

BOARD OF SUPERVISORS



PINAL COUNTY
WIDE OPEN OPPORTUNITY

PROPOSED 2023 MAJOR COMPREHENSIVE PLAN AMENDMENTS

11/15/2023

Community Development Department

SCHEDULE - 2023

Major Comprehensive Plan Amendments



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MCPA SCHEDULE

- October 19: Public Hearing Planning & Zoning
- November 15: Public Hearing Board of Supervisors (**FINAL**)

PROPOSALS - 2023

Major Comprehensive Plan Amendments



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PROPOSALS FOR 2023 MAJOR AMENDMENTS

- PZ-PA-006-23 : Update CHAPTER 7 : Environmental Stewardship (County Initiated)
- PZ-PA-009-23 : Cielo Solar
- PZ-PA-010-23 : Casa Grande Carmel Solar

PZ-PA-006-23 – Chapter 7 Environmental Stewardship:

This application is a request to **update** Chapter 7: Environmental Stewardship, Section–Energy, Sub-Sections–Renewable Energy Sources and Appendix D (Glossary of terms) of the 2019 Pinal County Comprehensive plan document.

Item #1: PZ-PA-006-23

Chapter 7 Environmental Stewardship - Update



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□ **Proposal:** (Includes following)

1. Expand the Renewable Energy sources to include additional categories besides 'Solar'
2. Update Goals, Objectives and Policies under the same Chapter 7
3. Update Appendix D: Glossary of additional terms (definitions) in the vocabulary of the Comprehensive Plan Document



□ **Objective:**

1. Provide a comprehensive list of renewable energy sources promoting quality, safety and benefits to the Pinal County Residents
2. Expand the toolbox and provide options for renewable sources of energy to create diversity within this category.



□ **Purpose:**

1. Ensure projects proposed in future that fall in the category of ‘renewable energy sources’ can be tied to the policy stated in the comprehensive plan.
2. Bring the Pinal County Comprehensive Plan document up-to-date with current trends in the Energy Sector in the State of Arizona

Item #1: PZ-PA-006-23



Chapter 7 Environmental Stewardship - Update **PINAL COUNTY** WIDE OPEN OPPORTUNITY

□ Sources/Links used:

EIA - Department of Energy-Arizona

1. <https://www.eia.gov/state/print.php?sid=AZ#:~:text=In%202022%2C%2099%25%20of%20Arizona's, and%20petroleum%2C%20supplied%20the%20rest>

EIA

2. <https://www.eia.gov/state/rankings/?sid=AZ#series/12>

US. Census Data

3. <https://azmag.gov/Programs/Maps-and-Data/Census-2020>

Office of Nuclear Energy

4. <https://www.energy.gov/ne/advanced-small-modular-reactors-smrs>

SRP

5. <https://www.srpnet.com/grid-water-management/grid-management/improvement-projects/coolidge-expansion-project-faq>



□ **Renewable Energy Sources:**

1. **Solar Energy**
2. Bioenergy
3. Geothermal Energy
4. Hydrogen
5. Hydropower
6. Wind Energy

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Renewable Energy Sources

1. **Solar Energy**
 - a. Photo Voltaics (PV)
 - b. Concentrating Solar Thermal Power (CSP)



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Renewable Energy Sources

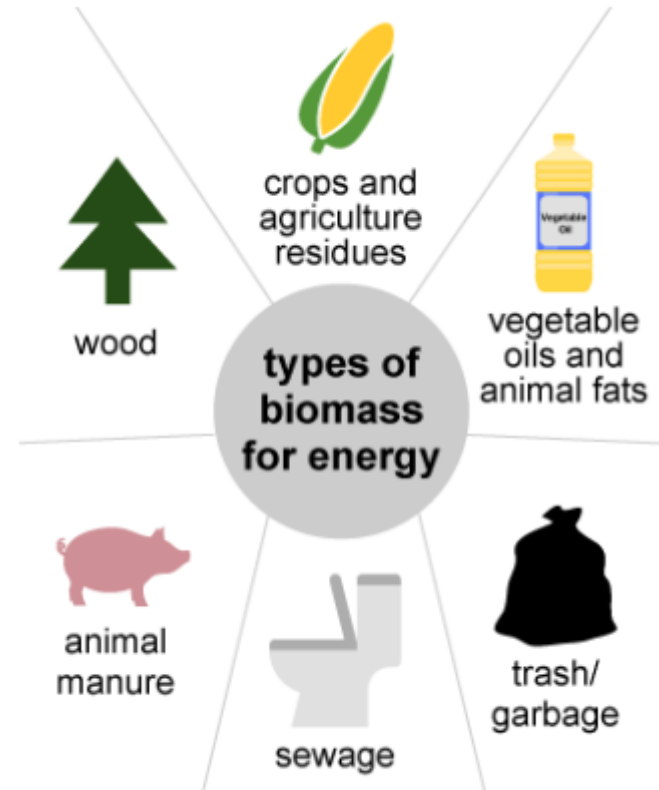


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2. Bioenergy

Derived from Organic Materials called biomass

(Forest thinning)



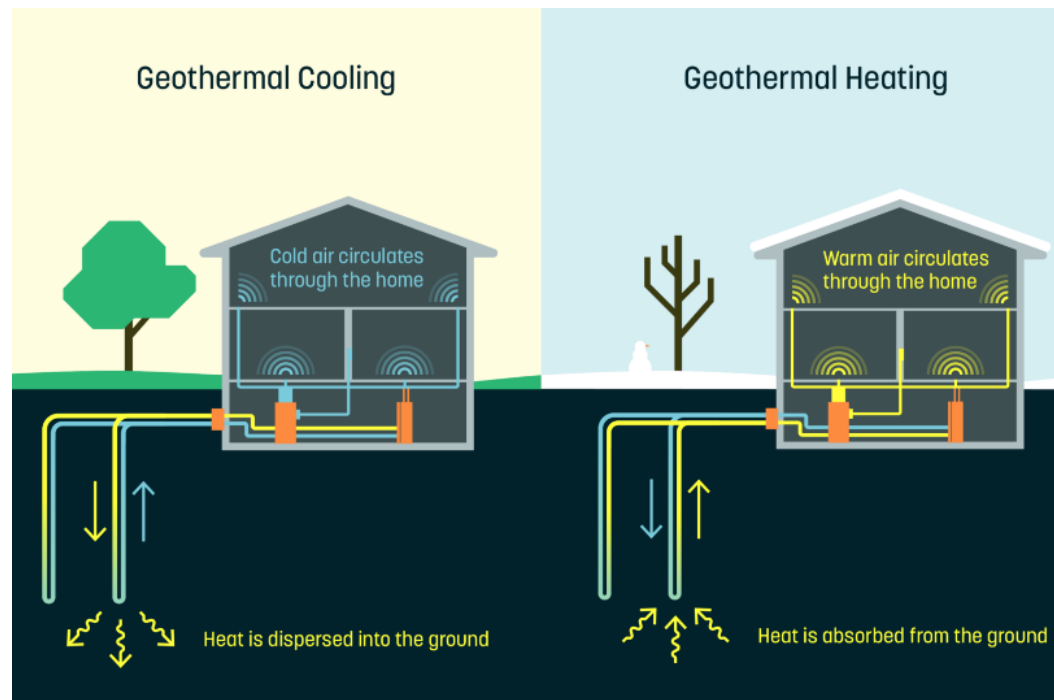
Source: U.S. Energy Information Administration (public domain)

