

Proposition 218 Service Charge Study Proposed Rates and Charges

Pajaro Valley Water Management Agency

February 3, 2010

Service Charge Study Presentation

- ◆ Purpose of the study
- ◆ Explain cost of service methodology
- ◆ Present calculated charges
- ◆ Next steps

Service Charge Study prepared to comply with Proposition 218

- ◆ **... fees do not exceed the funds required for service**
- ◆ ... fees shall not be used for any other purpose other than that for which it is collected
- ◆ **... fee charged does not exceed attributable cost of service to the property**
- ◆ ... fee may not be imposed unless service is used by or immediately available
- ◆ ... fee may not be imposed for general governmental services

Agency Expenses

Agency Budget

Revenue requirement for a test year (1)

Revenue Sources

Direct cost to be recovered from General Fund (2)

Supplemental Water Service Cost to be Recovered From Special Revenue, Capital, and Debt Service Fund (3)

(4)

Functional Categories (Services)

Supplemental Water Service to Groundwater Water Users

Delivered Water Service

Metering

Billing

Additional Service to Metered Water Users in Delivered Water Zone

Cost of Service

Cost Attributed to Providing Supplemental Water to Metered Water Users

Cost Attributed to Providing Supplemental Water to Water Users

Cost Attributed to Providing Delivered Water

Cost of Additional Services to Metered Water Users in Delivered Water Zone (5)

Customer Rates

Metered Water Users Outside DWZ

Metered Water Users Inside DWZ

Unmetered Water Users

Delivered Water Water Users

Notes:

(1) Revenue requirements for a test year are developed by adjusting the Agency budget for cost incurred in a typical year.

(2) Agency cost that attributed for general purposes and are not related to the service of providing supplemental water. These costs are to be recovered from the General Fund and are paid for through Management Fees.

(3) Supplemental water costs are recovered from the Special Revenue, Capital, and Debt Service Fund. Supplemental water costs are all costs attributed to providing supplemental water to the Pajaro Basin.

(4) Cost to be recovered from the Special Revenue, Capital, and Debt Service funds are further categorized by service function prior to allocation to user classes receiving the service.

(5) Cost attributed to service to metered water users in DWZ is recovered from metered water users within the Delivered Water Zone with the ability to connect to the Delivered Water System.

Agency Expenses

Agency Budget

Revenue requirement for a test year (1)

Revenue Sources

Direct cost to be recovered from General Fund (2)

Supplemental Water Service Cost to be Recovered From Special Revenue, Capital, and Debt Service Fund (3)

(4)

Functional Categories (Services)

Supplemental Water Service to Groundwater Water Users

Delivered Water Service

Metering

Billing

Additional Service to Metered Water Users in Delivered Water Zone

Cost of Service

Cost Attributed to Providing Supplemental Water to Metered Water Users

Cost Attributed to Providing Supplemental Water to Water Users

Cost Attributed to Providing Delivered Water

Cost of Additional Services to Metered Water Users in Delivered Water Zone (5)

Customer Rates

Metered Water Users Outside DWZ

Metered Water Users Inside DWZ

Unmetered Water Users

Delivered Water Water Users

Notes:

(1) Revenue requirements for a test year are developed by adjusting the Agency budget for cost incurred in a typical year.

(2) Agency cost that attributed for general purposes and are not related to the service of providing supplemental water. These costs are to be recovered from the General Fund and are paid for through Management Fees.

(3) Supplemental water costs are recovered from the Special Revenue, Capital, and Debt Service Fund. Supplemental water costs are all costs attributed to providing supplemental water to the Pajaro Basin.

(4) Cost to be recovered from the Special Revenue, Capital, and Debt Service funds are further categorized by service function prior to allocation to user classes receiving the service.

(5) Cost attributed to service to metered water users in DWZ is recovered from metered water users within the Delivered Water Zone with the ability to connect to the Delivered Water System.

Total cost of services was established for a “Test Year”

	<u>Amount</u>
FY 2010 Budget	\$ 11,502,199
Adjustments	(1,346,369)
Test Year Budget	\$ 10,155,830

- ◆ FY 2010 budget used as the base
- ◆ Adjustments made to reflect typical year
- ◆ Key adjustments
 - Excludes cost of refunds
 - Includes update to Basin Management Plan
 - Includes a repair and replacement reserve

Total cost of service was further reduced

	<u>Amount</u>
Expense	
Operating Expense	\$ 4,550,126
Non-Operating Expense	5,605,704
Additional Reserve Requirement	-
Total Expense	10,155,830
Less Miscellaneous Revenue	304,888
Net Revenue Requirements	\$ 9,850,942

- ◆ Revenue requirements calculated by deducting miscellaneous revenue
 - Management fees
 - Interest on unrestricted and un-earmarked reserves

Agency Expenses

Agency Budget

Revenue requirement for a test year (1)

Revenue Sources

Direct cost to be recovered from General Fund (2)

Supplemental Water Service Cost to be Recovered From Special Revenue, Capital, and Debt Service Fund (3)

(4)

Functional Categories (Services)

Supplemental Water Service to Groundwater Water Users

Delivered Water Service

Metering

Billing

Additional Service to Metered Water Users in Delivered Water Zone

Cost of Service

Cost Attributed to Providing Supplemental Water to Metered Water Users

Cost Attributed to Providing Supplemental Water to Water Users

Cost Attributed to Providing Delivered Water

Cost of Additional Services to Metered Water Users in Delivered Water Zone (5)

Customer Rates

Metered Water Users Outside DWZ

Metered Water Users Inside DWZ

Unmetered Water Users

Delivered Water Water Users

Notes:

(1) Revenue requirements for a test year are developed by adjusting the Agency budget for cost incurred in a typical year.

(2) Agency cost that attributed for general purposes and are not related to the service of providing supplemental water. These costs are to be recovered from the General Fund and are paid for through Management Fees.

