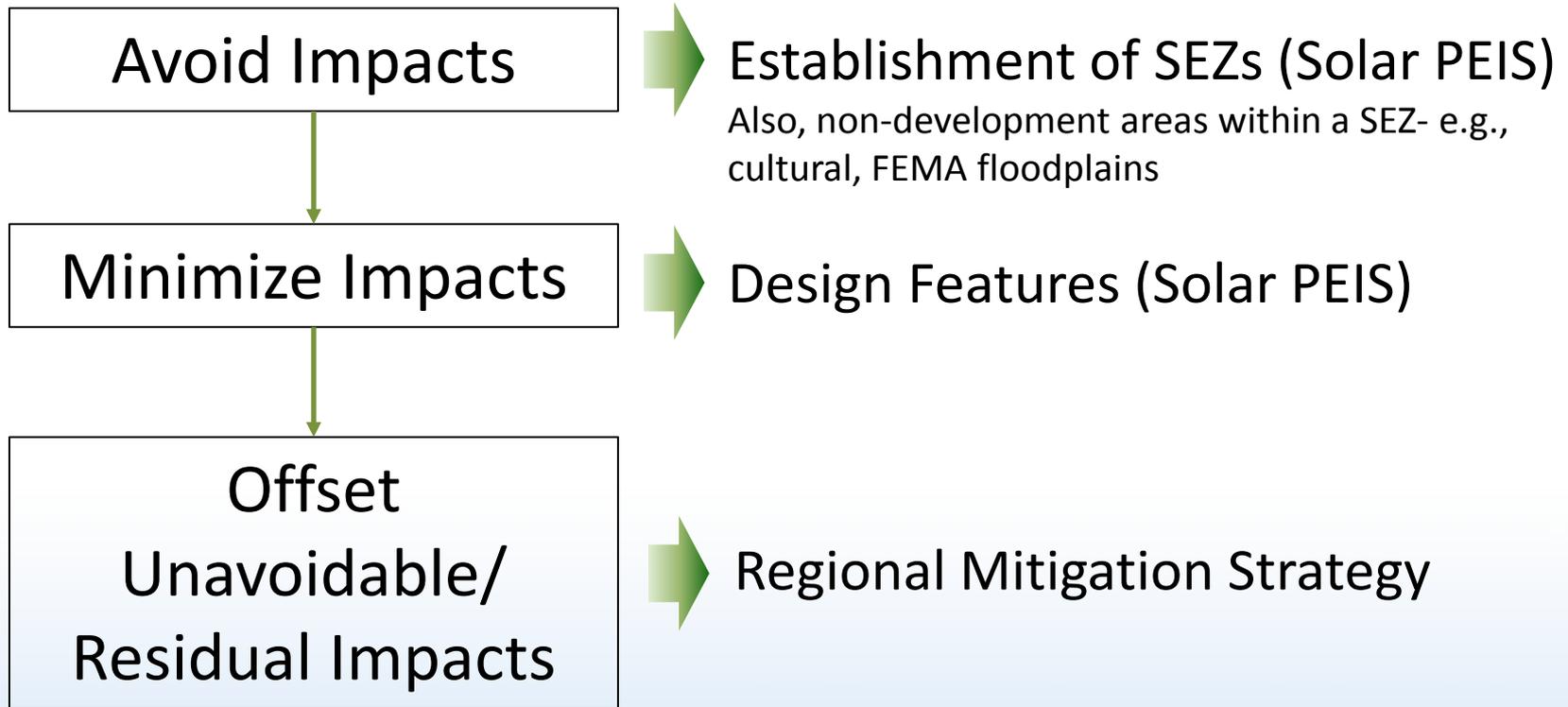


# Arizona Solar Regional Mitigation Strategy Workshop 2: Mitigation Goals and Objectives

Presented by:  
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Arizona SRMS Workshop 2  
Phoenix, AZ  
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# BLM Mitigation Hierarchy: Focusing our Discussion



# Regional Mitigation Goals

(Source: Draft Procedural Guidance – July 2014)

- **Articulate Overarching Regional Mitigation Goals and Desired Outcomes**
  - Regional mitigation goals should consider all of the resources and values that will be unavoidably impacted by SEZ development
  - Should be based on understanding of:
    - affected ecosystem
    - landscape condition
    - current trends in the condition of resources and values
    - external actions that affect condition
    - potential for restoration, enhancement, and/or preservation.
  - Should enhance the ability of state and federal agencies to invest in larger scale conservation and mitigation efforts and prioritize investments

# Regional Mitigation Goals (cont.)

## **WHAT?**

- Identify the resources we are mitigating for based on the impacts from development and regional trends in the ecosystem

