



November 2012

## Case Study - Large Municipal Pool - Scale, Bio and Filtration (Full 4 month bathing season evaluation)

### Customer

Yakama Nation - Youth Activities



### Installer

MBI Water Solutions - *HydroFLOW* Master Distributor in the US Pacific Northwest



**MBI Water Solutions**

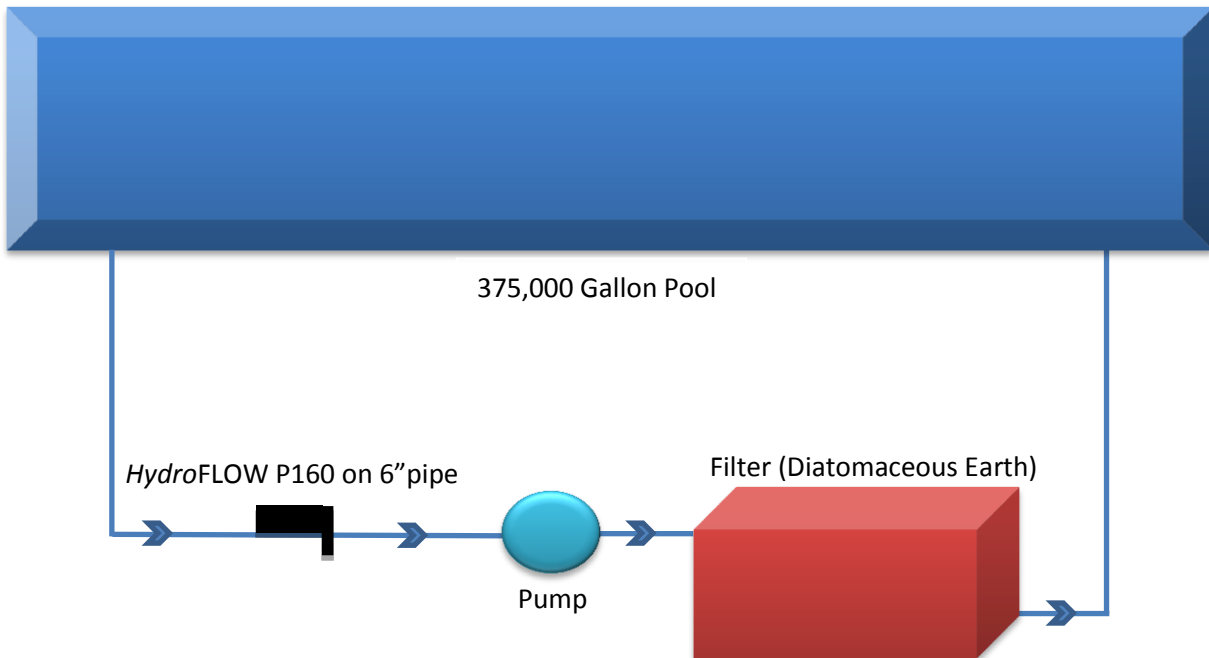
<b>Location:</b>	401 Fort Road, Toppenish, WA 98948
<b>Application:</b>	375,000 Gallon Municipal Pool
<b>Purpose of Installation:</b>	Maintain a balanced pool with minimal chemical usage
<b>Installed <i>HydroFLOW</i> Device:</b>	P160 on a 6" pipe
<b>Installation Date:</b>	August 23, 2011



