

Economics of Water

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Vineyard Professional Services



Annual Irrigation Operations Costs

Irrigation R&M: \$55–255

Irrigation Labor: \$115–605

Irrigation Energy: \$125–325

Irrigation Monitoring: \$10–295

Irrigation Operations: \$305–1480



Energy On The Rise

Energy Costs, like everything else were on the rise last year. On average Diesel and Natural Gas have been very comparable as expected. Electricity remains stable.

Diesel

2018: \$120

2019: \$116

2020: \$70

2021: \$126

2022: \$239

5 Year Avg: \$134
Per Irrigated Acre

Natural Gas

2018: \$133

2019: \$115

2020: \$95

2021: \$126

2022: \$227

5 Year Avg: \$139

Electricity W/Solar

2020: \$330

2021: \$348

2022: \$338

3 Year Avg: \$339

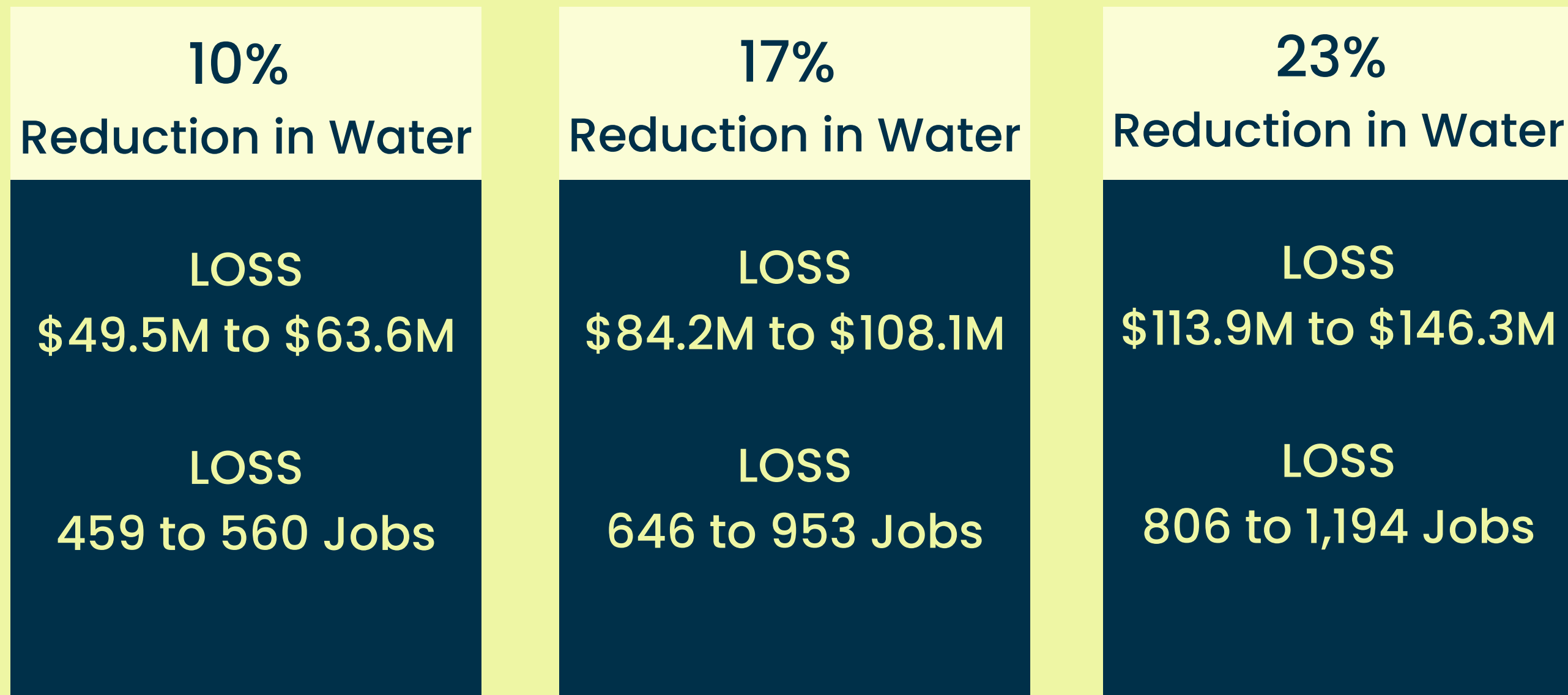
The Economic Impact on the Local Economy of Irrigated Agriculture in the Paso Robles Area and Potential Impacts of the Sustainable Groundwater Management Act Lynn Hamilton & Michael McCullough



PURPOSE OF THE STUDY

Analyze the economic impact on the local economy if the Paso Robles SubBasin Groundwater Sustainability Plan (GSP) is accepted and implemented

IMPLAN-MODELED ECONOMIC LOSSES (\$/jobs lost due to crops, not wine sales or tourism)



CAL POLY

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ECONOMIC IMPACT OF LOST WINE GRAPE PRODUCTION ON WINERIES & ENTIRE PR SUBBASIN

