Greater Sage Grouse Plan Amendment

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Deputy State Director of Resources
BLM Nevada
Sagebrush Ecosystem Council 2/12/16

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BLM NV SG Implementation Training to Date

- SG Plan Amendment Orientation
- Table 2-2
- Disturbance Cap calculations

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Goals, Objectives and Mgmt Decisions

- Special Status Species (SSS) Goal: Conserve, enhance, and restore the sagebrush ecosystem upon which GRSG populations depend…..

- Objective SSS 1: manage land resource uses to meet GRSG habitat objectives, as described in Table 2-2….
- Objective SSS 2: Maintain or improve connectivity between, to, and in PHMA and GHMA…
- Objective SSS 3: Identify and Implement GRSG conservation actions that can augment, enhance, or integrate program conservation measures…
- Objective SSS 4: in PHMAs and GHMAs, apply the concept of "avoid, minimize, and compensatory mitigation" for all human disturbances ….to avoid adverse effects on GRSG and its habitat…

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Goals, Objectives and Mgmt Decisions

- MD SSS 2: In PHMAs, the following conditions will be met in order to avoid, minimize and mitigate any effects on GRSG and its habitat from the project/activity.

  A. Manage discrete anthropogenic disturbances, whether temporary or permanent, so they cover less than 3 percent of 1) biological significant units and 2) in a proposed project analysis area

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Goals, Objectives and Mgmt Decisions

- Objective Veg 3; Conifer encroachment Veg 4; Riparian and Wetlands Habitat Veg 8; Livestock Grazing LG 1
- Management Decisions VG 2, VG 6; Wildfire Mgmt Fire 1; Fuels Mgmt Fire 31; Post Fire Mgmt Fire 35; Livestock Grazing LG 3, LG 4, LG 5, LG 8, LG 12; Wild Horse and Burro WHB 2, WHB 6, WHB 7, WHB 8; Utility Corridors and Communication Sites LR 4; Mitigation MIT 2.

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Habitat Objectives/Desired Habitat Conditions

- Table 2-2 is based on the most current and local scientific literature.
- Modification of Connelly et. Al. 2000 guidelines.
- Identifies specific GRSG seasonal habitat requirements.
- Table 2-2 is to be used in project implementation design, project authorizations, and livestock grazing permit renewals.

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Process Flowcharts & Big Picture
Greater Sage Grouse
Plan Amendment

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2 Flowcharts

- Landscape Scale
- Site Specific Scale
- Similar Steps
- New Steps

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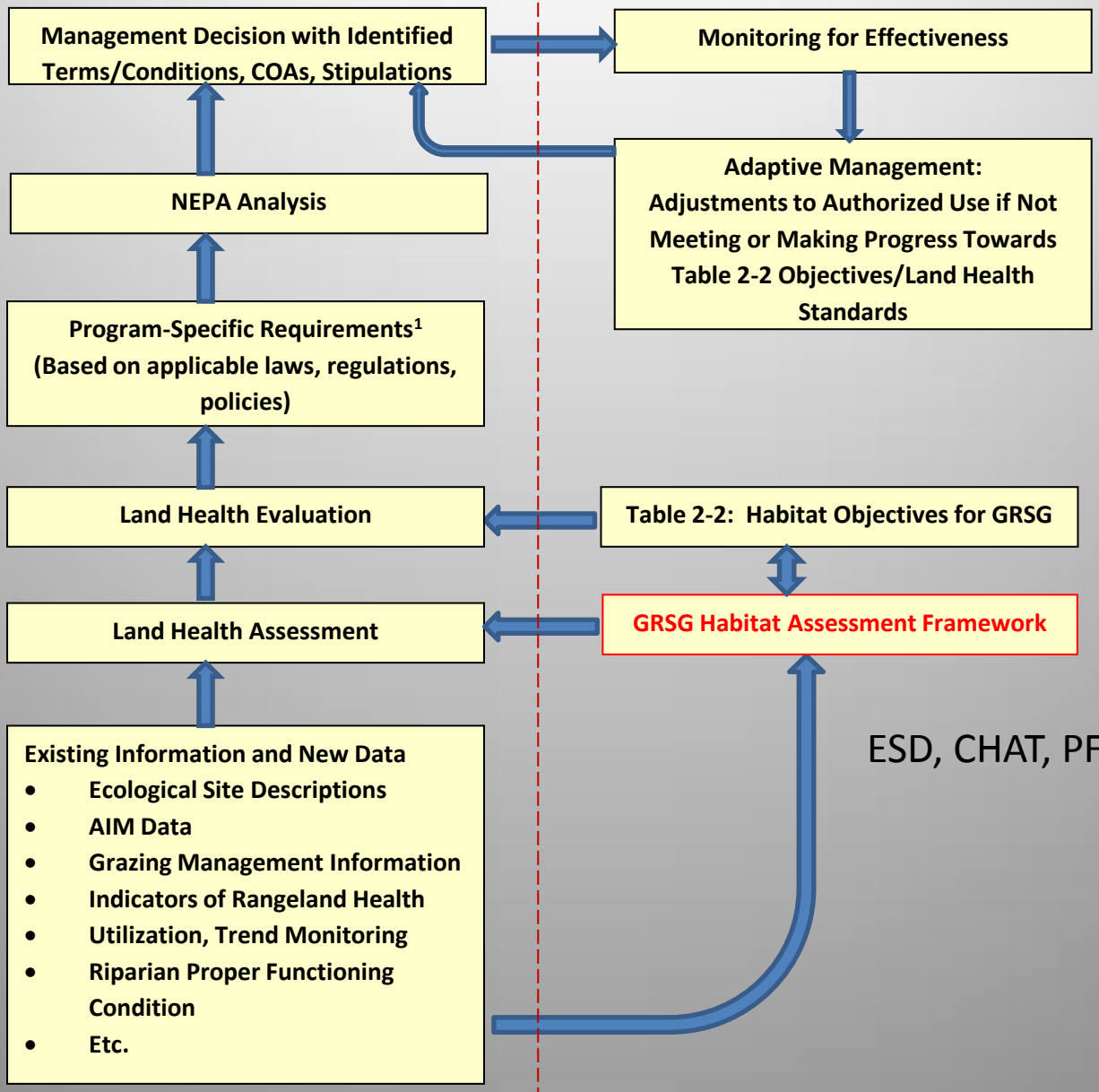
What Has Changed?

Landscape Scale



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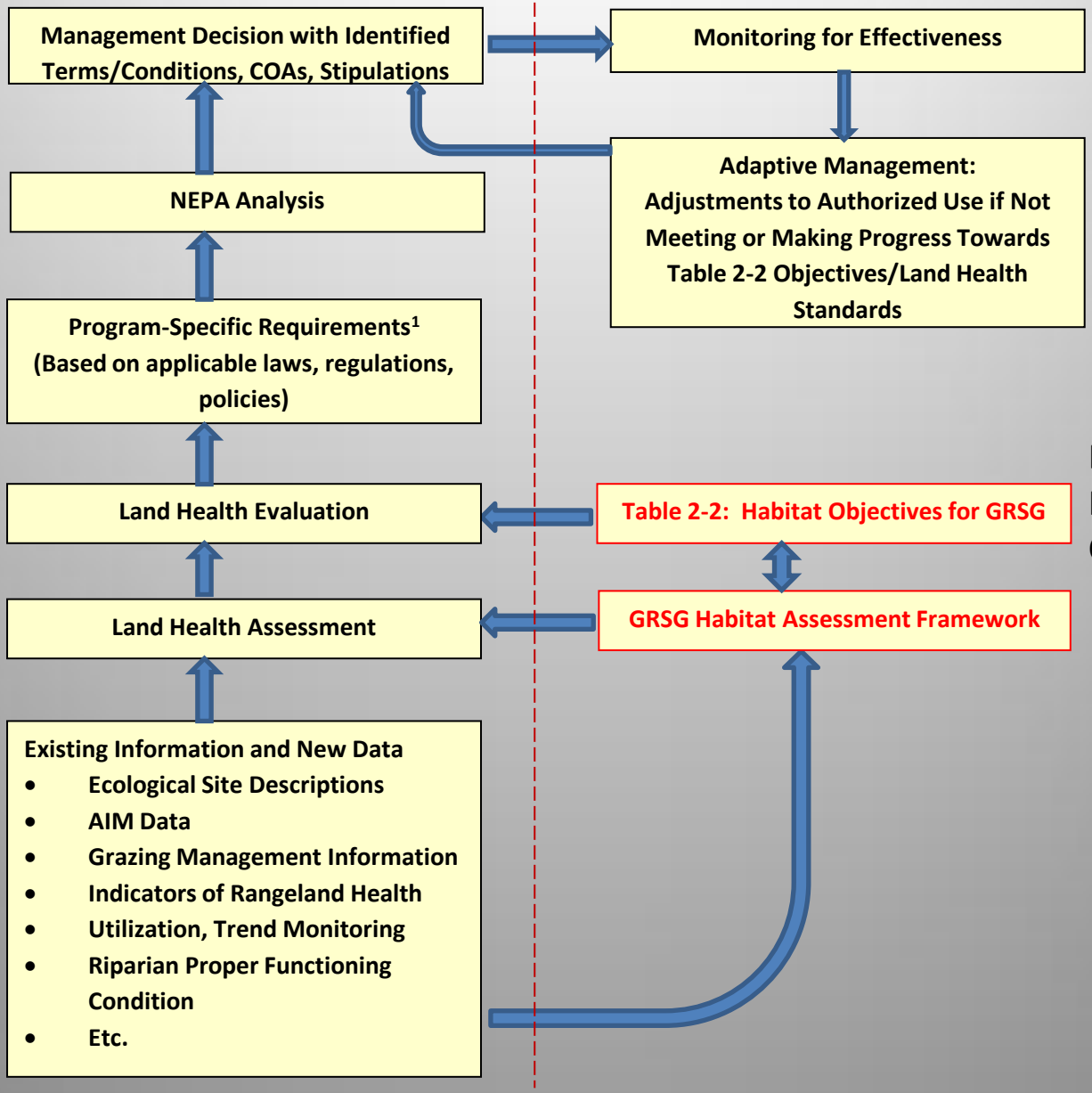
What Has Changed?

