

## **8 Proposed Rate Plan for Recommended Alternative**

The Recommended Alternative requires an annual source of revenues of approximately \$13.9 million to support debt payments and annual operations and maintenance costs, including CVP water purchases and energy costs. PVWMA conducted a series of public workshops to evaluate alternative rate approaches and to identify water users' issues of concern. This approach allowed the PVWMA Board of Directors to formulate a recommended rate plan that addressed these concerns.

### **8.1 Existing Rates and Restrictions**

PVWMA has in place two sources of revenue. The first is a Management Fee that is levied on a parcel basis. The Management Fee results in annual revenues to PVWMA of approximately \$400,000. The Management Fee is presently utilized for overall agency management and funding

The second source of revenue presently utilized by PVWMA is an Augmentation Charge. The Augmentation Charge is based on water use, and is administered primarily through well metering. The Augmentation Charge is limited by the agency's enabling legislation to 15 percent of the highest rate charged by the City of Watsonville. Based on the City of Watsonville water rate for customers outside the City limits, the maximum Augmentation Charge allowed by the enabling legislation is presently \$162/AF.

The Augmentation Charge is further currently, limited to \$50/AF by the passage of Measure D in 1998. A popular vote is scheduled for March 2002 to reinstate the legislative authority of PVWMA and remove this limitation. If the election in March is successful, PVWMA would be allowed to raise the Augmentation Charge to the limit allowed by the enabling legislation, presently \$162/AF. The limit could increase in future years if the City of Watsonville raises rates.

### **8.2 Alternative Rate Structures**

Several types of rate structures were considered by PVWMA, including:

- Flat Water Rate Structure;
- Tiered Water Rate Structure;
- Land Assessment Structure; and
- Water Rate and Land Assessment Combination Structure.

#### *Flat Water Rate Structure:*

A Flat Water Rate Structure would set all water sales at the same price per acre-foot of use. This rate structure is the simplest of all rate structures to understand and administer. A single water rate would apply to all users whether they used one acre-foot per acre or five acre-feet per acre. In this way a flat water rate avoids the administrative task of tracking the number of acres a user is irrigating with a given well/meter.

If the PVWMA used a Flat Water Rate Structure, nearly all of its income would come from water sales. In years when water sales are less than the assumed long-term average of 64,000 AF, PVWMA revenue would be insufficient to cover the annual costs. To bridge this revenue shortfall, the PVWMA would

need to set up a reserve fund. Bond sellers would probably require such a reserve fund with any of the alternative strategies presented herein. They could require that rates be increased by as much as 20 percent for the first five years to build up a reserve fund equal to one year's annualized costs.

*Tiered Water Rate Structure:*

A Tiered Water Rate Structure would charge progressively higher water rates as the demand of a user increases. For example, the first acre-foot per acre of demand would be at one price, the second acre-foot per acre would be at a higher price and the third acre-foot per acre of demand at a still higher price. If the rate tiers were set up to be 'cascading', the user of three acre-feet per acre would have one third of its water use billed at the lowest rate, one third of its use billed at the middle rate, and one third billed at the highest rate. The water bill for this user would be an average of the three rates.

A tiered structure can also be 'non-cascading'. In this case a user of three acre-feet per acre would see its entire water bill calculated at the highest tier rate.

For the PVWMA service area, tiered water rates would be developed on the basis of intensity of use (the amount of water used per acre of land irrigated). This basis is needed to account for the wide range in agricultural property sizes per water meter in the Pajaro Valley. Without this mechanism within a tiered structure, large property owners would be billed at the highest tier even if they grew crops with low water demands.

Use of tiered water rates alone would result in water sales being the sole source of income for the PVWMA. As with a flat rate, a reserve fund would likely be necessary to meet the requirements of bond sellers.

Tiered water rates are difficult to understand and administer because the rate tiers would be based on the amount of water used per acre of land irrigated. This would require the PVWMA to track acreage under irrigation meter-by-meter.

*Land Assessment Rate Structure:*

A Land Assessment Rate Structure could be used to raise all or part of the PVWMA annual costs. As the name implies, this source of PVWMA revenue would be an assessment on property. The assessment would be collected on the tax rolls, along with landowner's annual tax assessment payments. Because a land assessment is collected with the annual tax payment, the PVWMA has a greater assurance of receiving payment. Therefore, land assessments often ease the requirements of potential bond sellers. Depending upon how much of the costs are recovered by land assessments, the need to set up a reserve fund could be waived, or greatly reduced.

Proposition 218 requires that land assessments be based on the benefit that a given parcel derives from the project to be funded. To conform to this requirement, a property-by-property assessment must be made and the property owner notified. The assessed property owners must vote upon the assessment. Their votes are weighted based upon the assessment. That is, a property that is assessed \$1000 would have twice the votes of a property that is assessed \$500. A majority protest of the weighted votes would disapprove the assessment for all properties assessed.

Because land assessments have to be in direct proportion to the benefits derived by a given property, some rationale for assigning benefit must be established.

