Disclaimer *These Draft Documents are provided for information only and are intended to help facilitate discussions related to Projects & Management Actions to be considered in the Paso Basin Groundwater Sustainability Plan (GSP), currently under development. The information contained herein is subject to change and does not commit, nor does it necessarily reflect the views, opinions or endorsement of, the Cooperative Committee or any Agency.*

Paso Robles Basin GSP Development

Example Water Charges Calculation and Financial Impacts

DRAFT

February 2019

Illustrative Projects Portfolio

- **State Water Project (SWP):**
  - Injection wells in Creston.
  - Average volume: 1,100 AF.
- **Nacimiento Project (NWP):**
  - Recharge basin in Estrella.
  - Average volume: 8,400 AF.
- **Land Retirement:**
  - Purchase and retire irrigated land in key areas where groundwater levels are declining.
  - 1,150 acres based on 50% of alfalfa and pasture land in the basin.
  - Average volume: 5,220 AF.

Area	Supply	Annual Volume (AF)
Creston	SWP	1,100
Estrella	NWP	8,400
All	Land Retirement	5,220
TOTAL		**14,720**

Preliminary Project Cost Estimates

	SWP	NWP	Land Retirement	Total, All Projects
CAPEX	$990,834	$1,672,032	$2,879,610	**$5,542,476**
OPEX	$94,000	$742,000	$232,500	**$1,068,500**
Water	$1,320,000	$10,080,000	$0	**$11,400,000**
Total Annual	**$2,404,834**	**$12,494,032**	**$3,112,110**	**$18,010,976**

- All capital expenditures (CAPEX) are annualized over 30 years using a 4.6% discount rate.
- Operating expenditures (OPEX) escalate annually at CPI.
- SWP and NWP cost estimates prepared by Carollo Engineers.
- Land retirement costs:
  - Acquisition CAPEX: $30,000/ac based on vineyard land values of $50,000/ac minus $20,000/ac establishment costs.
  - Land management OPEX: $150/ac annually.

Establishment of Water Charges

- **Base Pumping Assessment:**
  - Fee per acre-foot charged for all non-exempt pumping.
  - Intended to cover infrastructure CAPEX, infrastructure OPEX, and all land retirement costs as these investments benefit all pumpers in the basin.
- **Overproduction Surcharge:**
  - Additional fee per acre-foot charged for any non-exempt pumping above an individual's pumping allowance.
  - Intended to cover water costs which are incurred to directly replace overpumping by individuals.

		SWP	NWP	Land Retirement	Total, All Projects
Base Pumping Assessment	CAPEX	$990,834	$1,672,032	$2,879,610	**$5,542,476**
	OPEX	$94,000	$742,000	$232,500	**$1,068,500**
Overproduction Surcharge	Water	$1,320,000	$10,080,000	$0	**$11,400,000**
	Total Annual	**$2,404,834**	**$12,494,032**	**$3,112,110**	**$18,010,976**

Water Charges Calculations

Base Pumping Assessment:

CAPEX	$5,542,476
OPEX	$1,068,500
Total Costs	$6,610,976
Total Pumping	70,780 AF (after land retirement)
	$93/AF

Overproduction Surcharge:

Water Costs	$11,400,000
Overproduction	13,700 AF
	$832/AF

Financial Implications for Growers

Revenue and cost assumptions obtained from crop enterprise budgets published by UC Davis, and personal interviews with growers. Actual revenues and costs vary across growers and properties.

Illustrative Enterprise Budget (Vineyard)

Assumption	Value	Unit
Yield	7	Tons/ac
Price	$1,200	Per ton
Gross Revenue	*$8,400*	*Per ac*
Operating Costs	$2,400	Per ac
Cash Overhead	$1,200	Per ac
Total Cash Costs	*$3,600*	*Per ac*
Net Revenue	**$4,800**	**Per ac**
Pumping Allowance	1	AF/ac
Actual Pumping	1.25	AF/ac
Overproduction	0.25	AF/ac
Base Assessment	$116	Per ac ($93/AF x 1.25 AF)
Overproduction Surcharge	$208	Per ac ($832/AF x 0.25 AF)
Total Water Charges	*$324*	*Per ac*
Net Revenue	**$4,476**	**Per ac**

Without water charges →

With water charges →