



**Briefing to the  
Desert Management Group  
November 2007**



# Strategic Support Issues – Edwards AFB



**95 ABW**

- **Quality of Life**
  - Family Support and Housing – All grades and all locations
  - Education and Opportunity – Center of Excellence
- **Sustainment**
  - Increased self-sufficiency – Value added, entrepreneurial spirit
  - Economic impact on Antelope Valley and Air Force
- **Energy**
  - Energy Savings Performance Contract
  - Enhanced Use Lease for Energy
- **Encroachment**
  - Preservation of present & future Test Enterprise capabilities
  - Rationale land-use and Engagement with Community
- **Borders and Boundaries**
  - Stewardship of lands, conservation of resources
  - Hawes Field & UAS – sustainable range management

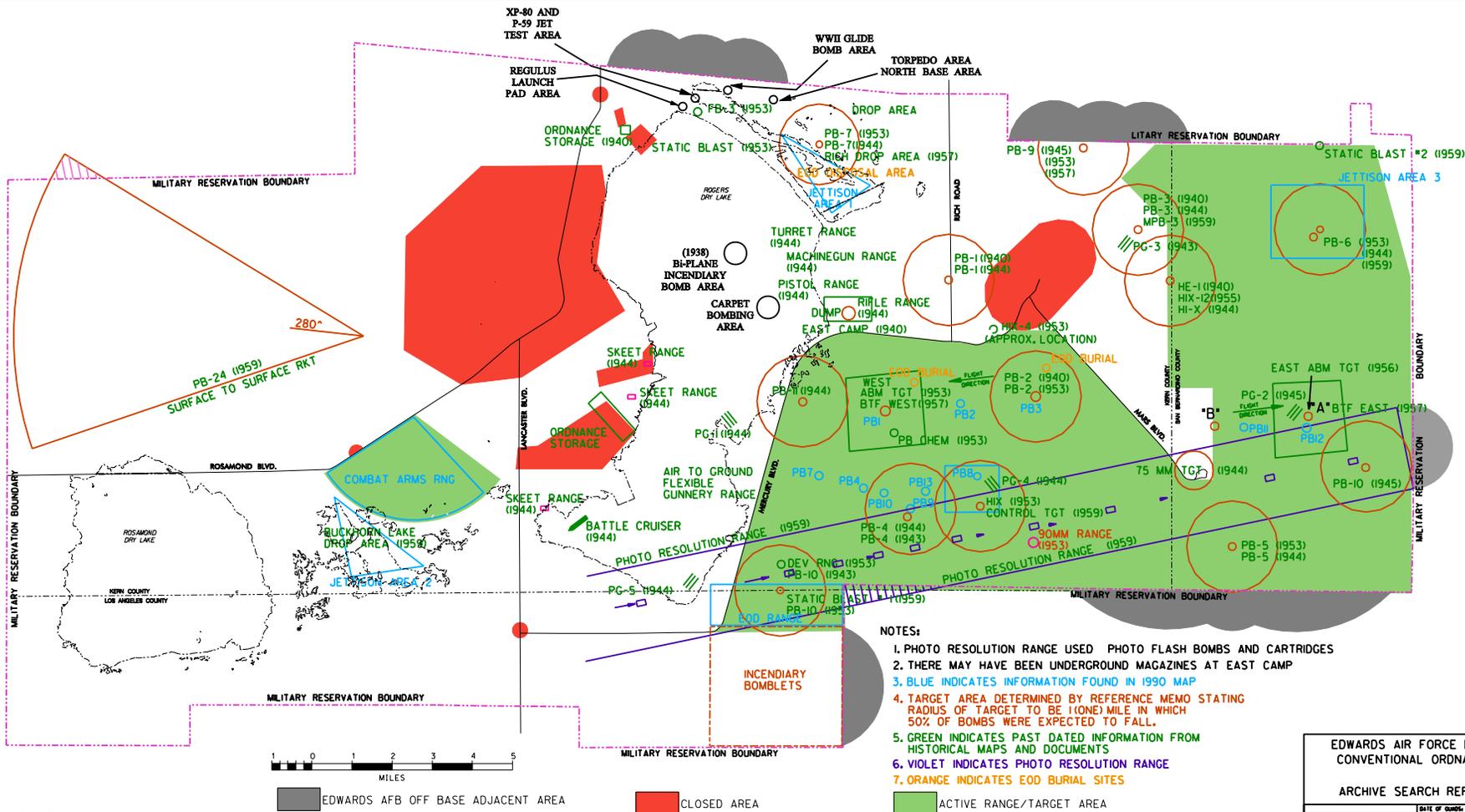


# Edwards Ranges

Target Rings indicate circular error of 50%



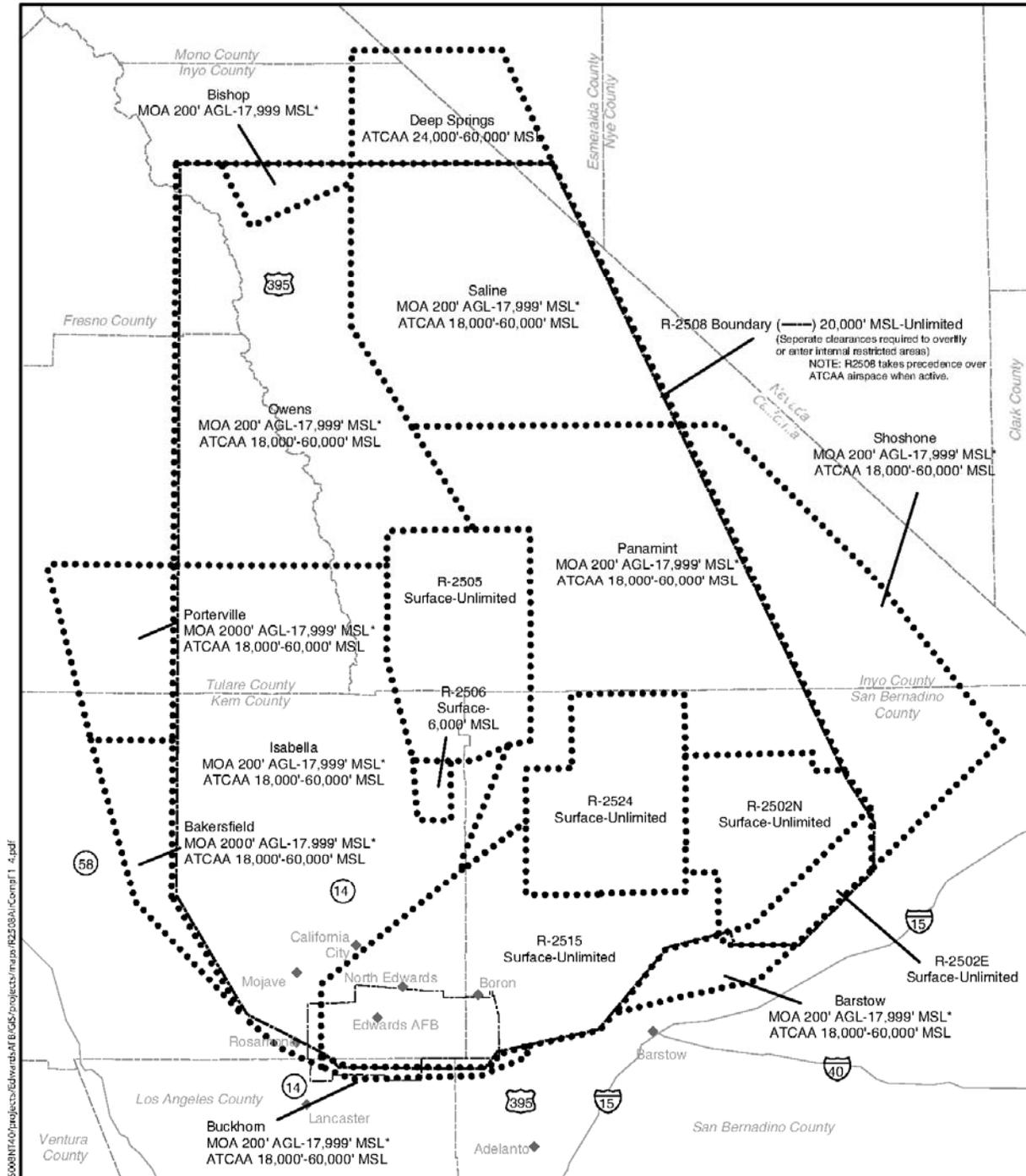
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Green: Active Range    White: Inactive Range    Red: Closed Range    Gray: Other Range