(3) Supplemental water costs are recovered from the Special Revenue, Capital, and Debt Service Fund. Supplemental water costs are all costs attributed to providing supplemental water to the Pajero Basin.

(4) Cost to be recovered from the Special Revenue, Capital, and Debt Service funds are further categorized by service function prior to allocation to user classes receiving the service.

(5) Cost attributed to service to metered water users in DWZ is recovered from metered water users within the Delivered Water Zone with the ability to connect to the Delivered Water System.

Report defines service provided to water users as the following

- ◆ Planning and preservation of water quantity and quality for the common good
 - Construction and operation of supplemental water projects to increase groundwater quantity and quality
 - Delivered water service to the Coast
- ◆ Basin modeling, monitoring, and planning
- ◆ Metering and billing
- ◆ Protection of the groundwater basin to avoid Basin adjudication

Agency provides services through shared facilities

- ◆ Coastal Distribution System, Harkins Slough project, supplemental wells, and Recycled Water Facility:
 - To secure Basin supply
 - To replace extracted groundwater
 - To retard seawater intrusion
 - To reduce overdraft
 - To promote conservation
 - To delay or avoid more harsh groundwater regulations

Projects work together to achieve Basin objectives

Services were classified into five “functional categories”

Supplemental
Water Service to
Groundwater Users

Delivered
Water Service

Metering

Billing

Additional Services
for Metered Users
in DWZ

- ◆ Categories represent unique Agency services provided

“Supplemental water” service

- ◆ Defined in the Agency Act
- ◆ Purchase/acquisition, capture, storage, and distribution of supplemental water through the Recycled Water Facility, Harkins Slough Project, Supplemental Wells, and CDS
- ◆ Basin management planning to identify and determine future supplemental water projects to balance the basin and halt seawater intrusion

“Delivered water” service

- ◆ Defined in the Agency Act
- ◆ Delivery of alternate water supplies produced by the Agency and delivered at pressure
- ◆ Projects constructed and operated to protect the groundwater basin from overdraft
- ◆ Includes basin management planning activities

Framework for cost allocation

Functional Category	Supplemental Water Service to Groundwater Users	Delivered Water Service	Billing	Metering	Additional Services for Metered Water in DWZ
<u>Projects</u>					
Harkins Slough Project	X	X			
Supplemental Wells	X	X			
Recycled Water Facility	X	X			
Coastal Distribution System	X	X			X
<u>Activities</u>					
Basin Monitoring					
Basin Modeling					
<u>Activities</u>					
Metering Program					
<u>Activities</u>					
Billing					

Agency Expenses

Agency Budget

Revenue requirement for a test year (1)

Revenue Sources

Direct cost to be recovered from General Fund (2)

Supplemental Water Service Cost to be Recovered From Special Revenue, Capital, and Debt Service Fund (3)

(4)

Functional Categories (Services)

Supplemental Water Service to Groundwater Water Users

Delivered Water Service

Metering

Billing

Additional Service to Metered Water Users in Delivered Water Zone

Cost of Service

Cost Attributed to Providing Supplemental Water to Metered Water Users

Cost Attributed to Providing Supplemental Water to Water Users

Cost Attributed to Providing Delivered Water

Cost of Additional Services to Metered Water Users in Delivered Water Zone (5)

Customer Rates

Metered Water Users Outside DWZ

Metered Water Users Inside DWZ

Unmetered Water Users

Delivered Water Water Users

Notes:

(1) Revenue requirements for a test year are developed by adjusting the Agency budget for cost incurred in a typical year.

(2) Agency cost that attributed for general purposes and are not related to the service of providing supplemental water. These costs are to be recovered from the General Fund and are paid for through Management Fees.

(3) Supplemental water costs are recovered from the Special Revenue, Capital, and Debt Service Fund. Supplemental water costs are all costs attributed to providing supplemental water to the Pajaro Basin.

(4) Cost to be recovered from the Special Revenue, Capital, and Debt Service funds are further categorized by service function prior to allocation to user classes receiving the service.

(5) Cost attributed to service to metered water users in DWZ is recovered from metered water users within the Delivered Water Zone with the ability to connect to the Delivered Water System.