Landscape Scale



Desired Future Conditions

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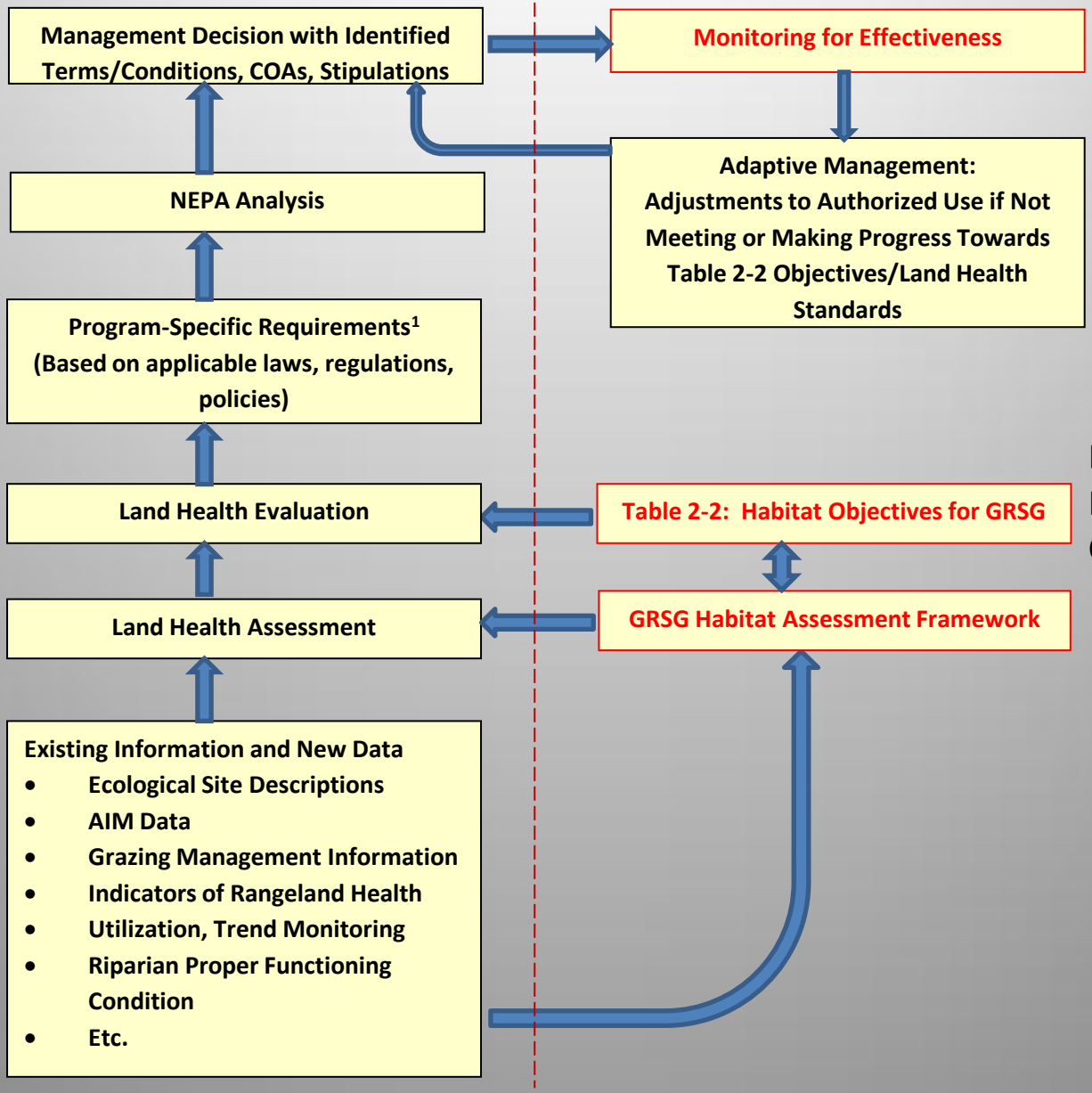
What Has Changed?

Landscape Scale



Desired Future Conditions

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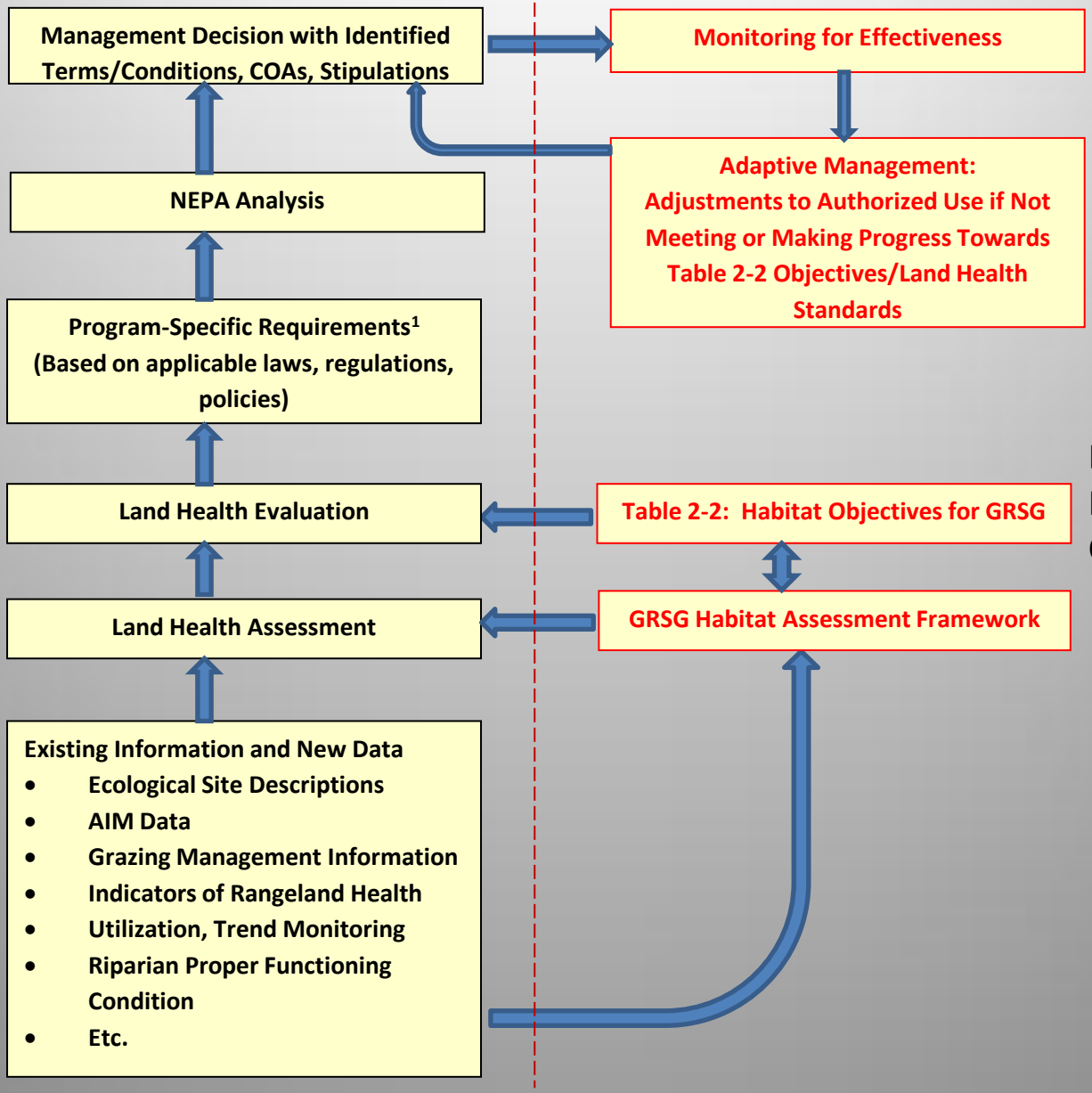
What Has Changed?

