

# Olivehurst Public Utility District



## Agenda Item Staff Report

**Meeting Date: October 15, 2020**

### **Item description/summary:**

**Update of parks irrigation controller connectivity.** This item has been discussed in committee meetings. Because of some of the new irrigation controller hardware all newly constructed parks must be built with the new DX3 type system. There are several ways to connect this system with our current computer and software and after careful research and consideration we have determined that cellular connectivity is the best alternative. The new system will also work with all of our existing park controllers so this update only applies to new parks that get the DX3 system installed. We have one park that has already received the DX3 and Rain Master agreed to update this system at no cost for the new hardware. We will make an addendum to our park specifications to include the new requirements in the park irrigations systems from here forward.

### **Fiscal Analysis:**

For new parks the up-front cost is \$8,550 and the cellular cost is \$120 per year per park after installation. Rain Master quote attached

### **Employee Feedback**

None

### **Sample Motion:**

Move to approve the update of OPUD park specifications to include cellular connectivity for the new DX3 irrigation controllers.

Prepared by:

John Tillotson, P.E., General Manager

Luis Menchaca  
Parks Maintenance Coordinator  
Olivehurst Public Utility District  
1970 9<sup>th</sup> Ave  
Olivehurst, CA 95961

September 24, 2020

Re: Rain Master Laguna/DX3 Estimated Cost of ownership

Dear Luis,

Please consider the following controller *list prices*, projected communication cost and overall cost of operation for the various communication paths available on Rain Master DX3 controllers. For reference, I'm using a 24 station controller in a stainless-steel, top-entry pedestal. I'm also using a 20 year depreciation life-span of the controller for communication cost estimates. The Rain Master part number is listed for reference.

**Ethernet** – DX3-SPED24

• List Price	\$ 6,600
• Included Communication	N/A
• <u>Communication Cost for 20 Years of Service</u>	<u>N/A*</u>
<b>Total Cost of Operation over 20 Years of Service</b>	<b>\$ 6,600</b>

Note: Hardwired Ethernet communication must be provided to the controller cabinet.

\* Does not include third-party cost for internet service

**Cellular** – DX3-SPED24M8C

• List Price	\$ 8,550
• Included Communication	10 years of LTE Cellular Data Service
• <u>Communication Cost for 20 Years of Service</u>	<u>\$ 1,200**</u>
<b>Total Cost of Operation over 20 Years of Service</b>	<b>\$ 9,750</b>

\*\* Future cost of LTE cellular service is not to exceed \$120 per year, but could change based on market conditions and advancement in technology. Communication packages to “lock in” cellular communication cost at \$120.00 per year are available.

**UHF Radio** – DX3-SPED24M8U / EV-ANT-F

• List Price Controller	\$ 8,800
• List Price High-gain Antenna Assy.	\$ 975
• Included Communication	N/A
• <u>Communication Cost for 20 Years of Service</u>	<u>N/A</u>
<b>Total Cost of Operation over 20 Years of Service</b>	<b>\$ 9,775***</b>

\*\*\*A DX3 UHF Base Radio is required for UHF radio communication with new DX3 controllers. This is a one-unit, one-time purchase, though as the system expands additional UHF Radio Repeaters may be needed. List price \$3,000

Note: a high-gain antenna is recommended for controllers more than 2 miles from the base radio or repeater.

The full Rain Master 2020 Price List is available at [http://rainmaster.com/PDF/RainMaster\\_PriceList\\_2020.pdf](http://rainmaster.com/PDF/RainMaster_PriceList_2020.pdf).

The water conservation and operational efficiency potential of a controller using Laguna software is the same for all DX3 controllers regardless of communication path. However, new features like the ProMax Connect and future development will be deployed principally on “*Cloud Connected*”, *Ethernet communicating DX3 controllers*. This includes Cellular communication. Therefore, given the lower up-front cost and similarity in long-term cost of operation, Rain Master recommends Ethernet or Cellular communication on new systems whenever possible.

I’m looking forward to the conversation on the 29<sup>th</sup>. In the meantime, please give me a call with any questions.

Sincerely,

A handwritten signature in cursive script that reads "Michael Smith".

Michael Smith  
Specification Sales Manager  
Rain Master/The Toro Company