Farmers for Water Quality

Cost and Revenue Impacts on Tier 3 Farmers

Calculations are based upon:

- Tier 3 grower interviews
- SWRCB Integrated Report
- RWQCB NOI database
- DPR PUR
- Ag Commissioner's PUR
- Ag Commissioner's Crop Reports

Total Tier 3 Farmers and Acreage

	SLO/Santa Barbara	Monterey	Santa Cruz	Santa Clara/ San Benito	County Unconfirmed	Total
Growers who grow more than 1000 Acres of high-nitrate crops						
Total Acres	33,949	103,738	19,163	3,710	8,945	162, 536
Total Growers	17	37	7	4	4	69
Growers who discharge Chlorpyrifos or Diazinon to an impaired waterbody for Tox/Pesticides						
Total Acres	38,354.19	8,052	1,550	1,429.55		49,385.74
Total Growers	191	48	2	15		256
Tier 3 Total						
Total Acres	72,303.19	111,790.00	20,713.00	5,139.55	8,945.00	**218,890.74**
Total Growers	208	85	9	19	4	**325**

Estimated Tier 3 Enrollment Costs

Costs include:

- NOI
- Farm Plan
- MRP
- QAPP

	Low	High
Per Operation	$25,000	$30,000
Total Tier 3	$8,125,000	$9,750,000

Tier 3 Annual Monitoring and Reporting Costs

Monitoring and Reporting Costs		Low	High
	Cooperative Monitoring Program	$328,500	$470,850
	Groundwater Sampling	$500,000	$650,000
	Nitrate Risk Factor Determination	$162,500	$325,000
	Annual Compliance Reporting	$3,250,000	$4,875,000
	Photo Monitoring	$162,500	$260,000
	Surface Water Discharge Monitoring	$1,462,000	$1,950,000
	Irrigation Nutrient & Management Plan	$235,000	$500,000
Total M&R Costs – Tier 3		**$6,100,500**	**$9,030,850**

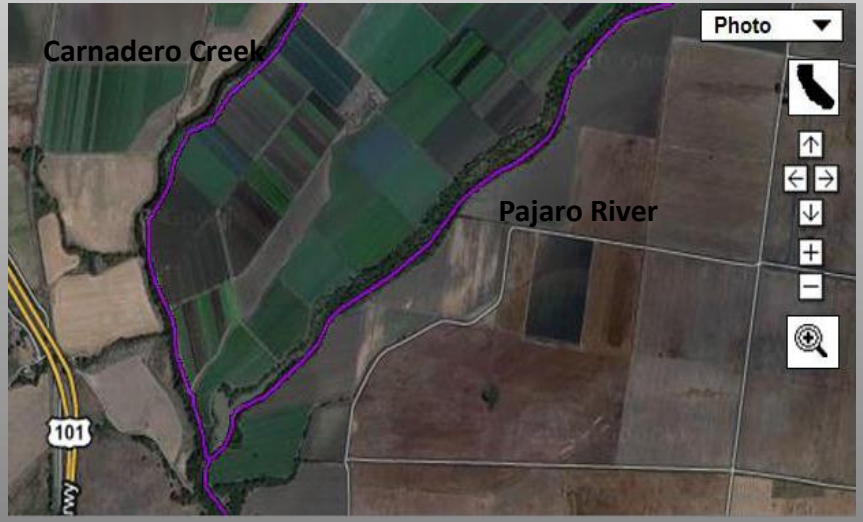
Economic Impacts of 30’ Vegetated Buffers

- Small watersheds often are sinuous rather than broad alluvial plains
- Fields follow the water body contour
- A 30-50’ buffer could render a long, narrow field useless because the remaining land would be financially infeasible to farm

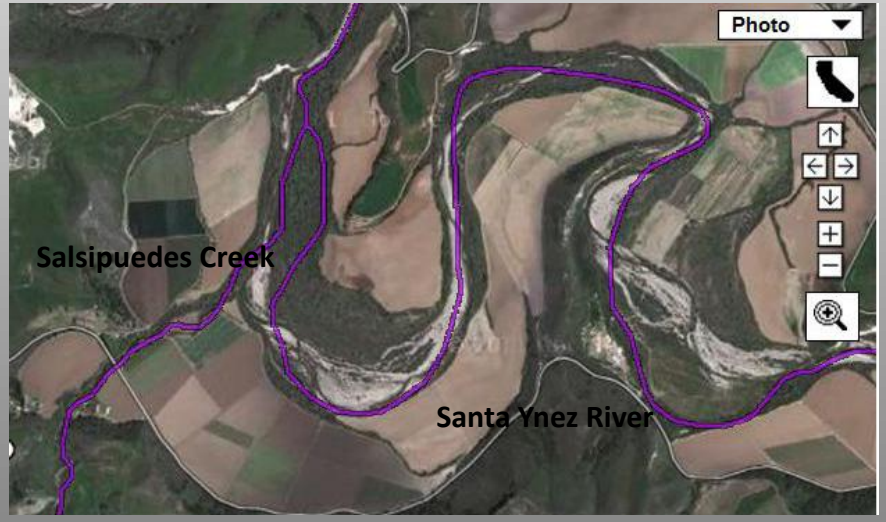
Corralitos Creek

Los Berros Creek

Carnadero Creek and Pajaro River



Santa Ynez River, Above Lompoc



Calculating The Cost of Tree and Vine Removal for Vegetative Buffers

- Avocado trees
  - Loss of $5,000-$6,000 per tree
- Vineyard removal
  - Loss of $1,500 per acre (907 vines per acre, $1.65 per vine)
- Endpost Relocation
  - Loss of $2,280 per acre (570 posts per acre, 8 feet apart at ~ $4 per recycled post)
- Endpost Replacement
  - Loss of $9,690 per acre (570 posts per acre, $17 per post)

- **Total** - $3,780.00 – $11,190.00/acre

Buffer Fence Installation and Maintenance Costs

- Food safety practices for Leafy Green Vegetables may require fencing to be installed to limit animal intrusion
- Installation cost estimated at $8.25 per linear foot

	Linear Feet of Waterway Border	Fencing Cost Per Linear Foot	Upper Bound for Costs
Monterey Co.	8,222,676	$8.25	$67,837,077
Other	1,752,436	$8.25	$14,457,596
Totals	9,975,112		**$82,294,673**