**375,000 Gallon Pool**

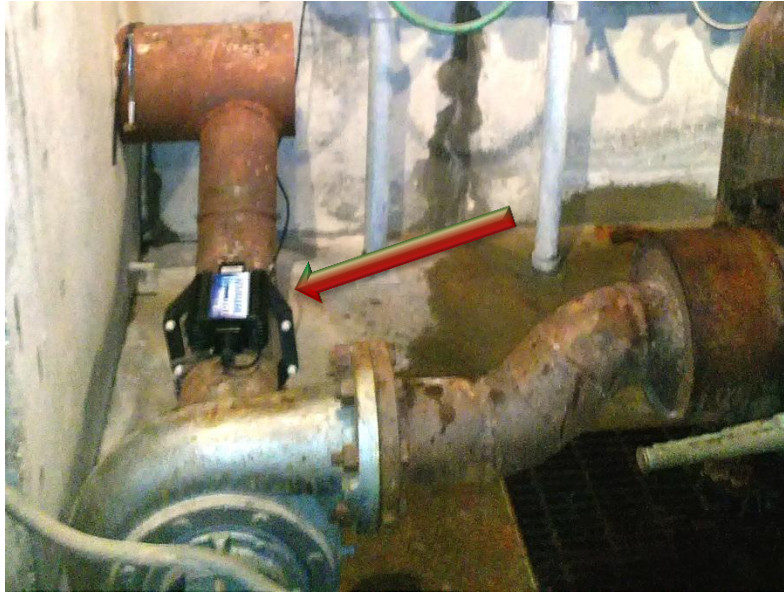


**Pool System Diagram**





Installed *HydroFLOW* P160

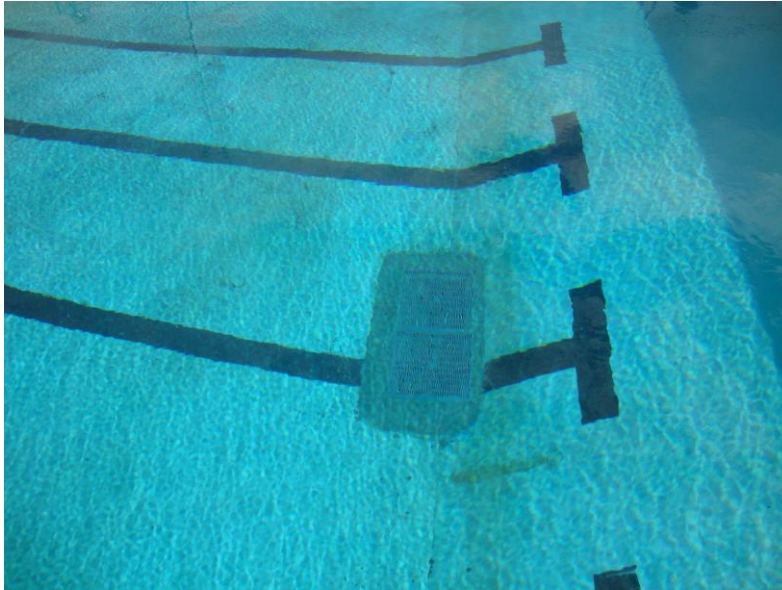


Diatomaceous Earth Filter

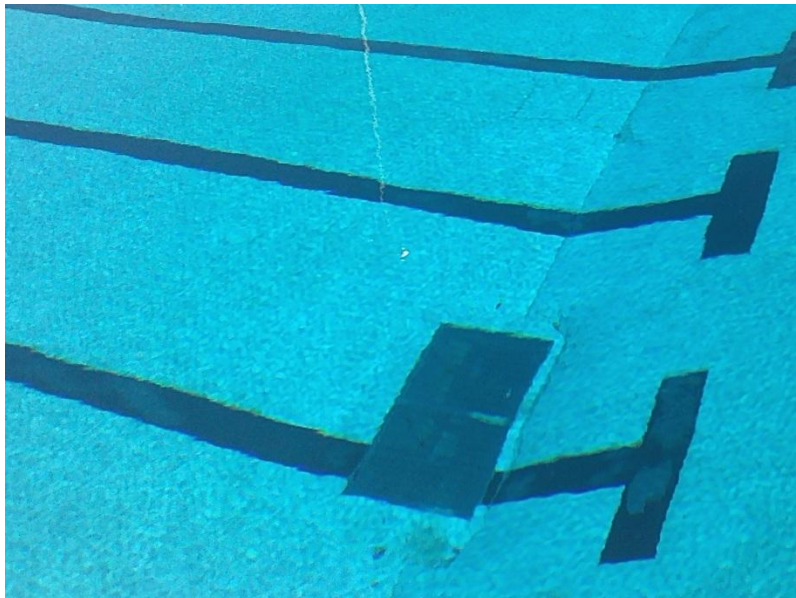




Pool before and after *HydroFLOW*



Before



After



**2011 Bathing Season:** The customer monitored most chemical usage during the 2011 season. The *HydroFLOW* P160 water conditioner was purchased at the end of the season, which didn't provide sufficient time to gather precise chemical reduction data.

**2012 Bathing Season:** In order to establish a clear baseline of chemical usage, the customer decided to run the pool without operating the *HydroFLOW* device for a full month. The baseline data was then compared to the 2011 season (without *HydroFLOW*) and the rest of the 2012 season (with *HydroFLOW*).

**Results:**

May-Aug 2011 (without <i>HydroFLOW</i> )	May 2012 (without <i>HydroFLOW</i> )	June-August 2012 (with <i>HydroFLOW</i> )
Dicalite (filter media): 50~60 bags per month	60 bags of per month	20 bags per month * Backwash reduced by 65%
Chlorine: 30 buckets per month	30 buckets per month	15 buckets per month
Shock: N/A	30 buckets per month	5 buckets per month
Sunscreen stabilizer: N/A	30 buckets per month	5 buckets per month
Muriatic acid: ½ drum per month	½ drum per month	¼ drum per month

**Return on Investment per 4 month bathing season (due to chemical reduction only): Under 2 months.**

Chemical	Without <i>HydroFLOW</i>	With <i>HydroFLOW</i>
Dicalite	\$6,090.00	\$2,030.00
Chlorine	\$26,880.00	\$13,440.00
Shock	\$7,790.00	\$1,300.00
Sunscreen stabilizer	\$12,120.00	\$2,020.00
Muriatic acid	\$1,046.00	\$523.00
	<b>\$53,926.00</b>	<b>\$19,313.00</b>

**Quote from Isha Wyman, Pool Manager:**

“At the end of May, when the *HydroFLOW* device was turned on, we noticed immediate changes; the monitor kept reading high levels of pH and Chlorine. We had to keep reducing our chemicals in order to get the pH to stabilize between 7.2 and 8.0 and the Chlorine to stay at 1.0 ppm. Our customers gave us compliments throughout the last 3 months of the bathing season. The state inspector claims our pool is the cleanest in the Yakima Valley!”

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*Note: If Isha is unavailable, ask to speak with Odena Howard, Program Coordinator.*