



Military Perspective & Report out of 30 AUG Session

20 October 2016

Presented to:

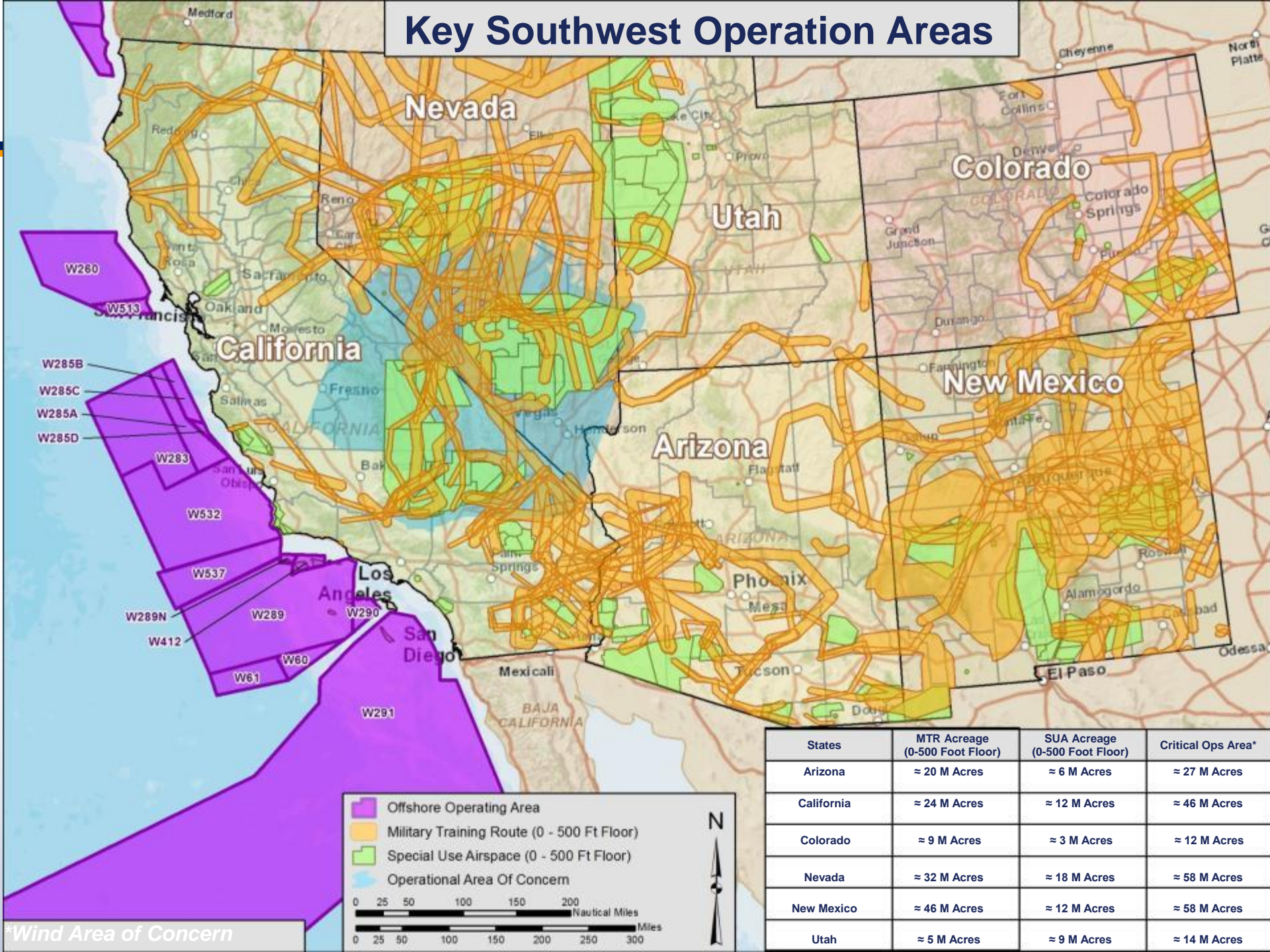
California Geothermal Forum
A Path to Increasing Geothermal Development in California

Presented by:

Steve Chung

NRSW Regional CPLO – Encroachment Program Director

Key Southwest Operation Areas

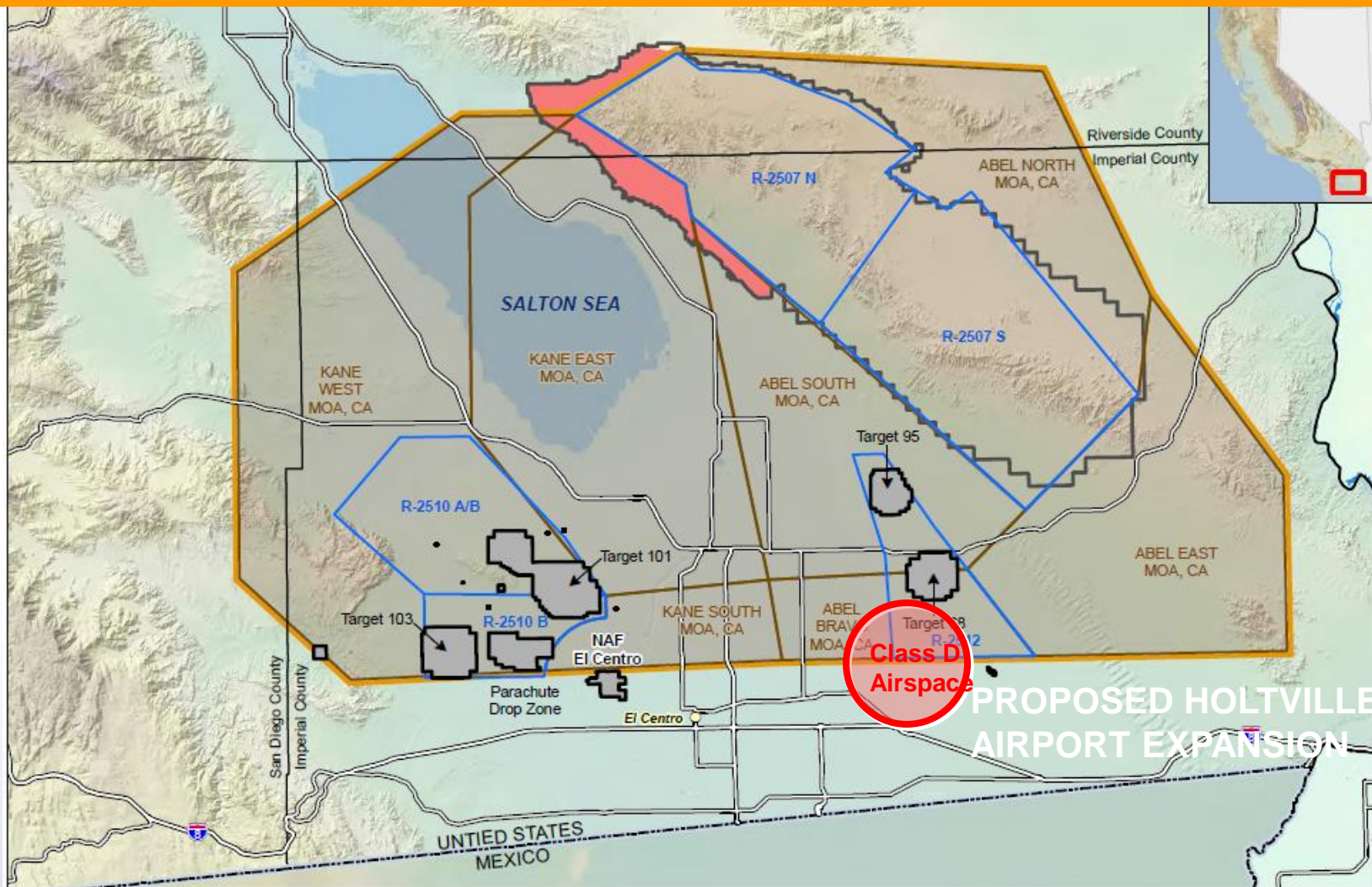


States	MTR Acreage (0-500 Foot Floor)	SUA Acreage (0-500 Foot Floor)	Critical Ops Area*
Arizona	≈ 20 M Acres	≈ 6 M Acres	≈ 27 M Acres
California	≈ 24 M Acres	≈ 12 M Acres	≈ 46 M Acres
Colorado	≈ 9 M Acres	≈ 3 M Acres	≈ 12 M Acres
Nevada	≈ 32 M Acres	≈ 18 M Acres	≈ 58 M Acres
New Mexico	≈ 46 M Acres	≈ 12 M Acres	≈ 58 M Acres
Utah	≈ 5 M Acres	≈ 9 M Acres	≈ 14 M Acres