# Military Airspace Adjacent / Connected to Edwards AFB



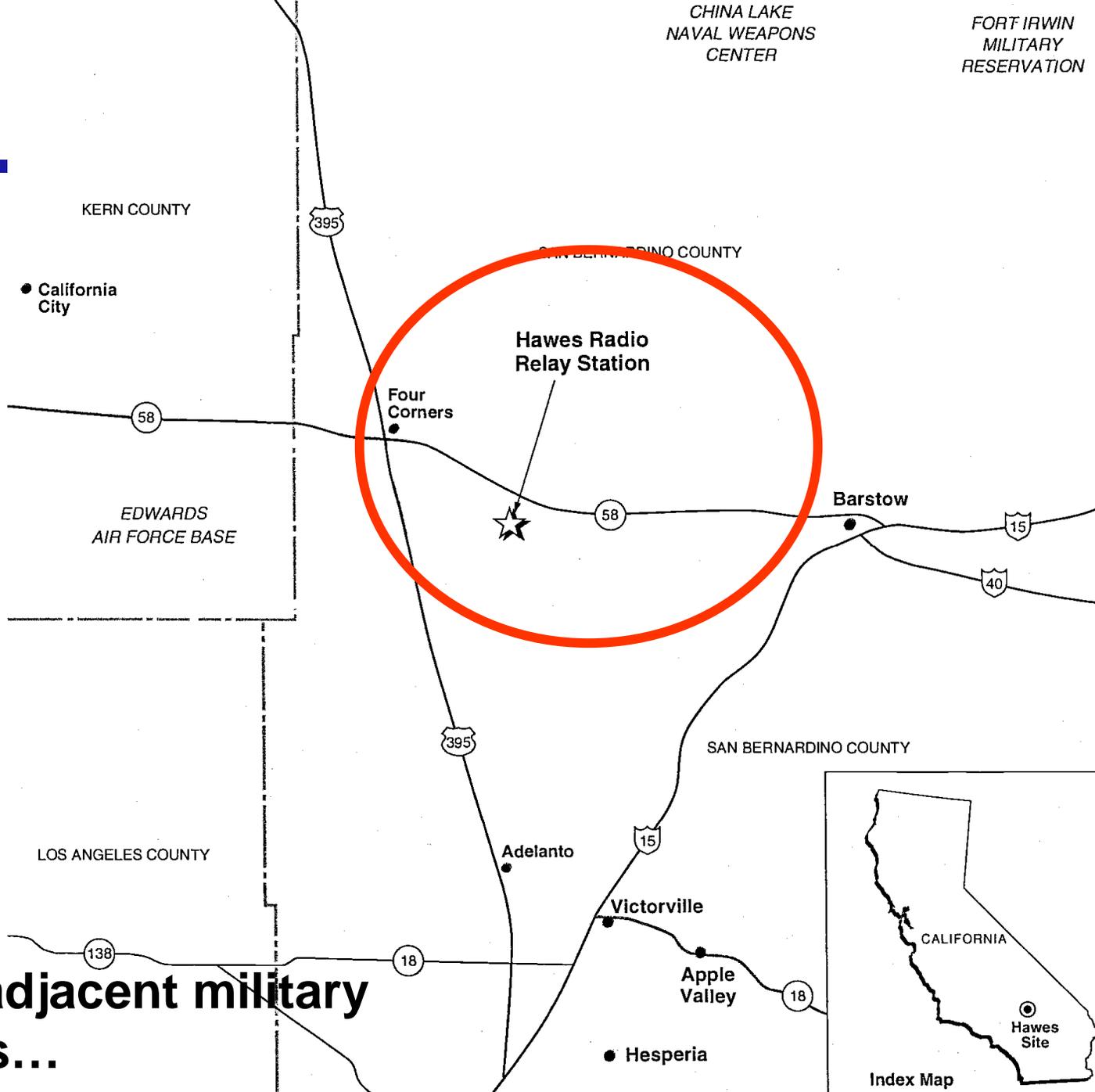


CHINA LAKE  
NAVAL WEAPONS  
CENTER