Landscape Scale



Desired Future Conditions

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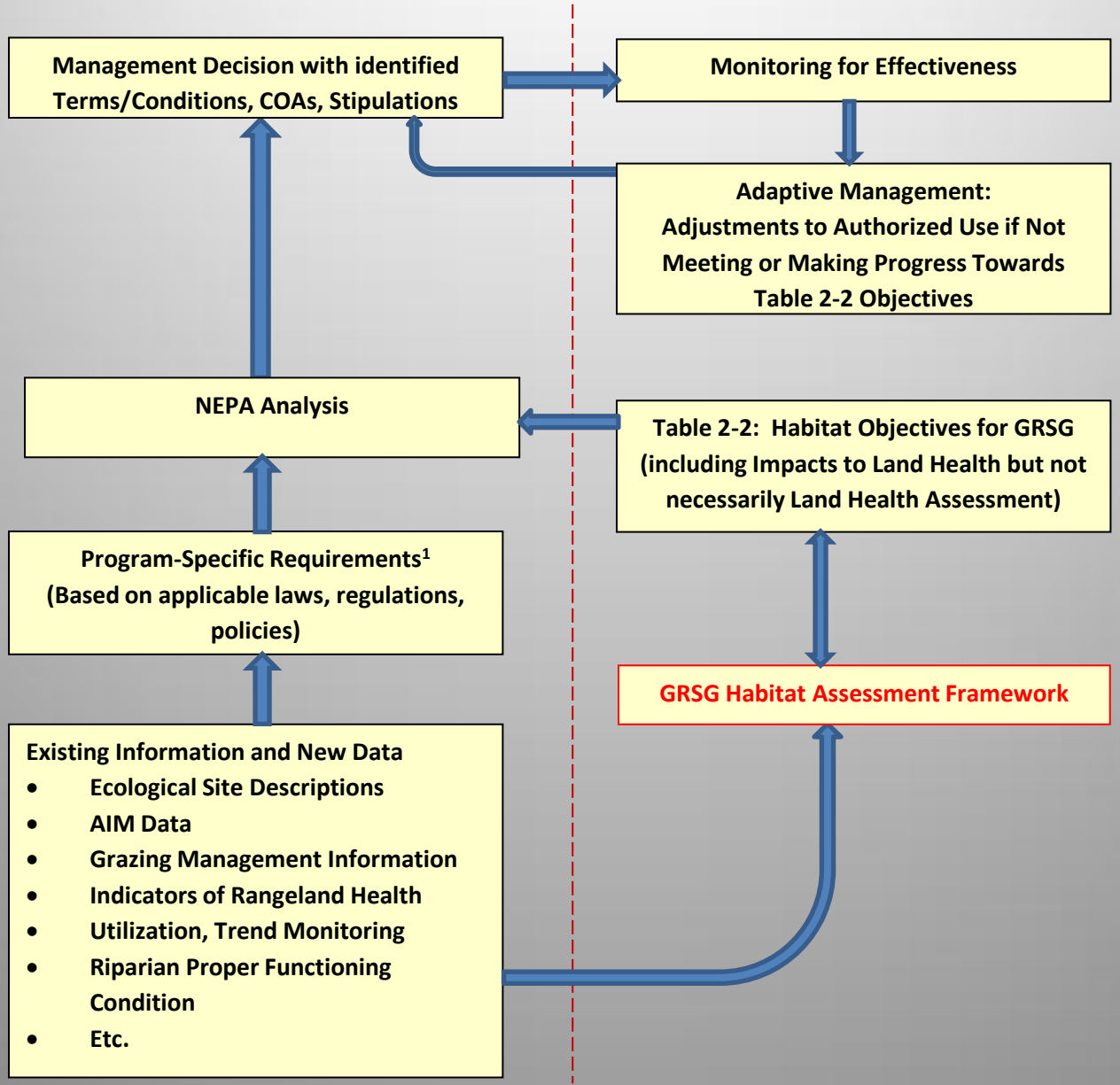
What Has Changed?

Site Specific



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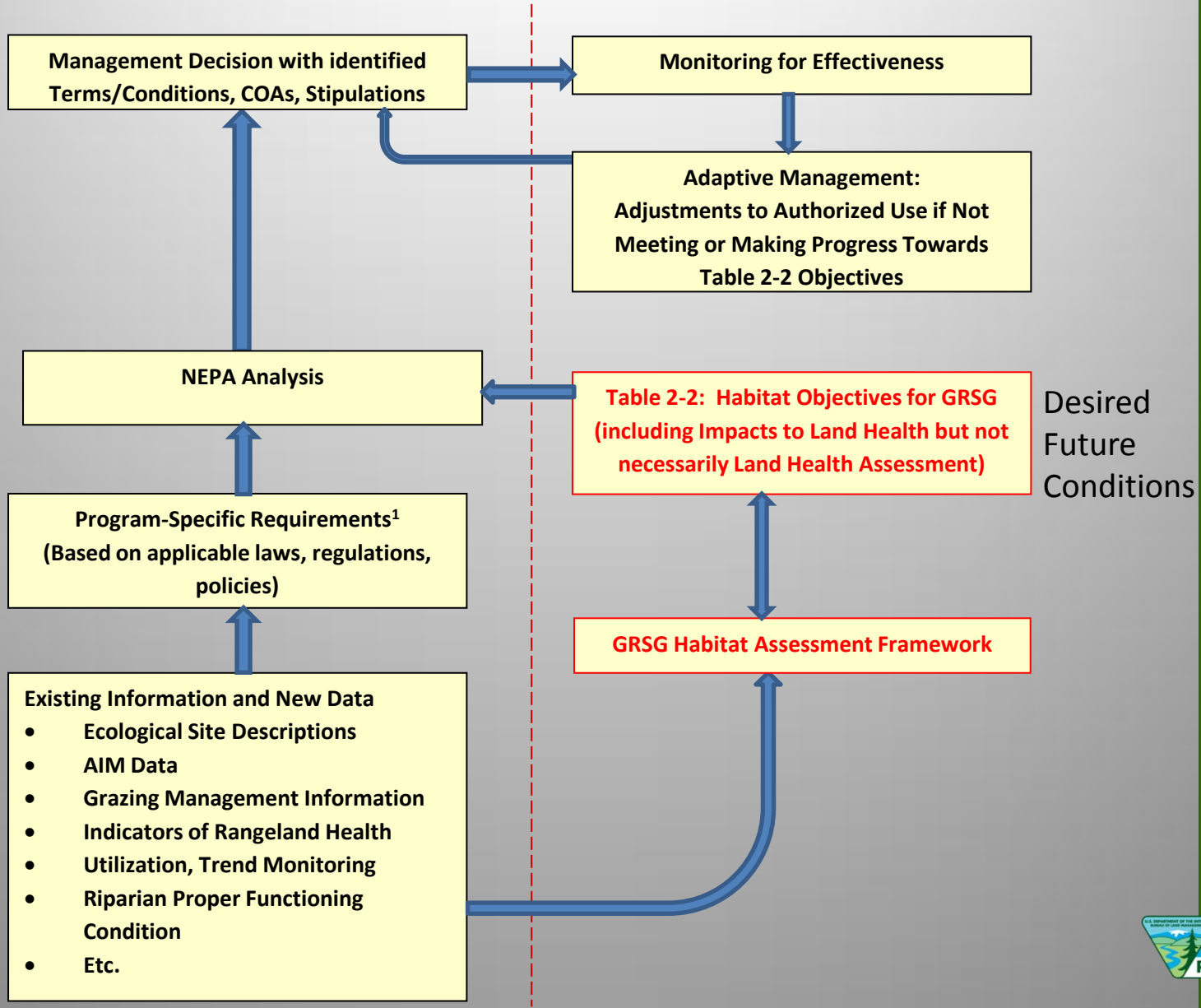

Site Specific

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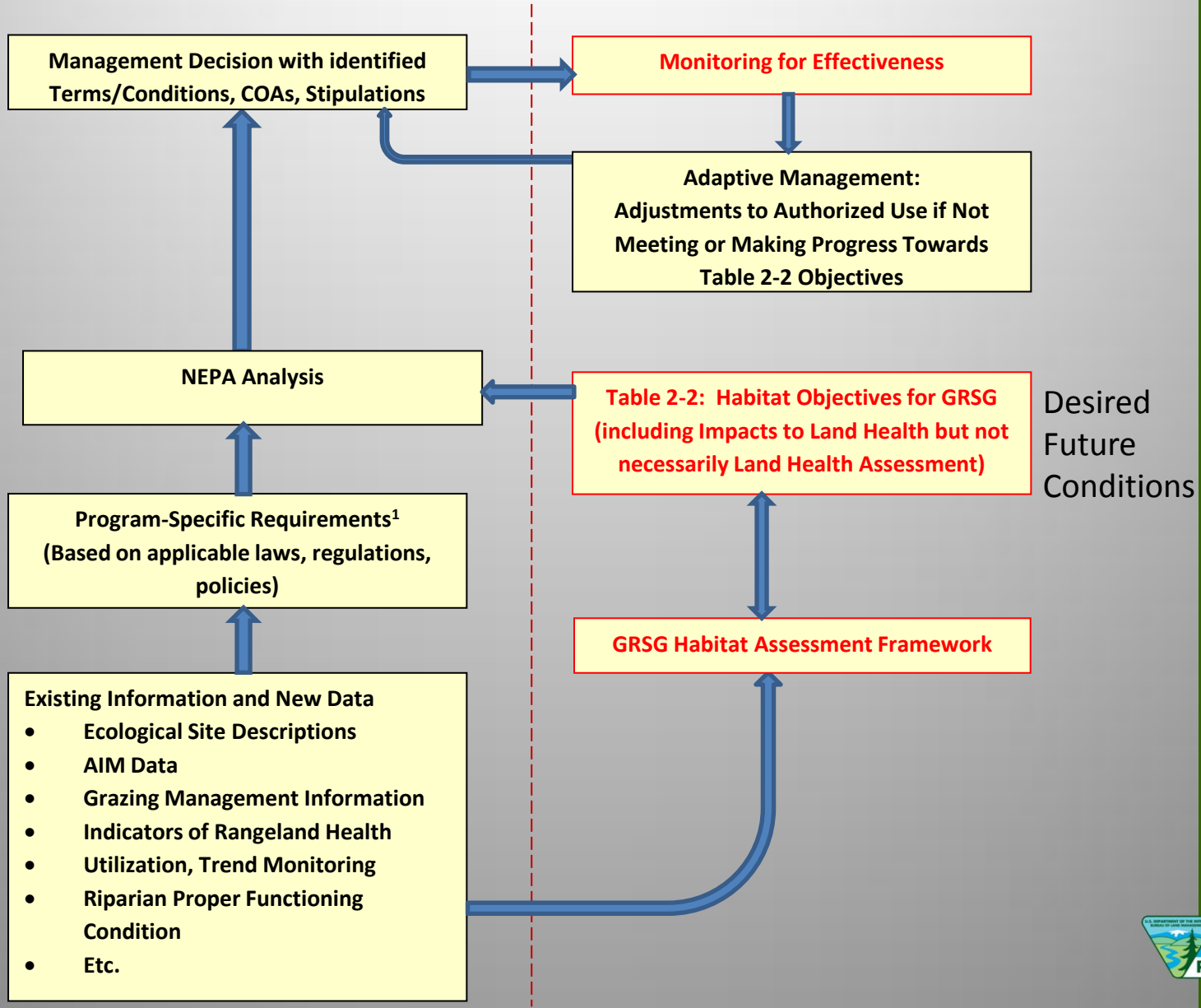
What Has Changed?



