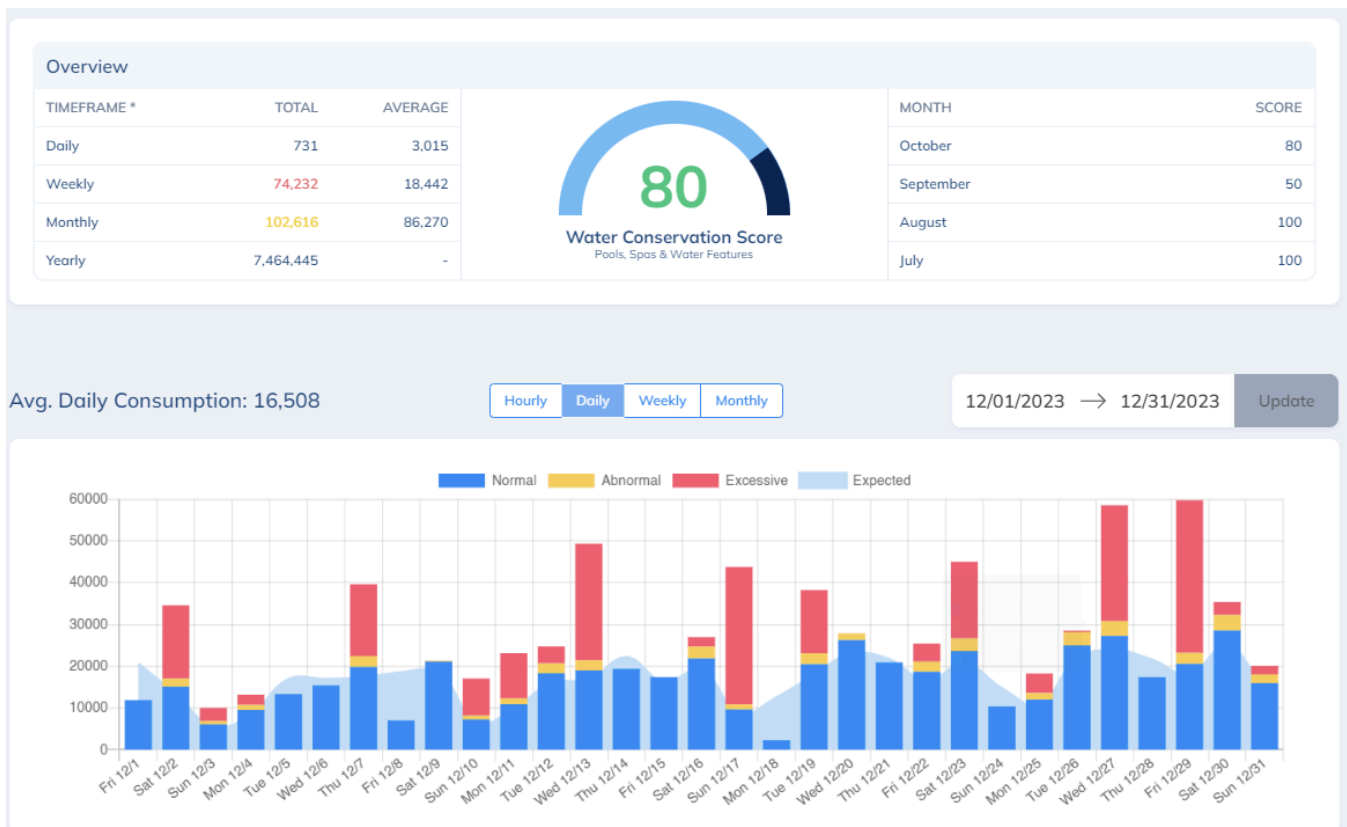


Water Consumption Manual

For properties with water meters connected to VivoPoint, the Water Consumption pages now track and monitor water usage in real time. Monitoring water usage is critical for several reasons, including optimizing water efficiency, identifying potential leaks or abnormal usage patterns, managing operational costs, complying with sustainability goals, and ensuring regulatory compliance.

