

Utah SRMS Webinar

August 31, 2016; 10:30am-12:00pm Mountain.

Participant Dial-In: 1-888-850-4523; Passcode 672617

Webinar URL: <http://anl.adobeconnect.com/ut-srms/>

Documents posted at:

<http://blmsolar.anl.gov/sez/ut/regional-mitigation/>

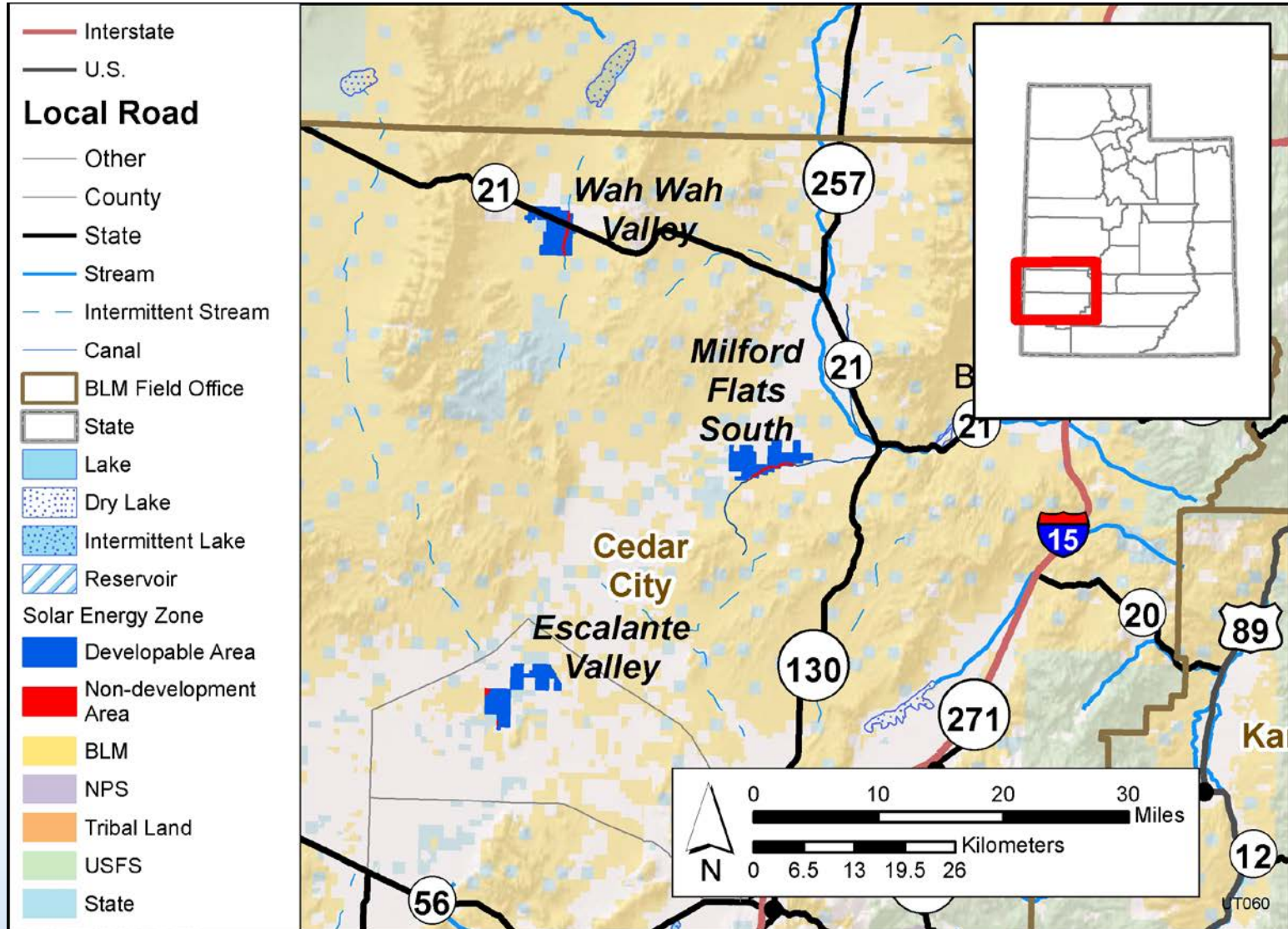
Call-In Instructions:

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- ***If you have a question, please click on “Raise Hand” under the Set Status icon (on status bar at top of web page).***
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- ***Thank you for your participation!***