## **HOW?**

- Improve or protect affected resources or resource values elsewhere in the region

## ***Where do the goals come from?***

- Review of potential impacts step-down from PEIS and RDEP
- BLM Resource Management Plans (RMPs)
  - RMP Designations and Desired Future Conditions

# Regional Mitigation Objectives

(Source: Draft Procedural Guidance – July 2014)

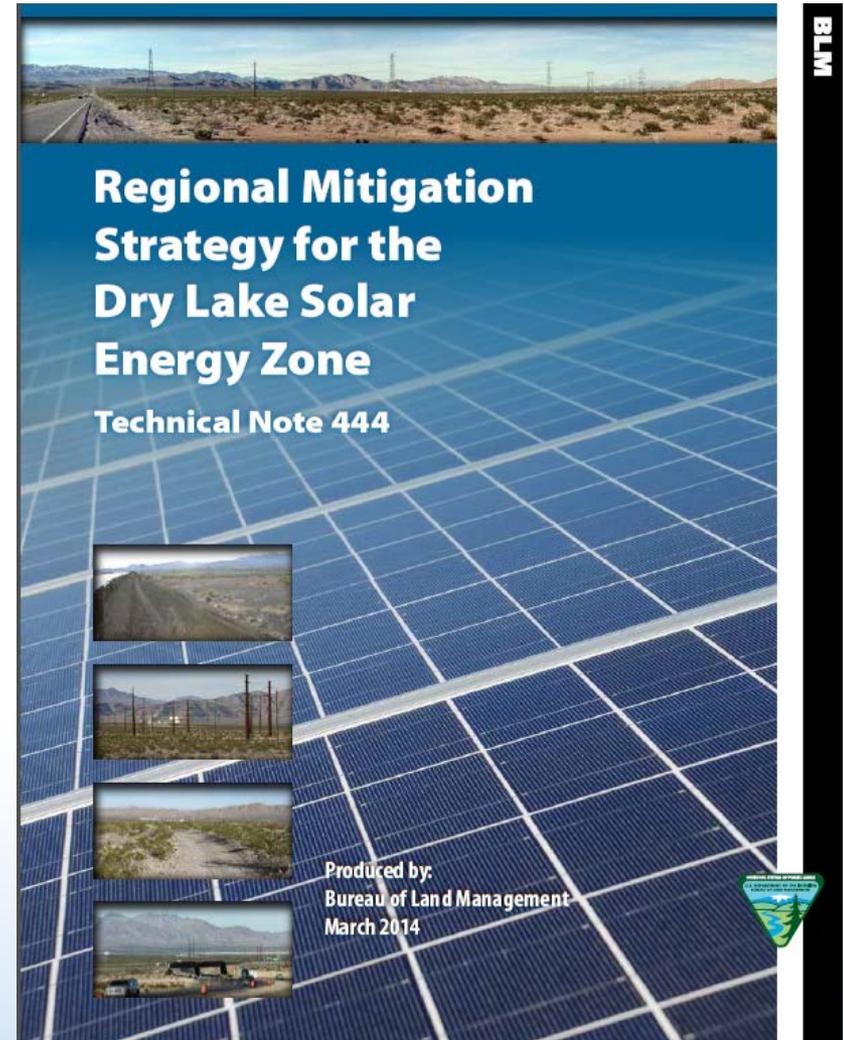
- **Identify Measurable Objectives for Each Location and Action:** For each mitigation action (acquisition, restoration, enhancement, preservation, or other) considered, the BLM should identify:
  - measurable objectives by which it can evaluate the impact of the mitigation action based on the current regulatory requirements, overarching land use planning goals, and the desired future condition of the landscape.
  - the implementation and time frame of the action, including how the durability of the mitigation investment will be ensured

# Regional Mitigation Objectives (cont.)

- Objectives: Specific identified priorities for mitigation investment
- Some mitigation objectives may provide for mitigation of impacts on multiple resources – if complementary
- Iterative process among goals, objectives, sites, and actions
- Where do these come from?
  - BLM Resource Management Plans (RMPs)
    - Designations and Desired Future Conditions
  - Stakeholder input and priorities
  - Dry Lake Solar Regional Mitigation Strategy

# Dry Lake SEZ Pilot Project (NV) - Example Strategy

- 3,471 developable acres
- Identified unavoidable impacts on:
  - Desert tortoise;
  - Special status species
  - Vegetation, habitat, and ecosystem services
  - Visual resources
- Goals
  - Mitigate unavoidable impacts to the above resources in the context of regional conditions and trends
- Objectives
  - Prevent further loss of habitat and degradation
  - Restore disturbed areas at an off-site location