Site Specific

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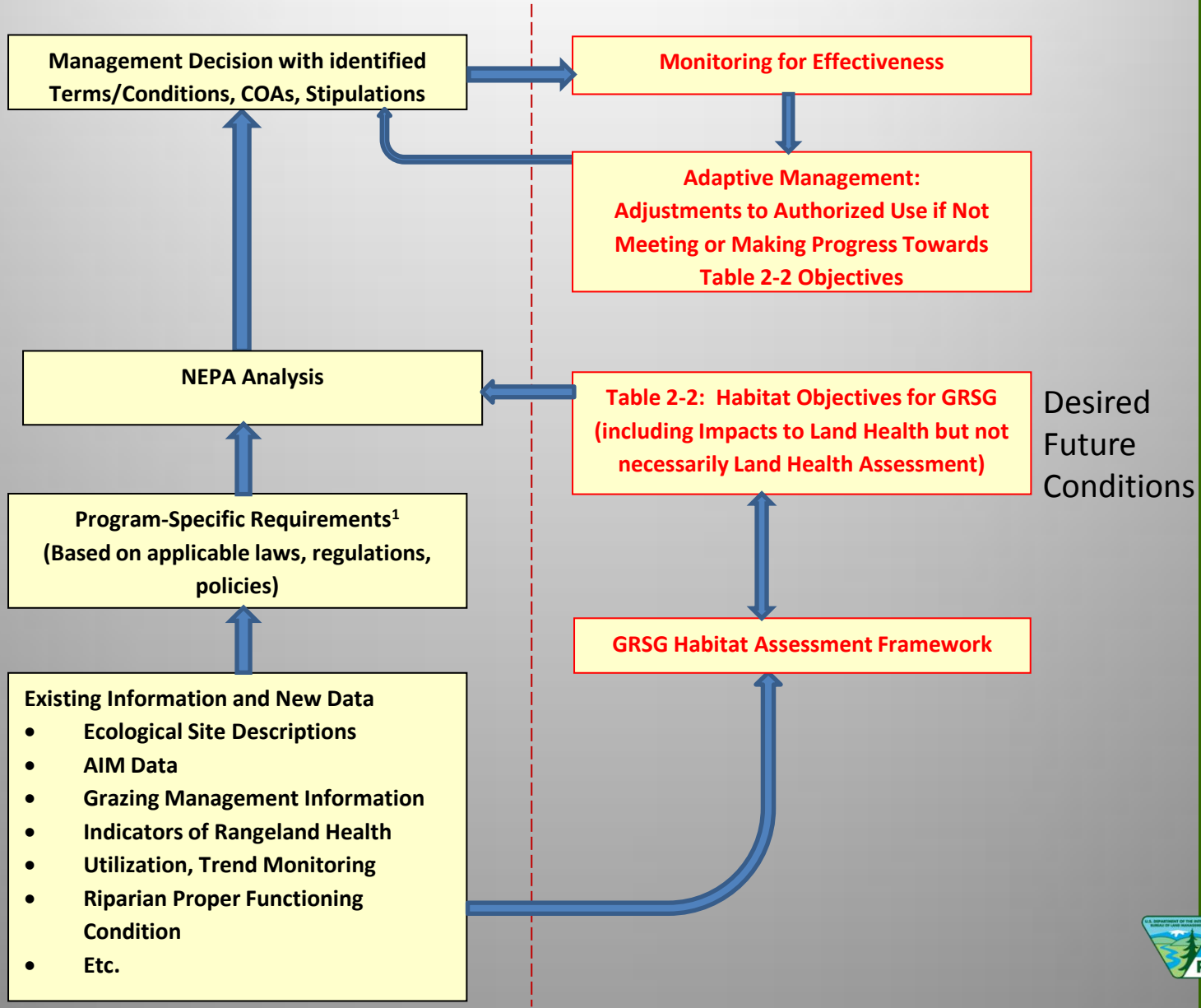
What Has Changed?



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What else (may) have changed?

- **ALL** BLM use authorizations will contain *terms and conditions, stipulations*, etc. regarding the actions needed to meet or progress toward meeting the habitat objectives.
  - If monitoring data show the habitat objectives have not been met nor progress being made towards meeting them…
    - If authorized use is a major factor for not meeting habitat objectives, the **use will be adjusted** by the response specified in the instrument that authorized use (permit, ROW, etc)

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Bureau of Land Management Land Health Standards and Guidelines

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Overview

- Historical Context of Development
  - Standards 1994 to Today
- S & G Use in Public Lands Management up until Greater Sage Grouse Plan Amendment
- How will Table 2-2 and the S & G's work together?!?!
  - AKA- What will change?

Standards and Guidelines - Intent

"In implementing the Rangeland Reform '94 initiative, the Department:

- intends to develop **standards and guidelines for livestock grazing** in rangeland ecosystems…
- to be incorporated in LUPs, AMPs or other activity plans, range improvement permits and as T & Cs of all permits and leases.

These standards and guidelines would be developed:

- to reflect the best available science for specific **ecosystems** or **ecoregions**, and
- to provide greater **consistency in rangeland management** from office to office and agency to agency within each rangeland ecosystem.

The standards and guidelines would reflect:

- **properly functioning conditions**, or
- those conditions that must be met to ensure **sustainability and healthy, productive ecosystems**."

-- From: "Advanced Notice of Proposed Rulemaking" (ANPR) 58 F.R. 43212 (8/13/93) [Formatting edited.]

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Standards and Guidelines

So what was the result of ‘Rangeland Reform ‘94?

43 CFR 4100 was revised in 1995 and the 4180 subpart was added.

Subpart 4180 is known as ‘ Fundamentals of Rangeland Health and Standards and Guidelines for Grazing Administration’

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Fundamentals of Land Health

(Paraphrased – 43 CFR 4180.1)

- Watersheds are functioning properly.
- Ecological processes (hydrologic cycle, nutrient cycle, energy flow) support healthy biotic populations and communities.
- Water quality meets state standards and meets BLM biological management objectives (e.g., clean water for fish).
- Wildlife habitat is being restored or maintained for special status species (T&E, etc.).

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Standards
43 CFR 4180.2(d)

- At a minimum standards must address:
  - Watershed function
  - Nutrient quality and energy flow
  - Water quality
  - Special status species habitat
  - All other native species habitat

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Guidelines
43 CFR 4180.2(e)

- At a minimum (grazing) guidelines must:
  - Promote adequate ground cover
  - Maintain healthy soil physical and biological conditions
  - Maintain or restore riparian/wetland processes and functions
  - Maintain healthy habitat for plants and animals
  - Promote the use of native species wherever possible in vegetation restoration efforts

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Use of S&Gs in Public Land Management (Livestock Grazing)

- 43 CFR 4130.3-1(c) (2005)

- [Grazing] “Permits and Leases shall incorporate terms and conditions that ensure conformance with subpart 4180 of this part” [Fundamentals of Rangeland Health and Standards and Guidelines for Grazing Administration].

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Use in Land Management (Livestock Grazing)

- 43 CFR 4180.2(c)
- Appropriate action?
- Changes are implemented by a BLM grazing decision

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How will Standards & Guidelines change with Table 2-2?

- They won't!!

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What are the Nevada and NE CA S&G's, and where will this fit?

Susanville	Sierra Front / NW Great Basin	NE Great Basin
Five Standards	Five Standards	Four Standards
17 Guidelines	23 Guidelines	14 Guidelines

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Northeastern Great Basin Area

STANDARD 3. HABITAT:

Habitats exhibit a healthy, productive, and diverse population of native and/or desirable plant species, appropriate to the site characteristics, to provide suitable feed, water, cover and living space for animal species and maintain ecological processes. Habitat conditions meet the life cycle requirements of threatened and endangered species.

As indicated by:

- Vegetation composition (relative abundance of species);
- Vegetation structure (life forms, cover, height, or age classes);
- Vegetation distribution (patchiness, corridors);
- Vegetation productivity; and
- Vegetation nutritional value.

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Sierra Front-Northwestern Great Basin Area

STANDARD 5. SPECIAL STATUS SPECIES HABITAT:

Habitat conditions meet the life cycle requirements of special status species.

As indicated by:

- Habitat areas are large enough to support viable populations of special status species;
- Special status plant and animal numbers and ages appear to ensure stable populations;
- Good diversity of height, size, and distribution of plants;
- Number of wood stalks, seed stalks, and seed production adequate for stand maintenance; and
- Vegetative mosaic, vegetative corridors for wildlife, and minimal habitat fragmentation.

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Susanville RAC Standard 5 - Biodiversity

- Viable, healthy, productive, and diverse populations of native and desired plant and animal species, including special status species, are maintained.

- **Meaning that:** Native and other desirable plant and animal populations are diverse, vigorous, able to reproduce, and support nutrient cycles and energy flows.