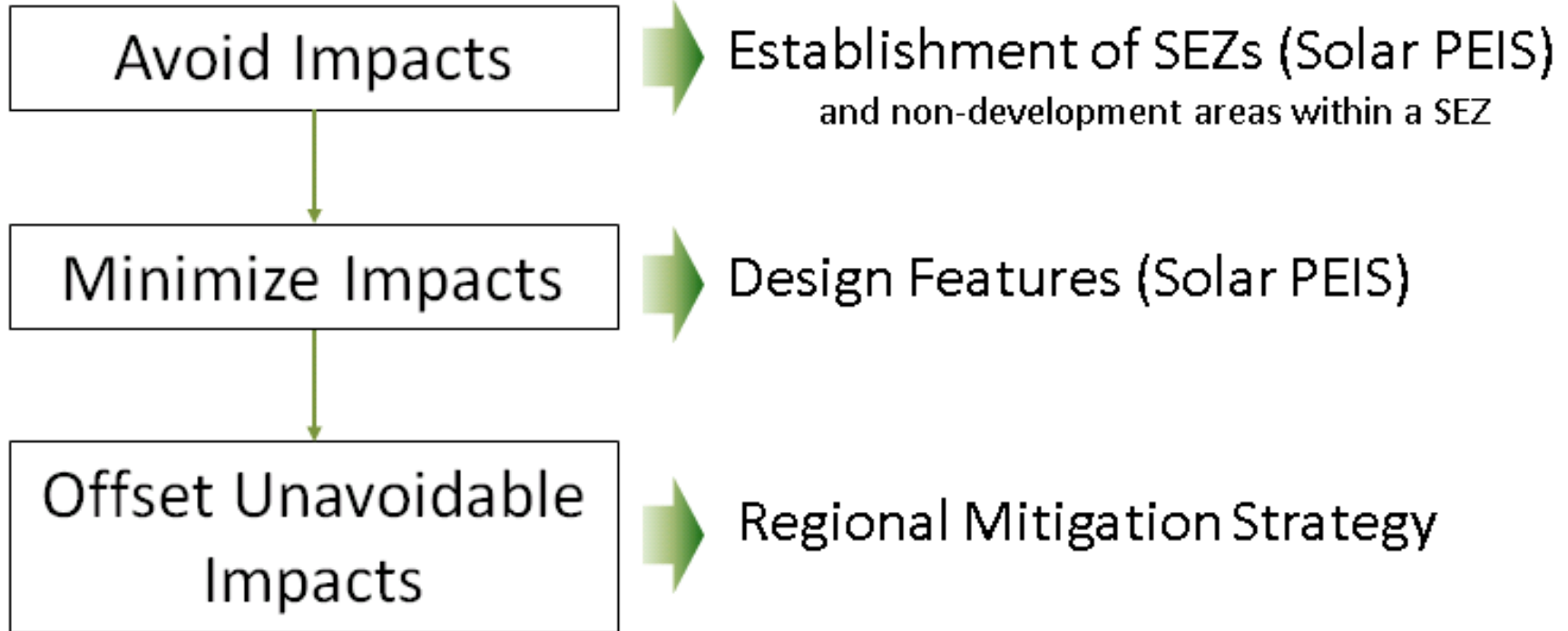
Introduction and Webinar Objectives



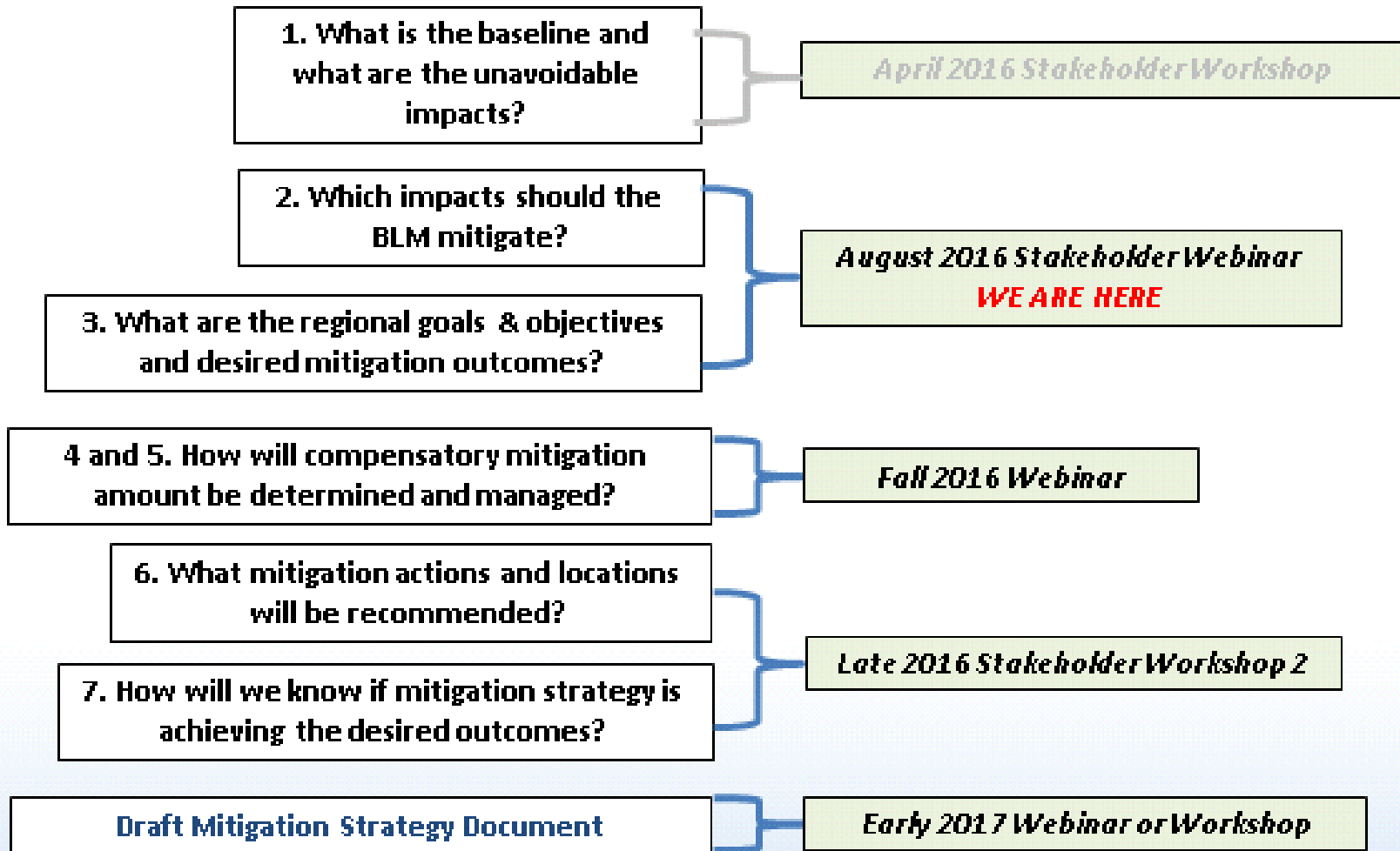
Utah SEZs and Surrounding Areas



BLM Mitigation Hierarchy:



