



*Submitted by Staff at
2/19/2014 Committee
meeting - Item 2*

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Dear MPWMD

This letter is to request funding to complete a landscape water conservation project at twelve MPUSD school sites: Colton, Ord Terrace, District Office, Del Rey Woods, Monterey High, Del Monte, Foothill, Seaside Children's Center, Cabrillo, Bay View, Monta Vista and La Mesa. Six sites have Hydro-point controllers installed through a grant funded by MPWMD. Seven of the sites will have Hydro-point controllers if the other MPWMD proposal MPUSD has submitted is funded. Hydro-point are one of the highest standards in ET controllers. The funding will install flow sensors and master valves at all twelve school sites.

Hydro-point controllers have the capability to learn flow rate of each station and detect and manage issues such as line breaks and broken heads. In the past MPUSD has had issues with irrigation breaks that have increased water consumption and cost the district much money. By installing new master valves and flow sensors, the detection time will be minutes compared to months. The controller will detect the issue, shut the system down and then send an alert. Currently irrigation issues are reported by Cal Am after major excessive use is noticed or by the Energy Specialist while analyzing billing data. One leak using the present method cost the district over \$45,000.

Flow sensors will also allow for analysis of daily flow data. The controller will send usage information to the Hydro-point website, so that school district administration can analyze the data and plan for additional water conservation.

Flow sensors will also allow the controller to use the budget feature. Once the flow is learned a water budget can be programmed. The controller will automatically set the amount of water each station will receive and manage the budget and the usage over a period of time. This feature would allow the district to set a water budget for each area and when the budget was done the system would not water anymore.

MPUSD's is a large water user and has high water costs. By funding this energy conservation project we will cut down on water waste, provide the highest quality tools for water conservation and put more money towards education. MPUSD has adopted new energy conservation policies and is committed to improving water conservation. In March 2013 they hired me as the Energy Specialist. My job is to monitor and conserve energy: water, gas and electric. The savings from utilities will enter the general fund and be used by classrooms, teachers and students.

The amount MPUSD is requesting is \$74,477. The funds will be used to purchase master valves, flow sensors, and installation needed to complete the project. There are 23 Hydro-points installed at the twelve sites. Each controller will have a flow sensor and master valve. The cost of materials is \$32,502. The installation cost is \$41,975. There are two methods of installing flow sensors. The first method is to install the sensor and master valve near the point of contact then run the wire to the controller. The second method is running the wire to the nearest valve and use the existing wiring to the controller. The cost of installation depends on the distance to the controller and the substrate. The installation cost is an estimated cost based on average installation cost. Please see the attached Hydro-point quote.

This landscape water conservation project will set the highest standard for irrigation. By funding this project the district will have the capability to avoid wasted water and money caused by irrigation breaks. It will also allow for different methods of water budgeting and data analysis. MPUSD is in a challenging place, we are committed to conserving water and we are also committed to keep our school and community fields green. The solution is to provide the highest standard of water conservation tools to meet both commitments. Thank you for your time and consideration.

Yours sincerely,

David Chandler

MPUSD Energy Specialist