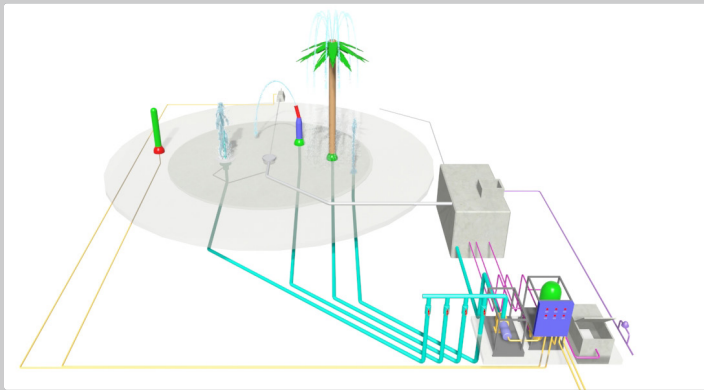


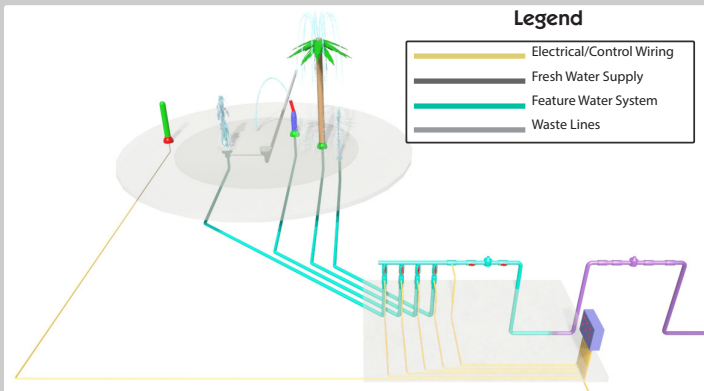
System Options & Water Use

Aquatix is a UL listed equipment system integrator for operating systems and control panels. Aquatix offers both prefabricated recirculation systems and city water systems for splash pads. These prefabricated systems are offered in either above grade skid systems or below grade vault systems. Systems can be designed for specific project needs with a variety of equipment types and configurations.



Recirculation Water System

- Enhanced water play without the wasting of water
- Complete water quality management and failsafe controls that are easy and safe to operate
- Recirculation systems are provided with the following, pre-plumbed, pre-wired components: UL Filtration Skid, UL Control Panel, Water Quality Management System, UV Disinfection System, Underground Water Reservoir, UL Feature Pump Skid, Distribution Manifold, Activation Bollard, Collector Boxes, Drain to Waste Valve Box, Optional Underground Vault Enclosure
- Optional Above Ground Skid Enclosure, Optional Water Heater



Drain Away Water System

- For use in a controlled environment with limited usage
- Water play activity selection should be elements with water conservation sprays to limit water consumption
- Cost effective approach when water is not a concern and water reclamation is designed in the form of a retention pond for re-absorption or irrigation
- Systems are housed in either above ground enclosure or below ground vaults
- Equipment systems consist of the following components: UL Control Panel, Water Distribution Manifold, Drain-to-Waste Outlets, Activation Bollard
- Optional Underground Vault Enclosure, Optional Above Ground Enclosure



System Options & Water Use

Recirculation Water System

vs.

City Water System

- After a 5-7 year period the initial cost difference between a city water system and recirculation system is eliminated

5-7 Years

- Over a 5-7 year time period the cost of water and water waste fees will exceed initial cost difference between recirculation type system VS. city water type system including operational cost differences during that time period. After this time period water systems will cost an average of \$10K to \$15 K more per year than the recirculation system

- Initial material and installation costs are approximately 60-80% higher than a City Water System

Cost

- Initial Cost is much lower. Re-purposing the water for irrigation helps reduce operating costs and water conservation

- Heavier flow water play attractions for an enhanced water play experience

Flows

- Water play elements typically have lower water flows as a means of water conservation. Lower water flow play events do not offer the same interactive play value as higher flow water events

- Comfortable water temperatures as the water warms as it is recirculated over splash pad surface

Water

- Water temperatures can be uncomfortably cold for sustained water play

- Heavier water flow effects have large nozzle orifices and do not clog

Nozzles

- Lower flow water effects tend to have issues clogging and mineral build-up due to the use of smaller nozzle offices

System Options & Water Use

Recirculation Water System

vs.

