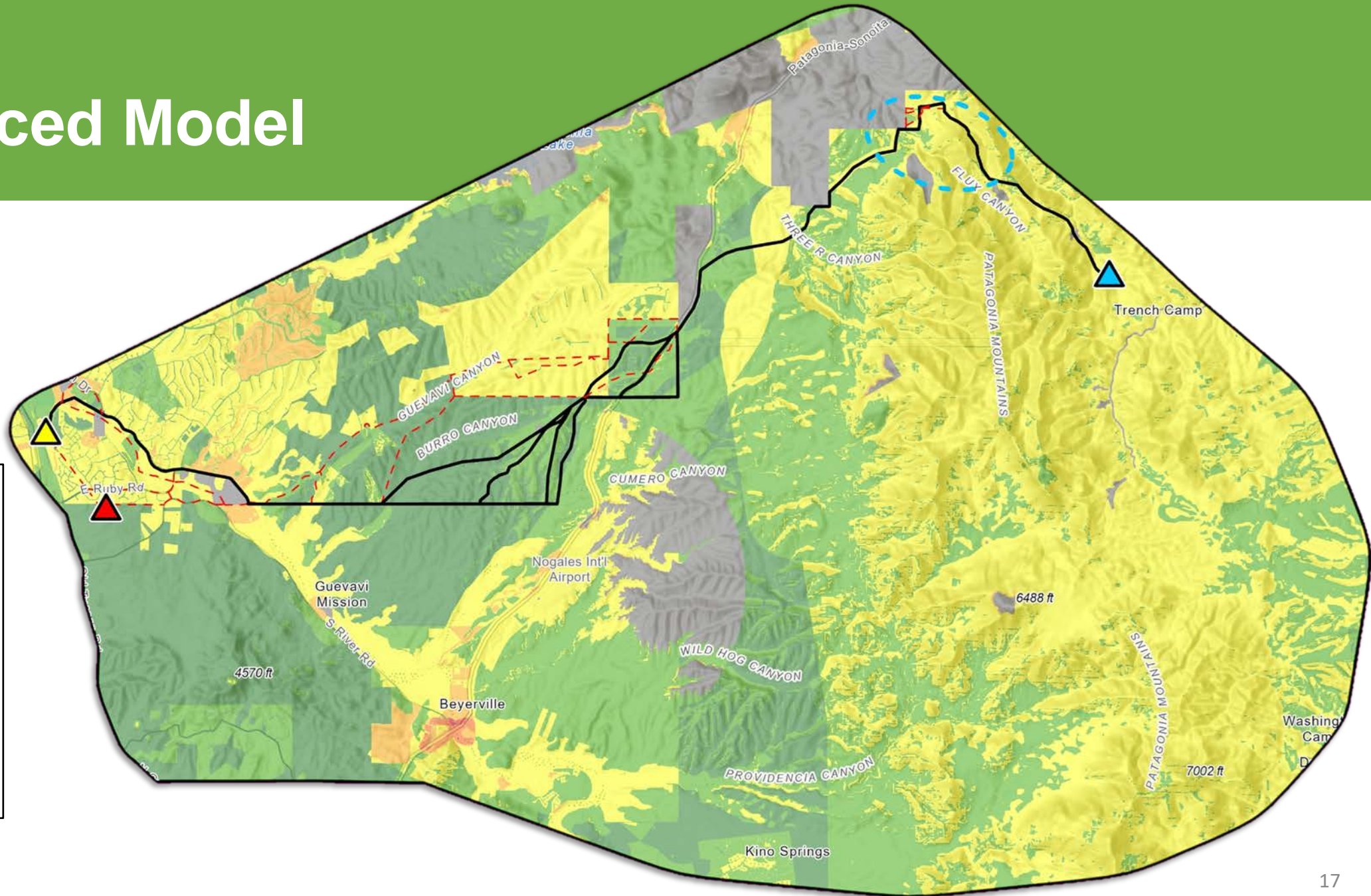
Criteria 2 x Weight



Criteria 1 x Weight



Balanced Model



