Sagebrush Ecosystem Council Meeting

Findings and Improvement Recommendations Report 2017

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Findings and Improvements 2017

December

1. Allow Term credits to offset permanent impacts using a 12:1 ratio
2. Identify and eliminate habitat of De Minimis quality from field data collection for debit projects
3. Removal of anthropogenic disturbances should require an increased reserve account contribution

January

4. Additional powerline classifications
5. Ancillary features
6. Conifer Removal

Finding 1

Permanent credits in some circumstances may not be a feasible option for either the credit developer or credit buyer

- Only a small portion of debits generated from each debit project is expected to be needed to offset with permanent credits.
- The cost of financial assurances is significantly higher for permanent credits than temporary credits.
- Credit developers are unlikely to be interested in generating both temporary and permanent credits from the same credit project.
- Credit developers are unlikely to sell or transfer permanent credits without clear understanding of the demand.

Improvement Recommendation 1

Allow term credits to offset permanent impacts using a 12:1 ratio

- The SETT recommends that a multiplier be an option to allow the conversion of the permanent credit obligation into term credits that are likely to be readily available.
  - Example: 20 Permanent Debits = 240 Term Debits

Improvement Recommendation 1: Rationale

- Nevada has a prohibition against Perpetuities, however perpetuities in Nevada are further described by NRS 111.1031 that defines a Wait and See period up to 365 years for vested interests.

- The cost to the credit developer to monitor, maintain, and manage a small number of permanent credits is extremely costly.

- Credits sold may only be a portion of the credit project area, creating a potential situation where the credit developer would need to manage a smaller portion of their project. This may create situations where it may not be financially reasonable or create an incentive for the credit developer to sell permanent credits.

Improvement Recommendation 1

- The SETT would require credit buyers to research the availability of permanent credits prior to considering the multiplier.

- The SETT will work with specific credit developers to explain the benefits of permanent credit development.

Finding 2

Some map units within debit project areas hold extremely low to no habitat value for sage-grouse (e.g. cheatgrass monocultures, phase III conifer). These areas can be identified prior to field data collection and excluded from the HQT analysis when calculating Debits. This will reduce the cost of assessing Debits by reducing the cost of field data collection efforts as well as increasing efficiency.

Finding 2

- For debit projects, some areas captured within the project area may be disturbed (e.g. cheatgrass monoculture post-wildfire) and calculate 0% habitat function.
- Phase III conifer may calculate function if some shrubs or other herbaceous vegetation are present.
- Due to the large extent of many debit projects, the area where field data collection is required can be tens of thousands of acres, which increases staff time and costs to complete field efforts.
- Several categories have been identified that should be removed from the debit project area assessment if certain criteria are met; guidance including maps of phase III conifer and annual grass composition will be used to help identify these areas.

Improvement Recommendation 2

Identify and eliminate habitat of De Minimis quality from field data collection for debit projects

- The SETT recommends that cheatgrass monocultures and phase III pinyon and juniper (PJ) as identified and mapped, be removed from the project area on debit projects when calculating habitat function.

- These areas will mostly yield very low or 0% habitat function for sage-grouse, and should be excluded from the HQT analysis when calculating debits.

- Exception: areas that occur within 1km of active leks.