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Renewable Energy Sources

3. Geothermal Energy systems

Heat harnessed from beneath the earth

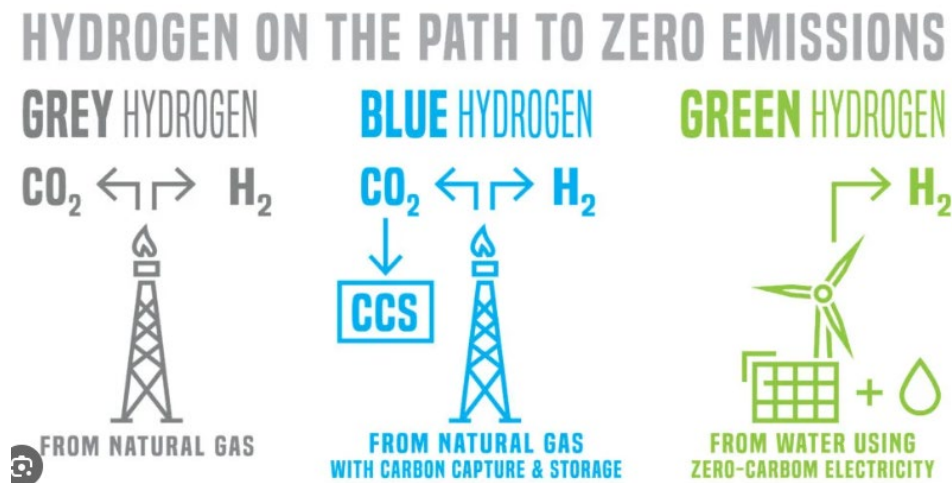


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Renewable Energy Sources

4. Hydrogen

Energy carrier produced from domestic sources (Natural gas, solar wind, geothermal, biomass,) or from processes (Electrolysis, biological, water splitting, steam methane reforming)



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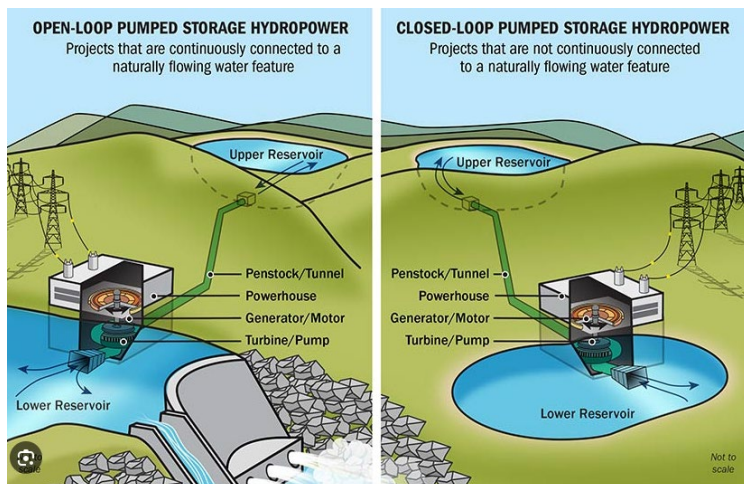
Renewable Energy Sources



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5. Hydropower

Usually associate energy source with Hoover Dam, harnessing power from with large water bodies/rivers. With technological advances and research, smaller facilities (Micro turbines) take advantage of water flows in Municipal water facilities or irrigation ditches.



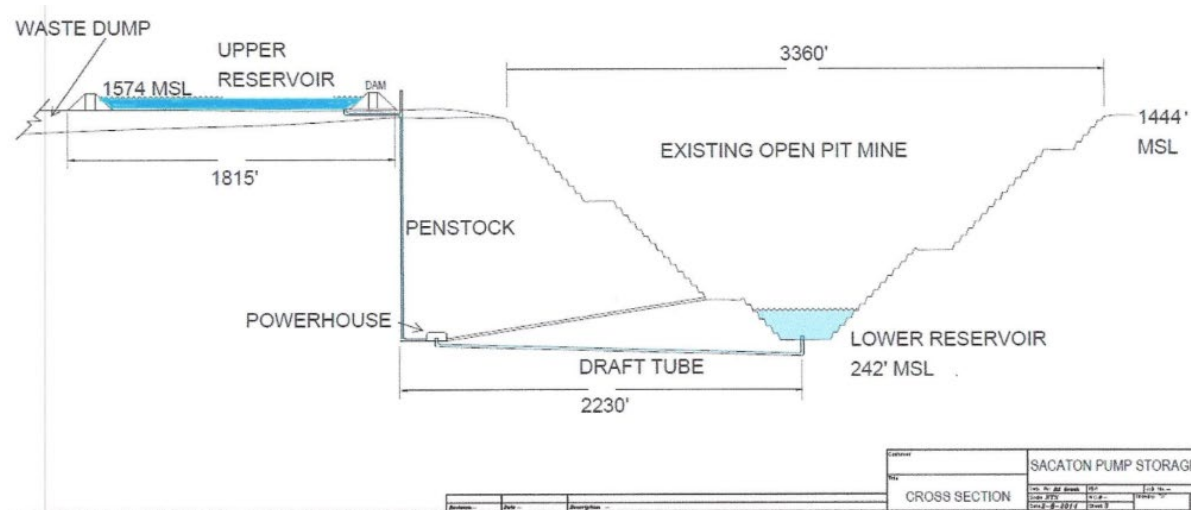
Micro-hydroelectric Dams Sustain Life in Rural Communities