FORT IRWIN  
MILITARY  
RESERVATION



**95 ABW**



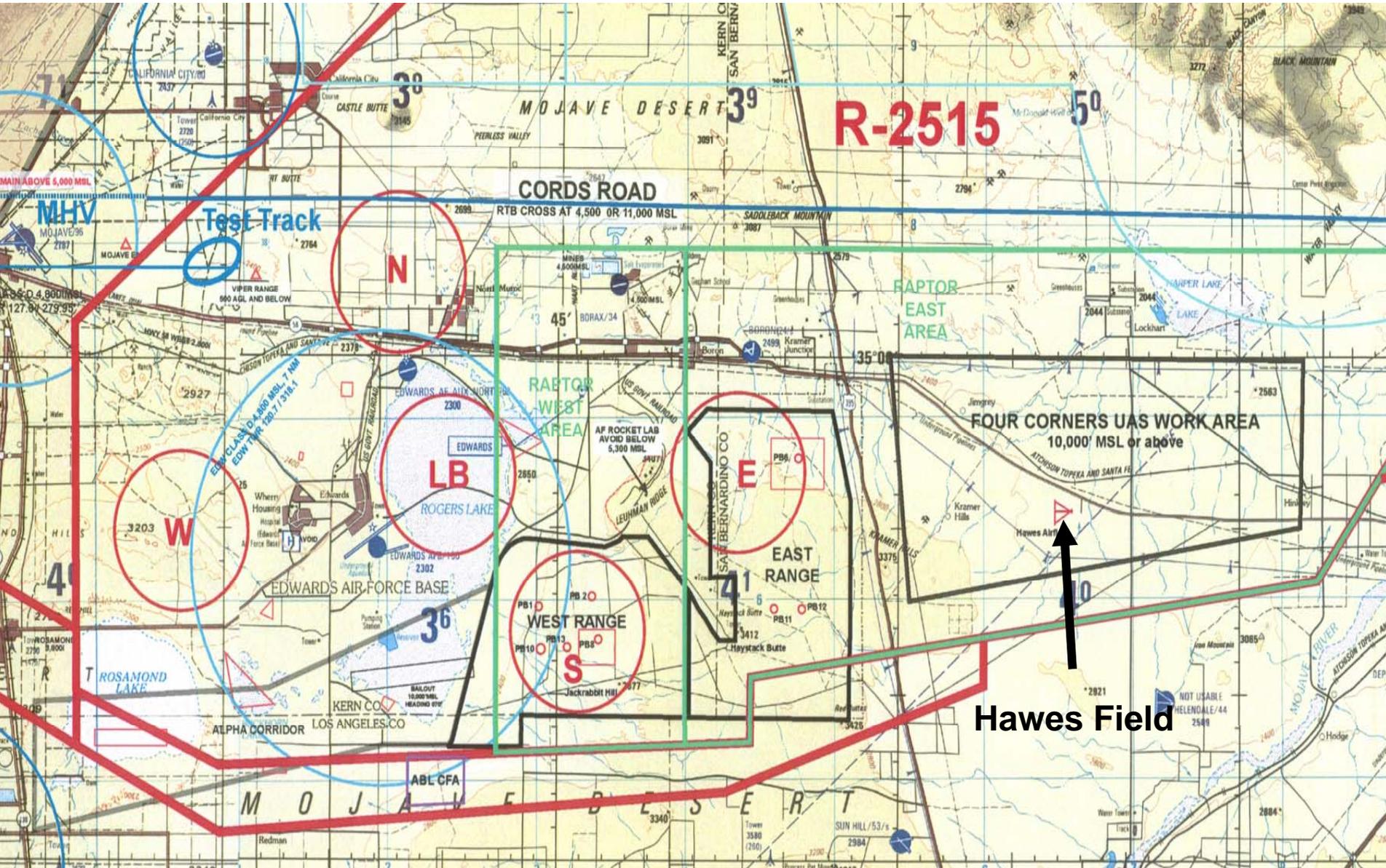
**... and adjacent military facilities...**