There are four costs of service categories

Metered Water Users

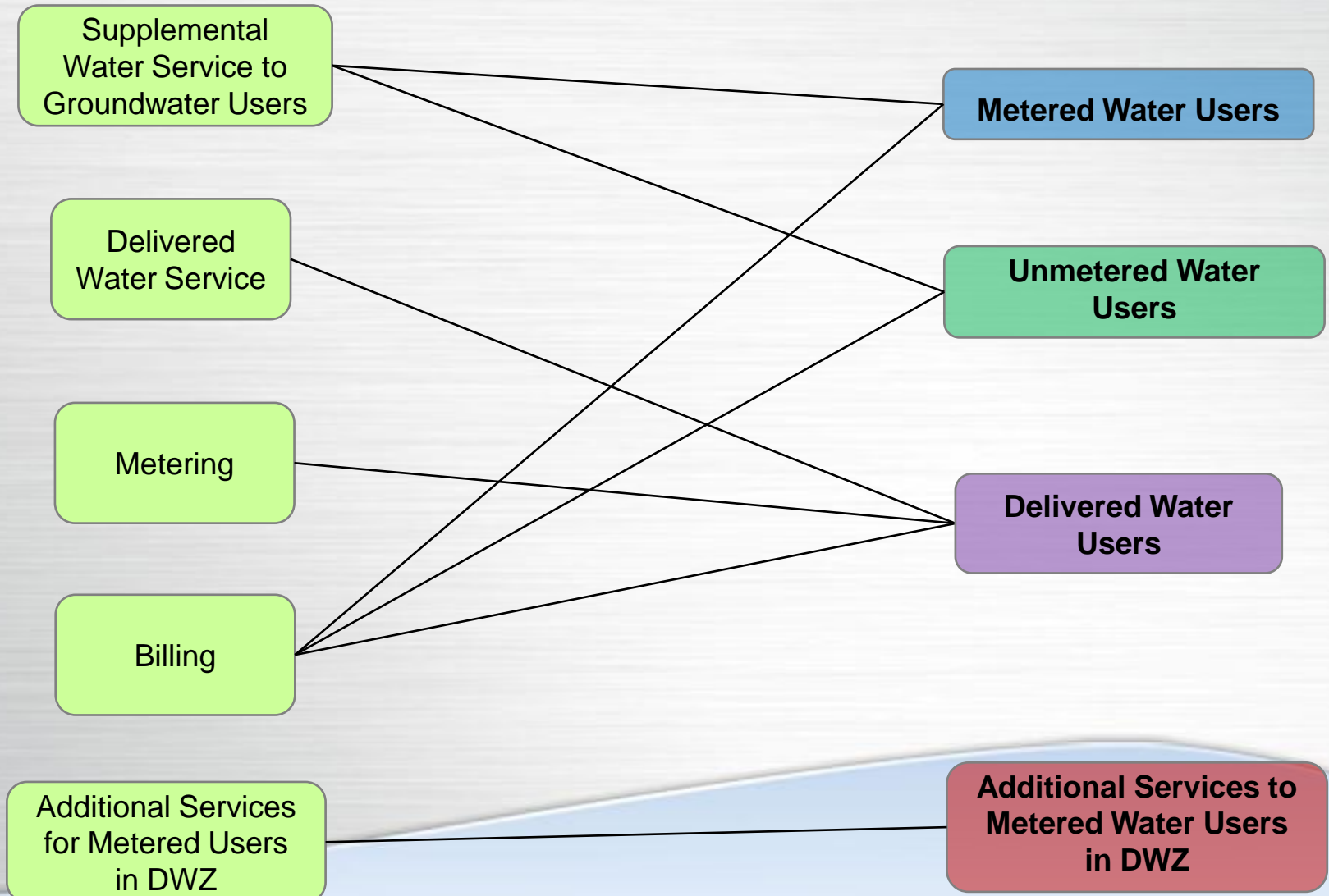
Unmetered Water Users

Delivered Water Users

Additional Services to Metered Water Users in DWZ

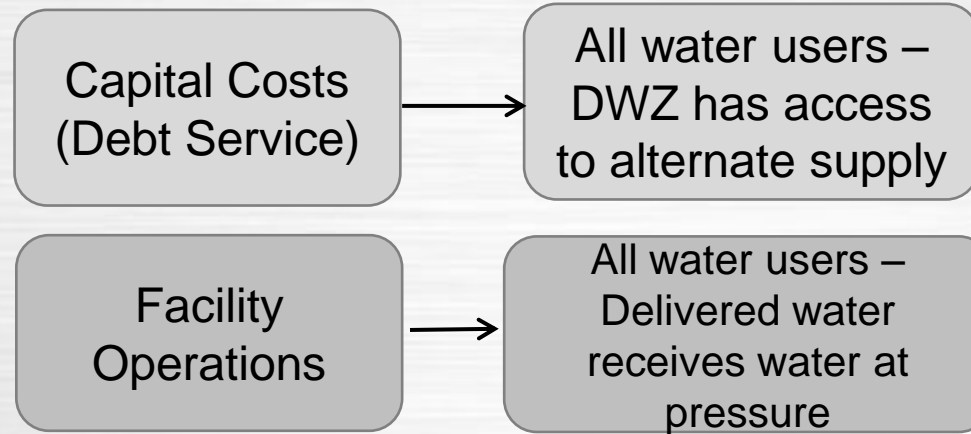
- ◆ Considers Ad Hoc Funding Committee recommended approach
- ◆ Considers different water user categories
- ◆ Considers services required for each water user category

