

Military Installation Resiliency & Compatible Use Hybrid Study – Results & Next Steps



February 20, 2023



U.S. Department of Defense
Office of Local Defense
Community Cooperation





Background

12/2020: City Administration applied for a federal grant award to fund a joint Military Installation Resilience/Compatible Use study.

- 1st of its kind study, now collectively referred to as MIR/MIS studies
- FY21: Office of Economic Adjustment → Office of Local Defense and Community Cooperation (commonly know as OLDCC)

01/2021: Council accepted \$1,364,930 grant award to conduct the hybrid study and awarded Bridgeview Resources (BVR) a sole source contract to conduct the study.

02/2021: BVR initiated MIS study for VSFB/Lompoc.

- Original plan = 18-month period of work (Feb. 2021 – July 2022)



Background

City staff requested (2) 9-month extensions (June 2022 & April 2023) due to COVID impacts and staffing amendments.

10/2023 – 01/2024: BVR concluded study, presented results, and finalized report volumes for submission to OLDCC.



Grant Amount	\$1,364,930
City of Lompoc Cost-Share (10% of total project cost)	\$151,659
Total Project Cost	\$1,516,589

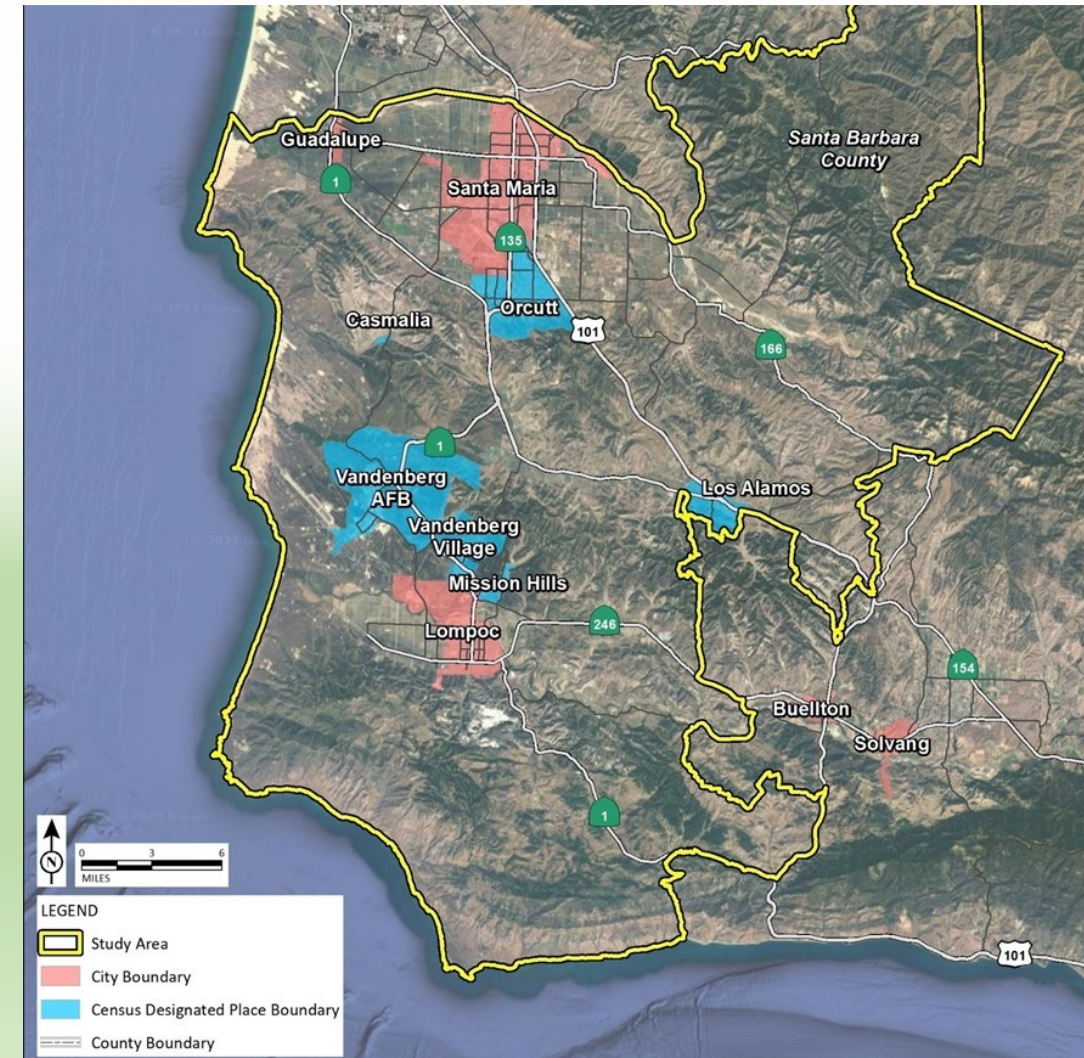
Overview

Study Objectives

Compatible Use: Identify strategies and mutually beneficial infrastructure solutions to ensure that the City plans are consistent with VSFB's mission objectives and support compatibility.