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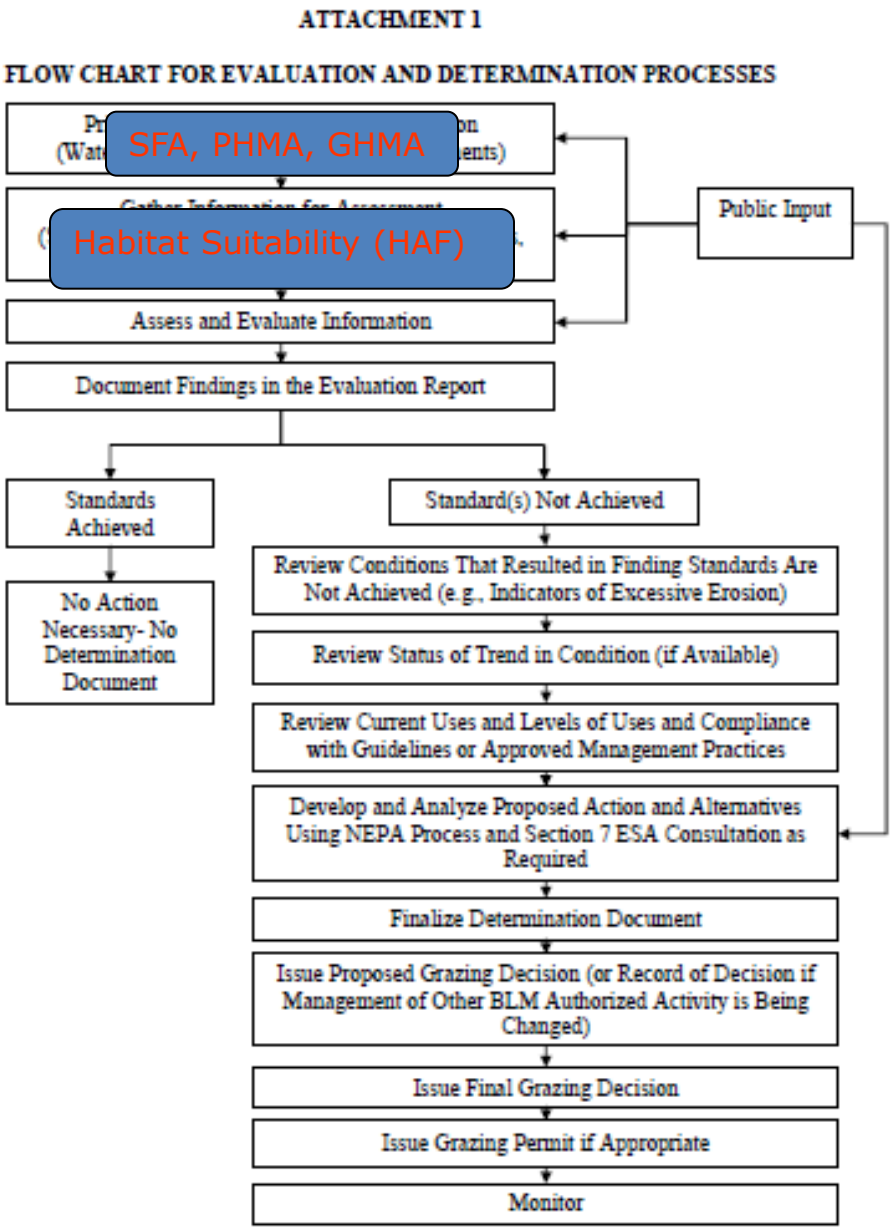

Field Application – Instruction Memorandum WO-2009-007

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Pretty clear for Range, but what about other programs?

- The Plan commits all programs to use RAC Standards to ensure that habitat objectives are being met.
- Smaller projects/applications need to use the HAF, and verify how the specific project will impact Land Health without needing to do a full assessment and evaluation.
- If the project is shown to have negative impacts to ability to achieve Land Health, then that must be addressed through terms & conditions, stipulations, and/or conditions of approval.
- **ALL** BLM use authorizations will contain *terms and conditions, stipulations*, etc. regarding the actions needed to meet or progress toward meeting the objectives.

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So, In Closing:

- Nevada has 3 sets of RAC Standards & Guidelines
- CA has an EIS that contains 3 S & G's
- Each set of NV S & G's has a habitat component
- Susanville RAC S & G's
- GRSG habitat (SFA, PHMA, GHMA) influences prioritization of areas to evaluate
- HAF data is required in order to make a call on 'habitat suitability'
- The 'habitat suitability' rating will be one of the data that informs the evaluation and determination of whether the Standard is 'Met'

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More Closing

- Land Health Assessments, Evaluations and Determinations will continue to be done on a landscape scale.
- Very little changes for Range/Permit renewals.
- Other programs will now need to use the HAF to rate habitat conditions, and will need to document how the project will impact Land Health
- Negative impacts to the Land Health will need to be addressed

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More Closing

- When landscape scale Land Health Evaluations and Determinations are done, all identified causal factors will need to take corrective action, not just range.
- Range is still the only program that has a timeframe associated with that corrective action

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Pop Quiz

- Under the Greater Sage Grouse Plan Amendment, BLM will manage every acre of public land to have sagebrush as the main vegetation component.
  - True or False?

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How do ecological sites play a role in the Greater Sage Grouse Plan Amendment?

- "…consistent with/based on/relative to ecological site potential…"

- See Table 2-2 footnotes #2 & #6

- Greater Sage Grouse Plan Amendment Objectives
  - VEG 1, 3, 8
  - MD VEG 3 & 7
  - MD LG 3

- HAF – 4th Order

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What is an Ecological Site?

- An ecological site is a unique, identifiable, and repeatable patch of vegetation and soil on a landscape. Each ecological site is the product of the **environmental factors that influence the development of the soil and vegetation, including disturbance regimes**.

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Let's Now Talk About Disturbance Calculations

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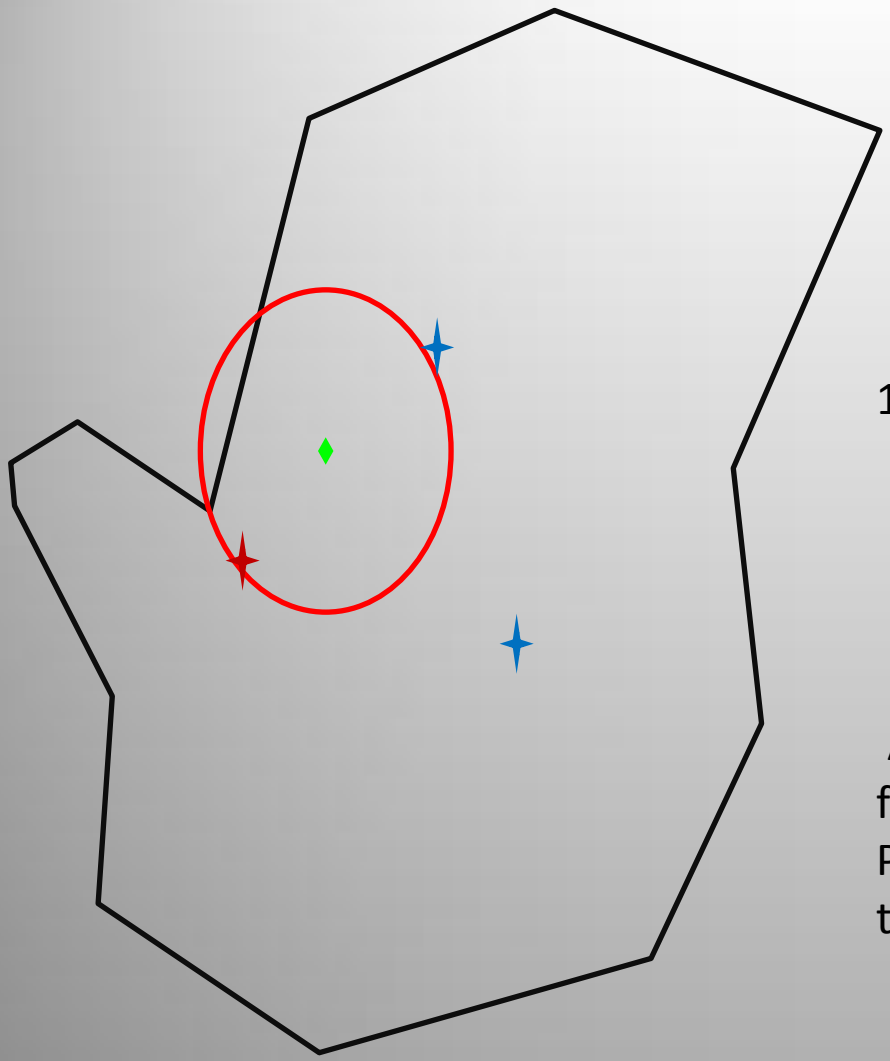

1) Determine potentially affected occupied leks by placing a four mile boundary around the proposed area of physical disturbance related to the project.

All occupied leks located within the four mile project boundary and within PHMA will be considered affected by the project.

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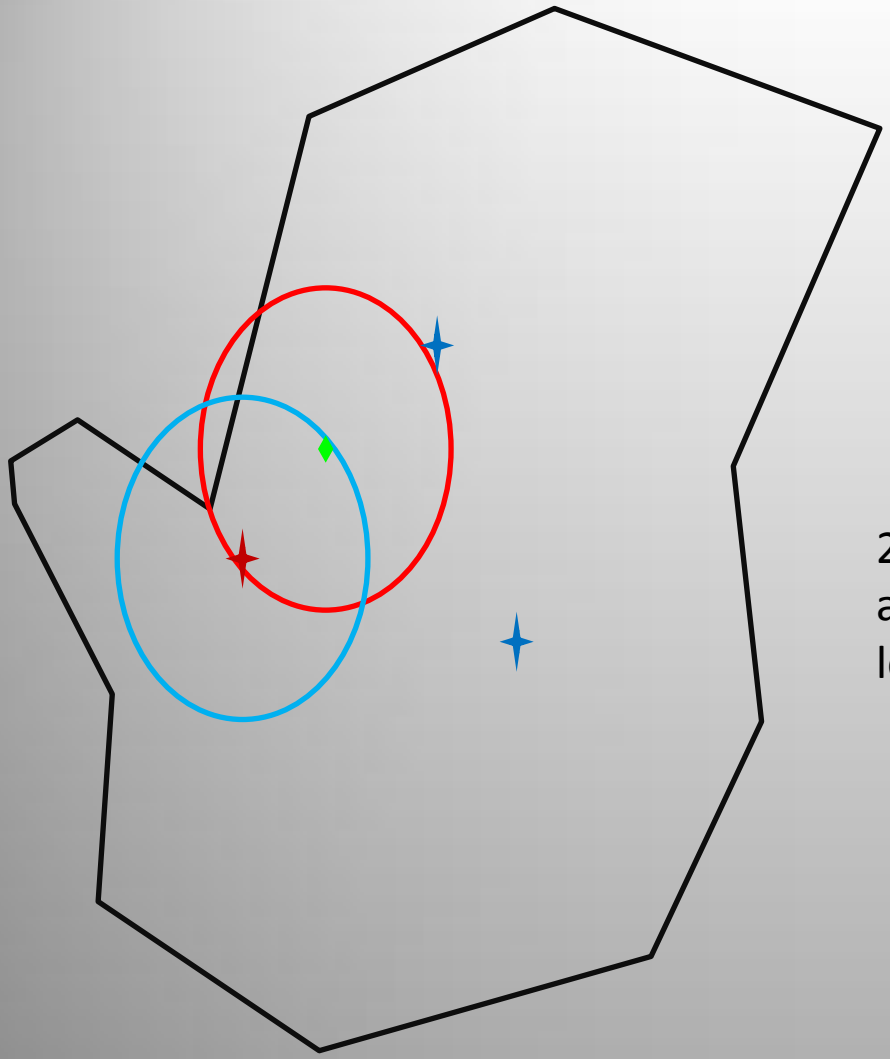

2) Next, place a four mile boundary around each of the affected occupied leks.