# Hawes Field Project



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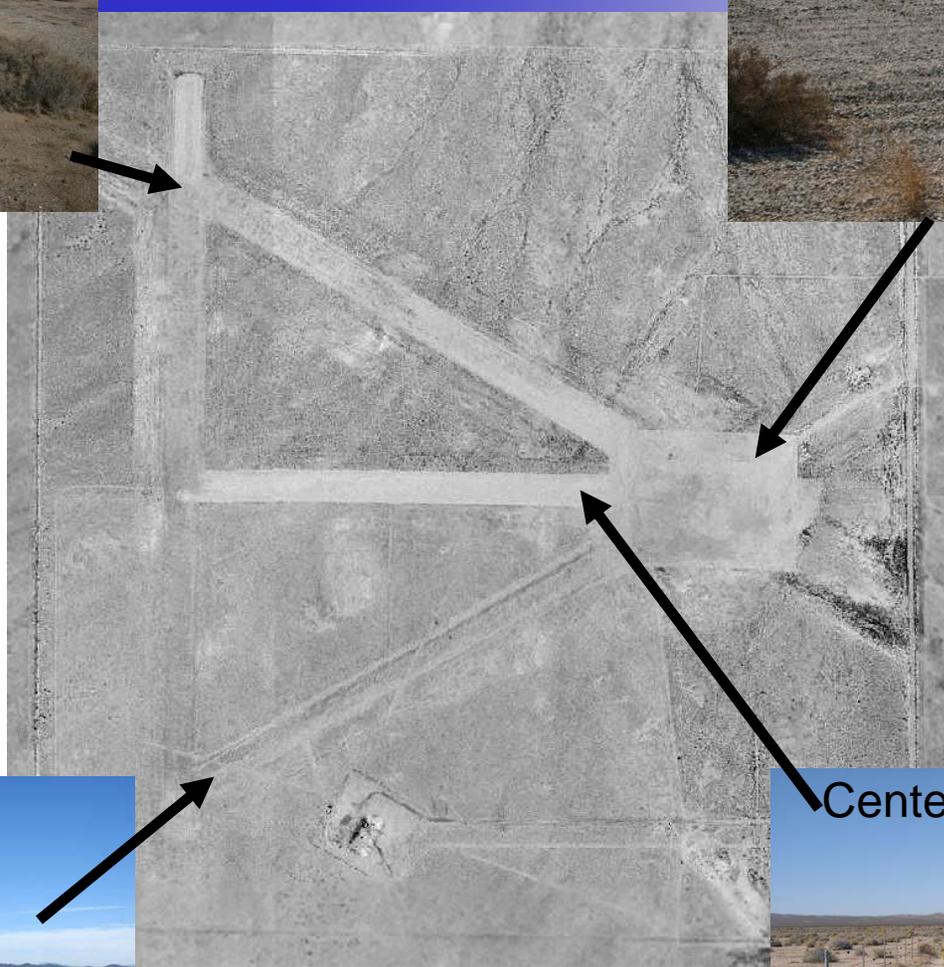


North Runway



# Existing Runways

EOR (End of Runway)