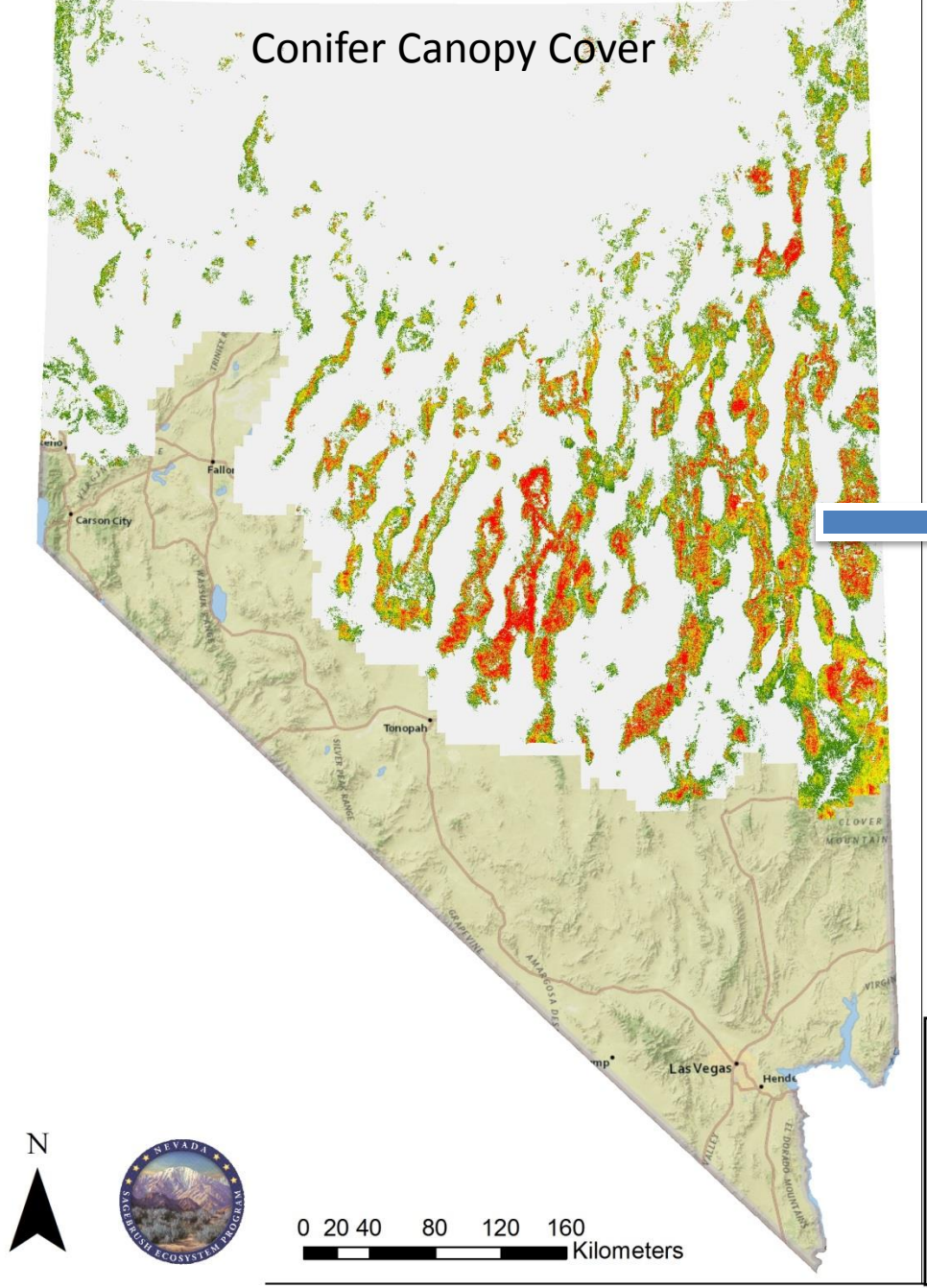
Improvement Recommendation 2: Rationale

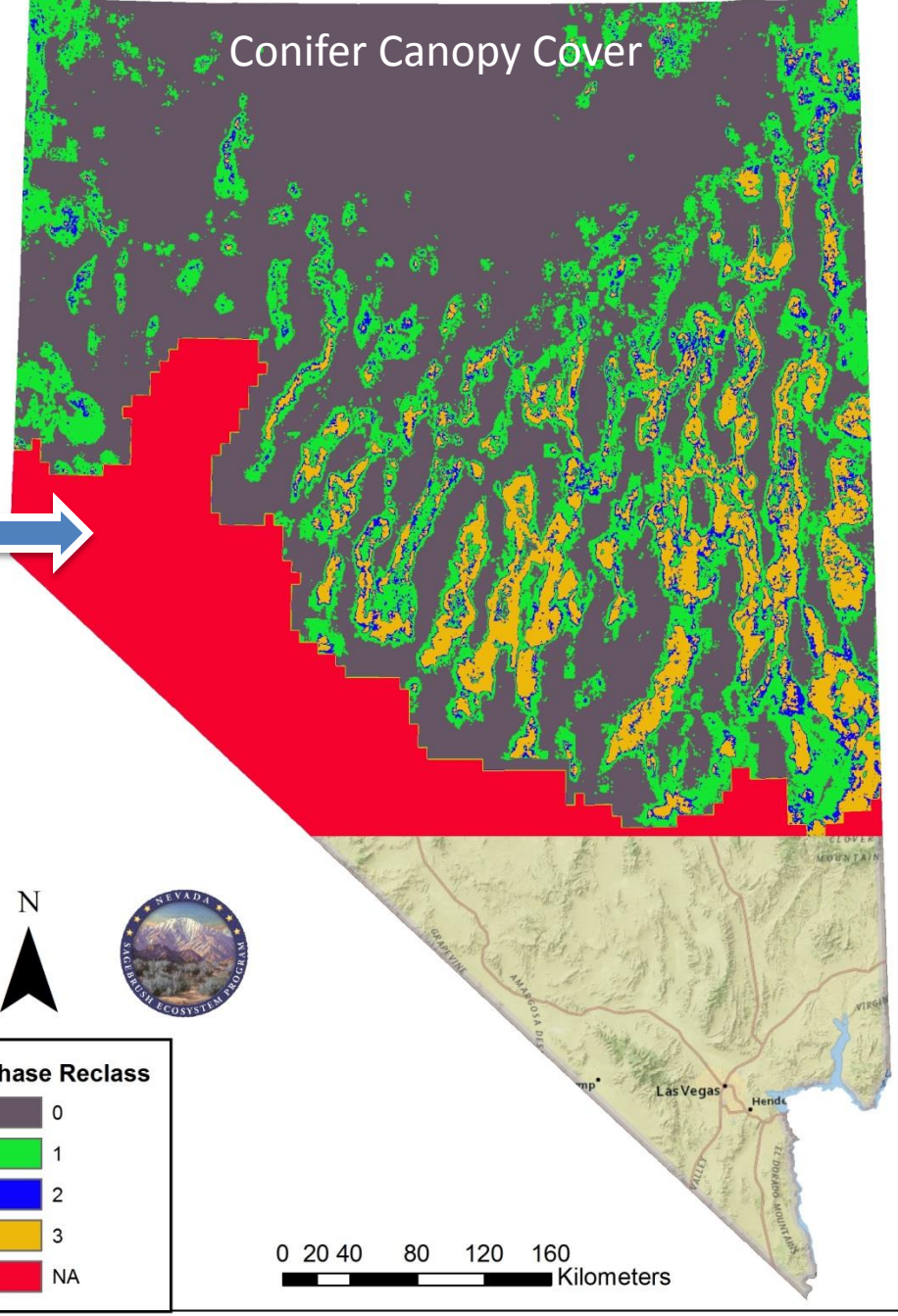
- Phase III conifer is considered non-habitat for sage-grouse, but if some shrubs or herbaceous cover are present, these areas may still calculate some habitat function.
- Grouse experience increased rates of movement and higher mortality, especially among juveniles and yearlings, in phase I PJ (Prochazka et al. 2017).
- Grouse strongly avoid phase II and III PJ (Coates et al. 2017)
- Females avoided areas with PJ cover greater than 3% within 800m of nests (Severson et al. 2017).

Improvement Recommendation 2: Rationale

- Cheatgrass greater than 30% in the HQT results in 0% habitat function for that map unit.