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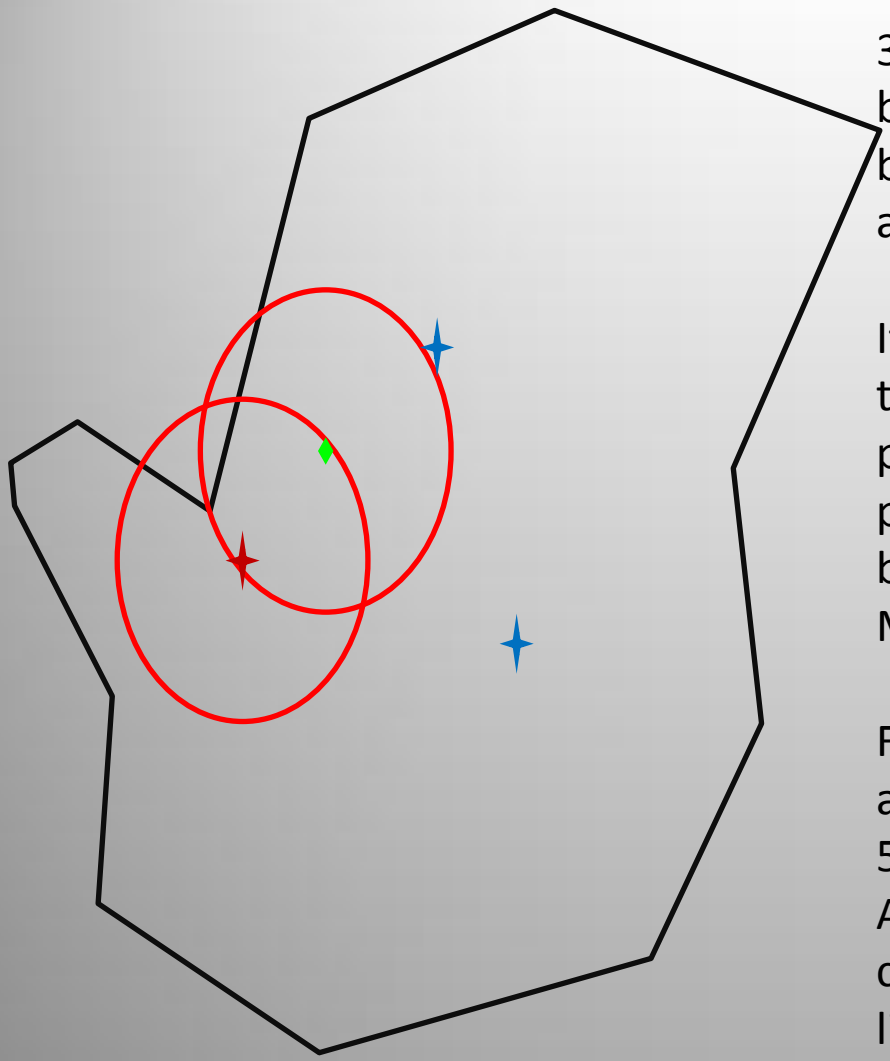

3) The PHMA within the four mile lek boundary and the four mile project boundary creates the project analysis area for each individual project.

If there are no occupied leks within the four-mile project boundary, the project analysis area will be that portion of the four-mile project boundary within the Priority Habitat Management Area.

For the purposes of this scenario, we'll assume that there are approximately 51,500 acres within the two circles. Approximately 6,500 acres of these circles fall outside the PHMA (black line), leaving us with 45,000 acres in our project analysis area.

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4) Map disturbances or use locally available data. Use of NAIP imagery is recommended for project authorization.

Within the project analysis area, disturbance is as follows:

- 3 miles of county road = 30 acres
- 3 miles of 2 collocated powerlines = 65 acres
- 1 hardrock mine = 1,000 acres

Total disturbance = 1,095 acres

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5) Calculate percent existing disturbance using the disturbance calculation formula. If existing disturbance is less than 3%, proceed to next step. If existing disturbance is greater than 3%, defer the project.

For the project analysis area:
% Degradation Disturbance = (combined acres of the 19 degradation threats) ÷ (acres of all lands within the project analysis area in the PHMA) x 100.

1,095 ÷ 45,000 x 100 = 2.43%

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6) Add proposed project disturbance footprint area and recalculate the percent disturbance. If disturbance is less than 3%, proceed to next step. If disturbance is greater than 3%, defer project/move project/say NO!.

For the purposes of this scenario, we'll assume the project will result in the following additional disturbance:

- New development complex with communication sites complex, mineral material site, and staging area (100 acres).

For the project analysis area:
(1,095 + 100) ÷ 45,000 x 100 = 2.66%

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7) For lands in California, calculate the disturbance density of energy and mining facilities. If the disturbance density is less than 1 facility per 640 acres, averaged across project analysis area, proceed to the NEPA analysis incorporating mitigation measures into an alternative.

If the disturbance density is greater than 1 facility per 640 acres, averaged across the project analysis area, either defer the proposed project or co-locate it into existing disturbed area.

For this scenario, the density of energy and mining facilities is less than an average of one facility per 640 acres.

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8) If a project that would exceed the disturbance cap or density cap cannot be deferred due to valid existing rights or other existing laws and regulations, fully disclose the local and regional impacts of the proposed action in the associated NEPA.

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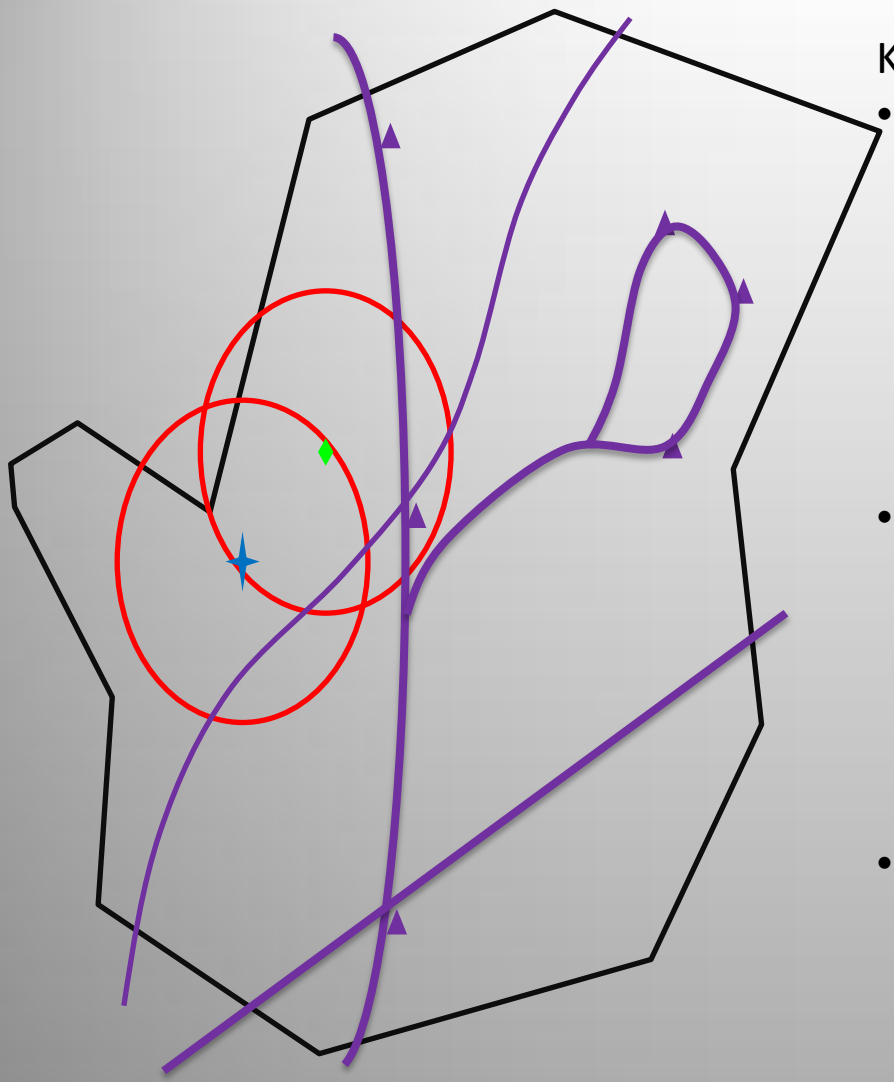

Key points to remember:

- The disturbance cap applies ONLY to PHMA. If a portion of the project analysis area is outside PHMA, the denominator will decrease from the boundaries drawn in Steps 1 and 2 for the project analysis area and lek buffer.
- The disturbance cap is calculated regardless of land ownership. While the BLM/FS can only make decisions on the lands which we administer, we do take into account impacts from adjacent lands.
- The disturbance cap does not differentiate between habitat and non-habitat within the biologically significant unit or project analysis area. It applies equally to all types of vegetation.