Item #1: PZ-PA-006-23 Renewable Energy Sources



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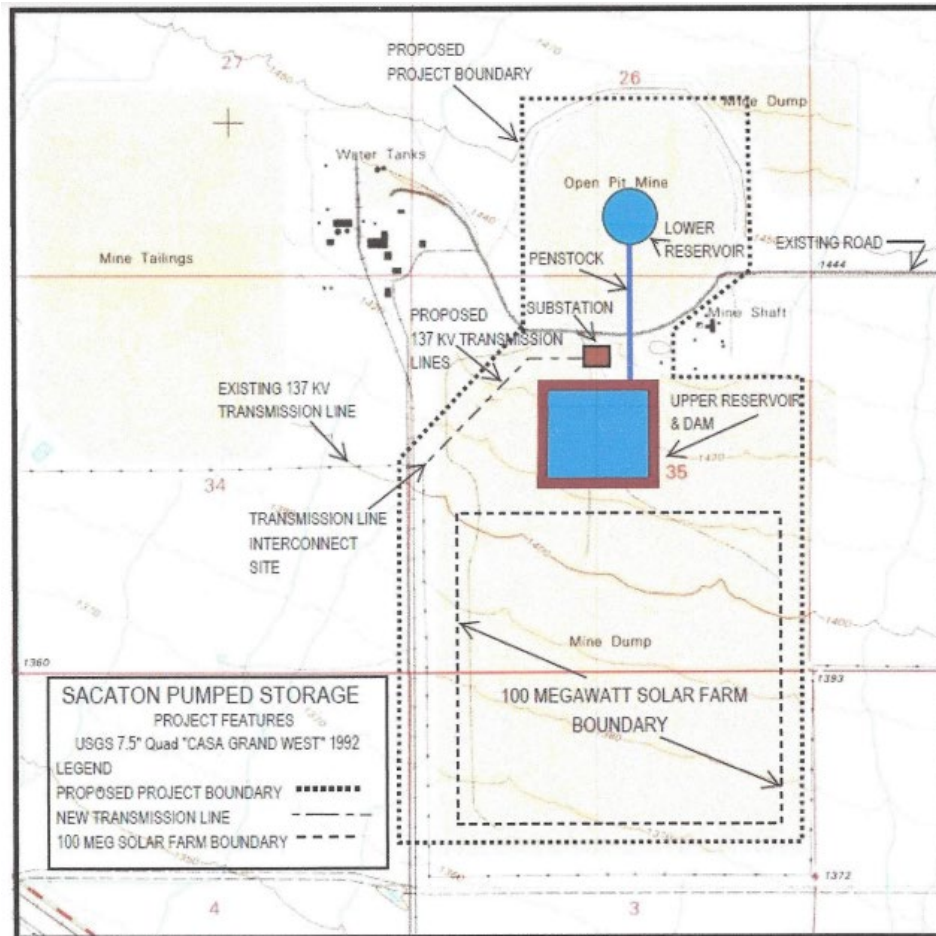
5. **Hydropower- current example in preliminary stage**
Sacaton Energy Storage Project, (using closed loop pumped storage, 150 Megawatts capacity) proposed along with a adjacent 100 megawatt solar-panel plant



Item #1: PZ-PA-006-23 Renewable Energy Sources



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SACATON ENERGY STORAGE
PROJECT FEATURES

Item #1: PZ-PA-006-23

Renewable Energy Sources

6. Wind Energy

Harnessing power of the wind through wind turbines collecting and converting the kinetic energy into electricity.



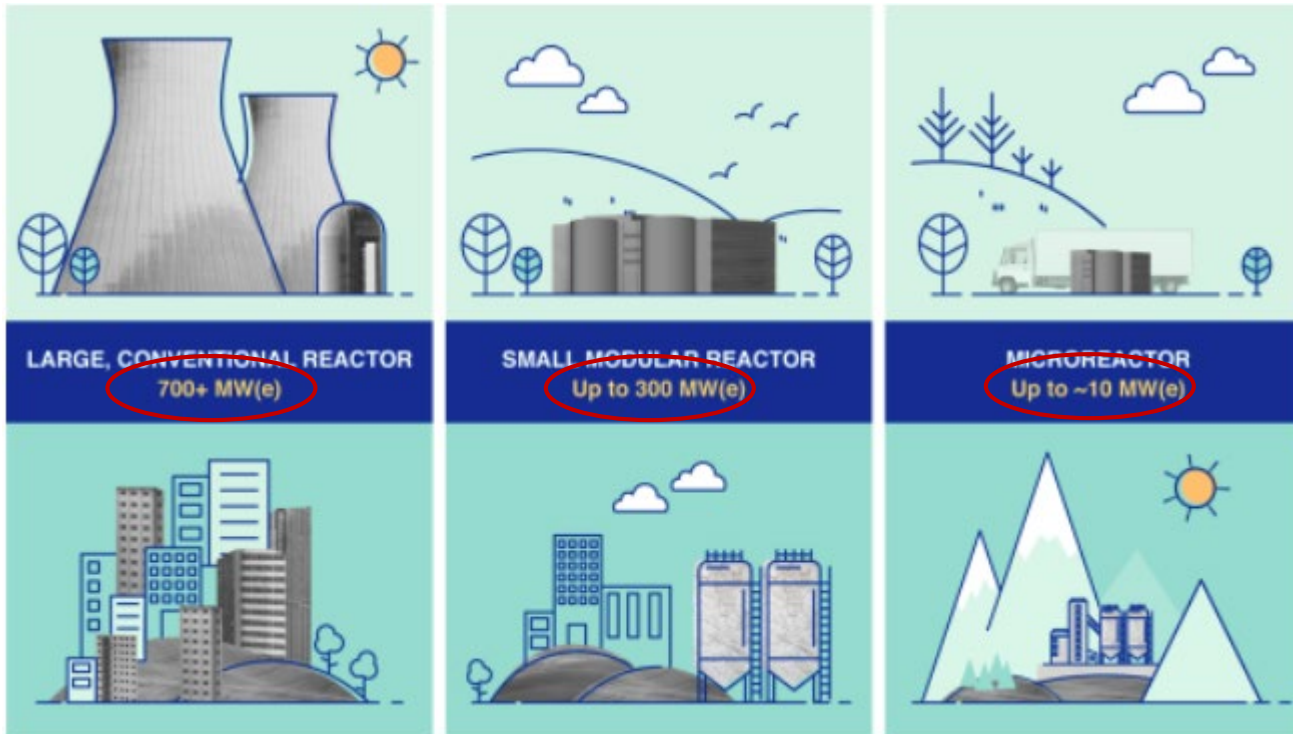
The ASU School of Sustainability



Item #1: PZ-PA-006-23

Energy Section

SMR's Small Modular Reactors



Features:

1. Small (1/3rd capacity of traditional Nuclear Reactors)
2. Modular
 - Factory assembled
 - Transported to locations difficult to build (rural)
 - Affordable
3. Stand-alone/Grid connected
 - Access to energy
 - Costs



Update Appendix G: Glossary to include the new terms introduced in the Chapter 7 Environmental Stewardship

Appendix D: Glossary

The terms defined in this glossary are done so for purposes of the Pinal County Comprehensive Plan only and may not be relevant or accurate for use outside of this plan.

- **NOTE** : Packet shares the updated Comprehensive Plan document and the original for reference

Item #1: PZ-PA-006-23

Chapter 7 Environmental Stewardship -Update

Public Response: None

Recommendation:

Citizen Advisory Committee- Recommended approval 9-0

Planning & Zoning- Recommended approval 9-0

Questions

- Comments



Item #2: PZ-PA-009-23

Cielo Solar Project



- **Proposal:** HA Cielo LLC; landowner, Storage Development LLC/Amy Smolen, agent, requesting approval of a MCPA to re-designate 1086± acres from MLDR (Moderate Low Density Residential) and Employment to Green Energy Production
- **Area:** 1086± acres.
- **Location:** south of east Laughlin Rd, north of Selma Highway, west of S Highway 87, and on both sides of south La Palma Rd in the unincorporated Pinal County area near Coolidge, AZ.
- **Owners:** HA Cielo LLC.
- **Applicant:** Pattern Solar & Storage Development LLC/Amy Smolen.