- Multiple studies across the Great Basin have demonstrated sage-grouse avoidance of cheatgrass during lekking (Knick et al. 2013), nesting (Lockyer 2012, Kirol et al. 2012), nesting and late brood-rearing (Coates et al. 2017).





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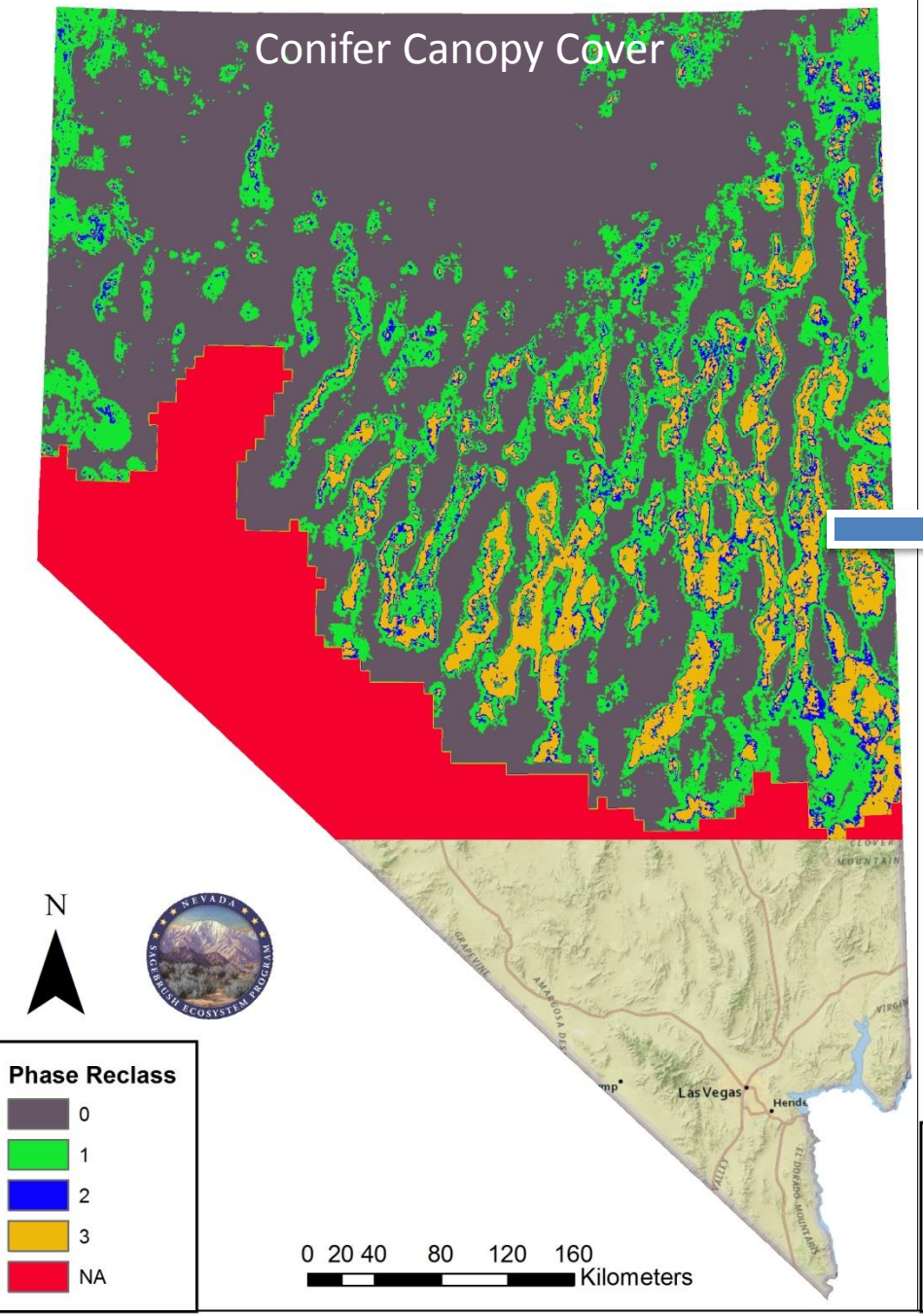
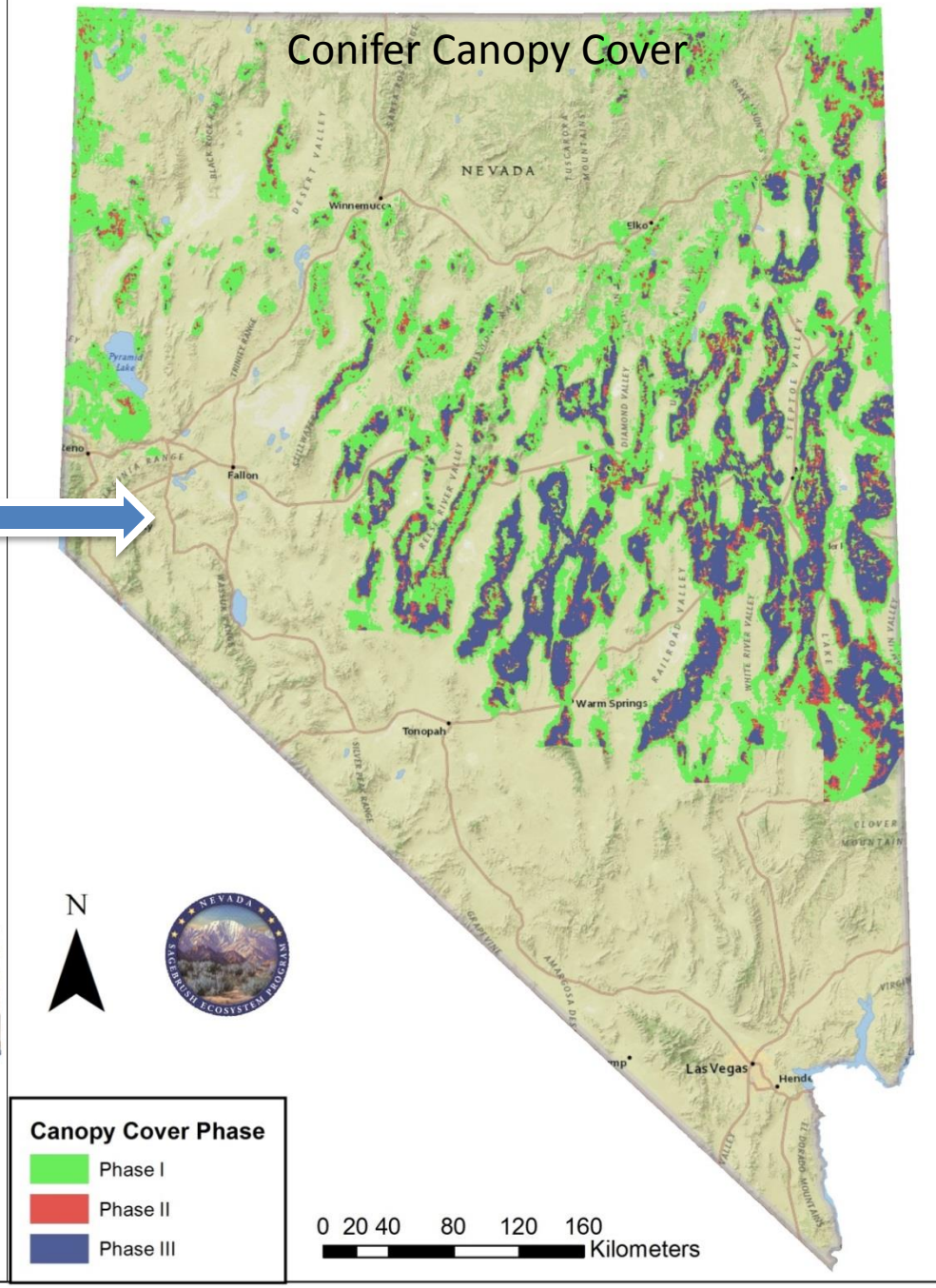
Improvement Recommendation 2:

- Conifer Classifications:
  - Phase I <10%
  - Phase II 10 – 20%
  - Phase III > 20%

- Classified according to Coates et al. 2017. Classes differ from Miller's 0-10%, 10-30%, >30% due to how sage-grouse telemetry data modeled against the USGS canopy cover layer that is used in the HSI.





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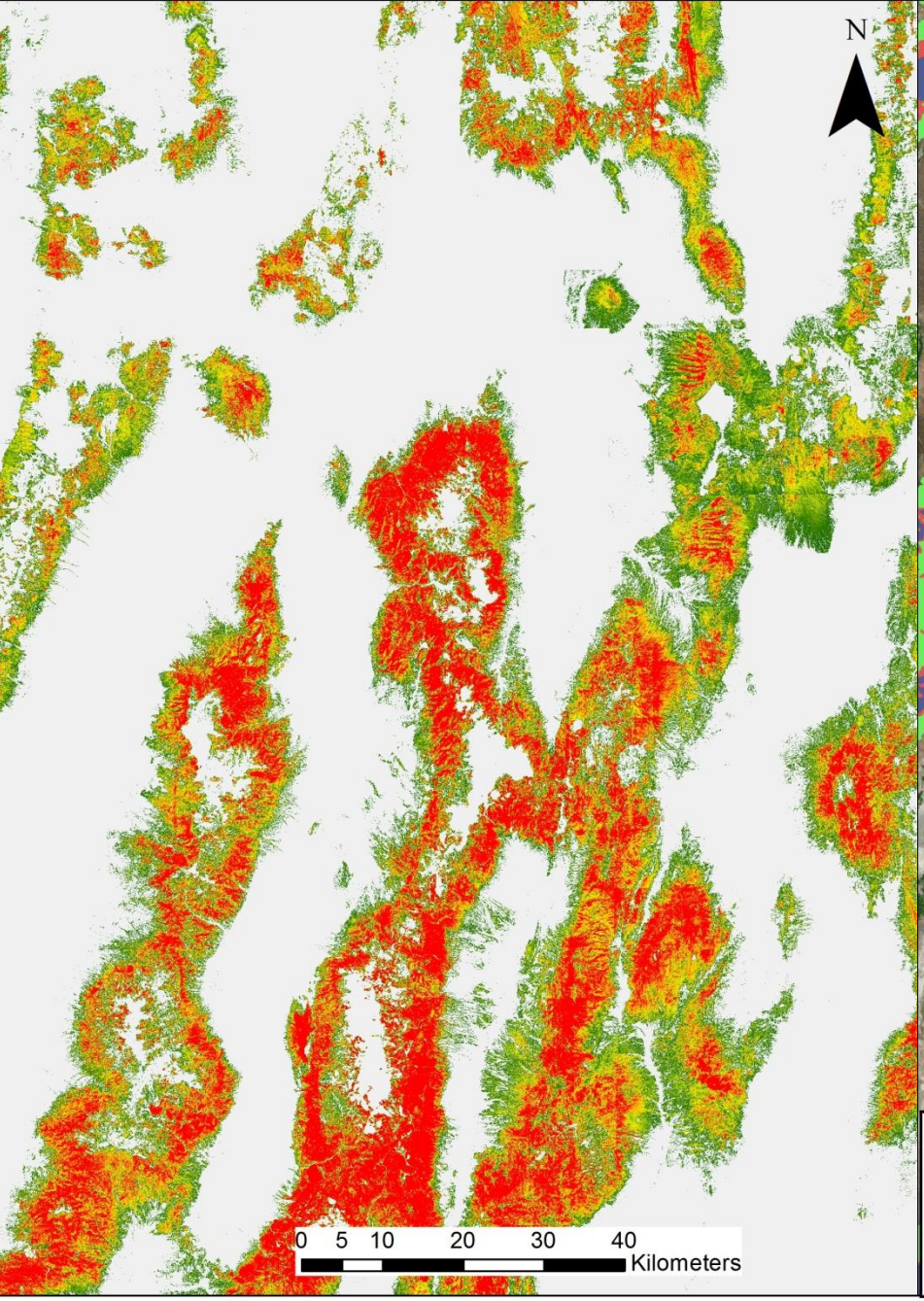