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Microwave Tower

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Initial data

The Microwave Tower for an existing Mine

Access to area is by existing roads

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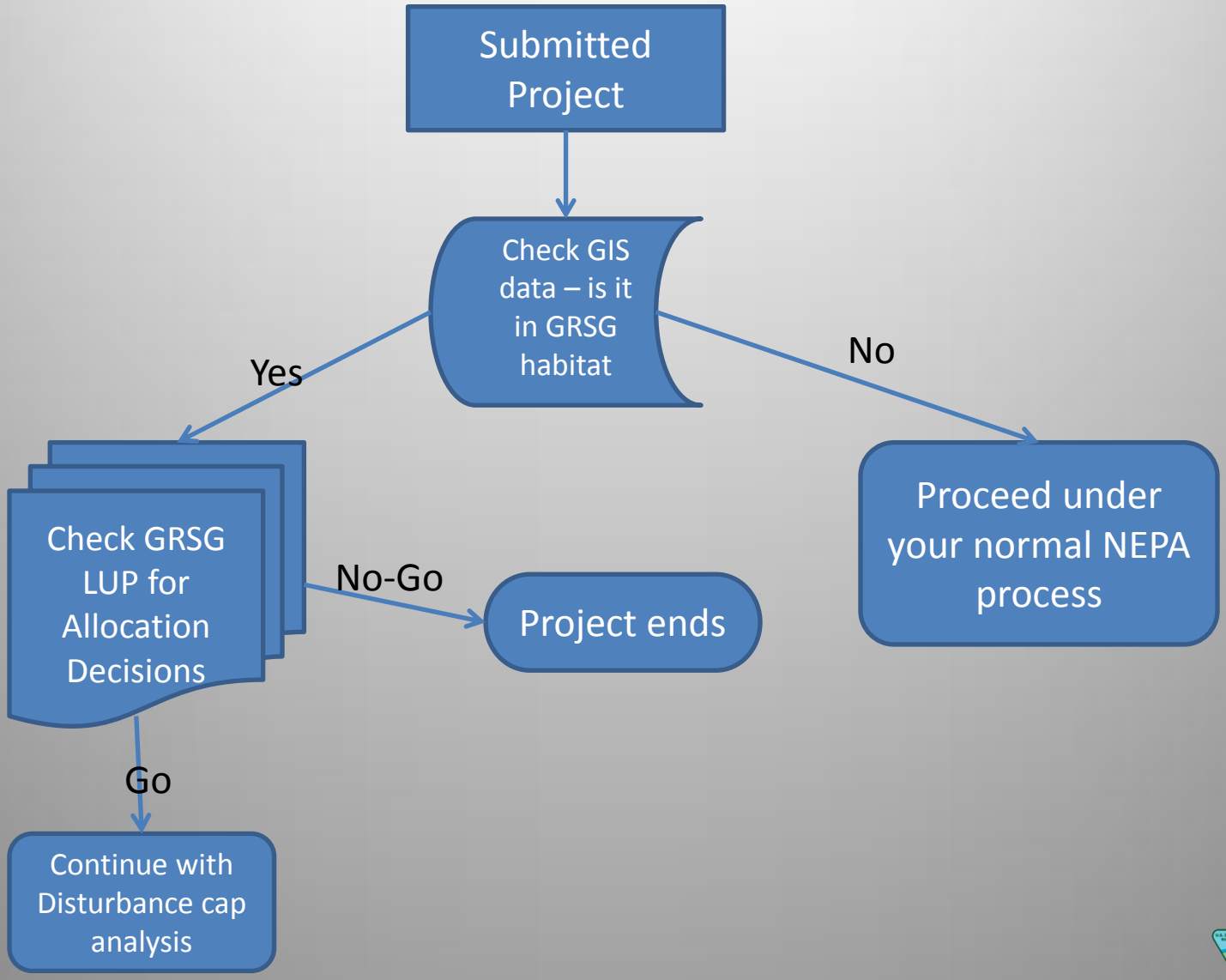
What to do first



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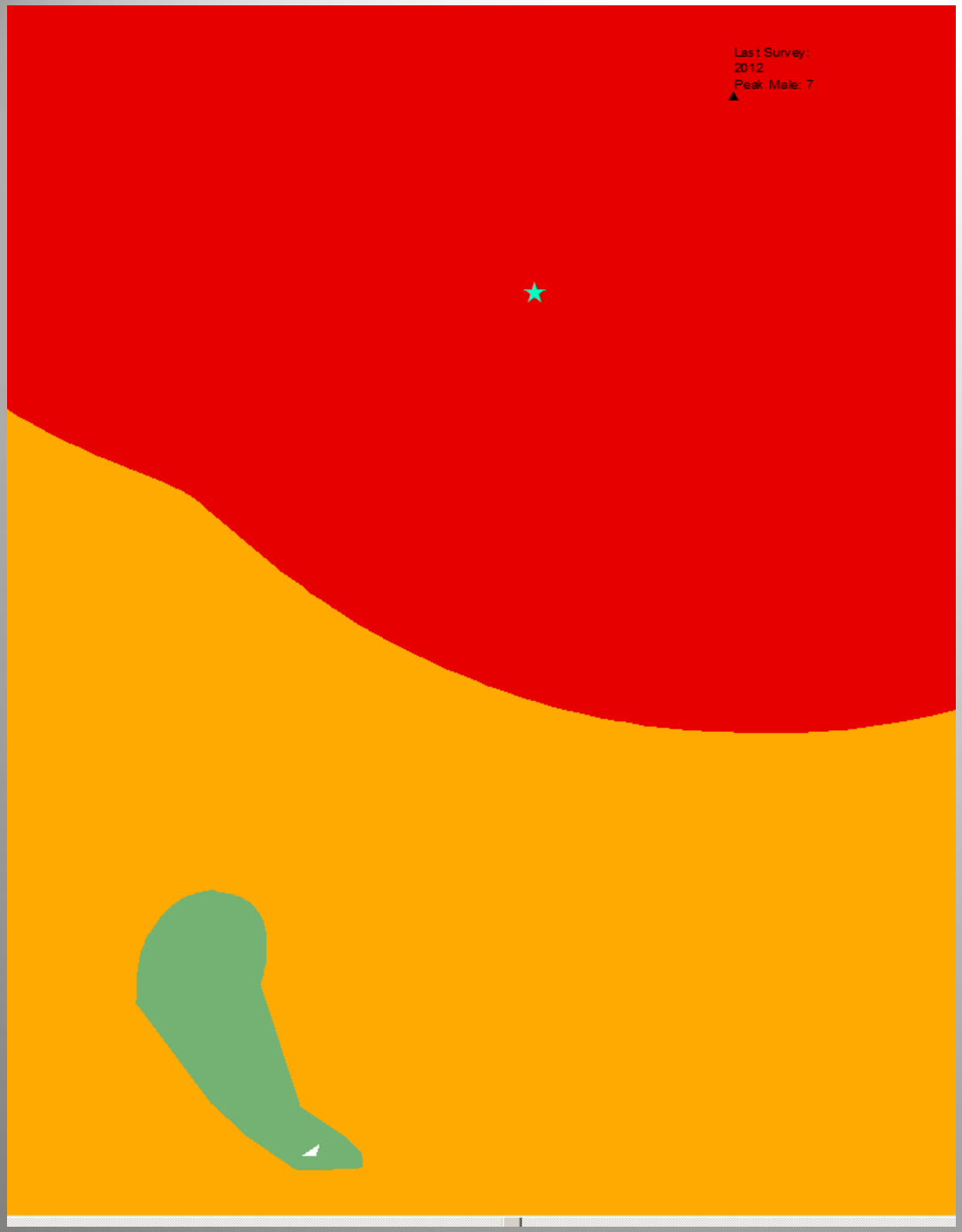

Check GRSG LUP for Allocation Decisions

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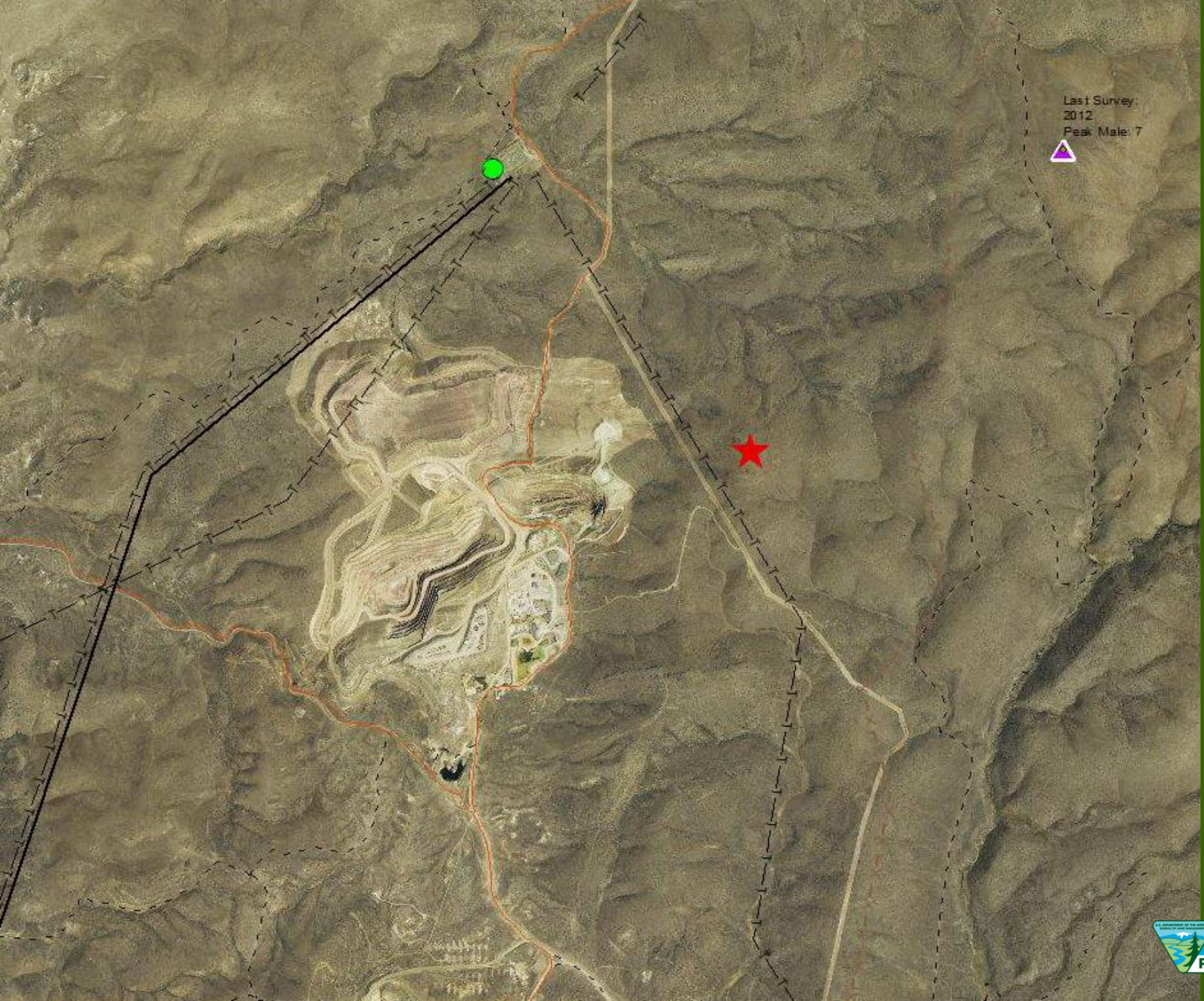