- What regional trends impact performance at VSFB?

Installation Resilience: Assess environmental conditions that have or may pose a risk to the VSFB mission and recommend strategies and actions to support community resources and activities that preserve the Base mission.





Overview

Goal

To identify policies and scope projects that mitigate impacts of natural and man-made threats and maximize positive impacts in the region.

Focus Issue Areas

1. Climate Risks and Resilience
2. Energy Resources
3. Water Resources
4. Housing and Land Use
5. Transportation Resilience: Emergency Evacuation
6. Transportation Network: Compatible Use

Meetings and Events

- Tours of VSFB and the city
- Ongoing monthly CPPE meetings with VSFB leadership.
- Steering Committee Meetings
- Governor's Q1 2023 Military Council Meeting
 - Hosted in Lompoc
 - "...most conducive discussion held at a GMC meeting to-date."





Results/Recommendations

1. Climate Risks and Resilience

- **Findings:** Ambient temperature increases in average winter minimum temperature and summer high-heat days; increase in extreme precipitation events; increase in occurrences and severity of wildfires; sea level rise.
- **Actions:** Train personnel and public on mitigating effects of flooding, wildfires, and high heat exposure (safe evacuation routes, equip cooling and evacuation centers with backup power)

2. Energy Resources

- **Findings:** Existential threats, man-made and environmental, create power supply vulnerabilities threatening resiliency (cyber, climate, geological, PG&E topology); lack of land for facilities.
- **Actions:** Identify locations and grant opportunities for design and construction of a new Lompoc 115KV substation, define opportunities for community collaboration with Vandenberg, PG&E, CAISO, NCPA and others in formation of a regional microgrid.



Results/Recommendations

3. Water Resources

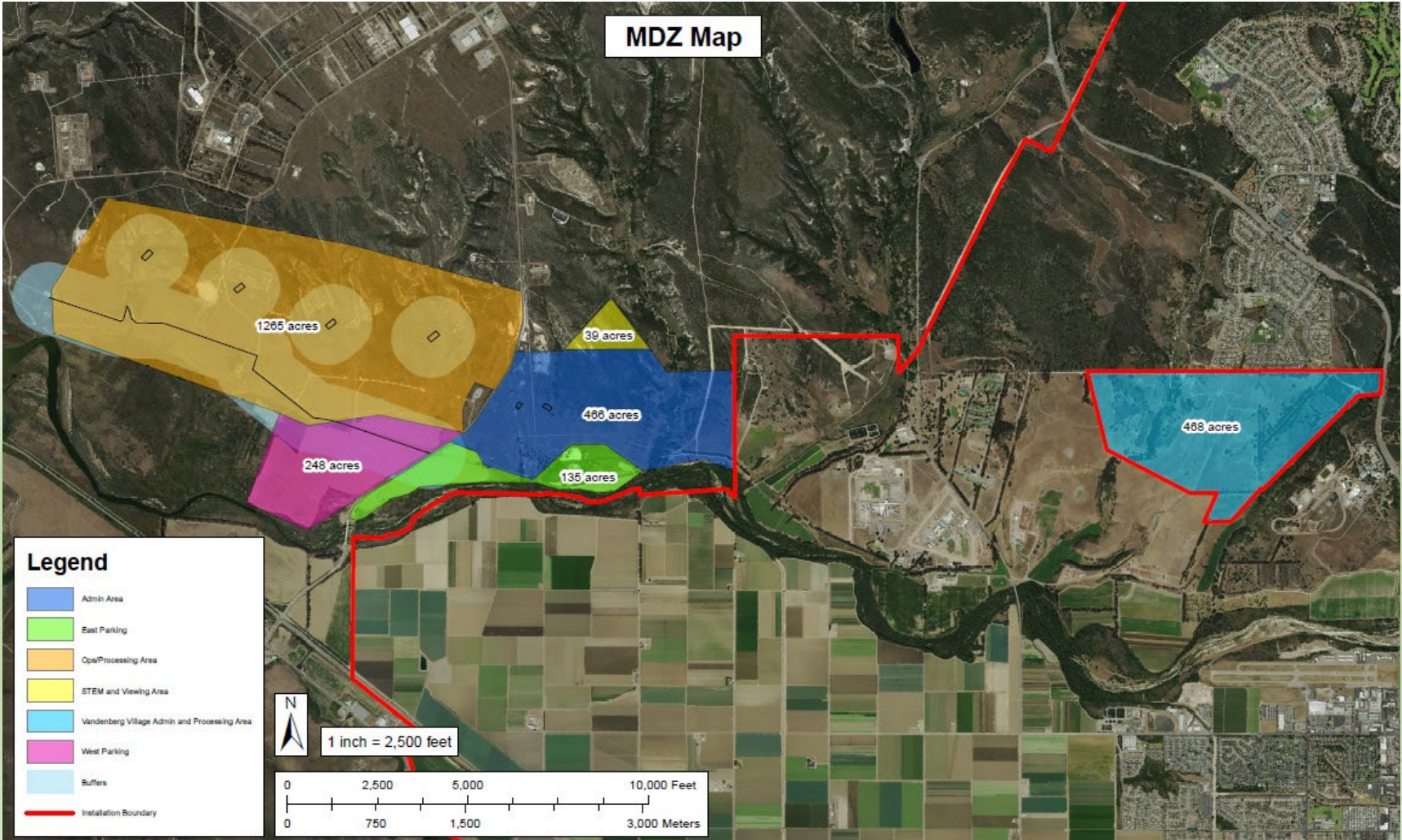
- **Findings:** Climate change effects (such as drought and wildfire) are predicted to affect potable water sources and supplies in the City of Lompoc and across the region.
- **Actions:** Expand the use of reclaimed water supplies from the LRWRP; in the interest of providing an additional water resource between the City and VSFB, support independent discussions regarding extension of a water line connecting the City water system to VSFB and/or the FCC; monitor long-term desalination opportunities.