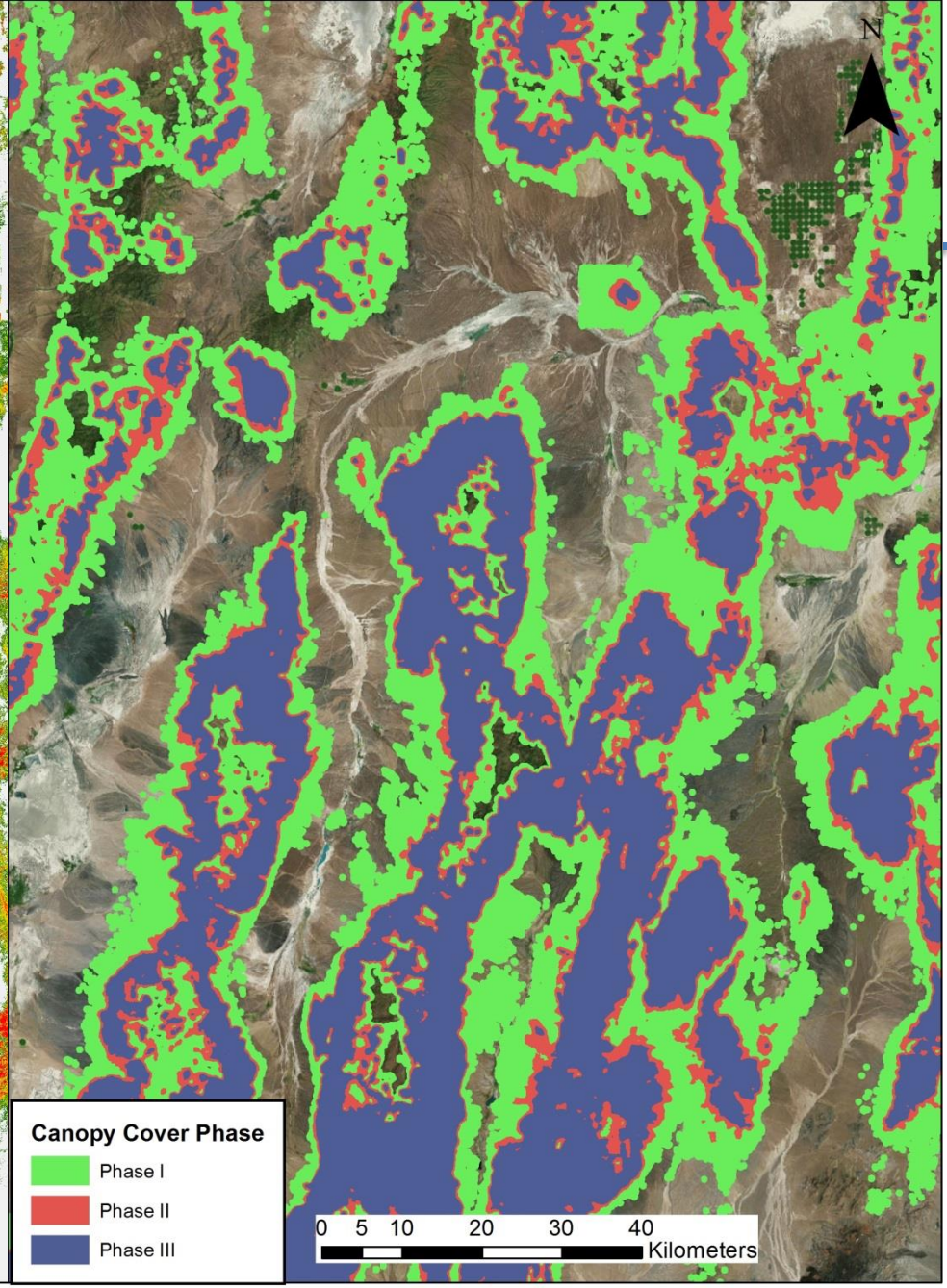

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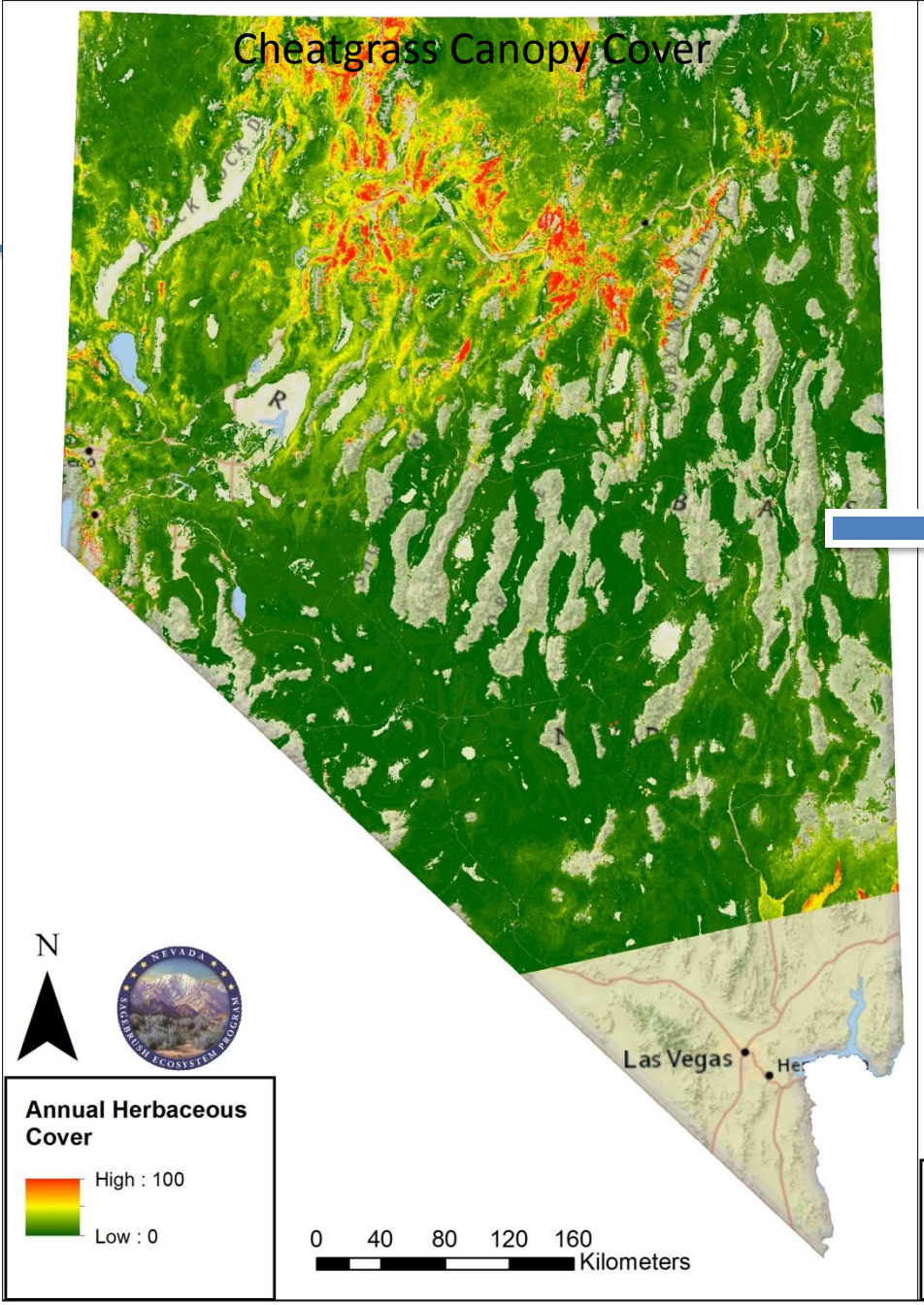