Water Rate and Land Assessment Combinations:

Water rates can be used in combination with land assessments to recover PVWMA costs. This approach would allow a portion of PVWMA costs to be recovered through a land assessment and the remainder through water use fees. Such an approach could be used to implement a policy that property receives a benefit due to implementation of a given project that is equal to a portion of a given project's costs, and that the remainder of the project benefits accrue to water users in proportion to the cost of service, and should be paid through water use fees.

As with the previous rate discussions, a wide range of combinations could be implemented.

### **8.3 Alternative Rate Evaluations**

PVWMA evaluated alternative rate structures through a multi-phased public process. The first phase of the process included outreach to a number of affected and interested public groups and workshops with the Board of Directors. This initial phase served to identify the range of potential alternatives and constraints associated with each alternative. PVWMA solicited and received input from a number of community interest groups representing a range of agricultural and urban interests. Flat and tiered rates and land-based assessments were discussed, along with combinations of rates and assessments. This phase of the evaluation identified the wide range of perspectives of preferred rate structures, particularly the differences of opinion regarding tiered versus flat rates and the desire for some level of land-based assessments.

The second phase of the process focused on agricultural water rates since agricultural water users will be paying for their proportionate share, or approximately 80 to 85 percent of the project costs. This phase of the water rate evaluation process was used to solicit input from the agricultural community on specific alternative rate structures. An Ad Hoc Agricultural Rate Committee was established by the Board of Directors to facilitate input and discussion of alternative rate structures. The Ad Hoc Committee met three times to discuss alternative rate structures. The majority opinion of the Ad Hoc Committee was a recommendation that the PVWMA adopt a differentiated rate structure that charged a higher rate to the recipients of delivered project water. The recommendation was that the recipients of delivered water would pay approximately 15 to 25 percent more for water than a grower that pumps ground water.

In addition, a minority opinion of the Ad Hoc Committee identified the potential for a low tier (perhaps free) water rate that would be applied to individuals that pumped less than the proportionate sustainable yield of the basin. This proportionate level of sustainable yield was estimated to be the sustainable yield of the basin (24,000 AFY) divided by the total acreage within the PVWMA (79,600 acres), or approximately 0.3 AFY/acre.

The final phase of the rate evaluation process was undertaken by the Board of Directors through a series of public workshops that focused on specific alternative rate structures. Beginning in December 2001 and concluding in January 2002, the Board of Directors conducted three water rate workshops.

The Board workshops included discussion and evaluation of land-based assessments, flat rates, and differentiated flat rates. The Board considered the impacts of the alternative rate structures on both agricultural and municipal water users. The Board selected a differentiated flat rate structure as the basis for recovering costs associated with the Recommended Alternative.

## 8.4 Recommended Rate Plan

The Recommended Rate Plan is a differentiated flat rate that will result in one rate (Augmentation Charge) for individuals who pump groundwater, and a second, higher flat rate for individuals who receive delivered project water.

California law requires that these charges be based on the cost of service being provided. For the Recommended Alternative, the recommended basis for establishing the cost of service for delivered project water and for augmented groundwater is:

1. Recipients of delivered project water will pay the incremental cost of providing delivered project water to their properties as established by the incremental cost of constructing, operating and maintaining the Distribution System,
2. All water users, including recipients of delivered project water, pay a proportionate share of all remaining costs associated with the Recommended Alternative.

Based on the estimated costs of the Recommended Alternative, as presented in Section 6, the proposed rate structure would be:

Augmentation Charge	\$158/AF
Delivered Water Charge	\$316/AF

The Augmentation Charge would be increased on an incremental basis, assuming a successful election in March 2002. On this basis, the Augmentation Charge would be increased gradually from its current level of \$50/AF to \$158/AF<sup>1</sup>.

Upon completion of the project and delivery of project water, the Delivered Water Charge would be applied to those water users receiving delivered water. That is, those water users who stop pumping and receive delivered water would move to the higher rate when they receive delivered water.

It should be noted that those water users who continue to pump groundwater will incur costs of approximately \$92/AF to cover the cost of owning and operating their own wells and pumps. This cost, which is directly borne by the water user, must be considered when calculating the total cost of water for these users. Thus, their total cost of water would be approximately \$250/AF (\$92 + \$158 Augmentation Charge). It is this cost that is directly comparable to the Delivered Water Charge of \$316/AF that will be levied on users of delivered water.

Finally, as discussed in Section 6, the Recommended Alternative would meet peak demand of the CDS if the irrigation day were extended from 18 hours to 20 hours. If this is unacceptable to growers, additional in-basin banking projects could be constructed to meet peak demand conditions relative to today's level of water use. Future projects will have to be funded by all PVWMA water users.

Increases in water supply to meet future water demand above today's level of use must be addressed through future water supply projects, which should be paid for by future water users. In addition, future water users will be asked to 'buy into' the infrastructure that was constructed to meet today's demands. Therefore, PVWMA should adopt a rate structure that includes payment of an Impact Fee, which would be paid by property owners if they convert or develop lands resulting in increased water demand. The exact nature and amount of the Impact Fee needs to be determined.

---

<sup>1</sup> These rates are expressed in current dollars and would increase in the future with the overall rate of inflation.