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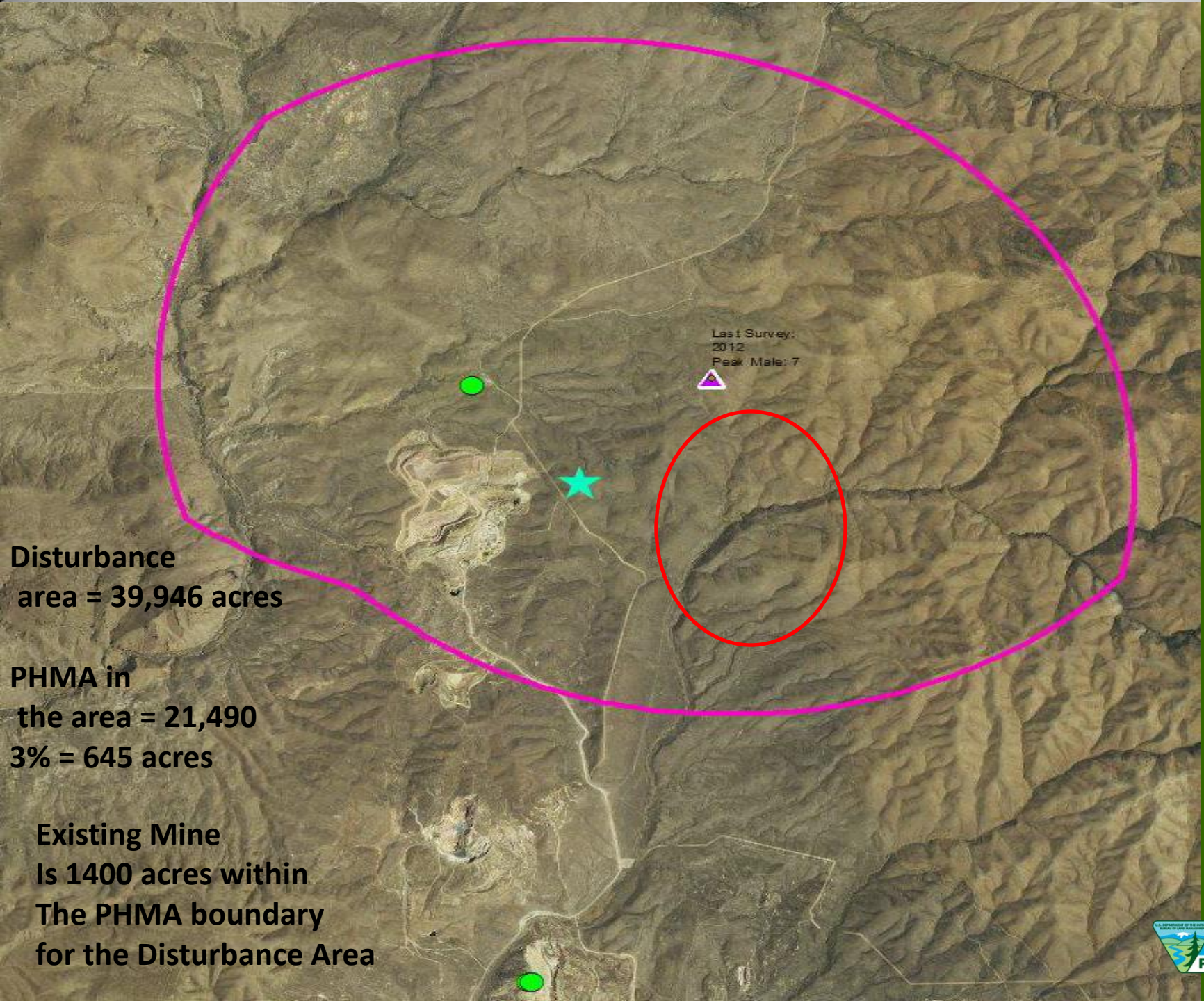

Disturbance area = 39,946 acres

PHMA in the area = 21,490
3% = 645 acres

Existing Mine Is 1400 acres within The PHMA boundary for the Disturbance Area

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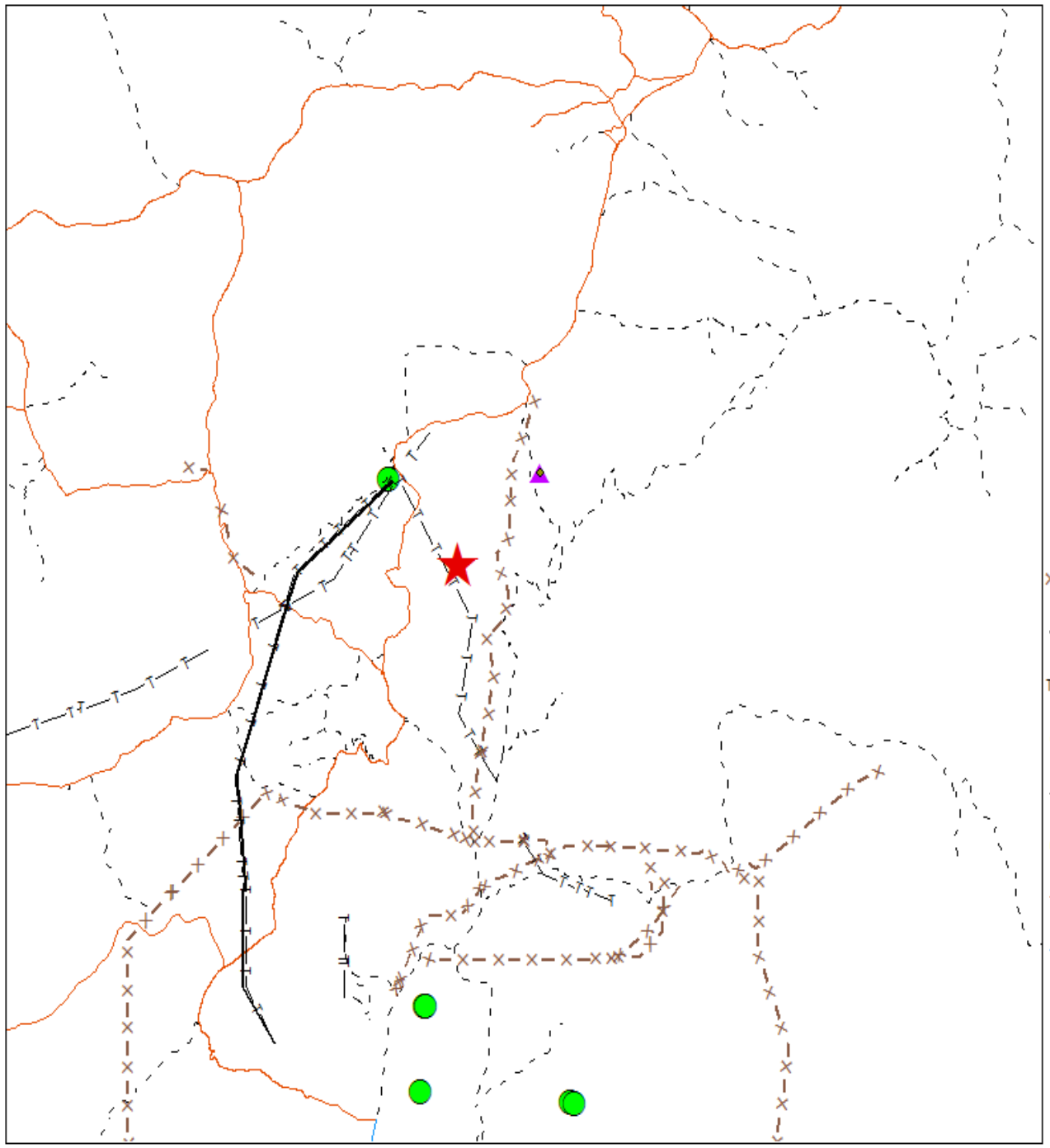

Legend

- Microwave_Tower
- LEKS_2014_Active

ROW

TYPE

- fence
- road
- transmission line

GTLF

- <all other values>

GTLF Ownership

- BLM
- County
- All_FCC_Comm_Towers

N

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WHICH DIRECTION DO I GO NOW

IN HABITAT

ON BLM LAND

EXISTING DISTURBANCE

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Questions

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