*Wind Area of Concern

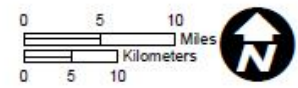


Naval Air Facility El Centro Training & Target Ranges



- NAFEC
- NAFEC Area of Operations
- Restricted Use Airspace
- MOA
- Chocolate Mountain Aerial Gunnery Range
- Naval Special Warfare Area
- Highway
- County Border
- International Border

**NAF El Centro
Training Ranges
(R-2510 and R-2512)
And Associated Target Ranges**





Encroachment Challenges

Realistic Training & Testing Areas Are Being Impacted From:

- Siting of Incompatible Renewable Energy Projects in Military Operational Areas
- Siting of Incompatible Urban Developments in Military Operational Areas

**Military Supports Renewable Energy and Economic Development
Compatible with Military Operations**

Impacts

- Degraded/Loss of Full Capabilities in Certain Test & Training Areas
- Program Slippage/Increased Cost
- Less Capability Delivered to the Warfighter
- Loss of Rapid Response Capability for Certain Systems
- Challenges to Fielding New/Upgraded Radar and Weapons Systems



Correlating Interests & Opportunities

Military Needs

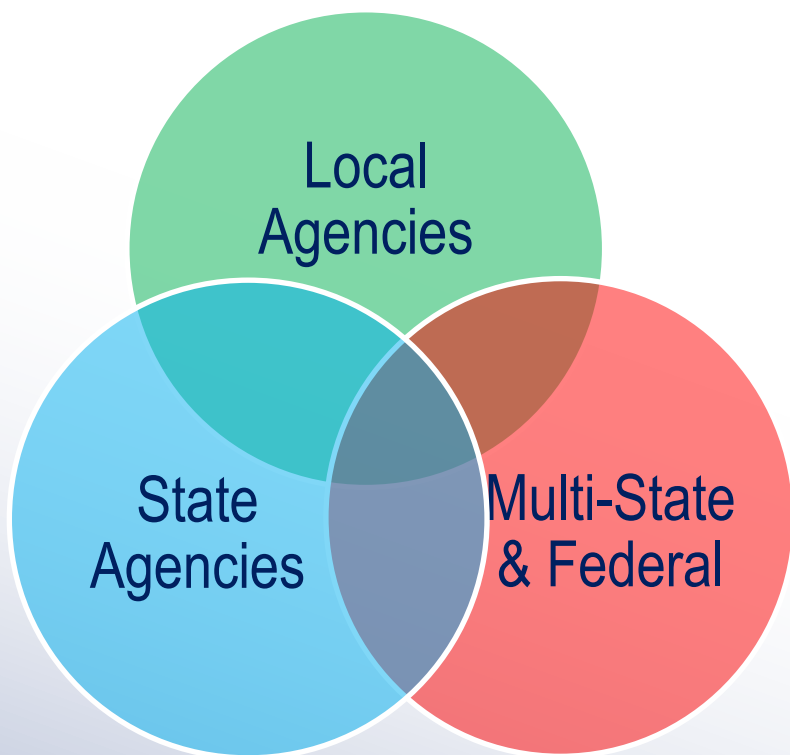
- Training for Deployment
- Qualification & Certification
- Testing & Evaluation

Regional/State Needs

- Renewable Energy
- Population Growth
- Economic Development
- Quality of Life

Challenges

- Physical Obstruction
- Electromagnetic Interference
- NIMBY



- Competing Interests
- DOD Operational Requirements
- Creative Solutions, Cooperative Attitude, and Sustained Dialogue



Geothermal Industry and Agency Forum

Overview of 30 AUG 2016 Session

Purpose: On-going collaborative initiative amongst stakeholders to share perspectives issues, challenges, strategies, and plans for geothermal development in the Imperial Valley.

Session Overview:

- Attended by 30 people representing local, State and Federal agencies, and representatives from the geothermal industry
- Key Perspectives Shared
 - Opportunities – Strong synergy for proactive and deliberate planning in Salton Sea restoration, conservation initiatives and compatible geothermal development
 - Risk – With exploration/development and inconsistent permitting/development timelines, there are many front-loaded risks that make many projects unfeasible.
 - Permitting – There is no streamlined or consistent permitting process in California.
 - Transmission - Existing and proposed infrastructure is lacking

Next Steps:

- **Agency/Industry Group will reconvene in early DEC 2016**
 - Continue efforts to establish complimentary initiatives with CA State and Fed agencies to leverage resources and create actionable steps