Utah SRMS Process – Schedule for 7 Elements



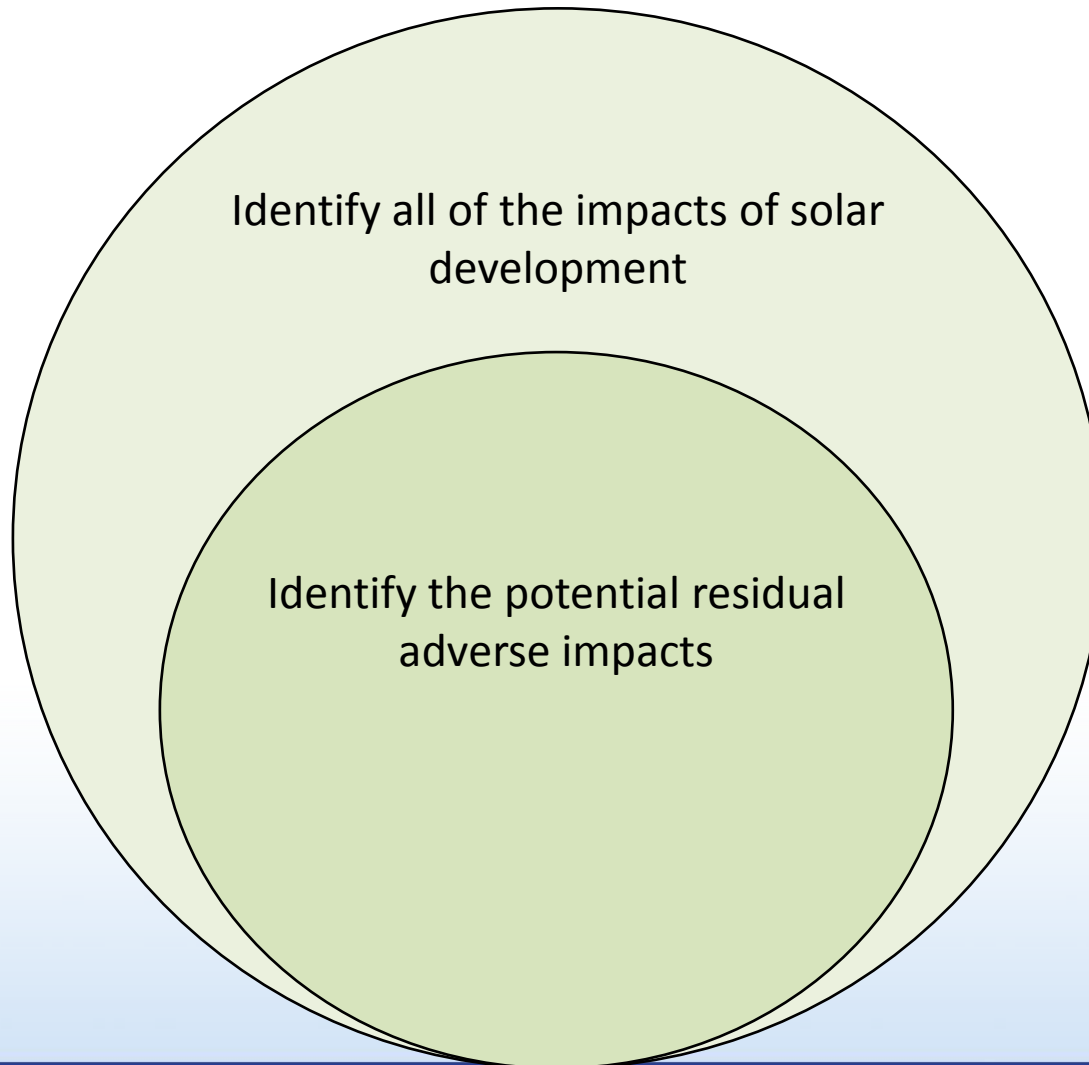
Webinar Objectives

1. Inform stakeholders of revisions made to the impact tables as a result of their input during the April workshop;
2. Introduce and get stakeholder feedback on BLM's preliminary assessment of which unavoidable adverse impacts may warrant regional mitigation;
3. Preview the regional goals and objectives, desired mitigation outcomes, and examples of potential regional mitigation actions; and
4. Introduce the process through which stakeholders may nominate candidate site locations and actions for regional mitigation.

Revisions to the SEZ Resource Impact Tables



Identify Residual Impacts of Solar Development



Identify all of the impacts of solar development

Identify the potential residual adverse impacts (those remaining after on-site mitigation)

Resource/Issue ¹	Milford Flats South Solar Energy Zone Impacts ²	On-site Mitigation ³		Residual Adverse Impacts? ⁴
		Avoidance	Minimization	
<p>Ecology: Terrestrial Wildlife, Big Game, and Non-Migratory Birds, Section 13.2.11</p>	<p>Direct: Loss of habitat and connectivity for several species of amphibians, reptiles, raptors, mammals, bats, and invertebrates. Year-long crucial pronghorn habitat exists throughout the SEZ. Ground disturbance, fugitive dust generated by project activities, lighting, vegetation clearing, spread of invasive species, accidental spills, harassment, and impacts on ephemeral washes could impact wildlife within the SEZ.</p> <p>Indirect: Outside the SEZ, impacts could occur from habitat loss or modification, increased human presence in the area, surface runoff, dust, noise, lighting, or accidental spills.</p> <p>Cumulative: Cumulative effects on some species could rise to a level of moderate, given the large acreages potentially disturbed and depending on the type, number, and location of other developments in the region.</p> <p>Data Gaps: Impacts on terrestrial wildlife from construction noise would have to be considered on a project-specific basis.</p>	<p>The steps outlined in the Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances should be followed.</p> <p>Avoiding or minimizing disturbance of woodland habitats (e.g., pinyon juniper, mixed conifer, oak) in the area of direct effects may reduce impacts on the ferruginous hawk (nesting), Lewis's woodpecker, and northern goshawk (nesting).</p> <p>See programmatic design features at http://blmsolar.anl.gov/documents/docs/peis/programmatic-design-features/Ecological_Resources.pdf</p>	<p>The fencing around the solar energy development should not block the free movement of mammals, particularly big game species.</p> <p>See other programmatic design features at URL under Avoidance column.</p>	<p>Yes. Development of the Milford Flats South SEZ will likely impact up to 6,252 acres of wildlife habitat. Level of site grading and disturbance to native vegetation would be the primary driver of residual impacts on functional habitat for full build-out of SEZ.</p> <p>Little can be done onsite to mitigate the loss of up to 6,252 acres of general wildlife habitat.</p>