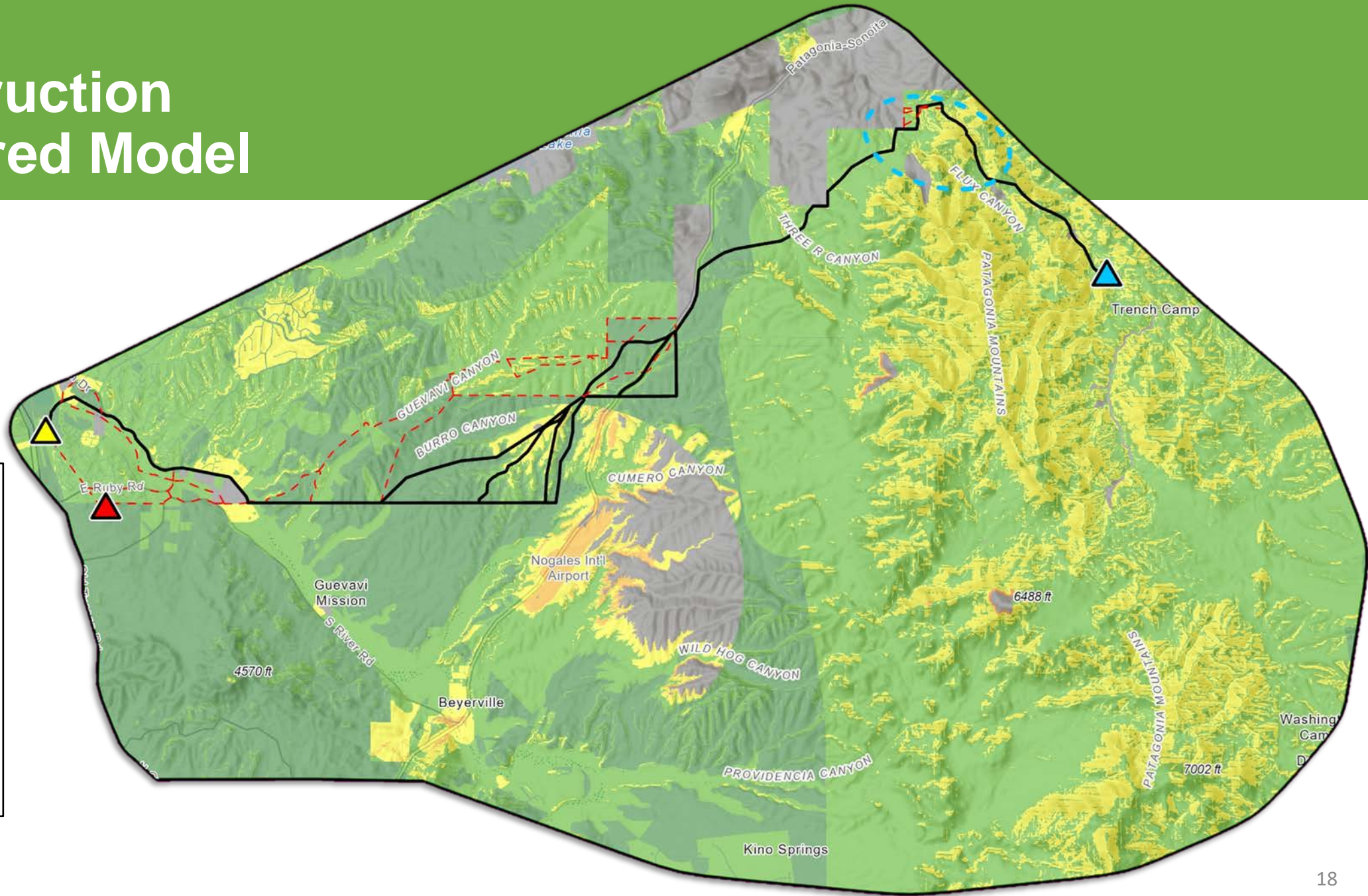
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