Costs of service were aligned with five functional categories

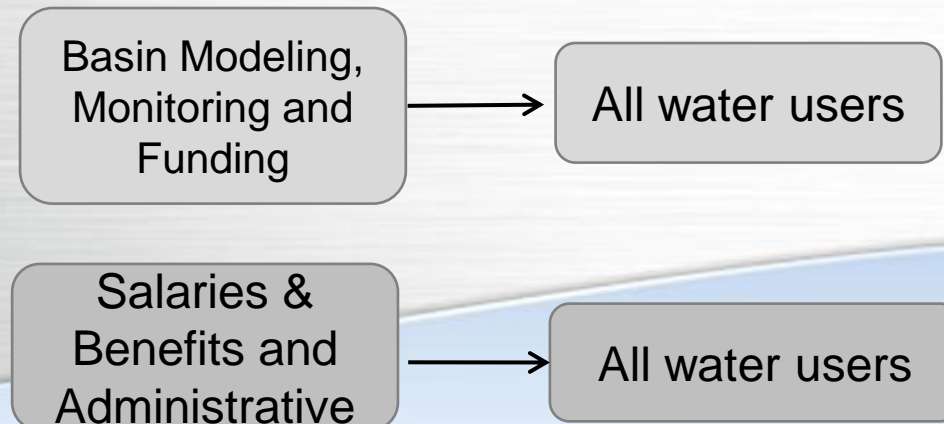


Costs were allocated on characteristics of services provided

Projects



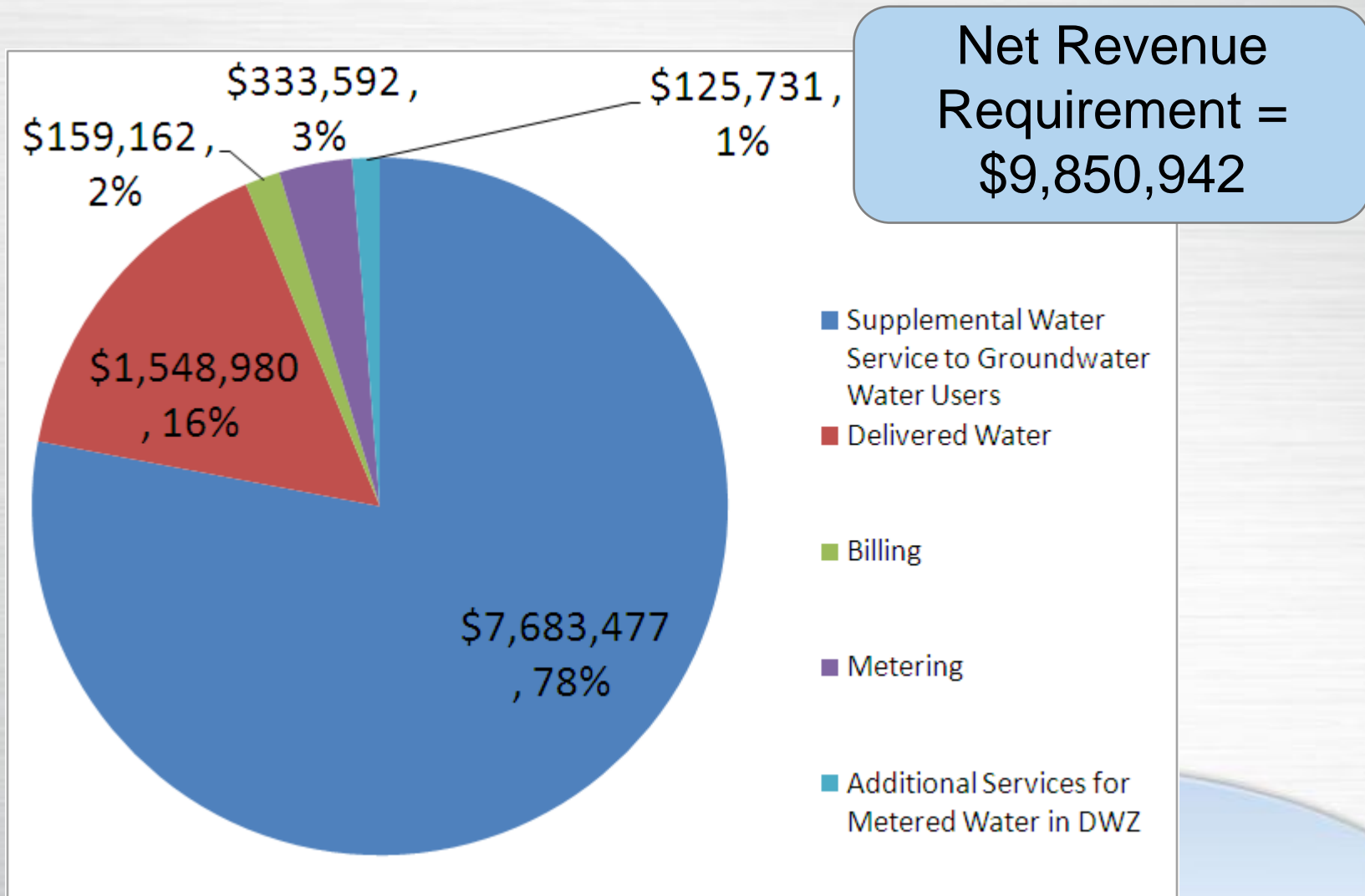
Activities



Percent allocation to functional categories

Functional Category	Supplemental Water Service to Groundwater Water Users	Delivered Water Service	Billing	Metering	Additional Services for Metered Water in DWZ
<u>Salaries and Wages</u>					
Salaries and Wages	64%	7%	12%	18%	0%
<u>Agency Administration</u>					
General	72%	17%	1%	7%	3%
<u>Special Fund Administration</u>					
General	72%	17%	1%	7%	3%
<u>Facility Operations</u>					
Harkins Slough	89%	11%	0%	0%	0%
Coastal Distribution	74%	26%	0%	0%	0%
Supplemental Wells**	63%	37%	0%	0%	0%
Recycled Water Facility	72%	28%	0%	0%	0%
Metering Program	0%	0%	0%	100%	0%
<u>Basin Management Planning</u>					
Modeling and Monitoring	89%	11%	0%	0%	0%
Basin Management	89%	11%	0%	0%	0%
Basin Funding	89%	11%	0%	0%	0%
<u>Capital Projects</u>					
Capital Projects and Reserves	74%	19%	0%	0%	6%
<u>Debt Service Payments</u>					
SWRCB Note#1 (Harkins Slough)	89%	11%	0%	0%	0%
SWRCB Note#2 (Pipeline and Wells)	89%	11%	0%	0%	0%
DWR (Coastal Distribution System - Prop. 13)	0%	61%	0%	0%	39%
1999 COP - Harkins Slough (Bond Principal)	89%	11%	0%	0%	0%
1999 COP - Harkins Slough (Bond Interest)	89%	11%	0%	0%	0%
City of Watsonville (Recycled Water) - Interest	89%	11%	0%	0%	0%