10% Reduction in Water	17% Reduction in Water	23% Reduction in Water
<p>-\$199.8M if 5% of lost grapes are replaced by imports</p> <p>-\$183.4M if 15% of lost grapes are replaced by imports</p>	<p>-\$338.6M if 5% of lost grapes are replaced by imports</p> <p>-\$311.8M if 15% of lost grapes are replaced by imports</p>	<p>-\$458.1M if 5% of lost grapes are replaced by imports</p> <p>-\$421.8M if 15% of lost grapes are replaced by imports</p>



**78% of lost economic value accrues to the wine
grape and winery industry**

**22% of the economic losses are agricultural input
industries + tourism industries**



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Models in this study estimate
decreases in total value output:

21%–53%: SLO County's Wine Industry

4%–11%: SLO County Agriculture Industry

**Including Ag Lending*



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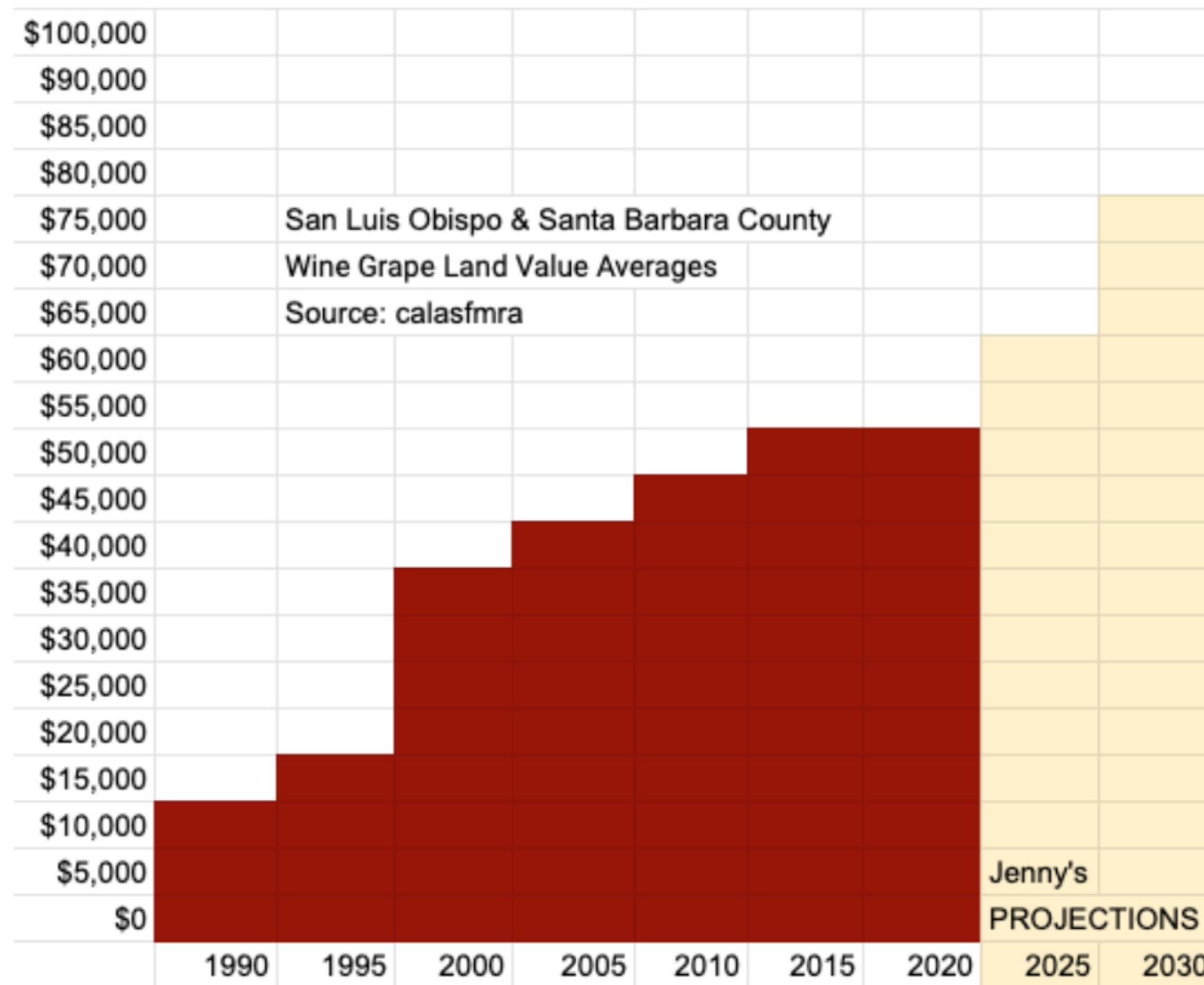
Cost Analysis of Recent Land Value

San Luis Obispo & Santa Barbara Counties

Row Crops	\$35,000 - \$64,000	Moderate	Very Limited
Plantable (Wine Grapes)	\$20,000 - \$70,000	Moderate	Moderate
Wine Grapes	\$25,000 - \$75,000	Moderate	Moderate-Strong
Coastal Rangeland (San Luis Co)	\$2,500 - \$15,000	Moderate-Strong	Limited
Inland Rangeland (San Luis Co)	\$300 - \$7,500	Moderate	Limited
Rangeland (Santa Barbara Co)	\$2,500 - \$15,000	Moderate	Limited

Credited : ASFMRA

VINEYARD VALUE PROJECTIONS



Credited : Jenny Heinzen Real Estate



Thank You