Revisions to SEZ Impact Tables Made in Response to Stakeholder Input at April Workshop

- Acoustics changed from a “No” to a “Maybe” depending on the solar technology used.
- Results of visual assessment for cultural features added.
- Specially Designated Areas and Lands with Wilderness Characteristics separated into two separate resource rows.
- For the Wah Wah Valley SEZ, the acreage and percent of potentially affected land within the Wah Wah Lawson grazing allotment was corrected.



Escalante Valley Solar Energy Zone

Revisions to SEZ Impact Tables (continued)

- Animal Special Status Species edits:
 - Dark kangaroo mouse and bald eagle included for Escalante Valley but removed from species lists for Milford Flats South and Wah Wah Valley SEZs.
 - Greater sage grouse removed from species list for Escalante Valley SEZ.
 - Text added regarding identified general habitat management areas for greater sage grouse in the Milford Flats South SEZ.
 - Kit fox added to species list for all 3 SEZs.



Questions?

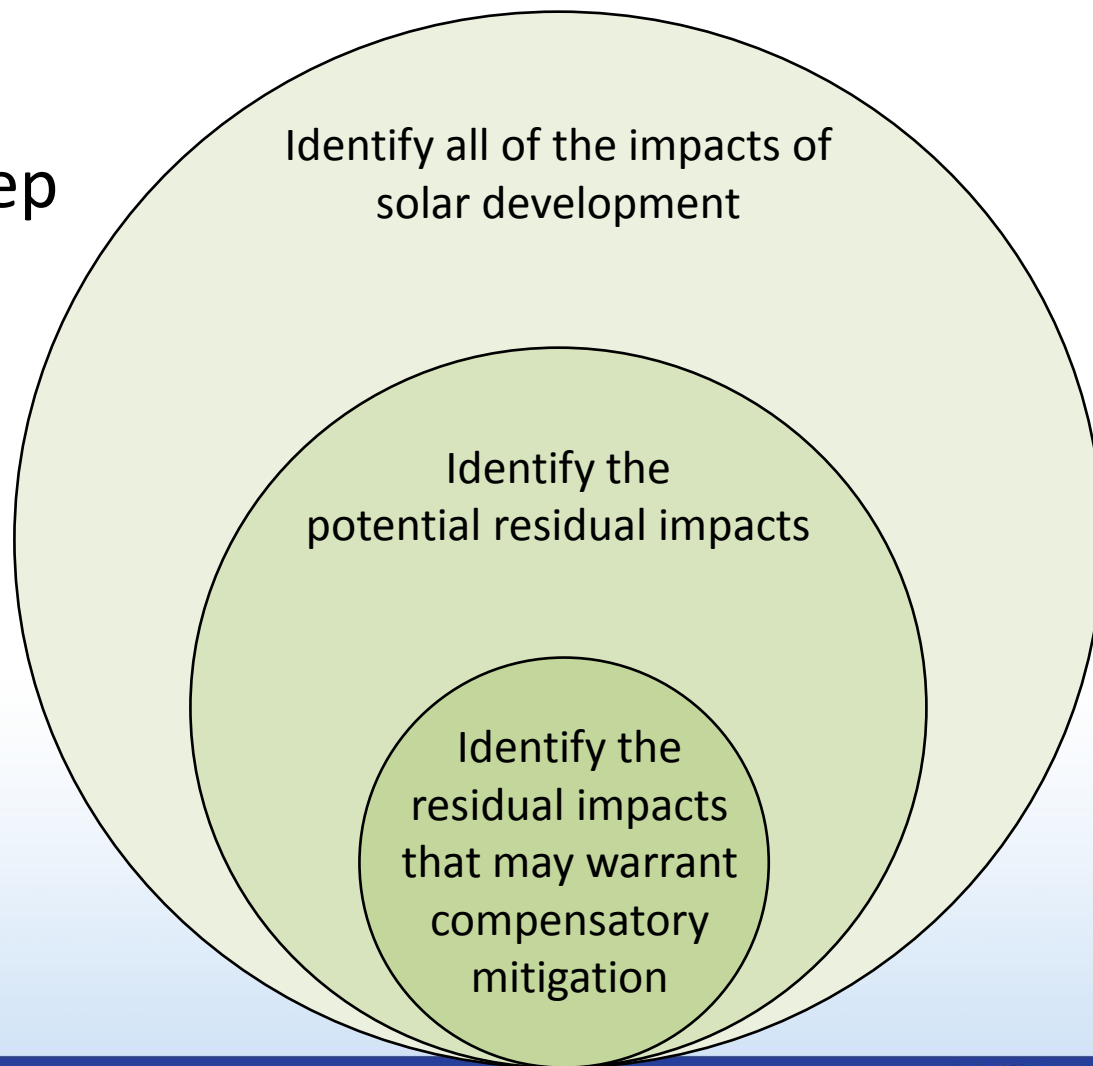


Residual Impacts Warranting Compensatory Mitigation



Identifying the Residual Impacts of Solar Development that May Warrant Compensatory Mitigation

Three step process



Steps for Identifying Resource Impacts That May Warrant Compensatory Mitigation

Identify the residual impacts that may warrant compensatory mitigation

1. Identify likely residual impacts (remember mitigation hierarchy); review and, if needed, identify non-development and/or minimization areas.
2. Identify important ecosystem components and interactions.
3. Identify at-risk resources and processes in the region.
4. Estimate how the residual impacts of solar development will affect the status and trend of the regional at-risk resources.
5. Determine the significance of the residual impacts in the region.