Allocated cost by functional category



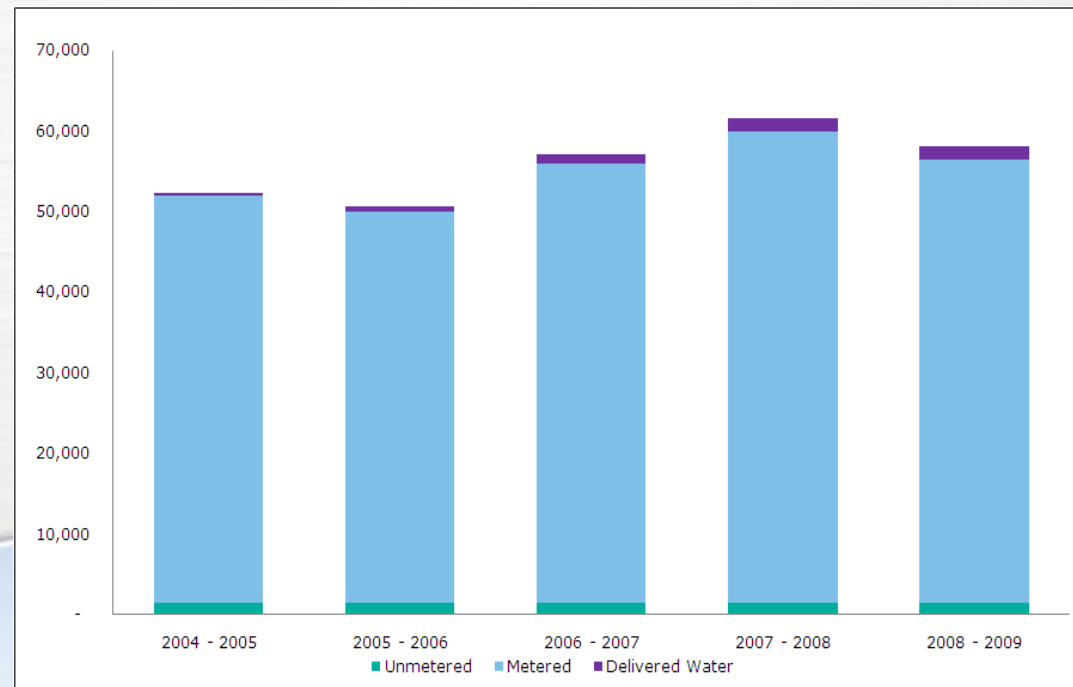
... but costs are required by user class

- ◆ Requires units of cost for each functional category
- ◆ Requires units of consumption for each user class

$$\begin{array}{|c|} \hline \text{Functional} \\ \text{Category} \\ \text{Cost} \\ \hline \end{array} \div \begin{array}{|c|} \hline \text{Units of} \\ \text{Consumption} \\ \hline \end{array} = \begin{array}{|c|} \hline \text{Unit} \\ \text{Cost} \\ \hline \end{array}$$

Units of consumption

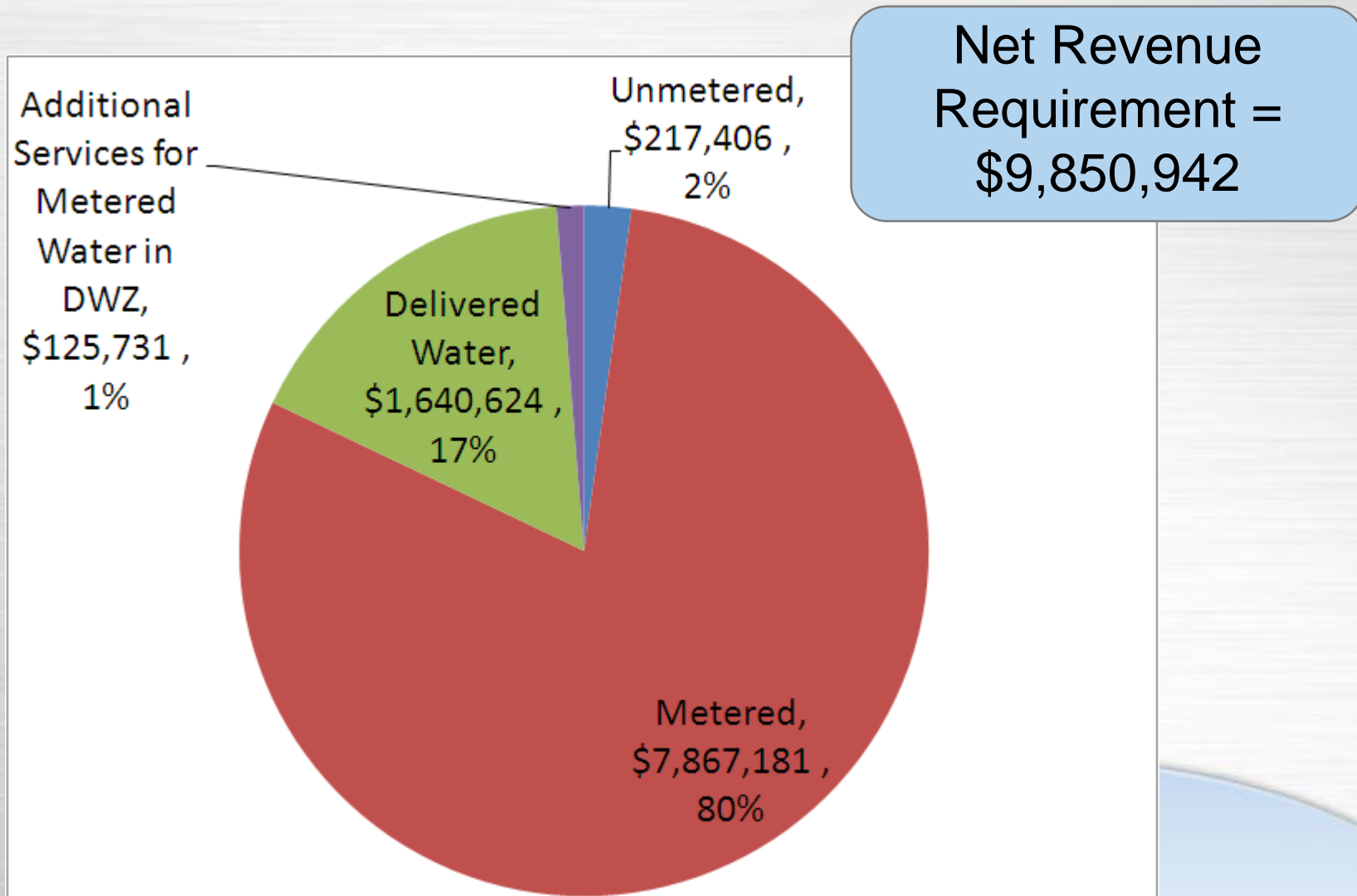
- ◆ Metered Water Users – 5 Year Average
 - Inside DWZ
 - Outside DWZ
- ◆ Unmetered Water Users – 0.59 acre-feet per parcel
- ◆ Delivered Water Users – 6,000 acre-feet per year