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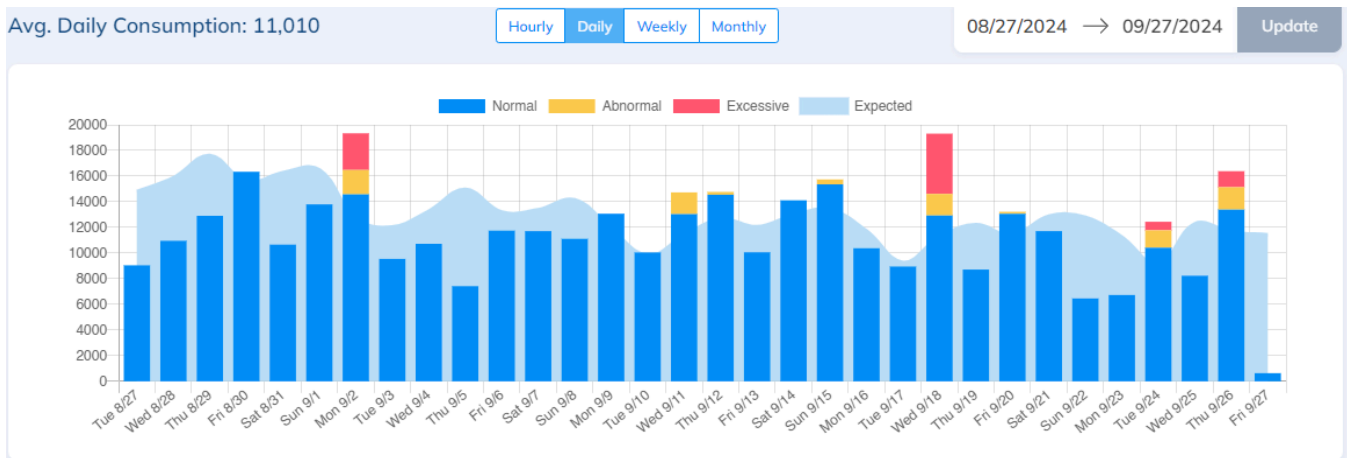
Definitions

- Normal, Abnormal, Excessive and Expected water usage.

Dark Blue	Normal		Based on historical data collected from property
Yellow	Abnormal	15% over average	Based off % over expected valve
Red	Excessive	30% over average	Based off % over expected valve
Light Blue	Expected	Baseline	Based on historical data collected from property

• Current and Expected water usage over time.

Time Frame	Baseline for expected consumption with no Historical Data	Baseline for expected consumption with Historical Data
Hourly	No baseline- real time information	No baseline- real time information
Daily	Prior 14 days	The same day of the week for 14 weeks
Weekly	Prior 4 weeks	The same day of the year for the past 4 years
Monthly	Prior 3 months	The same month of the year for the past 3 years
Yearly	Prior year	The prior 3 years



• Current and Average water usage.

- Each Body of Water (BoW) with an active water meter provides both current and average water meter readings.
 - The **current reading** reflects real-time water usage for the current day, week, month, and year.

- The **average reading** represents the water usage over time, calculated as the daily, weekly, monthly, or yearly average since the water meter was installed on that specific body of water.

Consumption								
SYSTEM	AVG. DAILY	AVG. WEEKLY	AVG. MONTHLY	AVG. YEARLY	DAILY	WEEKLY	MONTHLY	YEARLY
Activity Pool	4,499	31,276	130,033	1,554,889	0	7,294	49,253	918,583
Adult Spa	1,174	8,162	34,863	427,247	246	2,282	30,378	407,229
Crystal Lake	6,587	45,256	192,106	888,412	-	-	-	-
Family Spa	1,166	8,126	35,182	444,694	189	810	20,801	539,378
Indoor Spa	2,784	19,685	83,493	572,222	83	2,683	14,997	2,361,672
Infinity Pool	4,131	28,549	123,835	1,097,963	0	21,610	110,078	1,871,292
Lap Pool	2,987	20,894	89,005	609,428	113	2,422	14,078	2,456,828
Lazy River	5,434	37,416	162,840	2,500,711	0	0	75,985	369,967

Water Conservation Score

Is a metric that evaluates a property's water efficiency by comparing the size and number of Bodies of Water (BoWs) on the property—such as pools, spas, and other water features—with similar properties. Pools are compared to other pools, spas to other spas, ensuring an accurate assessment of how efficiently each property uses water relative to properties of comparable scale and water features.