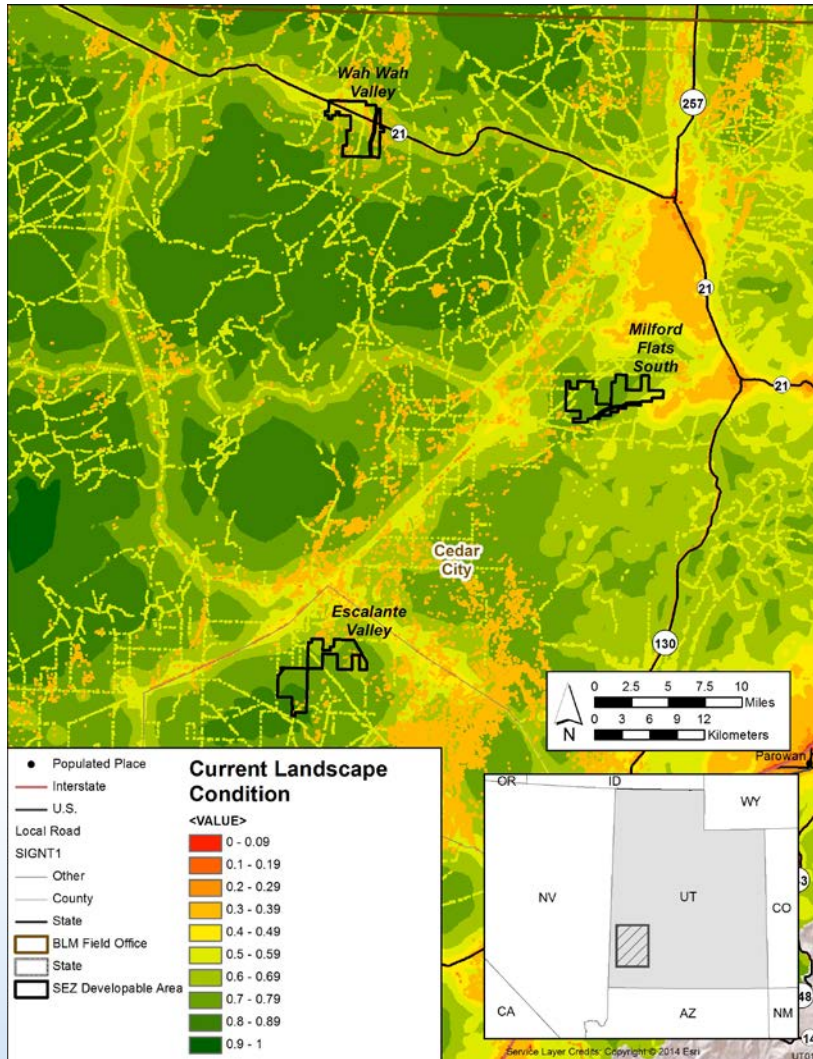
Apply these criteria to identify which residual adverse impacts warrant compensatory mitigation.

Identifying Resource Impacts that May Warrant Compensatory Mitigation (continued): Identify Non-Development/Minimization Areas

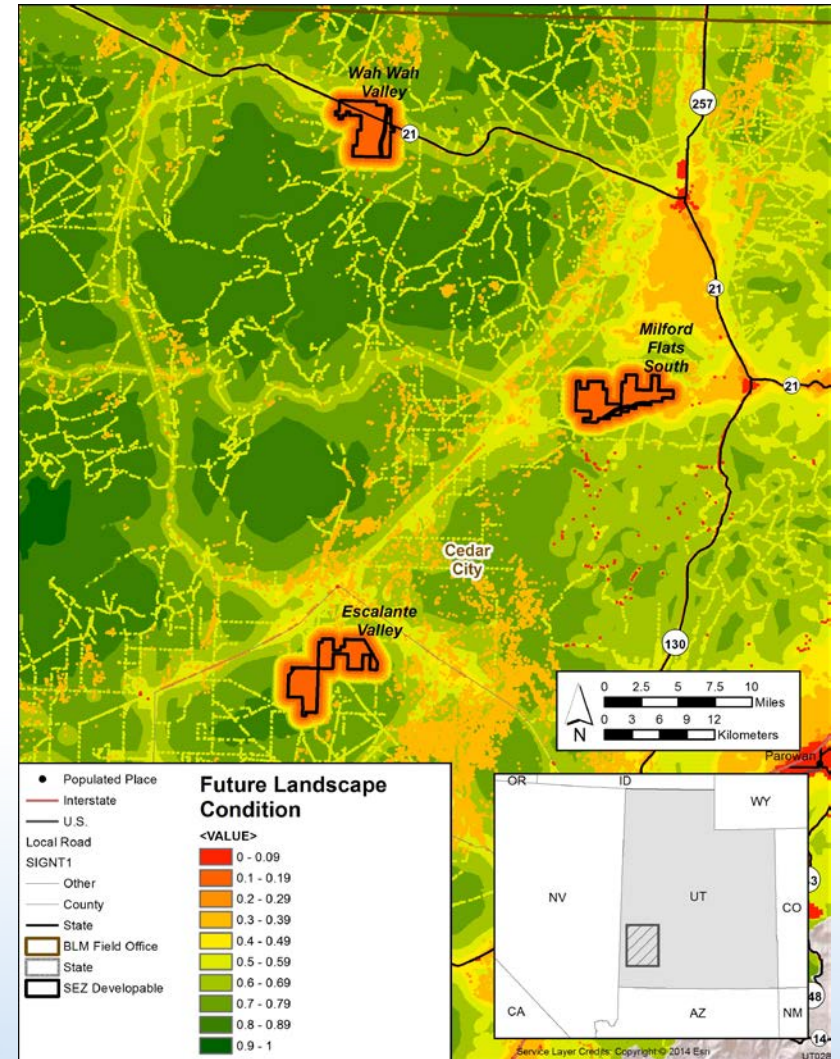
- BLM Interdisciplinary Team (IDT) reviews and if appropriate recommends revising the developable area based on:
 - existing right-of-way grants
 - washes/ephemeral streams
 - any other potential land-use conflicts with resource values that might be avoided by restricting SEZ development areas
- Example – Sage grouse GHMA and lek near Milford Flats SEZ