Item #2: PZ-PA-009-23

Cielo Solar Project

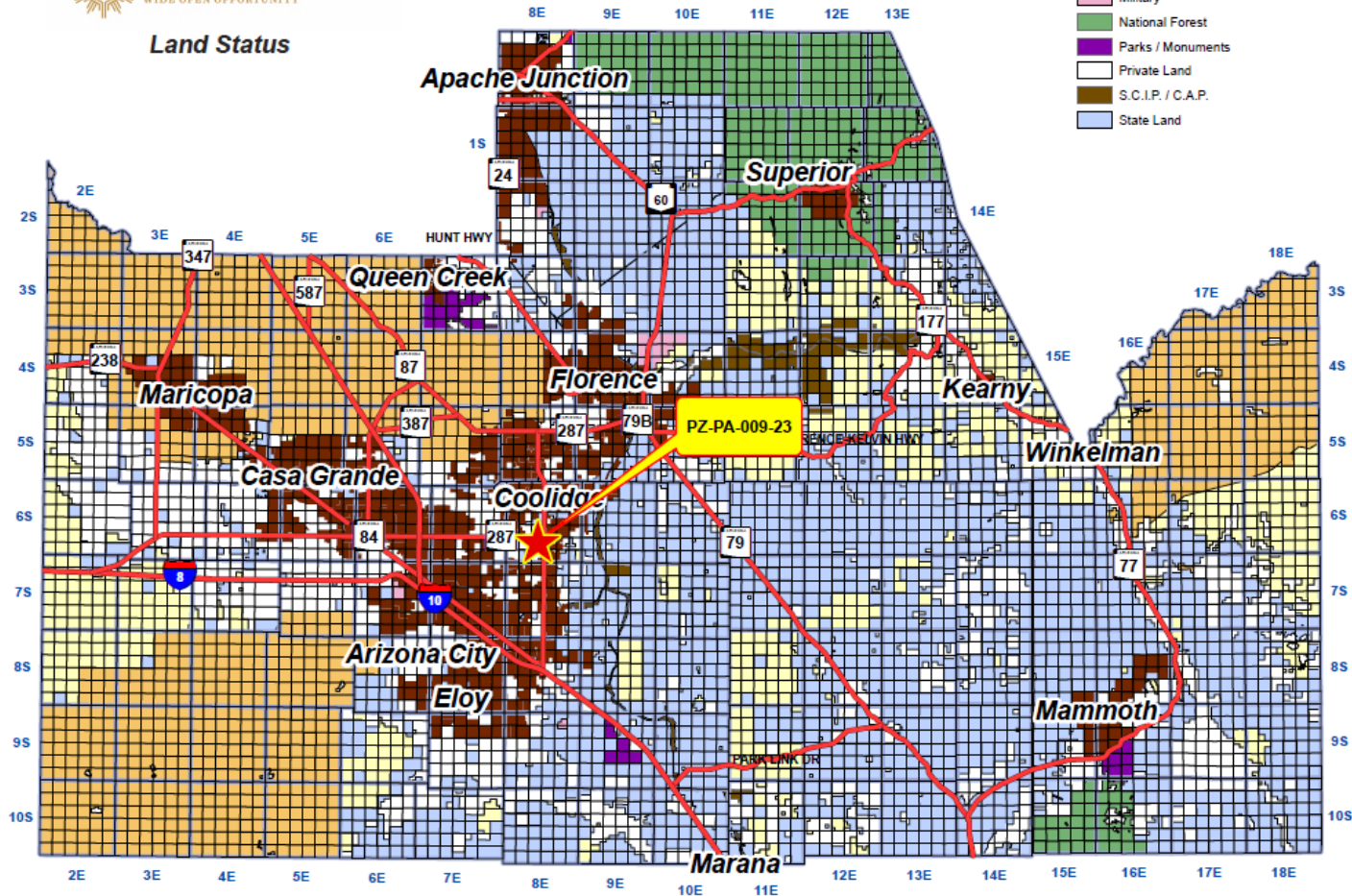


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Land Status

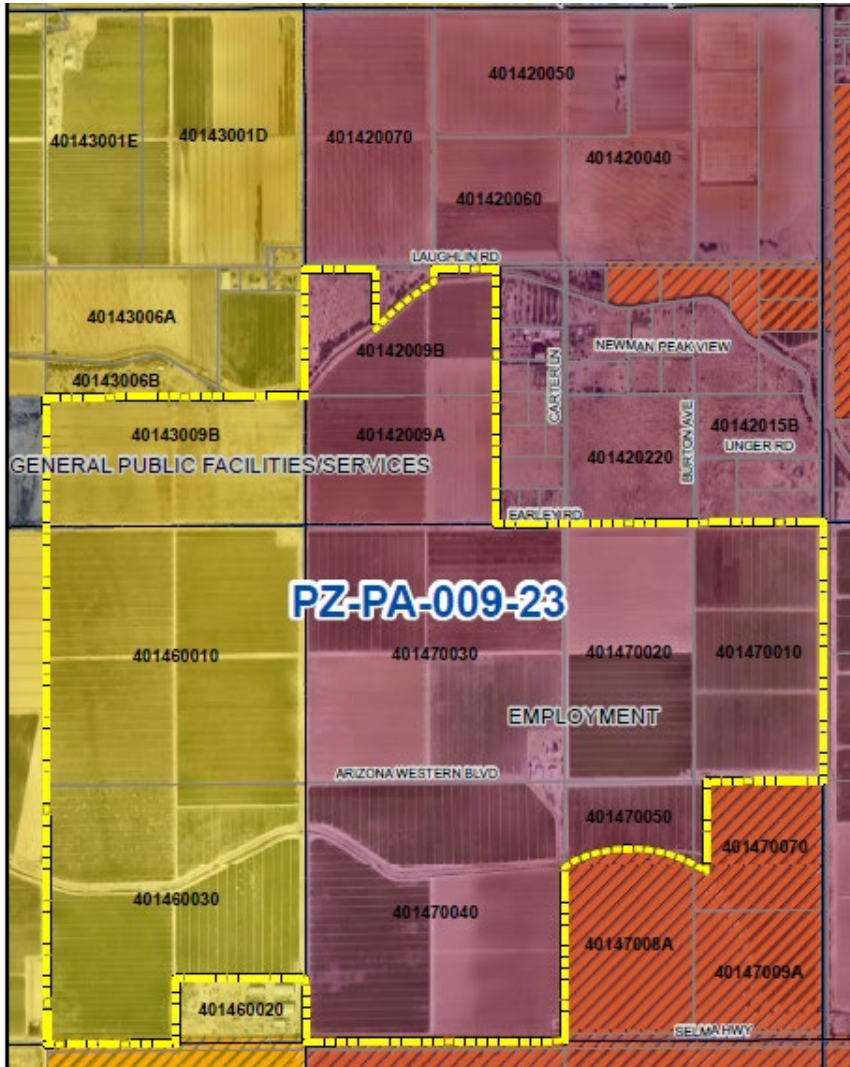


Legend

- B.L.M.
- Indian Community
- Military
- National Forest
- Parks / Monuments
- Private Land
- S.C.I.P. / C.A.P.
- State Land

Item #2: PZ-PA-009-23

Cielo Solar Project



Comprehensive Plan:

Existing Land Use Designation:

MLDR 1 – 3.5 du/ac & Employment

Proposed Land Use Designation:

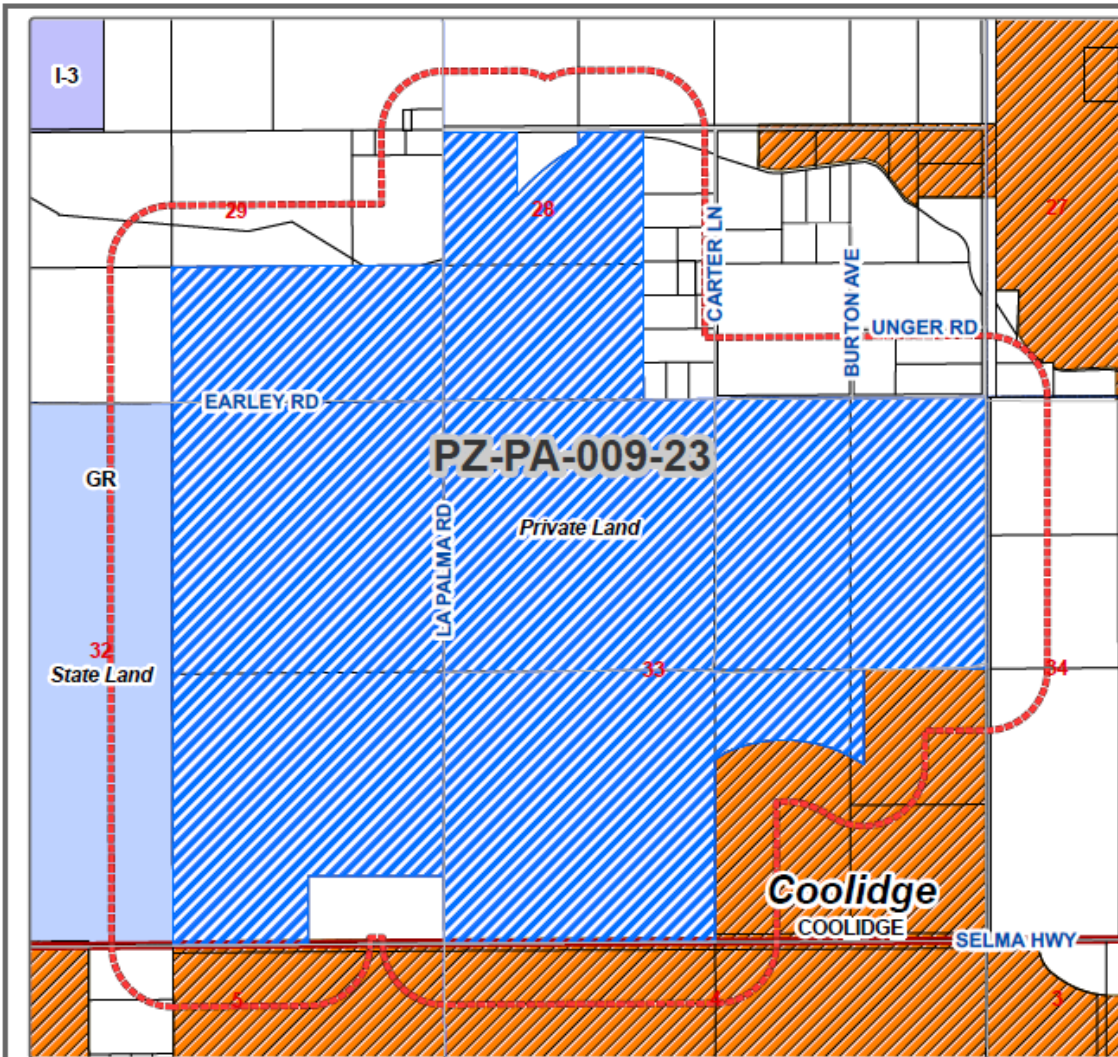
Green Energy Production

Item #2: PZ-PA-009-23

Cielo Solar Project



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Zoning:

Site:

GR-General Rural

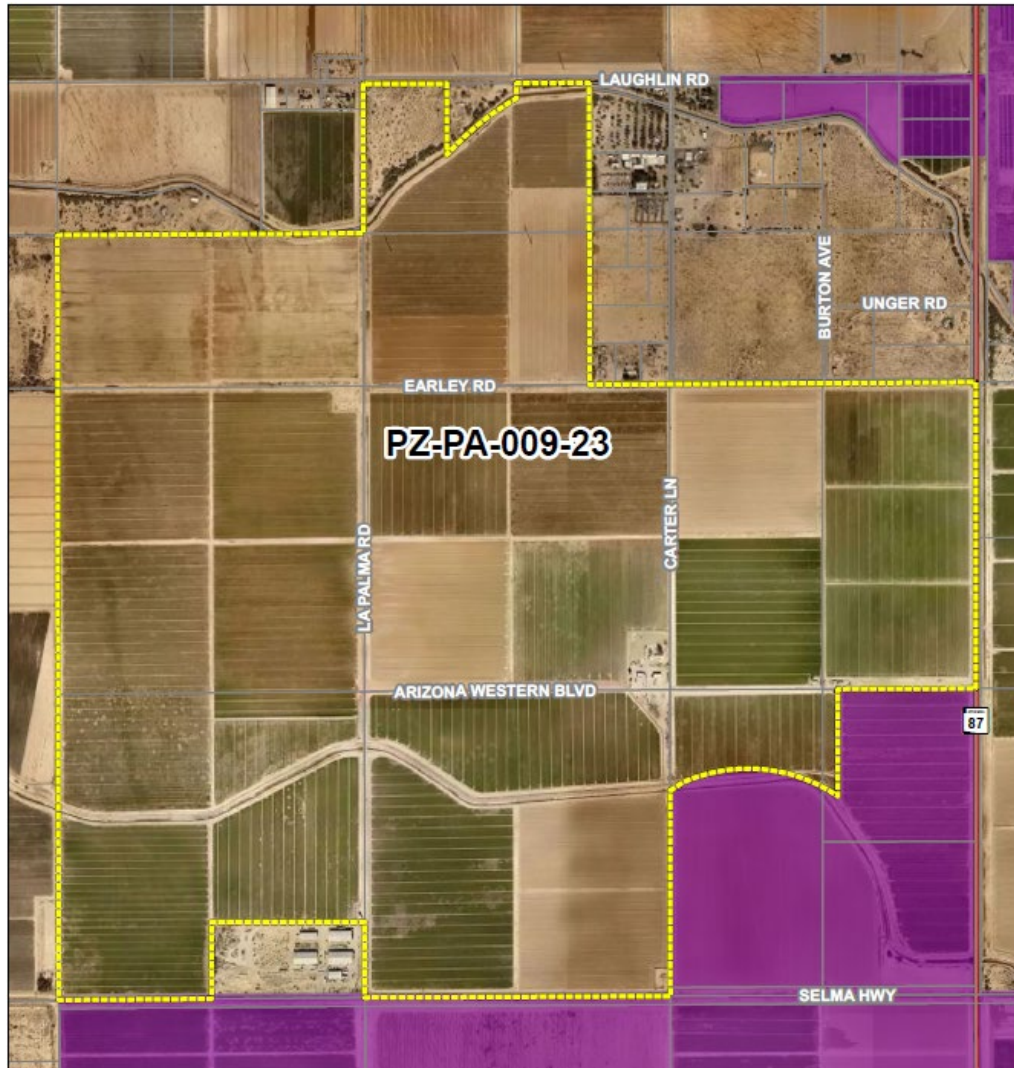
Surrounding:

**GR-General Rural &
City of Coolidge**

Item #2: PZ-PA-009-23 Cielo Solar Project



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Project Aerial

Item #2: PZ-PA-009-23

Cielo Solar Project

- Current Conditions:
 - ▣ Relatively flat topography
 - ▣ Existing Agricultural Land
- Proposal: Solar generation of up to 150 MW photovoltaic solar energy to include:
 - ▣ Solar array field
 - ▣ Battery Energy Storage System (BESS)
 - ▣ Project Substation
 - ▣ Generation tie transmission line
 - ▣ Timing of the development to meet a commercial operation date: Late 2026

Item #2: PZ-PA-009-23

Cielo Solar Project

Agency Comments:

- Staff received comment from Pinal County Open Space & Trails with the following recommendations:
 - ▣ Regional Trail: Refer to OSRAM (Open Space and Recreation Area Design Manual) for rural trail development. (24' trail corridor width).
 - ▣ Casa Grande Canal: Provide a 25' buffer around canal space to retain wildlife movement corridors.
 - ▣ Coordinate directly with Arizona Game and Fish before, during and after site installation.

Item #2: PZ-PA-009-23

Cielo Solar Project

Agency Comments:

- Staff received comment from the City of Coolidge with the following comments:
 - Gilbert Lopez, Development Services Director: Coolidge general plan does not support utility scale solar in this location. Project exceeds a 16% solar overlay zone voter initiative.
 - Jon Thompson, Mayor: Solar expansion is within the Coolidge Planning Area. Conflicts with 16% Solar overlay zone. Opposition was received from Coolidge residents to similar solar projects.

Item #2: PZ-PA-009-23

Cielo Solar Project

Agency Comments:

- Staff received public comment by mail from a resident concerned by life safety aspects, including lead and cadmium leaks and heat radiation.
- At the October 19th Planning and Zoning Commission Public Hearing, six members of the public spoke in opposition of this project. No supporting comments were shared.

Item #2: **PZ-PA-009-23**

Cielo Solar Project

Citizens Advisory Committee Recommendation:

- After a detailed discussion and decision, at the public hearing, the Citizen's Advisory Committee voted 6-4 to recommend approval with the following recommendations.
- ▣ Maintain multiuse trail access along Florence-Casa Grande canal.
- ▣ Site BESS at least 1/2 a mile from future or existing homes.

Item #2: PZ-PA-009-23

Cielo Solar Project

Items for discussion:

- ❑ Proposed change in land-use to Green Energy Production results in loss of opportunity for future potential commercial uses for 706 acres, 65% of the site.
- ❑ Location of the project area is conducive to commercial developments due to the proximity of Highway 87 and I-10.
- ❑ Historic canal to the south of the parcel has a multi-use trail corridor requiring pedestrian linkages from neighboring land uses of residential development.
- ❑ The use is temporary and has less potential county benefit than a permanent industrial/commercial park.
- ❑ BESS use has introduced conversations regarding project permanence and failure potential.

Item #2: **PZ-PA-009-23**

Cielo Solar Project

Planning and Zoning Commission Recommendation:

- Planning and Zoning Commission Recommended Denial 9-0.

Item #2: **PZ-PA-009-23**

Cielo Solar Project

Items for discussion:

- Staff Recommendation:
 - ▣ Staff offers a recommendation of denial.

Questions



Item #3: PZ-PA-010-23

Casa Grande Carmel Solar



- **Proposal:** Altura Properties, Michael Hu and Lei Zhao, Quantum Resource Group Limited Partnership, a Nevada Limited Partnership, Traviano Partners LLC, an Arizona Limited Liability Company, Casa Grande Carmel Solar Park LLC, landowners; Casa Grande Carmel Solar Park LLC, applicant, Cecilia Chiu, agent, requesting approval of a MCPA to re-designate 805.36± acres from MLDR (Moderate Low Density Residential) to Green Energy Production
- **Area:** 955.875± acres as initially proposed/805.36 with removal of APN 511-07-001B/current Employment Land Use Designation.
- **Location:** Located at the intersection of Cornman Rd. and Bianco Rd. on the west side in the South western Casa Grande area, north of Interstate-8
- **Owners:** Altura Properties, Michael Hu and Lei Zhao, Quantum Resource Group Limited Partnership, a Nevada Limited Partnership, Traviano Partners LLC, an Arizona Limited Liability Company, & Casa Grande Carmel Solar Park LLC
- **Applicant:** Casa Grande Carmel Solar Park LLC

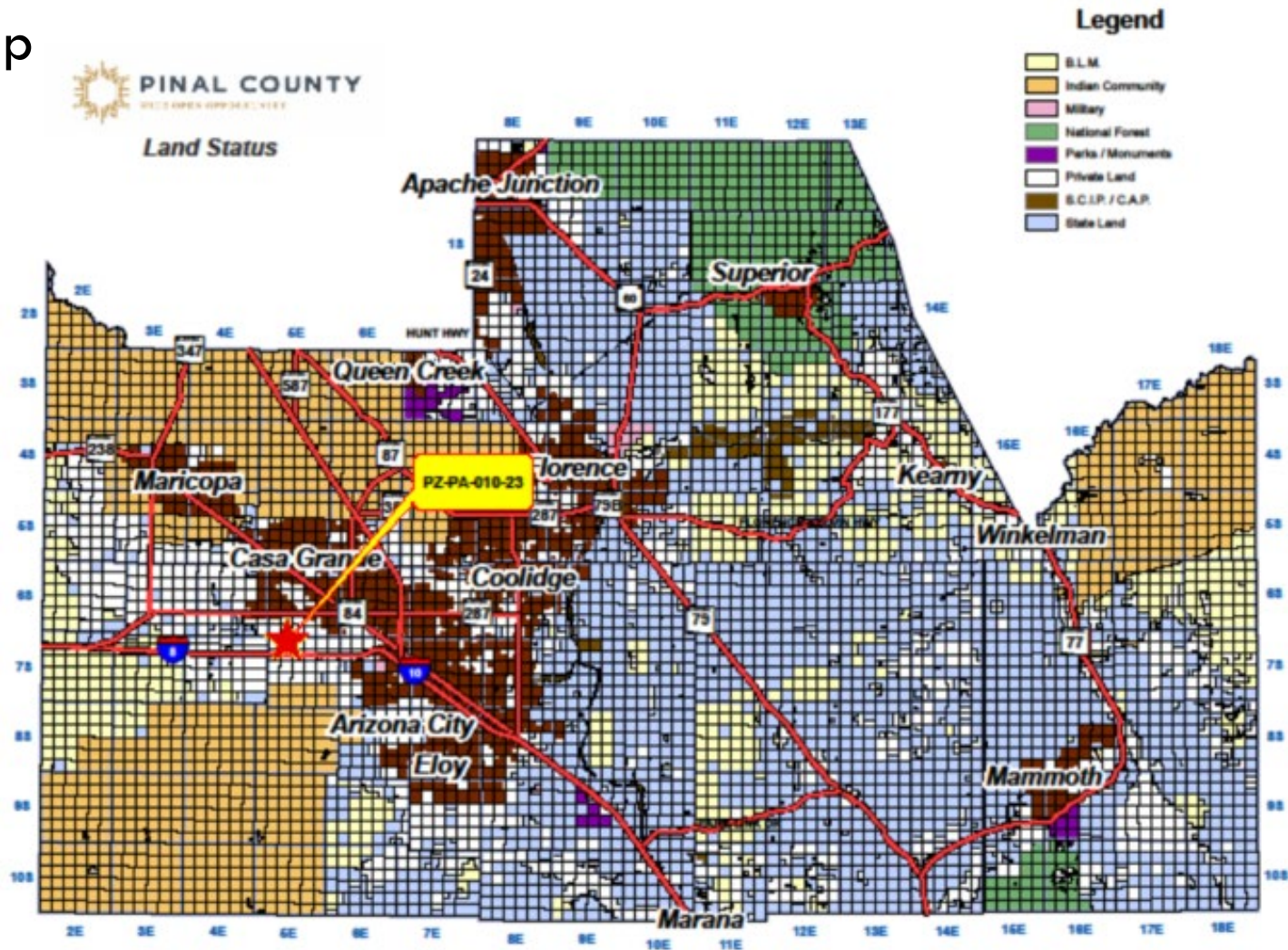
Item #3: PZ-PA-010-23 Casa Grande Carmel Solar