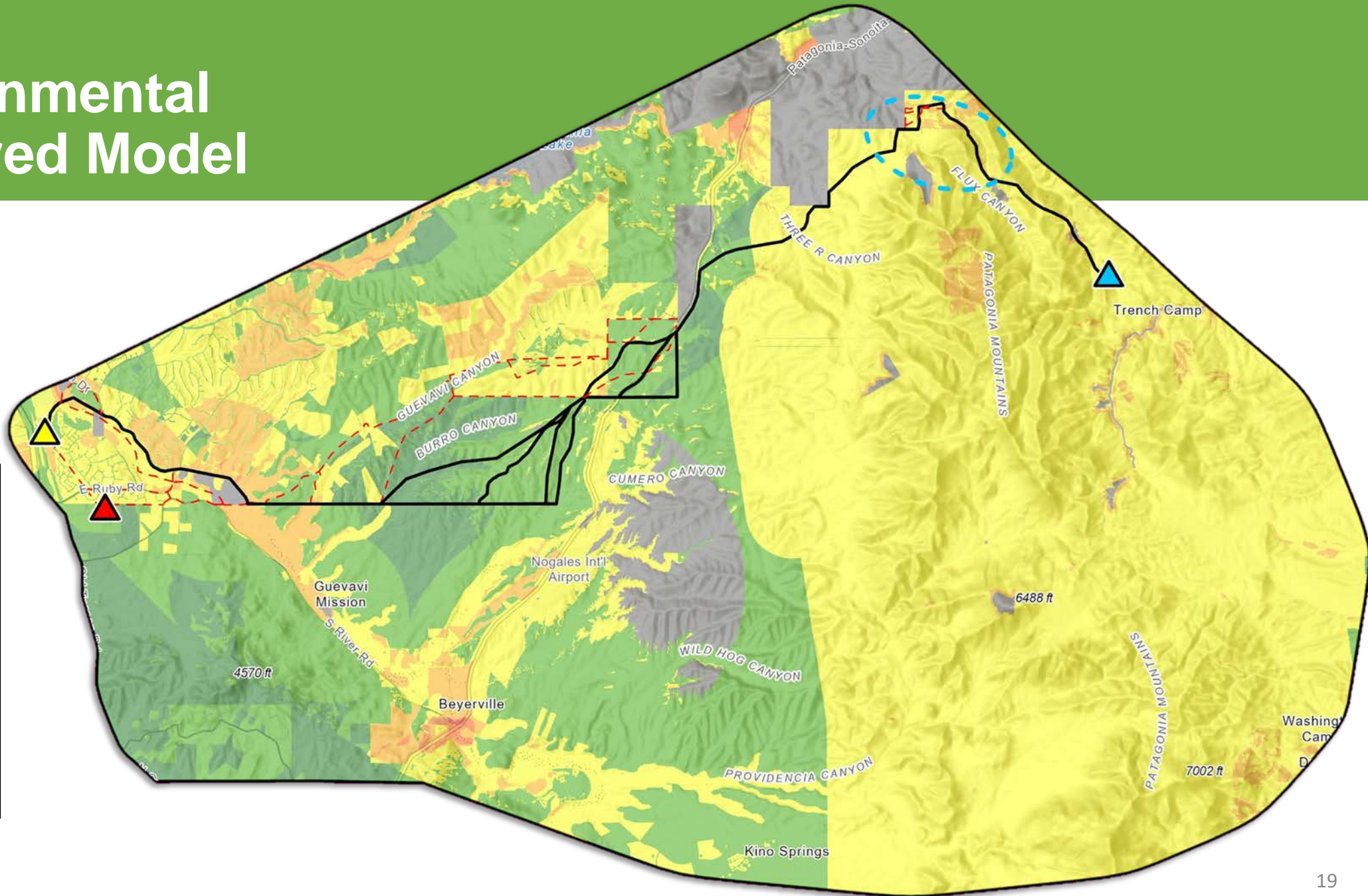
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Construction Preferred Model