Cost of service for each user class developed using unit costs

	Total Cost	Supplemental Water Service to Groundwater Water Users (acre-feet per year)	Delivered Water (acre-feet per year)	Billing (acre-feet per year)	Metering (Equivalent Meter)	Additional Services for Metered Water in DWZ (acre-feet per year)
Total Allocated Cost		\$7,683,477	\$1,548,980	\$159,162	\$333,592	\$125,731
Quantity		49,830	6,000	55,830	12,812	3,816
Unit Cost of Service		\$154	\$258	\$3	\$26	\$33
Metered						
Units of Service		48,446	0	48,446	9,949	0
Allocated Cost	\$7,867,181	\$7,470,018	\$0	\$138,110	\$259,053	\$0
Additional Services for Metered Water in DWZ						
Units of Service		0	0	0	0	3,816
Allocated Cost	\$125,731	\$0	\$0	\$0	\$0	\$125,731
Unmetered						
Units of Service		1,384	0	1,384	0	0
Allocated Cost	\$217,406	\$213,460	\$0	\$3,947	\$0	\$0
Delivered Water						
Units of Service		0	6,000	6,000	2,863	0
Allocated Cost	\$1,640,624	\$0	\$1,548,980	\$17,105	\$74,539	\$0
Total Cost of Service	\$9,850,942					

Cost of service by user class



Agency Expenses

Agency Budget

Revenue requirement for a test year (1)

Revenue Sources

Direct cost to be recovered from General Fund (2)

Supplemental Water Service Cost to be Recovered From Special Revenue, Capital, and Debt Service Fund (3)

(4)

Functional Categories (Services)

Supplemental Water Service to Groundwater Water Users

Delivered Water Service

Metering

Billing

Additional Service to Metered Water Users in Delivered Water Zone

Cost of Service

Cost Attributed to Providing Supplemental Water to Metered Water Users

Cost Attributed to Providing Supplemental Water to Water Users

Cost Attributed to Providing Delivered Water

Cost of Additional Services to Metered Water Users in Delivered Water Zone (5)

Customer Rates

Metered Water Users Outside DWZ

Metered Water Users Inside DWZ

Unmetered Water Users

Delivered Water Water Users

Notes:

(1) Revenue requirements for a test year are developed by adjusting the Agency budget for cost incurred in a typical year.

(2) Agency cost that attributed for general purposes and are not related to the service of providing supplemental water. These costs are to be recovered from the General Fund and are paid for through Management Fees.

(3) Supplemental water costs are recovered from the Special Revenue, Capital, and Debt Service Fund. Supplemental water costs are all costs attributed to providing supplemental water to the Pajaro Basin.

(4) Cost to be recovered from the Special Revenue, Capital, and Debt Service funds are further categorized by service function prior to allocation to user classes receiving the service.

(5) Cost attributed to service to metered water users in DWZ is recovered from metered water users within the Delivered Water Zone with the ability to connect to the Delivered Water System.

A flat fee rate with a premium for metered users in the DWZ was recommended

Outside DWZ

- Metered Rate
- Unmetered Rate

Inside DWZ

- Metered Rate + Premium
- Unmetered Rate
- Delivered Water Rate

Results of Cost of Service Study

<u>Unit Cost Per User Class</u>	<u>Existing Unit Cost Per User Class (\$/acre-foot)</u>	<u>Cost of Service Rate (\$/acre-foot)</u>
Augmentation Charge, Metered Users - Outside DWZ	\$80	\$162
Augmentation Charge, Metered Users - Inside DWZ	80	195
Augmentation Charge, Unmetered (Rural Residential)	80	157
Delivered Water Charge	262	273

Note:

Calculated cost of service rates are similar to those previously enacted by the Agency in 2004.

Example bill impacts

- ◆ For agricultural water use between 2-3 acre-feet per acre irrigated

	2 acre-feet	3 acre-feet
Augmentation Charge per Irrigated Acre (Outside DWZ)	\$325	\$487
Augmentation Charge per Irrigated Acre (In DWZ)	\$391	\$586
Delivered Water Charge per Irrigated Acre	\$547	\$820

- ◆ Unmetered well owners billed 0.59 acre-feet per residence

	Annual Cost per Residence	
Augmentation Charge (Unmetered)	\$92	

Next Steps

- ◆ Receive comments and questions
- ◆ Request Board authorization to proceed with Prop. 218 notice and hearing process at February 17th meeting
- ◆ Continue information and outreach effort

For further information

<http://www.pvwma.dst.ca.us/>

36 Brennan Street | Watsonville, CA 95076

Ph: (831) 722-9292

e-mail: info@pvwma.dst.ca.us

End of Presentation

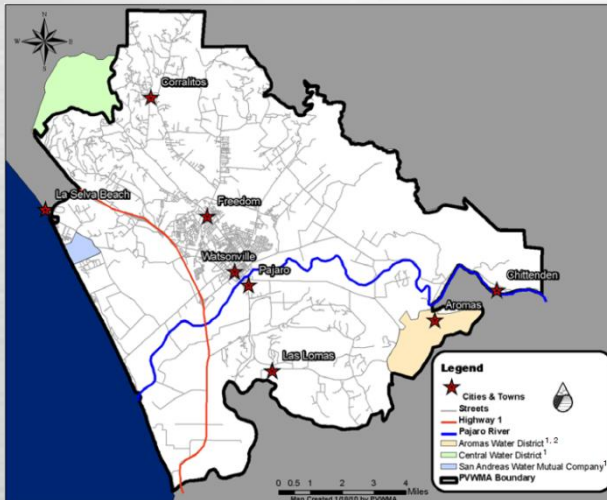
Conservation will impact water use and revenue potential