Landscape Condition (aids in evaluating impact and resilience)

Current (circa 2013)



Future (circa 2030)



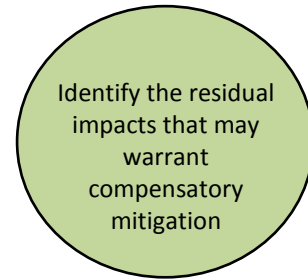
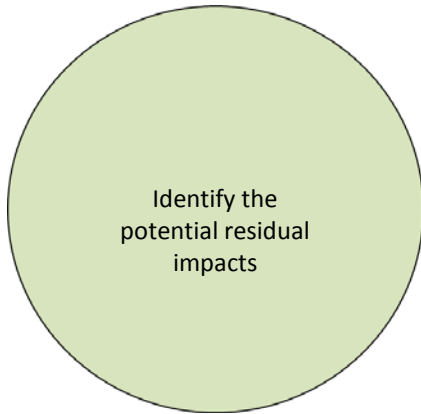
Example: Identifying Resource Impacts that May Warrant Mitigation – Vegetation

Identify the potential residual impacts

Identify the residual impacts that may warrant compensatory mitigation

Escalante Valley Solar Energy Zone Resource/ Issue	Residual or Unavoidable Impact?	How certain is it that the residual impacts will occur?	How significant are the residual impacts onsite?	How significant are the residual impacts of developing the Escalante Valley SEZ in the region?	Role in the ecosystem?	Other Considerations	Are potential residual impacts likely to warrant regional mitigation?
Ecology: Vegetation	Yes. Development would result in direct removal or disturbance of native plant communities, special soil environments, and the ecosystem services they provide.	Very high.	Very high. Expect the loss of all vegetation in the developed areas, though mitigation may result in some remaining vegetation.	Very low.	Basic component		Yes.

Example: Identifying Resource Impacts that May Warrant Mitigation – Cultural



Escalante Valley Solar Energy Zone Resource/ Issue	Residual or Unavoidable Impact?	How certain is it that the residual impacts will occur?	How significant are the residual impacts onsite?	How significant are the residual impacts of developing the Escalante Valley SEZ in the region?	Role in the ecosystem?	Other Considerations	Are potential residual impacts likely to warrant regional mitigation?
Cultural	Yes. Impacts on non-renewable resources are both irretrievable and irreversible.	High.	Moderate. Unknown until surveys are completed.	Moderate. Unknown until surveys are completed.	Human element	Avoidance is preferred for significant resources. Adequate mitigation would be dependent on consultation and the resources and their relative significance in the region. Procedures to handle inadvertent discoveries will be addressed in a monitoring and discovery plan developed during the right-of-way process.	Maybe. Impacts warranting mitigation to be evaluated in consultation with the UT State Historic Preservation Office (SHPO) and tribes.

Preliminary Identification of Resources that May Warrant Regional Mitigation in Utah SEZs

- Ecology: Vegetation
- Ecology: Terrestrial Wildlife
- Ecology: Migratory Birds
- Ecology: Animal Special Status Species
- Soils

Resources for which the preliminary determination of may warrant regional mitigation is Maybe: Cultural Resources, Livestock Grazing, Specially Designated Areas (Escalante Valley SEZ only), Tribal Resources, and Visual Resources (Escalante Valley SEZ)

Questions?



Regional Goals and Objectives, Mitigation Desired Outcomes, and Potential Mitigation Actions

Regional Goals and Objectives, Mitigation Desired Outcomes, and Potential Mitigation Actions

- **Need to Identify *Mitigation Desired Outcomes and Actions* in terms of Regional Goals and Objectives.**
- Regional goals and objectives are generally broad statements on desired conditions for resources over a large management area.
- Multiple documents may provide guidance for establishing regional goals and objectives for resources warranting mitigation:
 - Land use plans;
 - BLM policies, including handbooks and manuals;
 - Species conservation plans

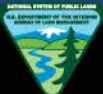
Regional Goals & Objectives, and Mitigation Desired Outcomes & Actions (continued):

- Mitigation Desired Outcomes and Actions should:
 - Consider all resources that may warrant regional mitigation due to SEZ development.
 - Consider affected ecosystem, landscape condition, current trends, external actions that may affect regional conditions.
 - Enhance the ability of agencies to invest in larger scale conservation and mitigation efforts, and to prioritize investments.
 - Use SMART principles (specific, measurable, attainable, relevant, timely).

Regional Goals and Objectives, Mitigation Desired Outcomes, and Potential Mitigation Actions for the Utah SEZs