Environmental Preferred Model



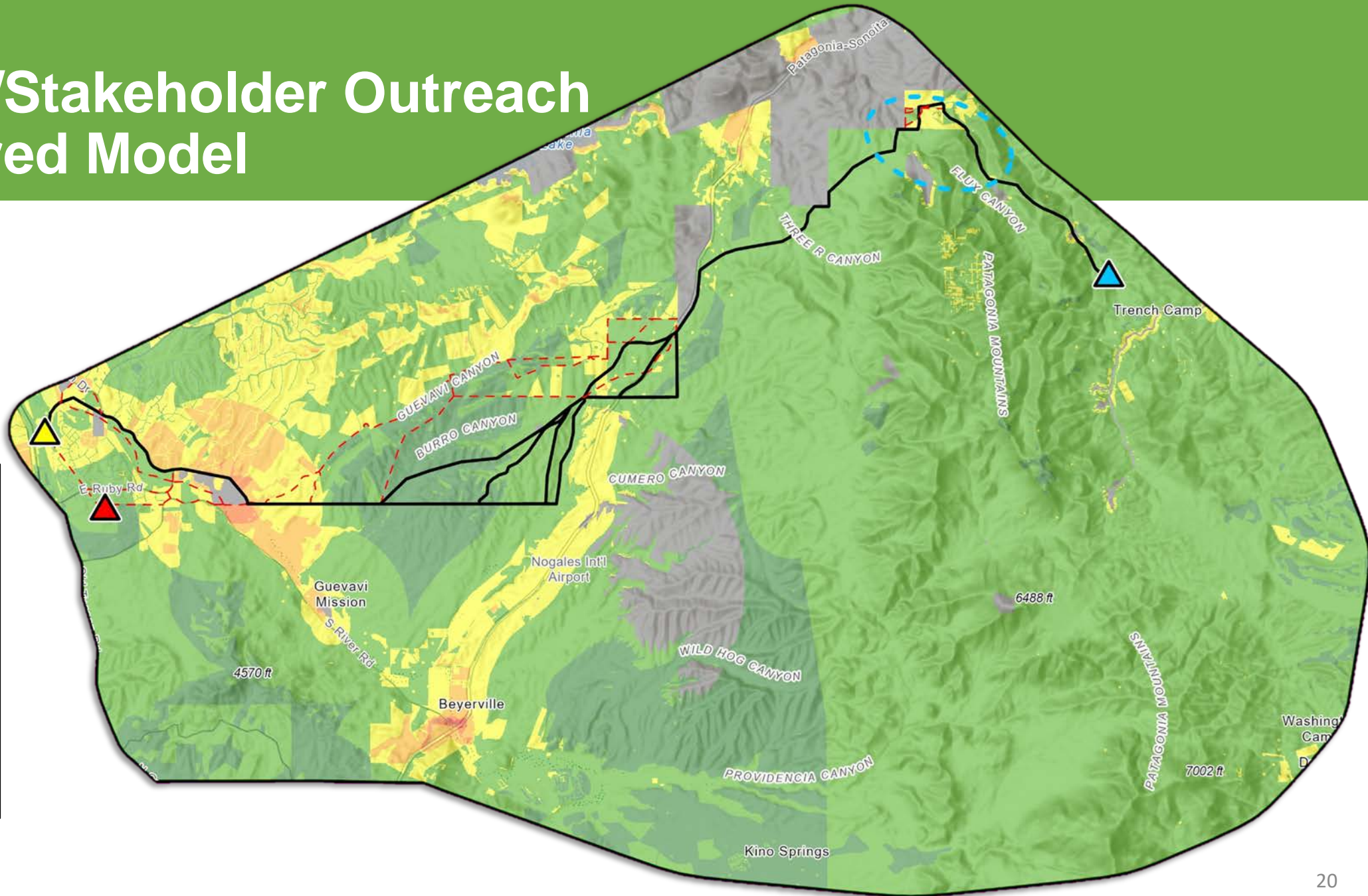
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Public/Stakeholder Outreach Preferred Model



Next Steps

- Nov. 2022 – Outreach on Revised Links
- Jan. 2023 – Preferred Route and Alternatives Routes
- March 3, 2023 – File Application for CEC
- April 17-21, 2023 – Line Siting Hearing
- May/June 2023 – ACC Approval of CEC

More Project Information

For more project information please visit the project webpage:

<https://www.uesaz.com/rio-rico-to-harshaw/>

Here, you will find:

- Project details including the project newsletter
- A print copy and of this presentation
- Commonly asked questions & answers
- Interactive survey link

How to Comment

- Mail a comment form or a letter to: UniSource Energy Services ATTN: Rio Rico-Harshaw PO Box 711 Tucson, AZ 85702
- Send comments to RR2Harshaw@uesaz.com
- Visit uesaz.com/rio-rico-to-harshaw and fill out an online comment form or use the Interactive Survey to provide further input
- Call 1-833-783-0396 and leave a voicemail message in English
- Deje un mensaje al 1-833-783-0396 y le regresaran su llamada