- Water Conservation Score starts over at the beginning of every month.
- The past 4 Water Conservation scores can be found right next to the Water Conservation Score on both the property page and body of water page. This will help determine trends and abnormalities in water usage.
- The property has a property wide Water Conservation Score
- Each Body of Water (BoW) with a water meter has its own water safety score.
- Boilers, irrigation systems, cooling towers, etc.. will not have a water conservation score. This is due to the lack of water meter comparison data.

Math and the Water Conservation Score

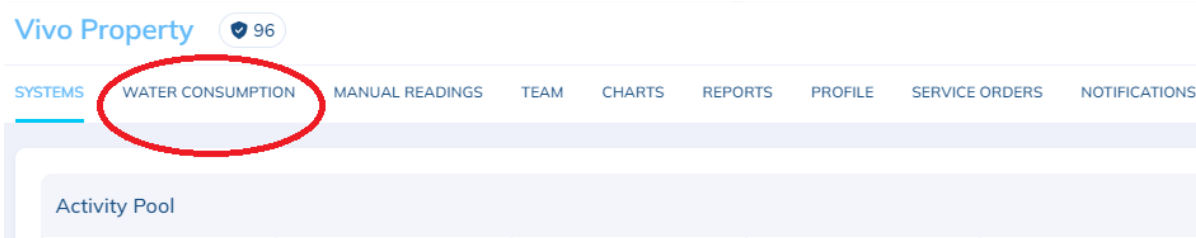
The Water Conservation Score is determined by:

- 1) Bodies of Water (BoWs) type (e.g., pool, spa, water features, etc..)
- 2) Volume- with the volume rounded up to the nearest 1000 gallons.

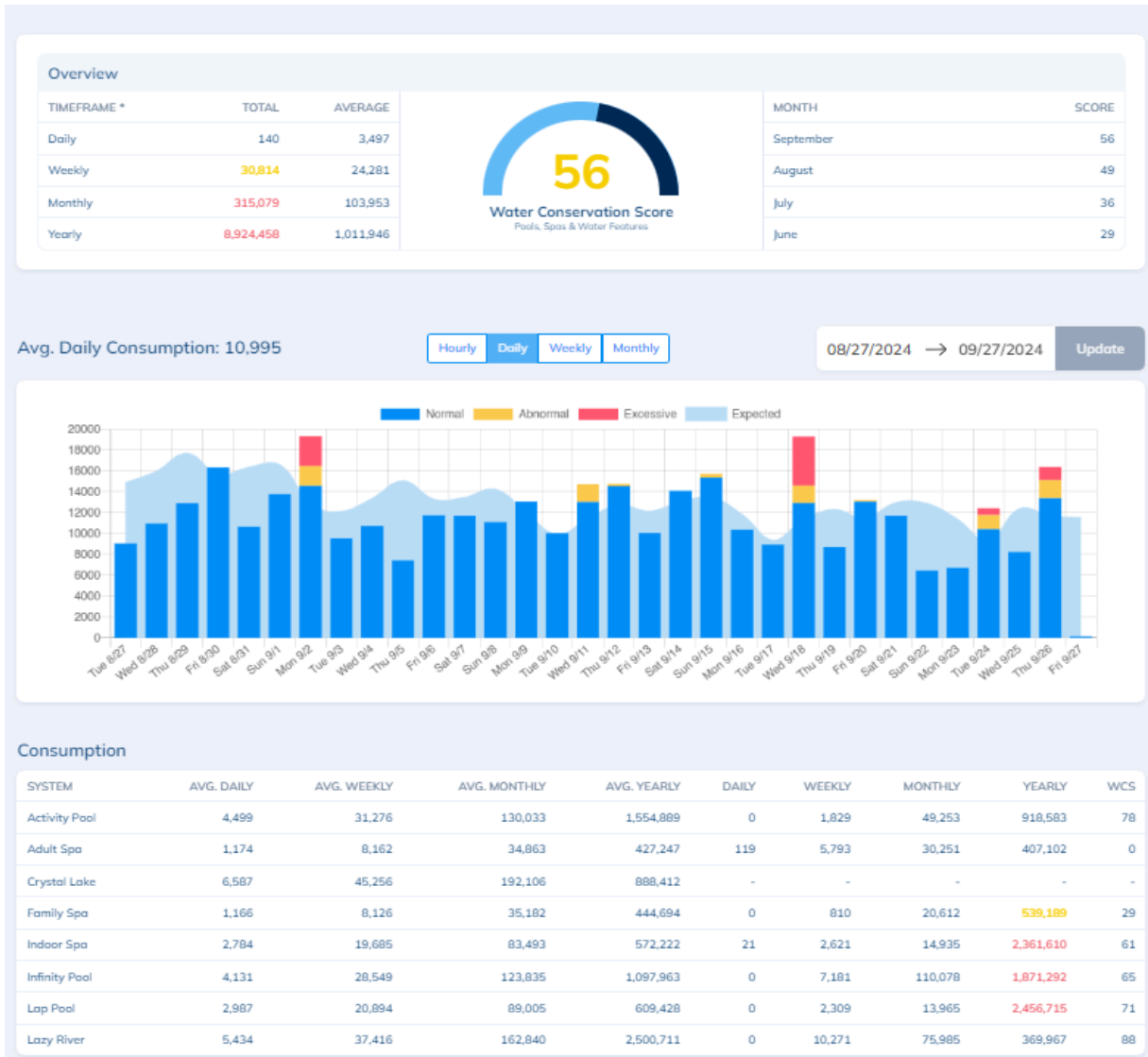
We use this information to form distinct clusters. Example: All pools 10,000- 20,000 gallons are compared to other pools 10,000-20,000 gallons.

