

Baseline Solutions for Dealing with Water Restrictions

Irrigators often find that their water supply is limited due to restrictions enacted to conserve water during periods of drought or due to rising costs imposed by water providers.

When irrigators have a limited water supply, they typically have to make complex decisions about how best to use that water to preserve their landscaping. Fortunately, Baseline has anticipated many of the scenarios related to water restrictions, and we have designed our irrigation controllers to handle many of the complex issues.

Adjusting the Irrigation Schedule to Meet Restrictions

In typical implementations, water restrictions limit the days and the time of day when you can irrigate. The days and times can change as the water restrictions go through different stages.

Obviously, all irrigation controllers allow you to adjust program schedules in order to deal with these restrictions, but if you have many programs, these changes can be tedious. Baseline controllers make this scheduling much easier than other controllers on the market.

Water Windows

Programs in Baseline's irrigation controllers are based on configurable "water windows." Water windows are used to select when watering will or will not be allowed. You can configure water windows on a weekly basis (having the same water window settings for each day of the week) or on a daily basis, where you can set each day of the week for a specific water window schedule. If water restrictions in your area prohibit you from irrigating between 10 a.m. and 4 p.m., you would "close" the water window during these times and make sure that your program start time is for a time when the water window is open. For specific instructions, refer to setting up water windows for a program in your controller's User Manual.

Watering Days

In addition to limiting the time of day when irrigation can occur, water restrictions often stipulate what day you can irrigate. Baseline's irrigation controllers have multiple options for setting start days. You can select the option that corresponds with the schedule prescribed by the watering restrictions in your area.

As the watering restrictions change during the year, you can quickly adjust your programs by selecting a different start day from the options. For specific instructions, refer to setting a start day for a program in your controller's User Manual.

Avoiding Water Waste

An important tool in conserving water is ensuring that you're not wasting water because of broken heads, lateral lines, or mainlines. When combined with a flow meter, Baseline irrigation controllers offer advanced flow management and monitoring solutions that tell you how much water the system expects to use under normal conditions. You can program the controller to automatically react to flow-related incidents, thereby preventing the system from wasting water.

Baseline controllers also offer detailed flow reports that show what was used versus what was expected to be used.

For more information about the advanced flow management and monitoring functionality in the Baseline irrigation controllers, refer to the Flow Management & Monitoring section in your controller's User Manual.

Reducing Water Use to Meet Restrictions

If you are dealing with a limited water supply, you need to know how much water your irrigation system uses during a complete water cycle. When you know this amount, you can compare it with the amount that you are allocated under the water restrictions. That analysis will help you determine how much you need to reduce your water use and how you need to adjust your system.

To meet the restrictions, some irrigation controllers would require you to manually adjust your program run times to reduce water use across the system. That method requires time and some trial and error to accurately reduce the water use.

If you are forced to stay within a specific amount of water because of a water restriction, you can easily manage this with the Monthly Water Budget feature on Baseline's BaseStation 3200 irrigation controller.

On the BaseStation 3200 irrigation controller, you can specify a gallon limit for a month on a specific water source, and the system will monitor the total water used during that month. If you are required to reduce your monthly water use, you can change the number in the Monthly Budget field and the controller will monitor the usage for the new amount.

If the monthly water used exceeds this number, an alert is generated. If you enable the Shut Down option, then the associated master valves shut off and watering is stopped when the limit is reached. Watering will resume at the first of the next month.

For specific instructions, refer to Setting Up a Water Source in the [BaseStation 3200 User Manual](#).

Reducing Water Use by Prioritizing Programs

In some cases, water restrictions can be so severe that you are not able to water all of your landscaping. If this situation occurs, you might want to give preference to your high-value landscaping and to the areas of the property that are highly visible, while you allow other areas to get by with very limited water.

Program Priorities

In the BaseStation 3200 controller, you can set up a specific program to water your high-value landscaping or your highly visible areas and then assign high priority to that program. When a start event is reached, the program with the highest priority gets first call on the water and time.

A higher priority program “preempts” lower priority programs and runs to completion before the lower ones.

For specific instructions, refer to the topic on setting the priority for a program in the section on Setting Up Programs in the [BaseStation 3200 User Manual](#).

Prioritizing the Use of Multiple Water Sources

If your irrigation system gets water from multiple sources such as a rainwater cistern, a well, and a city potable water connection, you need to consider which water source you want to use first and in what priority.

Water Source Priorities

The BaseStation 3200 controller supports 8 water sources. If you have control points (with flow devices and master valves) associated with each water source, the controller can manage each one independently based on the priorities that you set up. The system will use the highest priority (1) water source first, and then switch to the next, and finally to low (10).

When you combine water source priorities with a water budget or another empty condition, Baseline’s irrigation controllers give you the most flexibility to effortlessly manage limited water resources on your site.

For information on rainwater cisterns, refer to [Rainwater Harvesting and Use](#)

For specific instructions, refer to [BaseStation 3200 -- Setting Up Water Source Priorities](#)