Resource Impacted that May Warrant Compensatory Mitigation ¹	Regional Goals and Regional Objectives	Mitigation Desired Outcomes ²	Potential Mitigation Actions ³
<p>Ecology: Vegetation (Inter-Mountain Basins Mixed Salt Desert Scrub, Inter-Mountain Basins Desert Shrub Steppe, and Inter-Mountain Basins Big Sagebrush Shrubland</p>	<p>Goal: Manage or enhance vegetation resources to ensure future ecological biodiversity, stability and sustainability, and to respond to climate change. This would include diverse vegetative community and structural types to maintain soil site stability and hydrologic function while also maintaining the ecological integrity necessary to sustain or enhance viable and resilient wildlife populations.</p> <p>Objectives:</p> <p>Maintain or enhance the functional integrity of vegetation systems to ensure sustainable wildlife populations.</p> <p>Respond to the effects of climate change by maintaining vegetative communities in good vegetative and soil health. Manage communities to a standard which have decadent, dying or dead vegetation (carbon releaser) as a minor component (less than 10 percent) as compared to live, vigorous vegetation, which stores carbon.</p> <p>Within sagebrush and sagebrush steppe communities, identify areas in need of restoration due to pinyon and juniper expansion or sagebrush dominance. Initiate restoration and/or rehabilitation efforts to ensure sustainable population of sage-grouse, mule deer and other sagebrush obligate species.</p> <p>Maintain vegetation treatment areas to provide suitable habitats for wildlife and wild horses and adequate forage for livestock.</p> <p>Meet rangeland health standards and guidelines.</p>	<p>Create, restore, and/or acquire equivalent functional acreage of vegetation communities lost through development on the SEZ at a ratio of 1:1 or greater depending on the health of the impacted vegetation community within 5 years after initiation of development.</p>	<p>Acquire high quality habitat to compensate for the loss of comparable habitat and ensure preservation through conservation easements or other mechanisms</p> <p>Habitat enhancement and restoration (e.g., restore areas of pinyon-juniper encroachment).</p> <p>Rehabilitate existing disturbed areas.</p>

Questions?



Discussion Questions: *PLEASE PROVIDE INPUT*

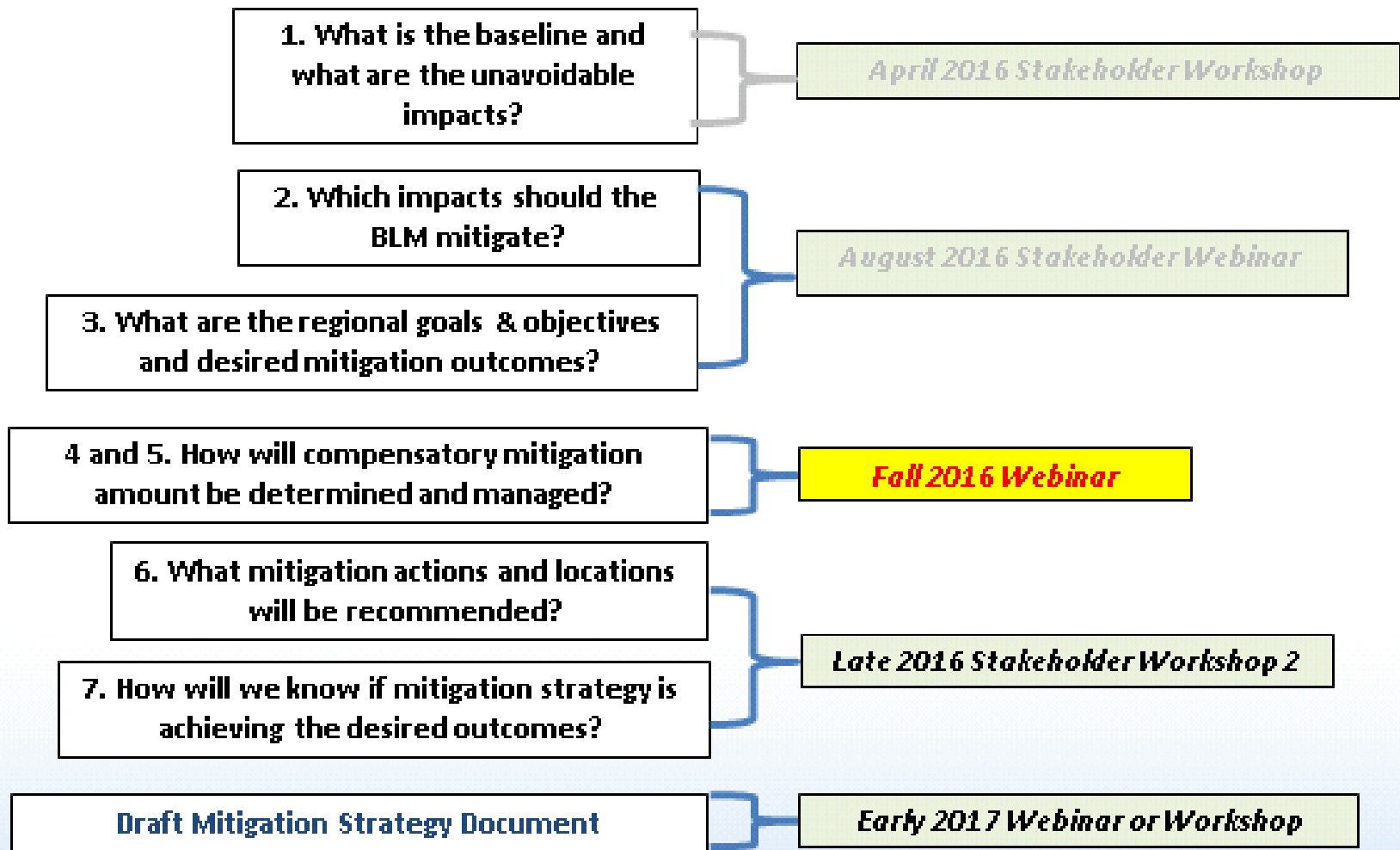
1. Has the BLM adequately captured the concerns regarding the initial resource impact evaluation that were voiced in the April workshop?
2. Are there additional resources that should warrant regional mitigation? Please provide a justification.
3. Are there resources included in the list of those warranting regional mitigation that can be addressed with onsite mitigation? Please include examples of onsite mitigation actions to address the impact.
4. Do the regional goals and objectives presented by BLM adequately address the unavoidable or residual impacts of solar energy development that may warrant regional mitigation for each SEZ?
5. Are there other established regional goals and objectives beyond those presented (e.g., from state action plans, species-specific management plans, etc.)?
6. Are the mitigation desired outcomes sufficiently defined to support identification and assessment of candidate mitigation sites and actions for each SEZ?