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Location Map

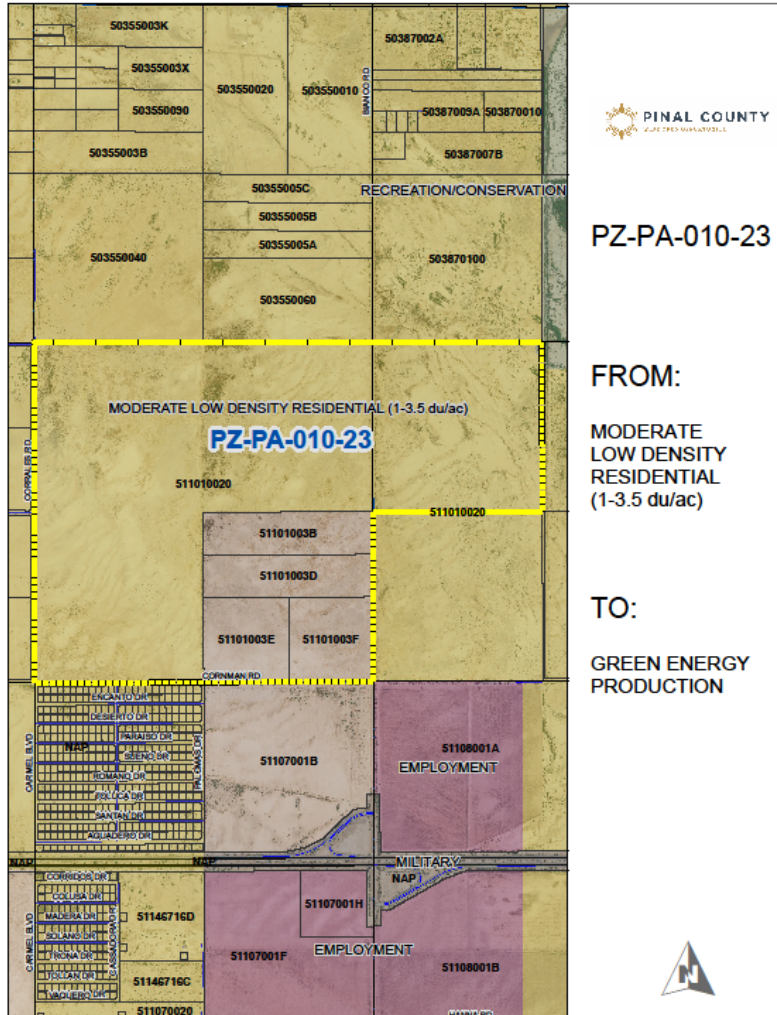


Item #3: PZ-PA-010-23

Casa Grande Carmel Solar



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Comprehensive Plan

Existing Land Use Designation:

MLDR 1 – 3.5 du/ac

Proposed Land Use Designation:

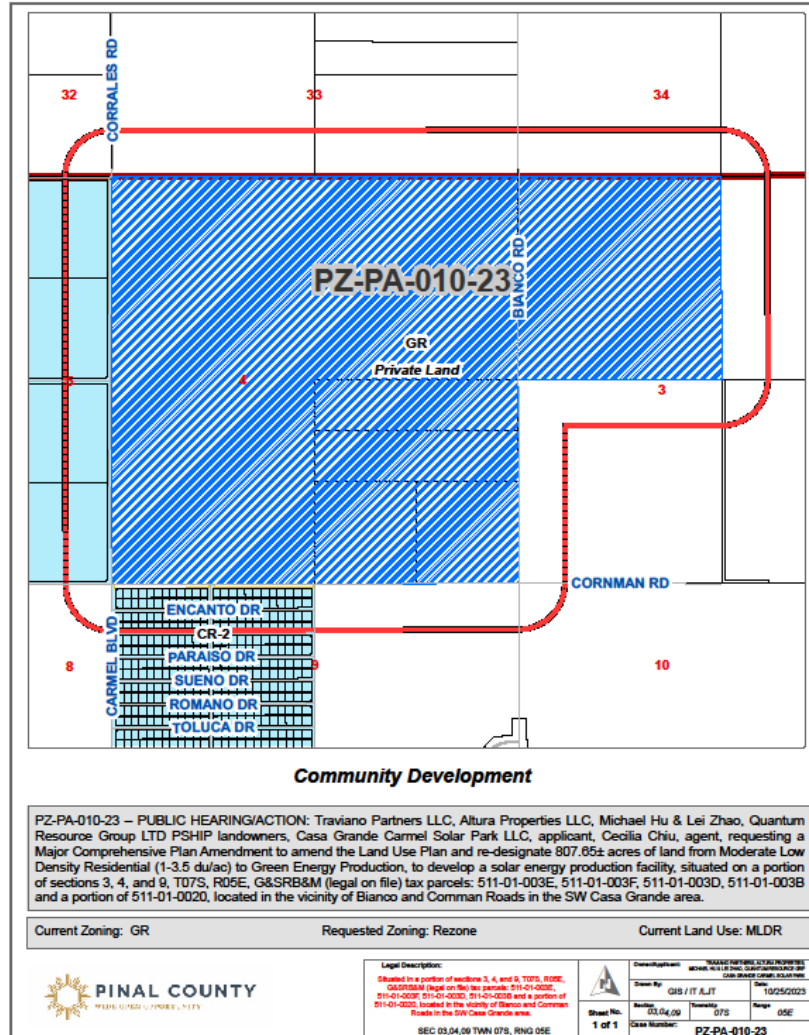
Green Energy Production

Item #3: PZ-PA-010-23

Casa Grande Carmel Solar



Case Map

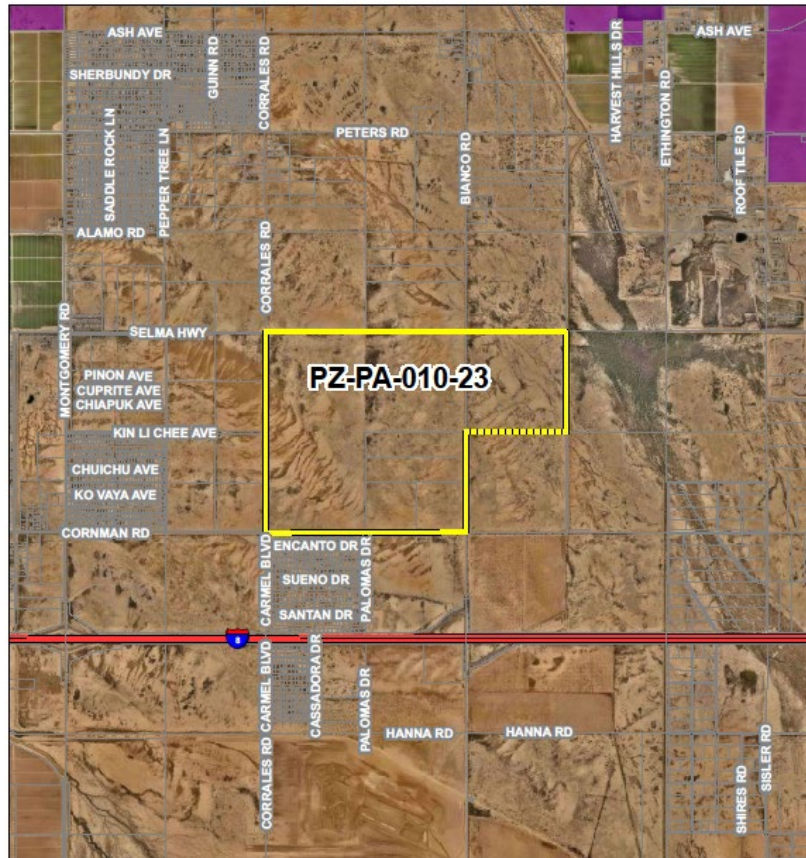


Item #3: PZ-PA-010-23

Casa Grande Carmel Solar



Aerial Map



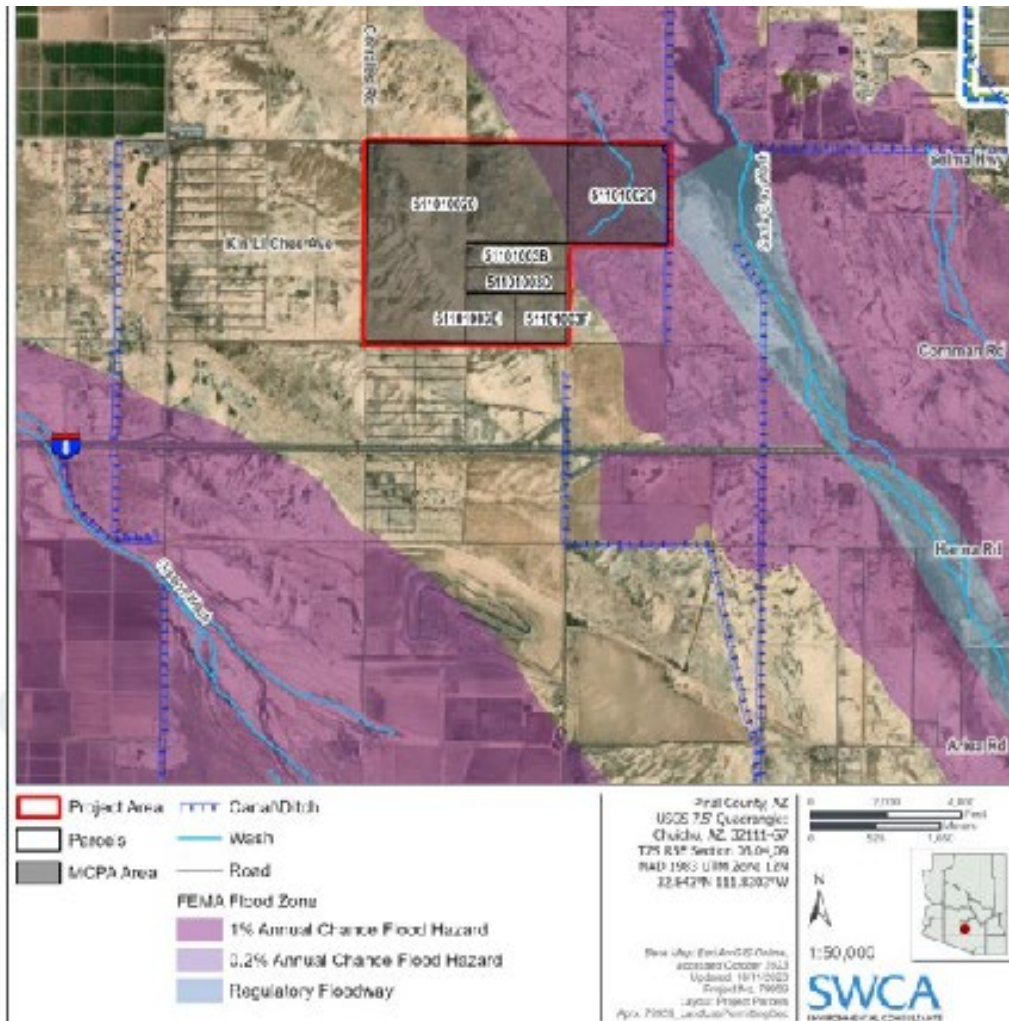
Community Development

Item #3: PZ-PA-010-23 Casa Grande Carmel Solar



PINAL COUNTY
WIDE OPEN OPPORTUNITY

Updated map from applicant



Item #3: PZ-PA-010-23

Casa Grande Carmel Solar

- Current Conditions:
 - Relatively flat topography, site contains little vegetation.
- Proposal: Solar generation of up to 96 MW photovoltaic solar energy to include:
 - Solar array of PV modules
 - Potential Battery Energy Storage System (BESS)
 - Project Substation
 - Generation tie transmission line
 - Timing of the development to meet a commercial operation date- end of 2026

Item #3: **PZ-PA-010-23**

Casa Grande Carmel Solar

Items for Consideration

- Applicant removed 148.35 acres, thus leaving unchanged land-use with future potential commercial uses for southern portion of original project area.
- Casa Grande does not oppose request that is also consistent with Casa Grande's General Plan that encourages large solar facilities in that category.

Item #3: **PZ-PA-010-23**

Casa Grande Carmel Solar

Items for Consideration

- Applicant amenable to modifications as recommended by staff are:
 1. Total acres of 805.36 acres recommended for GEP
 2. Consult with AGFD for fencing requirements
 3. Work with County engineer for ROW dedications

Item #3: **PZ-PA-010-23**

Casa Grande Solar Project

- Recommendation:
 - ▣ P&Z Recommended approval 9-0
 - ▣ Staff offers a recommendation of APPROVAL