Water Consumption Property Page

The Property page provides a comprehensive overview of water consumption data, including both averages and totals for all Bodies of Water (BoWs) within the property. This information helps track water usage patterns and supports efficient water management for the facility.



When you click on **Water Consumption**, you'll be directed to the property's water consumption page.



Breakdown of information on the Property Water Consumption page

Overview

Overview				
TIMEFRAME *	TOTAL	AVERAGE	MONTH	SCORE
Daily	250	3,497	September	56
Weekly	26,739	24,281	August	49
Monthly	315,189	103,953	July	36
Yearly	8,924,568	1,011,946	June	29

56
Water Conservation Score
Pools, Spas & Water Features

Timeframe: displays running totals and averages of water usage for all Bodies of Water (BoWs) on the property. This data remains fixed and does not adjust when different date ranges are selected, providing a consistent overview of historical water consumption.

- Daily/Weekly/Monthly/Yearly reflects real-time water usage for the current day, week, month, and year of all Bodies of Water (BoWs) on property. This is a running total.
- Average Daily/Weekly/Monthly/Yearly represents the water usage over all time, calculated as the daily, weekly, monthly, or yearly average since the water meter was installed on all the Bodies of Water (BoWs) on the property.

Water Conservation Score: is a metric that evaluates a property's water efficiency by comparing the size and number of Bodies of Water (BoWs) on the property—such as pools, spas, and other water features—with similar properties. Pools are compared to other pools, spas to other spas, ensuring an accurate assessment of how efficiently each property uses water relative to properties of comparable scale and water features. Water Conservation Score starts over at the beginning of every month.

Scale Color Status:

Green = 75-100

Yellow = 50-74

Red = 0-49

Month: displays previous Water Consumption Scores to compare with the current score. This feature helps identify trends over time and spot any unusual patterns or deviations in water safety performance.

