

Potential CAFES Impacts Associated with the Loss of Fields 28,29, & 31

This document provides an overview of the potential agricultural impacts of the proposed Fields 28, 29, and 31 faculty housing project. We have consulted with the Plant Sciences Department, Agricultural Operations, and members of the Dean's Advisory Council to ensure a more thorough view of impacts to our ability to deliver academic programming as well as maintain agricultural production operations that support our curriculum.

The lands under consideration are utilized for or immediately adjacent to the following academic units:

- Field 28 (13.6A): Lemon teaching and research
- Field 29 (9.5A): Grimm Family Organic Center organic research
- Field 31 (6.1A): Deciduous tree crop teaching and research

Introduction:

Cal Poly's "Learn by Doing" philosophy is integral to its identity, particularly within the College of Agriculture, Food and Environmental Sciences (CAFES). Fields 28, 29, and 31 are essential to this hands-on educational approach, providing immediate access to diverse agricultural systems for students and faculty. These fields are not only vital for experiential learning but also represent significant investments in sustainable agriculture and research. Their proximity to the new Plant Sciences Complex further enhances their value as extensions of cutting-edge facilities. Replacing these fields with development would compromise Cal Poly's educational mission and diminish its agricultural heritage.

Potential site concerns for exploration:

Compounding loss of finite agricultural land: These parcels were preserved in the Cal Poly Campus Master Plan (June 2019, <https://masterplan.calpoly.edu/docs/cal-poly-campus-master-plan-2019-06-27.pdf>) because of its continued importance to delivering our academic mission. The more that land is removed from the learning curriculum, the fewer the opportunities for Learn by Doing. The orchards in field 31 were planted in the last five years to replace orchards removed for construction of the J. Lohr and Gallo buildings. Field 29 was designated by the college for use by the Grimm Family Center of Organic Production and Research to support organic and regenerative research. The lemon orchards in field 28 are used by numerous classes support both long- and short-term research and provide cost recovery revenue from production to support CAFES teaching.

Essential to the "Learn by Doing" Philosophy: Cal Poly's "Learn by Doing" philosophy emphasizes active, hands-on learning, allowing students to apply theoretical knowledge in real-world settings. The immediate access to Fields 28, 29, and 31 enables seamless integration of classroom instruction with practical experience in near-commercial scale fields/orchards, a cornerstone of Cal Poly's approach. Relocating these field activities off-campus would disrupt

this synergy, as even minimal distances introduce logistical challenges that will diminish faculty enthusiasm to maintain field/orchard exercises and student participation. Colleagues at our sister universities that have undergone similar transitions report that moving operations to locations that cannot be easily walked in 15 minutes introduce logistical challenges that diminish or eliminate faculty enthusiasm and student participation. A partial list of courses that would be impacted is presented in **Table 1**.

Significant Investments in Sustainable Agriculture: The university has made substantial investments in these specific fields, enhancing their value as educational and research assets. Field 28 houses a lemon orchard, Field 29 is dedicated to organic and regenerative agriculture research, and Field 31 features a newly established temperate tree crop orchard. These fields support innovative research and provide students with exposure to contemporary agricultural practices. Their loss would represent a setback to these efforts and threaten the impressive headway CAFES faculty and staff have made in capturing competitive external funding and advancement gifts. A partial list of grants and advancement associated with the fields is presented in **Table 1**.

Integration with the New Plant Sciences Complex: The upcoming Plant Sciences Complex, a \$30 million-plus investment, includes a 23,000-square-foot laboratory building, state-of-the-art research and production greenhouses, an ancillary produce packing and cooling facility, and a farm store for food retail operations. Fields 28, 29, and 31 are adjacent to this complex, serving as practical extensions for research and teaching activities. Replacing these fields with housing or retail spaces would not only disrupt this integration but also undermine the substantial financial and strategic investments made in enhancing our plant science capabilities and require a significant financial commitment to replace their functionality.

Enhancing the Agricultural Gateway of Cal Poly: Located on Highland Drive, these fields offer a visual representation of Cal Poly's commitment to agriculture. Maintaining these fields reinforces the university's identity and commitment to Cal Poly's agricultural heritage. Replacing these fields with housing and retail spaces would create a discordant impression, detracting from the cohesive narrative of our dedication to a hands-on agriculture education and diminishing the impact of the gateway experience to campus core.

Off-Campus Relocation: Proposals to relocate research and teaching activities to off-campus sites fail to account for the practical challenges such moves would entail. Even a few miles of separation can significantly hinder faculty's ability to incorporate fieldwork into their courses due to time constraints and transportation logistics. Such a move would likely reduce student engagement with hands-on agricultural practices and research, a cornerstone of our educational approach. Additionally, off-campus relocation would **require substantial investments** in duplicate equipment and additional management staff, imposing financial burdens and operational complexities that are currently mitigated by the centralized nature of our on-campus fields.

Summary

Preserving Fields 28, 29, and 31 is essential for maintaining Cal Poly's "Learn by Doing" and "Ready Day One" philosophies, supporting sustainable agriculture research, and integrating with the new Plant Sciences Complex. These fields are not only educational assets but also symbols of the university's agricultural heritage. Their loss would represent a significant setback to Cal Poly's mission and identity. Given the significant impact on the college's ability to deliver our curriculum, a loss of faculty research space, and the real potential for negative perception by our industry partners, we respectfully ask the campus to identify alternative sites for potential faculty housing, including the parcel on the opposite side of Hwy. 1 that is already designated in the Master Plan as a potential housing site.

Should the university ultimately pursue building on these fields, we would expect mitigation efforts to be made to keep the college curriculum and optimal student learning intact. Should this involve the development of an off-campus site this would include ongoing support for new staff as well as farming equipment, transportation services, and infrastructure.

Table 1: A partial overview of the courses and research funding supported by irrigated fields.

Data were volunteered by individual faculty and center directors.

Unit	Faculty	Fields Used	Courses Supported (total students taught)	Ext. Funds (Pending)	Advancement
BRAE	Livingston, P.	28 and 29	BRAE 141 (99) BRAE 340 (295), BRAE 331 (36), BRAE 438 (12)		
Grimm Fam.Ctr. for Org. Prod. and Res.	M. Grieshop (Director)	34 and 29	PLSC 470 (19)	\$1,171,656	\$4,347,175
NRES	Wilson, S.	28	SS 321 (45)		
NRES/PLSC	Decock, C.	28 and 29	SS 221 (112)	\$249,162 (\$450,000)	
PLSC/WVIT	Ding, S.	28, 29, and 31	PLSC 323 (102), 428 (18)	\$45,000	
PLSC	Garner, L.	28 and 31	PLSC 205 (48), 355 (40), 360 (16)		
PLSC	Headrick, D. (replacement pending)	28, 29, and 31	PLSC 313 (87), 327 (48), 431 (27), 441 (45)	\$300,000	
PLSC	Steinmaus, S.	28, 29, and 31	PLSC 321 (82), 406 (42)	\$1,433,000	
TOTAL			Courses: 18 Students annually: 1,173	\$3,198,818	\$4,347,175