User Group	Cost of Service Rate Without Conservation (\$/acre-foot)	Rate Adjustment with 5 Percent Conservation (\$/acre-foot)	Rate Adjustment with 10 Percent Conservation (\$/acre-foot)
Augmentation Charge, Metered Users - Outside DWZ	\$162	\$170	\$178
Augmentation Charge, Metered Users - Inside DWZ	195	204	213
Augmentation Charge, Unmetered (Rural Residential)	157	164	172
Delivered Water Charge	273	279	286

Historical analysis of customer consumption and account data

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	5 Year Average	Test Year Projection
Consumption							
Metered Water Users	50,549	48,450	54,491	58,415	54,943	53,370	47,370
Unmetered Water Users	1,492	1,466	1,494	1,495	1,486	1,487	1,487
Delivered Water Zone							
Metered Water Users	8,893	8,823	8,767	9,194	8,020	8,739	8,739
Delivered Water Users	245	664	1,156	1,624	1,694	1,076	6,000
Total Consumption	61,179	59,402	65,908	70,729	66,143	64,672	63,596
Number of Accounts							
Metered Water Users	885	903	892	864	895	888	888
Unmetered Water Users (1)	2,378	2,326	2,364	2,364	2,354	2,357	1,685
Delivered Water Zone							
Metered Water Users	94	94	92	89	92	92	92
Delivered Water Users	14	19	20	22	35	22	36
Total Accounts	3,371	3,342	3,368	3,339	3,376	3,359	2,701
(1) Test year unmetered water users represent number of unmetered well owners.							

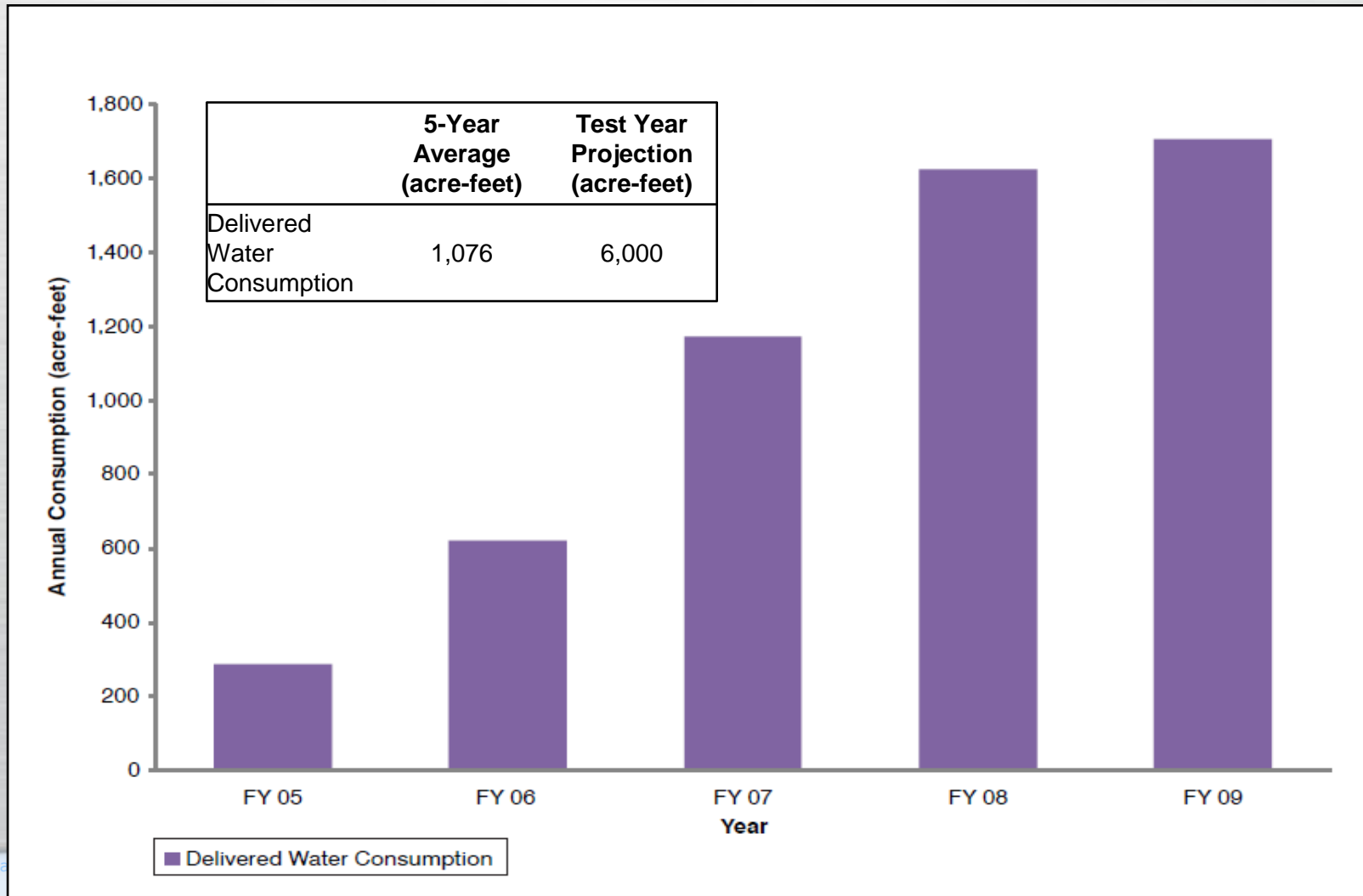
Unmetered water use – 5 year average of residential parcels and estimated consumption