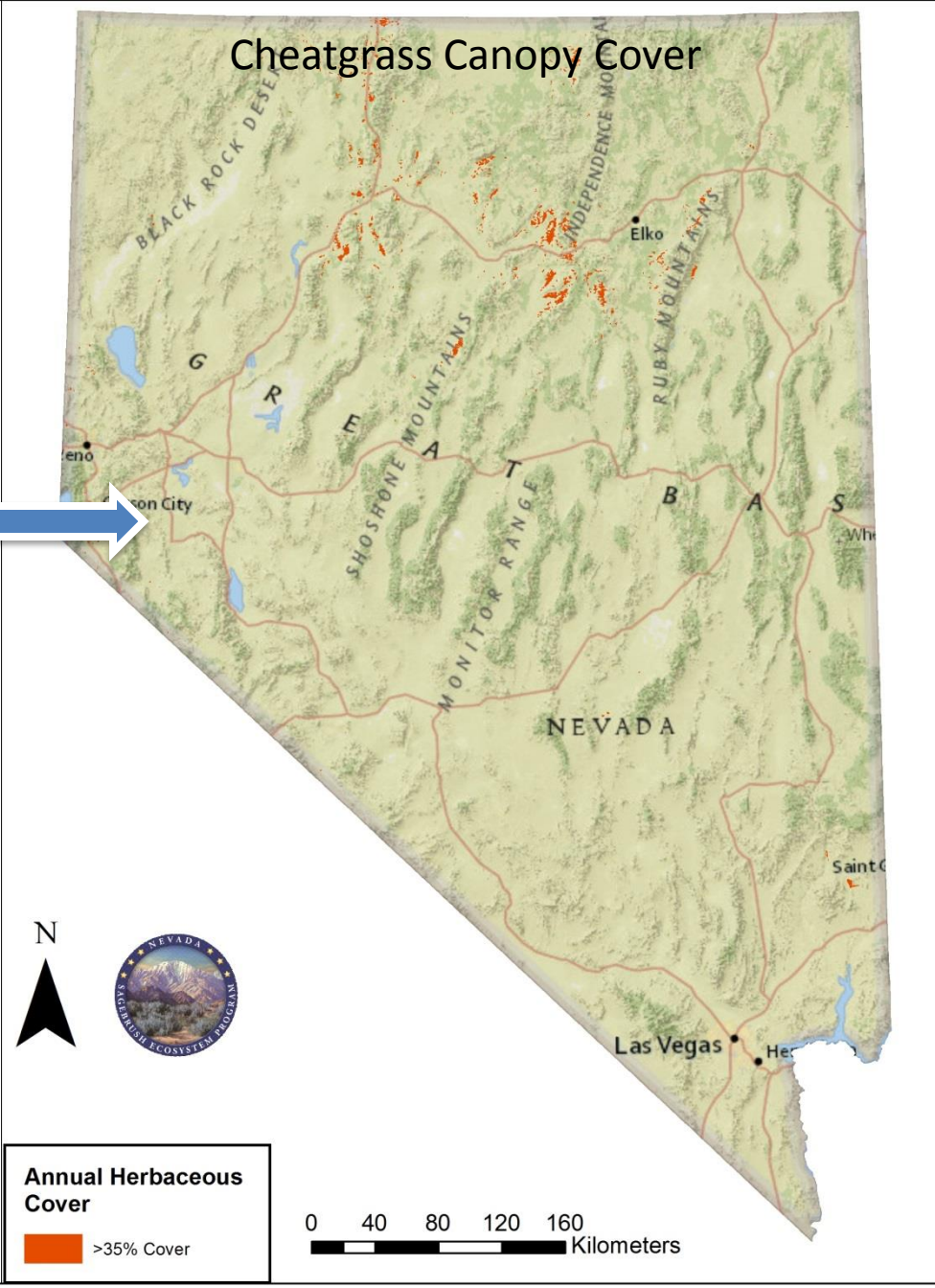

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