

Valley Center Water District
Water Demand Offset Concept
Policy White Paper
Updated February, 2009

The Water Demand Offset concept for supplying new development in a long-term water supply shortage environment has been implemented in some communities, such as the East Bay Municipal Utility District (Alameda/Contra Costa Counties) and Soquel Creek Water District (near Santa Cruz) and other (see attached materials) and is now being discussed in the San Diego region.

Developing Real Water, Not Just Paying Fees

A key tenant of this concept is that new development invests in projects and programs which actually result in new local supply development and this is not just another way for water agencies to collect development fees. As such, a prerequisite for this type of program is for the local agency and or regional wholesale agency to identify, or inventory the potential for new supply development through conservation and wastewater reclamation which could take place and then identify the costs associated with these programs. From this point, a per acre foot cost/edu can be derived.

Implicit in this approach is the assumption that there will be a finite limit to the feasible and cost effective opportunities to develop offset supplies, and that some offset supplies will be more expensive than others to develop. On the assumption that the more cost effective opportunities will be developed first, then it could be anticipated that the local and regional offset fees would become more expensive overtime.

Standards for Evaluating Net Water Demand and Water Demand Offsets

Also requisite will be a requirement to have large scale projects develop a specific net water demand analysis. However, well-based and widely recognized regional standards and methods for evaluating the accuracy of the net water demand analysis and volumes of water demand offsets will need to be developed. Such standards could be developed cooperatively by the regional wholesale agencies, such as MWD and/or the SDCWA and the local retail water agencies.

With accurate net demand analysis, water demand offset volume calculations, an inventory of opportunities, and development cost factors, then the actual water demand offset fees could be determined.

Local or Regional Program

One core issue with this concept is whether the water demand offset programs should be administered regionally or locally. There are advantages to both approaches and it likely that there will be both local programs in some jurisdictions as well as a complimentary regional program.

At the local level, a retail water agency could identify local supply projects to be developed on a priority basis and link those to proposed developments in the service area. The locally developed supply would go to the reliability benefit of the local agency. In addition to investment in water conservation among the current customer base, staff has identified several opportunities for development of local supplies, including:

- ▶ Expanded Golf Course and other landscape reclaimed water irrigation from the Woods Valley Ranch Wastewater Reclamation Facility (40 to 80 AF per year);
- ▶ Implementation of the Welk's Golf Course and Resort Skimming Plant Reclamation Project (90 to 110 AF per year);
- ▶ Initiation of Direct Reclamation at the Lower Moosa Canyon WRF9350 to 550 AF per year); and
- ▶ Increased Conservation at existing residential, commercial accounts, and dedicated landscape irrigation account through the installation of weather based irrigation controllers, artificial turf, low water use landscape, low water use dishwashers/clothes washers and other approved conservation devices (Potential Yield Unknown).

(Because of MWD's Drought Allocation Methodology, seawater desal and groundwater development have been eliminated as potential offset supply sources – see attached MWD memoranda)

Developments investing in the local programs would receive certifications from the retail agency and be fully or partially exempted from the regional program. If the required local development opportunities are consumed, then development could participate in the regional water demand offset fee program to the necessary levels.

Status of Water Demand Offset Program Development

For our agency, as stated above, staff has identified several projects which could develop new supply for the District. Over the next several months, staff will be refining the true feasibility and the offset potential of these projects.

With respect to a regional program, the San Diego County Water Authority has a member agency workgroup underway developing the initial framework of a regional program that would work in concert with and supplement local efforts.

It is anticipated that both our local programs and the regional program will be well defined and established at some point in 2009.

Policy Issues

The Water Demand Offset concept is largely uncharted territory for our agency and region at this point, and raises a number of policy issues:

1. Since we are facing a long-term shortage of supply even with existing demand, should a portion of the cost of developing the new supplies be born by the existing users?

Current thought is that if new development wants to move forward in a time of supply shortage and developing the offset supply is necessary for that to occur, then the cost of these supplies should be born by those needing to offset new demand.

2. What about the issue of timing between when the development pays the offset fee, when the development actually creates a new demand, and when the supply supported by the fee is actually available. Should new demand be allowed to come on line prior to the new supply being available, or should the local supply be developed in advance of the new development coming on line?

The current thought is that these supplies should be on line at the time the new development demand comes on line.

3. How would local supply development opportunities be prioritized and allocated between development on land currently within the District boundaries, and on land outside, but currently seeking annexation?

The current thought is that demand within the current service area should be given the opportunity to access the new supply opportunities prior to lands currently outside the District boundary.

4. Should local supply development opportunities within the district boundaries or sphere be exhausted first before development interests are allowed to participate in a regional program if it is developed?

Current thought is that local supply development opportunities should be exhausted, irrespective of relative cost, prior to allowing the use of regional opportunities.

5. Should local reclamation projects be credited with a higher offset value, say 1 to 1 offset compared to offsets gained through implemented conservation measures being required at 2 to 1, as supply developed through conservation measures is more difficult to quantify and may not be sustained over long periods of time?

Current thought is that wastewater reclamation projects have a reliable and verifiable yield than to supply developed through conservation offsets, and as such should be credited 1 for 1 once the nominal yields is determined. On the other hand, supplies developed through conservation offsets and less reliable because they are under private control and may not be sustained for the long-term and as such should be developed at a 2 to 1 rate.

6. Should specific developments and the offset cost be linked to specific projects or to the District's enhanced water supply in general?

Current thought is that project yield should be viewed as a general district supply, and yields not be allocated from a specific supply project to a specific new demand. The exception would be if a development is able to develop a project specific supply which results in not imposing a net demand on the district then all the new supply developed would be applied to that specific development.

7. Assuming that the most cost effective projects are developed first, and later projects are less cost effective and more costly on an acre foot-basis, should new development pay a variable cost based upon when they buy in, or should there be a cost averaging, however allowing for inflation, for equity?.

Current thought is that one melded rate be utilized for reclamation projects and conservation projects, rather specific rates fro specific projects and measures.

Future Actions

Staff will continue to develop and refine the proposals for local offset opportunities and will participate in the efforts to develop a regional program.

As part of that effort, staff will need to make more precise cost and supply yield estimates from the potential reclamation projects. Also, staff will have to develop a method to determine the acceptance and or demand from existing customers to have conservation measures and devices installed by the District at the expense of those wanting to use the developed supplies to offset new demand.