- ◆ Neighboring communities metered rural residential consumption 0.59 acre feet per residence
- ◆ 5 year average of rural residences billed – 2,357 parcels

$$0.59 \frac{\text{acre - feet}}{\text{per residence}} \times 2,357 \text{ residential parcels} = 1,384 \frac{\text{acre - feet}}{\text{year}}$$

Delivered water use projected to increase with full operation of recycled water facility



Groundwater consumption comprises 89% of Basin use

	Annual Use (afy)	Consumption in DWZ (afy)
Unmetered (Rural Residential)	1,384	---
Metered *	44,630	3,816
Delivered Water	<input type="text"/>	6,000

	<u>Percent of Consumption</u>	<u>w/ Delivered Water Zone</u>
Unmetered (Rural Residential)	2%	---
Metered	87%	39%
Delivered Water	11%	61%

Revenues generated from current rates do not recover cost of service

	Cost of Service	Revenue Generated under Current Rate	Difference Between Revenue and Cost
Metered Water Users	\$ 7,867,181	\$ 3,875,689	\$ (3,991,492)
Unmetered Water Users	217,406	110,750	(106,656)
Delivered Water Users	1,640,624	1,572,000	(68,624)
Additional Service to Metered Usres in DWZ	125,731	-	(125,731)
Total	\$ 9,850,942	\$ 5,558,438	\$ (4,292,504)

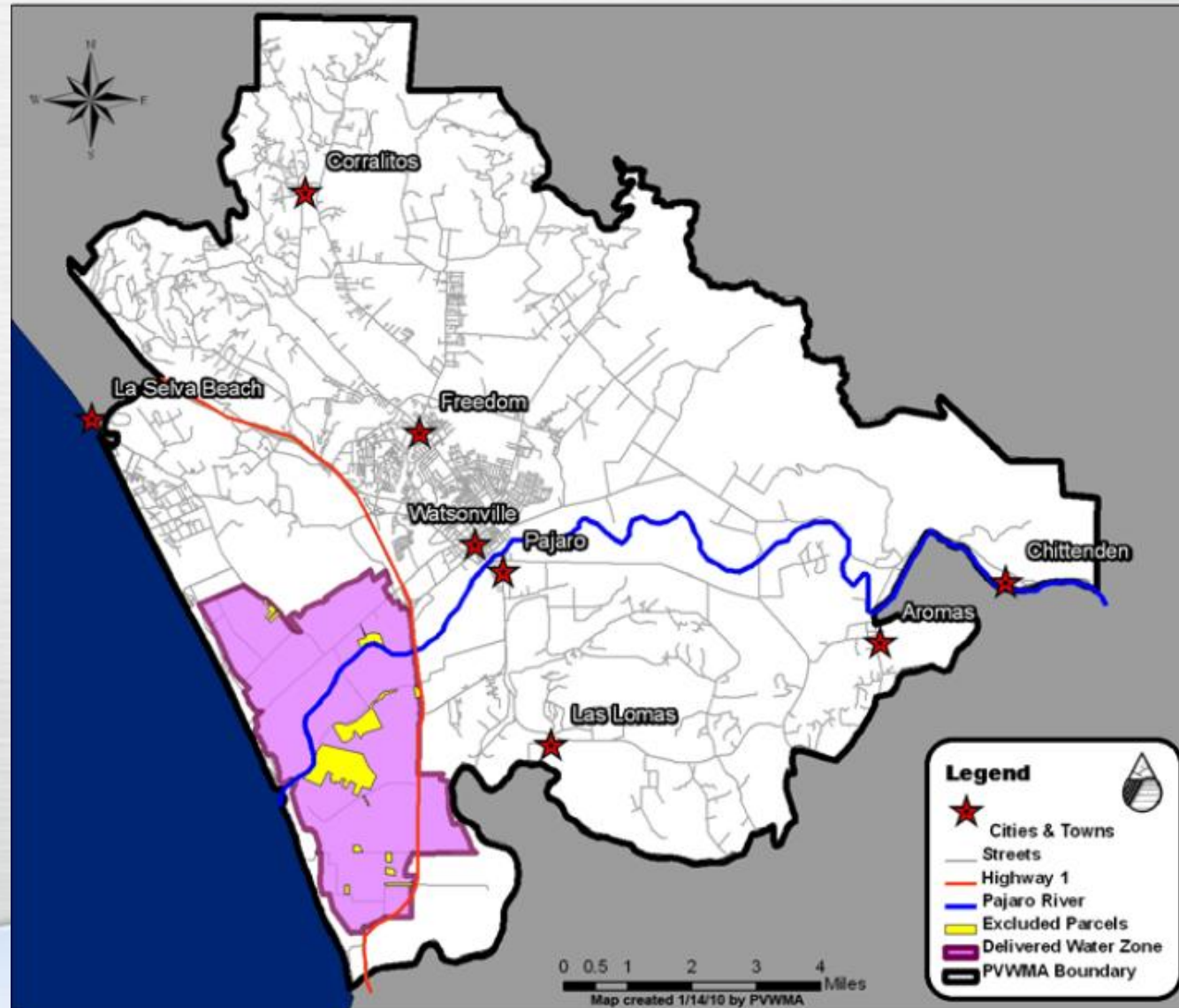
Ad Hoc Funding Committee evaluated solutions to funding needs

- ◆ Committee met over the past year to identify possible solutions to equitably recover costs
- ◆ Developed several cost recovery alternatives with input from local growers, the Farm Bureau, and other stakeholders

Committee recommended a consumption based charge

- ◆ Consumption-based flat fee + zones
 - Encourages conservation
 - Easy to implement
 - Recognizes additional service to water users in Delivered Water Zone (DWZ)

Zones of service include DWZ and Outside DWZ



Five functional categories were aligned with projects/activities