South Runway



Center Runway

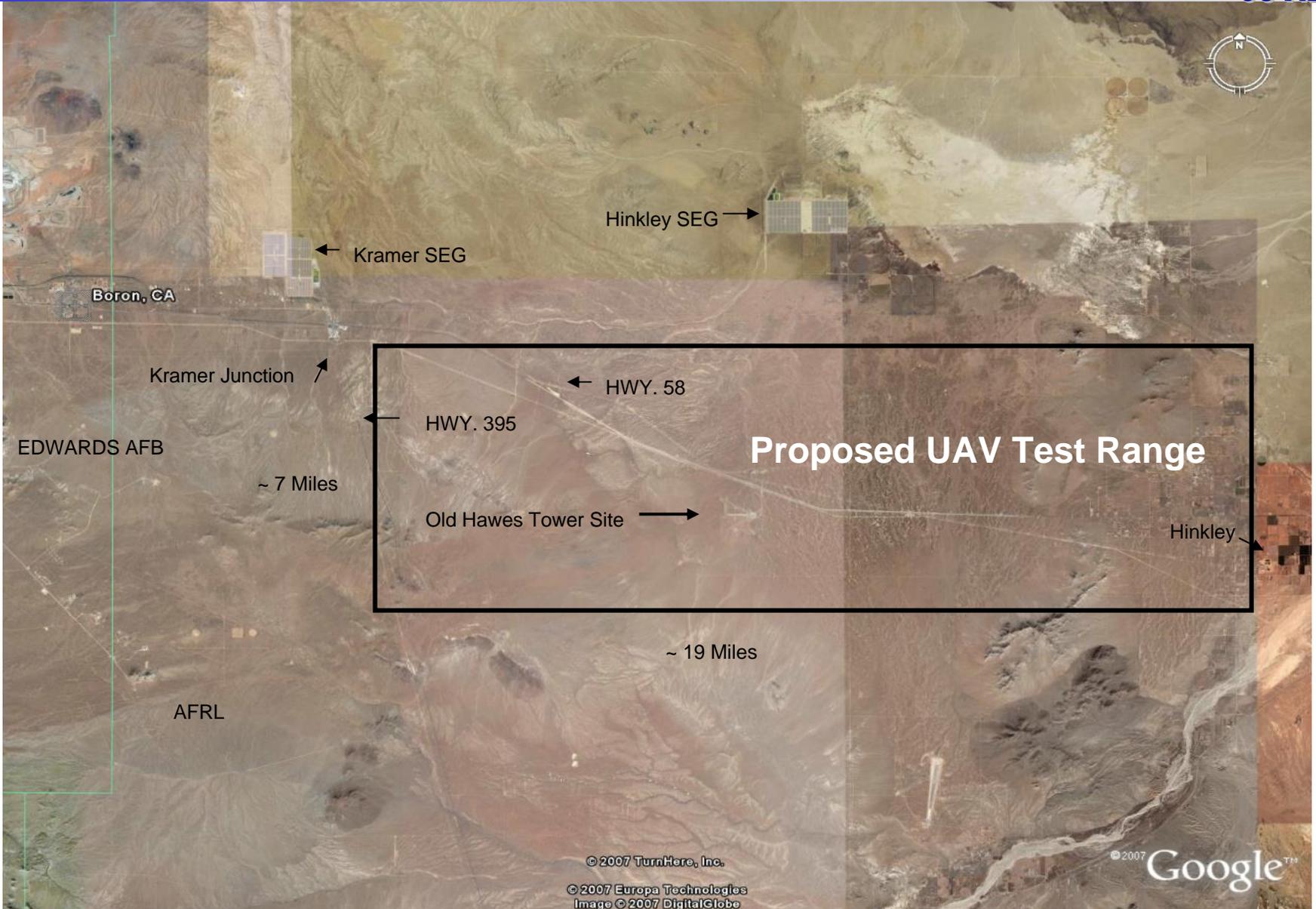




# Hawes Site



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**Questions & Comments**





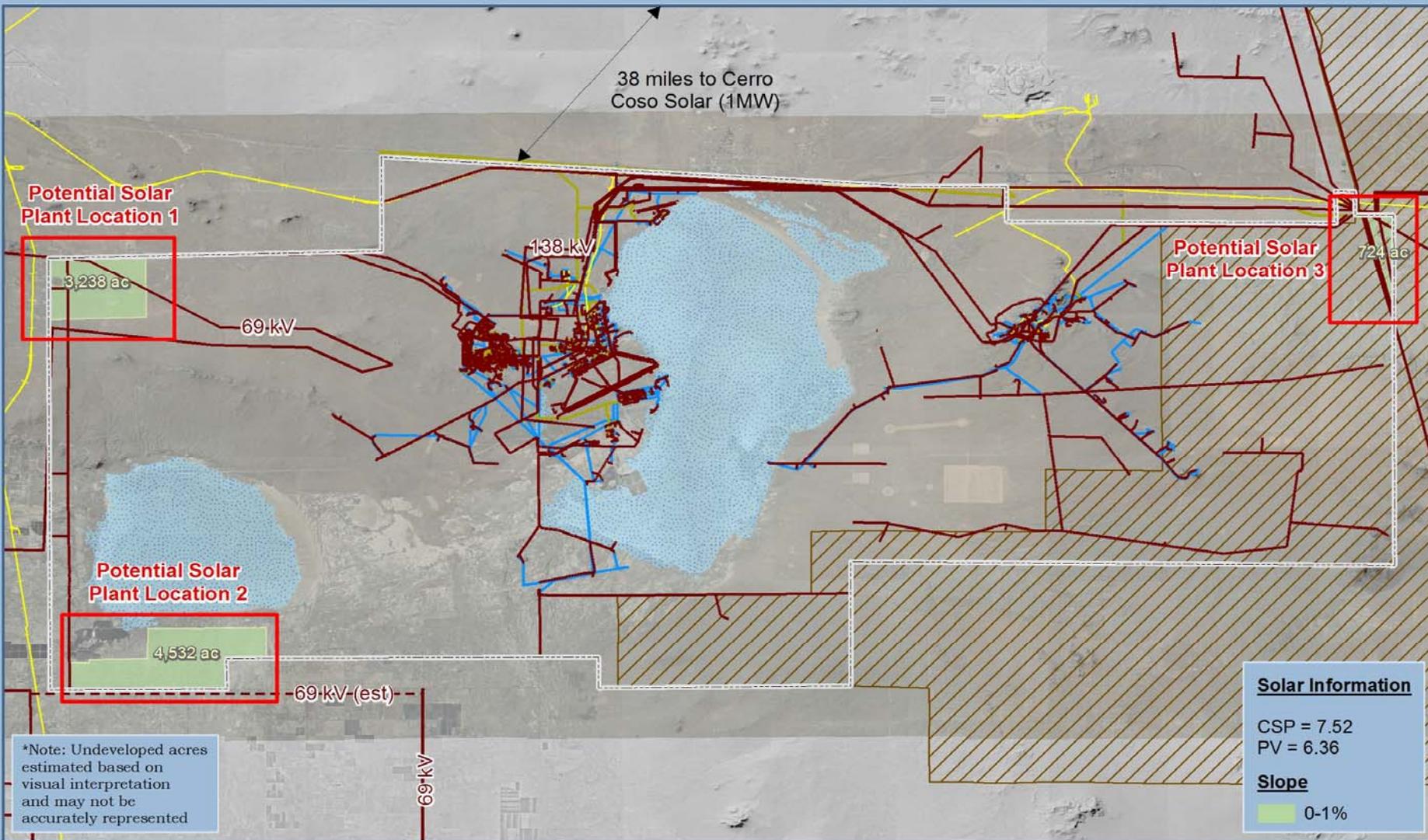
# Edwards Energy Initiatives



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- **Solar Power Energy Farm - EUL**
- **Kern River Gas Pipeline Project - EUL**
- **Other Initiatives**
  - **Hawes Airfield Site – Future Opportunity**
  - **Power Demand Cost Reduction (Load Shifting, Thermo Energy Storage, and Compressor Cycling)**
  - **Energy Systems Monitoring and Control (EMCS, SCADA, Metering)**
  - **Equipment Buyouts & Energy Efficient Maintenance Upgrades**
  - **Renewable Energy Applications (e.g. Green Power)**
  - **Continue Search for Cost Reduction Opportunities**
    - **Energy Savings Performance Contract**
    - **Energy Conservation Investment Program**
    - **Roof-Top Solar Power – EUL**

# Edwards AFB - Potential Solar Plant Locations

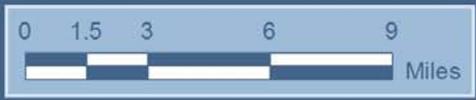


Geographic Feature	Boundary
Transmission Line	Installation Boundary (306,676 ac)
Natural Gas Line	Potential Solar Plant Area (8,494 ac*)
Railroad	Flood Zone Area
Water Line	Desert Tortoise Critical Habitat

Data Sources:  
NREL - Solar CSP & PV  
Edwards GeoBase Data  
USGS Elevation Data  
Created: 3 July 2007