City Water System

- Less water usage. Average annual water use is 10-20 thousand gallons a year

Water Usage

- Water conservation is a growing concern in the world. Average city water splash pad systems use 10-15 million gallons of water per annual season. Re-purposing water for irrigation helps reduce both operating costs and water consumption. However, there are additional costs and complexities to consider with integration or re-purposing for irrigation systems
- Percolation/Re-absorption systems do not reduce costs of water usage, but do offer a solution to water conservation

- Require a certified pool operator to maintain systems. Average maintenance is 10-15 hours more per week than a domestic system

Maintenance

- Easy to Maintain

- If not maintained correctly per local health department guidelines, water quality could become health risk

Code

- Liability is reduced because water is domestically treated for human consumption

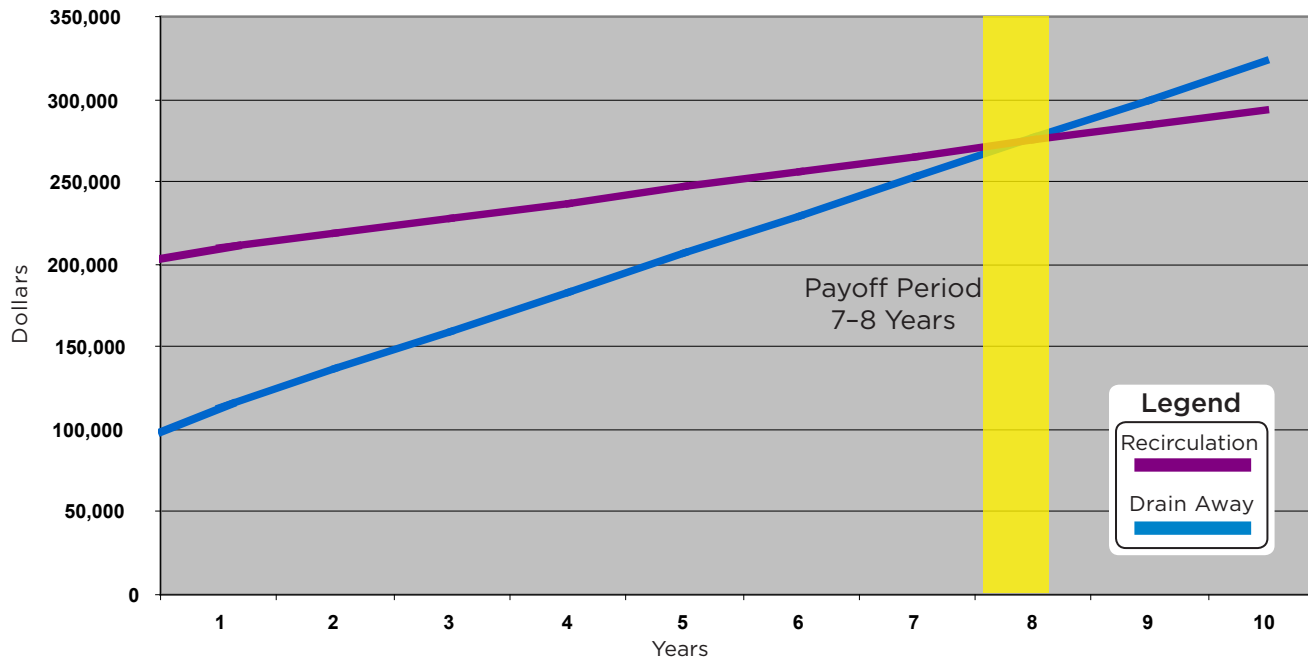
- Requires local health permitting and oversight

Health

- Typically does not require health department approval or oversight

System Options & Water Use

Cost & Operational Analysis



Data

All data shown is in US dollars

Recirculation Drain Away

Water \$.003 per Gallon	36	20,736
Energy	200	50
Labor \$35 per Hour	8,400 <small>15 Hours per Week</small>	2,800 <small>5 Hours per Week</small>
Chemical	500	0
Amortized Repair/Parts	100	50
Amortized Annual Services	120	80
Annual Cost	\$9,356	\$23,716

Water Usage

Drain Away

- Average Flow 120 GPM
- Gallons Used an Hour 7,200 Gallons
- Hour 8 Hours or 56,600 Gallons
- Average Daily Use 1,728,000 Gallons
- Monthly Use 6,912,000 Gallons
- Annual Use (Four Months)

Recirculation

- Average Flow 250 GPM (2X more water= more fun)
- Average Tank size 3,000 Gallons
- Avg. Daily Evaporation 10% Volume or 300 Gallons
- Monthly Use 9,000 Gallons
- Monthly Tank Replenish 3,000 Gallons
- Annual Use 12,000 Gallons (Four Months)



Low Flow



100 GPM

High Flow



200 GPM



Average initial investment for a City Water System is \$90,000.
Average initial investment for a Recirculation System is \$200,000.