# Resources in AZ SEZs with the Potential for Unavoidable Adverse Impacts from Solar Energy Development

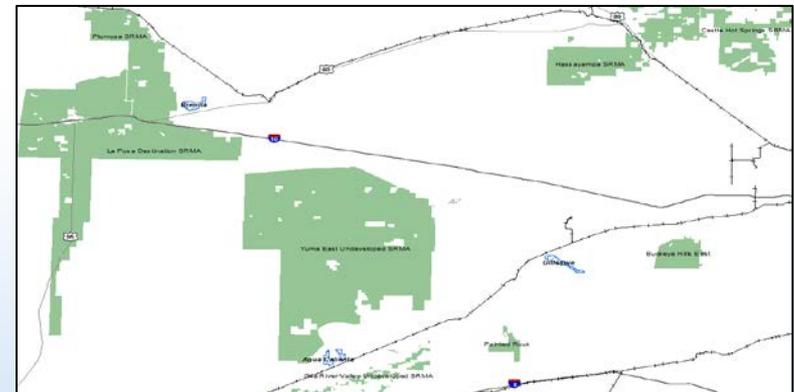
- Vegetation and Riparian Areas- Creosote Bursage and Desert Scrub
- Wildlife and Migratory Birds
- Animal Special Status Species
- Surface Water
- Soils/Erosion
- Visual
- Cultural Resources
- Native American Concerns
- Public Access and Recreation
- Specially Designated Areas



Sonoran population of Desert tortoise



Creosote Bush-White Bursage Scrub Alliance



SRMAs in the Vicinity of the Arizona SEZs

# Draft Regional Mitigation Goals for AZ SEZs

- Preserve and/or restore creosote bursage and desert scrub ecosystem/habitat community disrupted by development (taking into account the existing landscape condition)
- Preserve and/or restore riparian vegetation and habitat disrupted by development
- Maintain viable populations of affected BLM or other special status species in the region (Le Conte's Thrasher, Sonoran Desert Tortoise, Western burrowing owl, CA leaf-nosed bat, Pale Townsend's big-eared bat, Western yellow bat)
- Minimize impacts on specially designated areas, including impacts on recreation, access, and visual resources
- Minimize or offset impacts on recreation in the region
- Protect and preserve cultural resources

# Draft Regional Mitigation Objectives for AZ SEZs

## Ecological

- Preserve and/or restore a similar amount of creosote bursage and desert scrub ecosystem/habitat as is lost due to SEZ development in the same region as SEZs
- Preserve and/or restore a similar amount of riparian vegetation and habitat as is lost due to SEZ development in the same region as SEZs
- Preserve and/or restore a similar amount of sensitive species habitat/ecosystem as is lost due to SEZ development in the same region as SEZs



Creosote bush (*Larrea tridentata*) – white bursage (*Ambrosia dumosa*) scrub Alliance

# Draft Regional Mitigation Objectives for AZ SEZs

## Cultural

- Avoid impacts to high value cultural resources by identifying non-development areas in SEZs, if appropriate
- Preserve cultural resource values similar to those that would be lost due to SEZ development



Photo Credits: Konnie Wescott

# Draft Regional Mitigation Objectives for AZ SEZs

## Special Designations/Recreation/Visual

- Maintain legal access to any specially designated or other high-value recreation areas
- Preserve and/or restore similar visual resource values as would be lost due to SEZ development, complementary with ecosystem preservation/restoration



Photo Credit: AZ Game & Fish Department

# Examples of Mitigation Actions

- Acquire lands for future protection - e.g., ACEC expansion areas, wilderness/NLCS inholdings
  - Acquire as fee simple lands or conservation easement
- Restoration/rehabilitation of degraded lands - similar vegetation/resources to those impacted, removal of invasive species
  - Incremental improvement rather than starting from scratch
- Cleanup and protection- close undesignated routes, cleanup dumping/shooting areas, increase law enforcement presence
- Interpretation of cultural and natural resources
- Withdraw lands in ACECs from mineral entry and other uses
- Maintain or reroute access for recreation and other uses if impacted by development

# Help Us Make the AZ Regional Mitigation Objectives and Actions SMART!

- **S**pecific - What, Where, How?
- **M**easurable - Acres, dollars, confirm through monitoring
- **A**ttainable - Can the objectives be implemented successfully? Any constraints or risks?
- **R**elevant - Tied to both impacts and priorities
- **T**ime-Sensitive - Implemented in concert with development, how long does it take? Mitigation should last as long as the impacts do or longer