Document Posted to the Project Website: <http://blmsolar.anl.gov/sez/ut/regional-mitigation/>

NEXT STEPS:

- Webinar presentation will be posted to the project website along with the documents discussed.
 - <http://blmsolar.anl.gov/sez/ut/regional-mitigation/>
- Stakeholder input on the documents presented here and posted on the website are requested by **October 5, 2016**.
 - Please consider using the Discussion Questions form available on the website for the most effective way of providing comments. However, BLM will accept any format of comments (written letter, PDF comment tags, scanned markups, etc.).
 - Submit input to [BLM UT Solar Mitigation@blm.gov](mailto:BLM_UT_Solar_Mitigation@blm.gov)

Utah SRMS Process – Next on Schedule



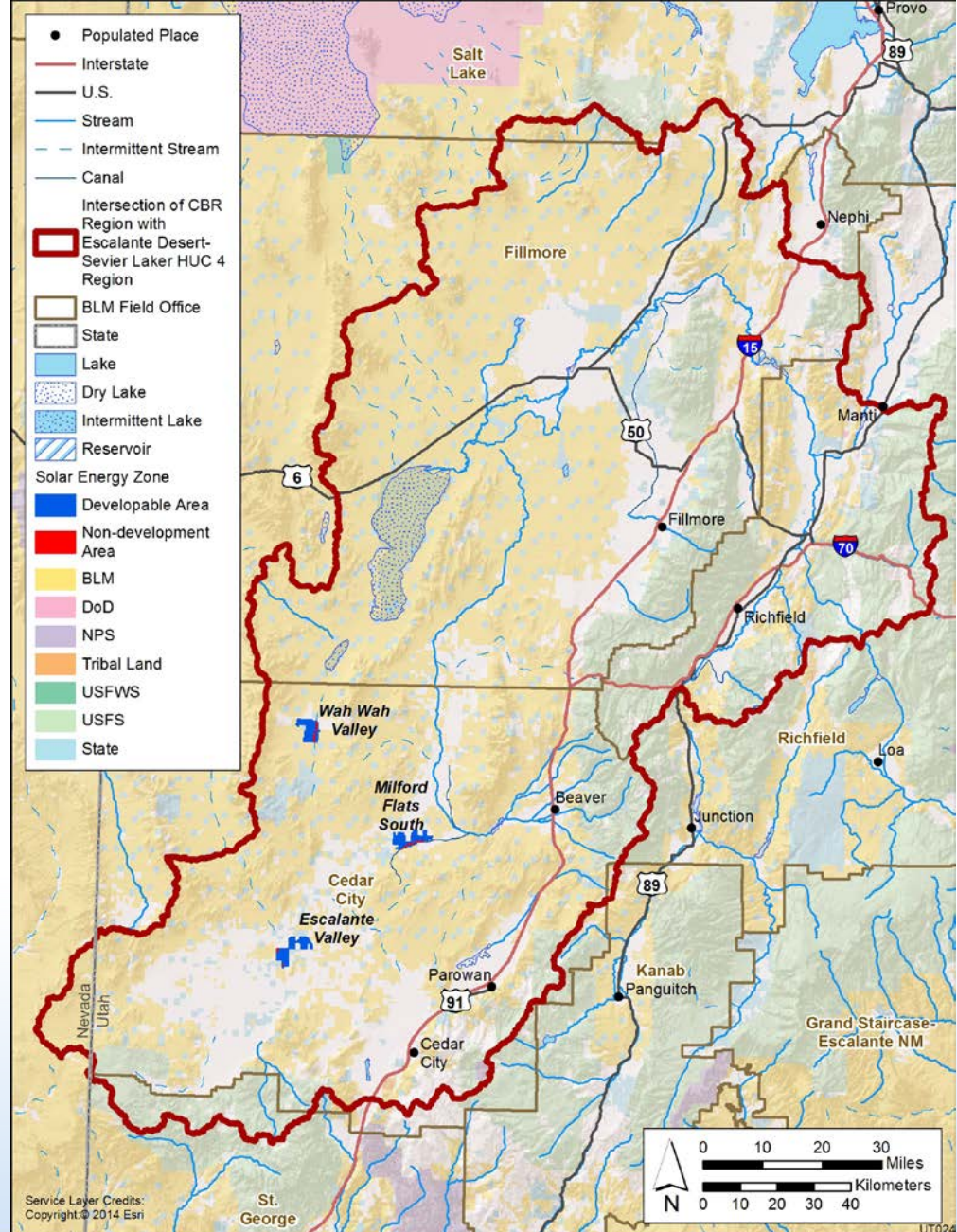
Candidate Site and Action Recommendations for Regional Mitigation

How Stakeholders Can Help BLM Identify Candidate Regional Mitigation Locations and Actions

- Stakeholders will be asked to provide candidate mitigation locations and actions (including G.I.S. data and rationale).
- BLM IDT will also propose & screen locations and actions.
- Screening of mitigation locations and actions is informed by regional goals and objectives.
- Locations and actions should mitigate for Residual Impacts Warranting Mitigation and address Regional Goals and Objectives.
- Evaluating mitigation locations and actions will be an iterative process.

SRMS REGION

- HUC4 Watershed



How Stakeholders Can Help BLM Identify Candidate Regional Mitigation Locations and Actions (continued)

- Key Compensatory Mitigation Criteria:
 - Mitigates for all or most impacts that warrant mitigation;
 - Addresses regional goals and objectives;
 - ***Is Feasible, Effective, Additive, Low-Risk, and Durable.***
- *Candidate Site Screening Matrix* tool:
 - Supports systematic comparison and ranking;
 - Can support identification of several locations and/or actions and corresponding objectives.

Request to stakeholders to submit matrix data for their site/action recommendations – details forthcoming in next webinar!

Questions?