Booz | Allen | Hamilton  
Spatial Solutions Team





# Stirling Cycle Solar Collectors



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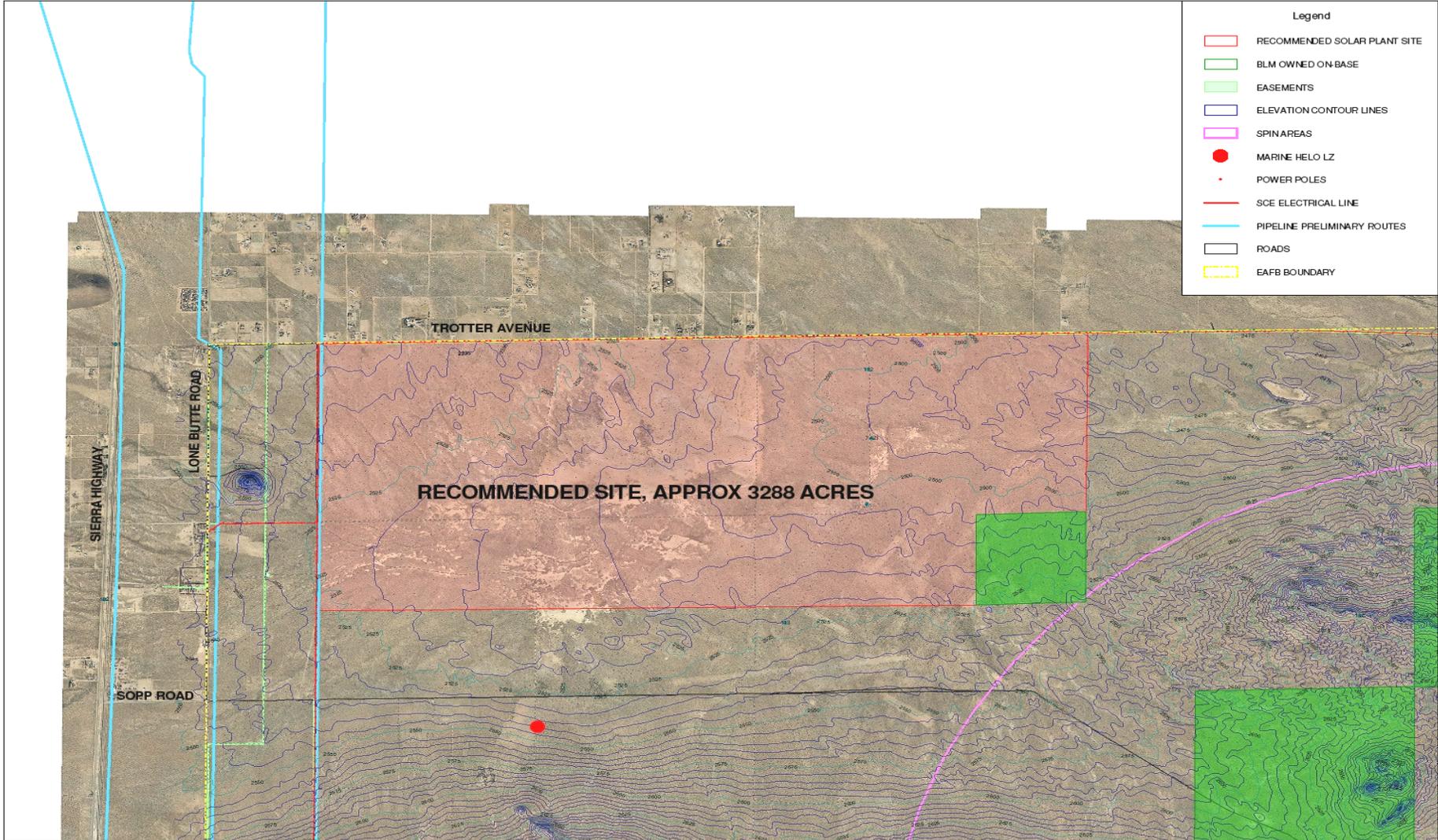




# Solar and Gas Line Projects



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**PROPOSED SOLAR PLANT LOCATION**  
Edwards Air Force Base





# Other Utility Initiatives



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**The Utility Conservation Program at Edwards AFB Consists of Five Pillars:**

- **Public Awareness and Action**
  - **Decrease Energy Use through Motivated User & Command Action**
    - **Communication**
    - **Cooperation**
    - **Command Priorities**
- **Power Demand Cost Reduction (Load Shifting, Thermal Energy Storage, and Compressor Cycling)**
  - **Decrease Electrical Energy Costs through Peak Control**
- **Energy system automation (SCADA, EMCS, Controls, Metering)**
- **Equipment Buyouts & Energy Efficient Maintenance Upgrades**
- **Utilize Renewable Energy Applications (e.g. Green Power)**
  - **Continue Search for Cost Reduction Opportunities**