4. Housing and Land Use

- **Findings:** Lompoc and the region do not have sufficient housing to accommodate existing and future demand at VSFB; Lompoc does not have the land base necessary to provide sufficient housing and associated services to accommodate existing and future demand. **VSFB's ability to play a key role in future space force missions will, in large part, be dependent on its ability to attract skilled workers as well as commercial space enterprise employees.**
- **Actions:** Conduct a housing market analysis and development needs assessment of the City of Lompoc and communities where most VSFB employees live (completed); prioritize collaborative efforts underway between the City of Lompoc and Vandenberg leadership to identify opportunities for creating new housing that capitalize on each partner's available assets and implementation capabilities.



Results/Recommendations





Results/Recommendations

5. Transportation Resilience: Emergency Evacuation

- **Findings:** Three evacuation areas were analyzed, and available routes were defined for: Evacuation of Lompoc, Vandenberg Village, and Mission Hills; evacuation of VSFB; and, evacuation of the outer Lompoc and VSFB area towards Santa Maria, Buellton, and Santa Barbara.
- **Recommendations:** Develop an emergency evacuation plan, including roadway design, traffic signal or manual intersection control, and public notifications protocols.

6. Transportation Network: Compatible Use

- **Findings:** A combination of physical roadway widening, and traffic signal timing improvements were identified to improve intersection and roadway deficiencies. These improvements were identified for intersections and roadways under City, County, State, and Federal control.
- **Recommendations:** Change base access to allow Mission Development Zone (MDZ) employees to utilize the VSFB internal roadway network to get to/from the MDZ; alternative work schedules for MDZ employees to minimize traffic during peak hours; support of telework options for MDZ employees; development of a carpool or vanpool program to incentivize high occupancy vehicle use to/from the MDZ; expansion of the City of Lompoc Transit system to provide service from Lompoc, Vandenberg Village, and Mission Hills to the MDZ; and, expansion of the City of Lompoc and Santa Barbara County bicycle system to provide off-street route options from Lompoc to the MDZ.



Next Steps: Targeting Priorities & Strengthening Regional Relationships

Prepare “shovel-ready” projects for future funding opportunities (DCIP):

- Design of backup systems and regional interconnections for critical components of Water and Wastewater, including resilience measures such as fuel storage capacities.
- Coordination and design of a new 115 KV transmission substation and microgrid concept, including distributed energy and redundant energy lines from PG&E’s Buellton transmission line.
- Identify and assess potential partnership vehicles for utilization of available VSFB land, including, but not limited to: enhanced use lease, long-term lease, fee simple title transfer, and expansion of housing privatization agreement.

Next Steps: Targeting Priorities & Strengthening Regional Relationships



- Ongoing discussions and coordination with regional leadership
 - Community Partner Program Engagement (CPPE) meetings with VSFB leadership
 - FCC - Lompoc
- Intergovernmental Service Agreements (IGSA)
- Community collaboration to improve quality of life in the region



Thank you for listening, and to all contributors!

Questions/Comments?

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