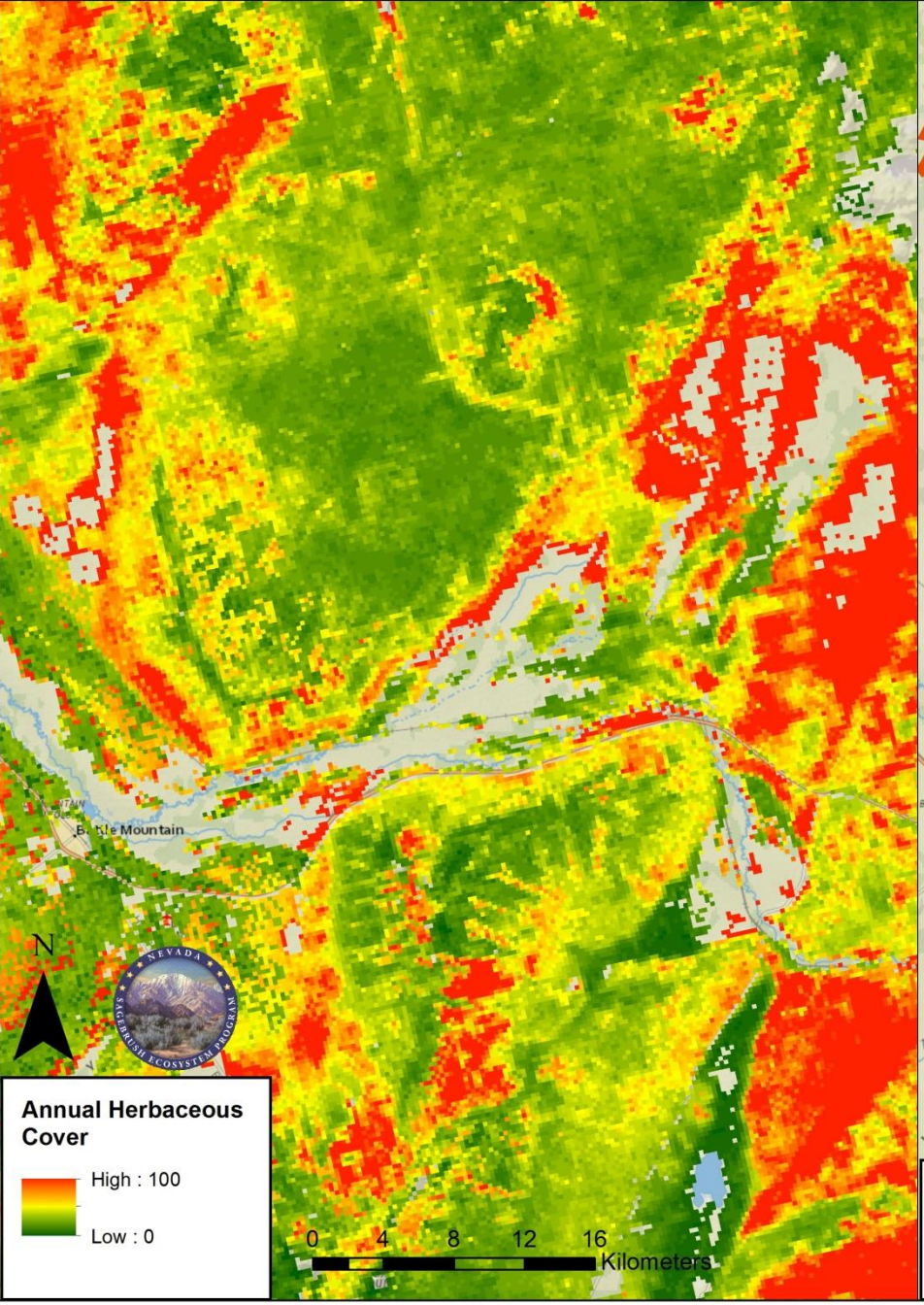
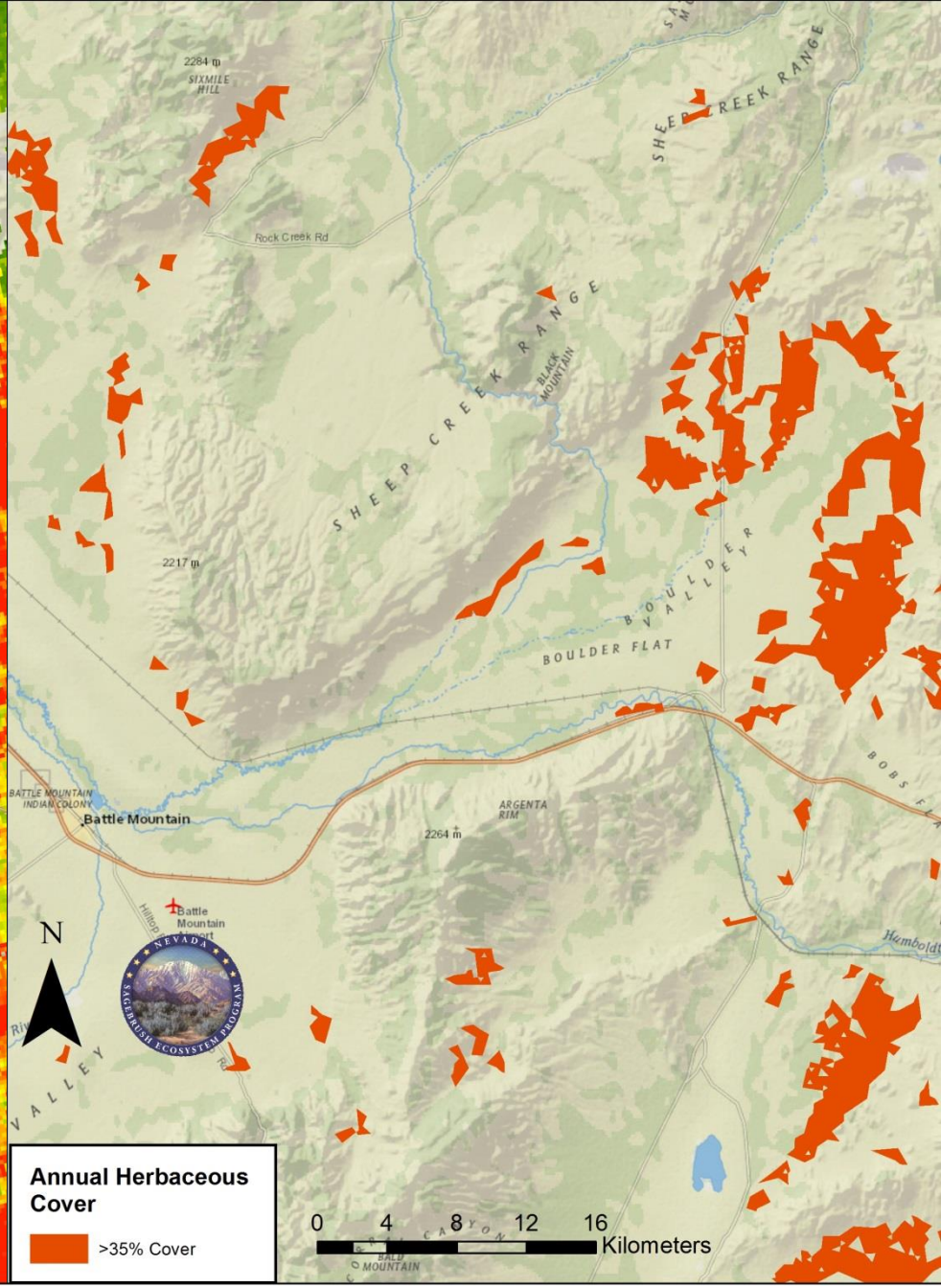
Improvement Recommendation 2:

- Cheatgrass Classification:
  - > 35% of annual herbaceous canopy cover

- Used USGS (Boyte and Wylie 2017) annual herbaceous layer to quantify areas averaging greater than 35% annual cover.





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Finding 3

Removal of anthropogenic disturbances is described within the CCS Manual as a means to generate credits, but when removal occurs on public lands' rights-of-way without a commitment to monitor and maintain habitat as part of a project, reduced durability is a concern.

Improvement Recommendation 3

- The SETT recommends 3 times the standard reserve account contribution in these situations. These contributions are necessary when credits are generated in this way without requirements for maintenance or monitoring due to the reduced habitat durability.

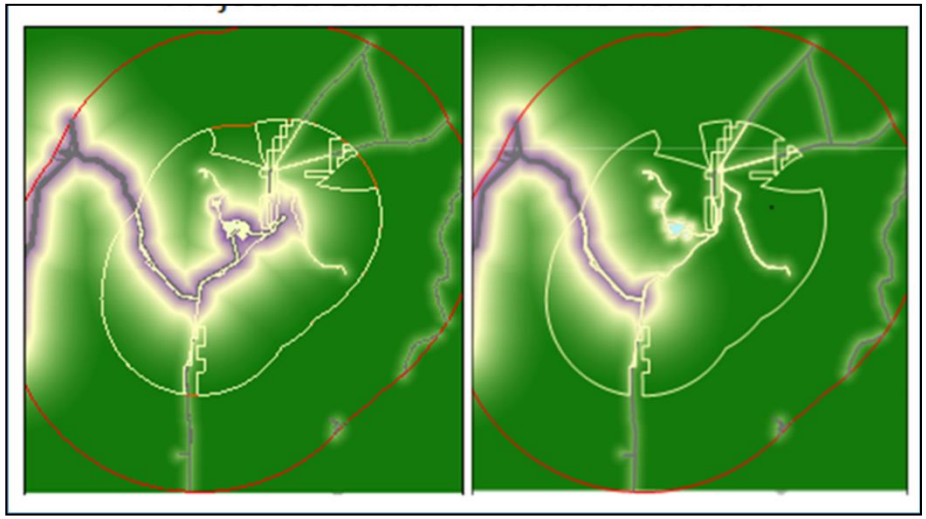
- Adds a feature to a previous improvement.

Improvement Recommendation 3: Rationale

- The risk of habitat loss due to natural events and manmade disturbances as well as the lack of financial assurances in these situations to address potential losses would create an unmitigated burden to the reserve account credits.

Improvement Recommendation 3: Project Example

- A powerline removal project on public lands rights-of-way that exhibits additionality.
- Credits yielded equal change in credits calculated with and without the disturbance in the area of its impact when conducting the desktop analysis with the HSI used in lieu of field data.



Improvement Recommendation 3: Project Example

- Because credits are for uplift through removal and maintenance credits are not eligible on public lands, monitoring, management and maintenance activities, and financial assurances are not required.
- However, the reserve account contribution would be 3x higher than that of a project that includes preservation and related components.
- So, if 350 credits are awarded for the removal of 5 km of transmission powerlines, the expected reserve account contribution would range from 15 to 42% as opposed to 5 to 14%.