Consumption Chart



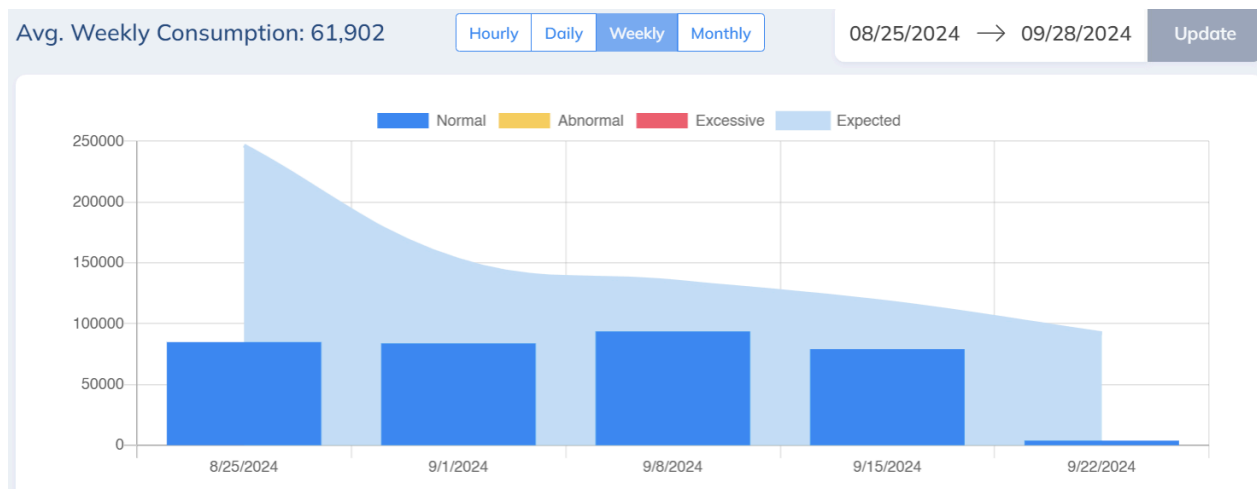
Color Scale

Dark Blue	Normal		Based on historical data collected from property
Yellow	Abnormal	15% over average	Based off % over expected value
Red	Excessive	30% over average	Based off % over expected value
Light Blue	Expected	Baseline	Based on historical data collected from property

Data

- Data is collected from all Bodies of Water (BoWs) on the property that are actively collecting data via water meters.
- Displays data based on selected date range, allowing full customization of the time frame to suit specific analysis needs.
- The chart updates dynamically when switching between Hourly, Daily, Weekly or Monthly views, while still reflecting data from the selected date range. The Hourly chart is real time data with no expected baseline. Baseline data for Daily/Weekly/Monthly/Yearly:

	With Historical Data	Without Historical Data
Daily	The same day of the week for 14 weeks	Prior 14 days
Weekly	The same week of the year for the past 4 years	Prior 4 weeks
Monthly	The same month of the year for the past 3 years	Prior 3 months
Yearly	The prior 3 years	Prior year



Consumption

Consumption									
SYSTEM	AVG. DAILY	AVG. WEEKLY	AVG. MONTHLY	AVG. YEARLY	DAILY	WEEKLY	MONTHLY	YEARLY	WCS
Activity Pool	4,499	31,276	130,033	1,554,809	0	1,829	49,253	918,583	78
Adult Spa	1,174	8,162	34,863	427,247	119	5,793	30,251	407,102	0
Crystal Lake	6,587	45,256	192,106	800,412	-	-	-	-	-
Family Spa	1,166	8,126	35,182	444,694	0	810	20,612	538,189	29
Indoor Spa	2,784	19,685	83,493	572,222	21	2,621	14,935	2,361,610	61
Infinity Pool	4,131	28,549	123,835	1,097,963	0	7,181	110,078	1,871,292	65
Lap Pool	2,987	20,894	89,005	609,428	0	2,309	13,965	2,456,715	71
Lazy River	5,434	37,416	162,840	2,500,711	0	10,271	75,985	369,967	88

- Breakdown of all Bodies of Water on the property (BoWs) that are actively reporting data from a water meter.
- Shows Water Conservation Score per Body of Water (BoWs).
- Displays data based on selected date range, allowing full customization of the time frame to suit specific analysis needs.
- Each Body of Water (BoW) with an active water meter provides both current and average water meter readings.
 - The **current reading** reflects real-time water usage for the current day, week, month, and year.

DAILY	WEEKLY	MONTHLY	YEARLY
0	1,829	49,253	918,583
119	5,793	30,251	407,102
-	-	-	-
0	810	20,612	538,189
21	2,621	14,935	2,361,610
0	7,181	110,078	1,871,292
0	2,309	13,965	2,456,715
0	10,271	75,985	369,967

- The **average reading** represents the water usage over all time since the water meter was installed, calculated as the daily, weekly, monthly, or yearly average since the water meter was installed on that specific body of water.

AVG. DAILY	AVG. WEEKLY	AVG. MONTHLY	AVG. YEARLY
4,499	31,276	130,033	1,554,809
1,174	8,162	34,863	427,247
6,587	45,256	192,106	800,412
1,166	8,126	35,182	444,694
2,784	19,685	83,493	572,222
4,131	28,549	123,835	1,097,963
2,987	20,894	89,005	609,428
5,434	37,416	162,840	2,500,711

Water Consumption Body of Water Page

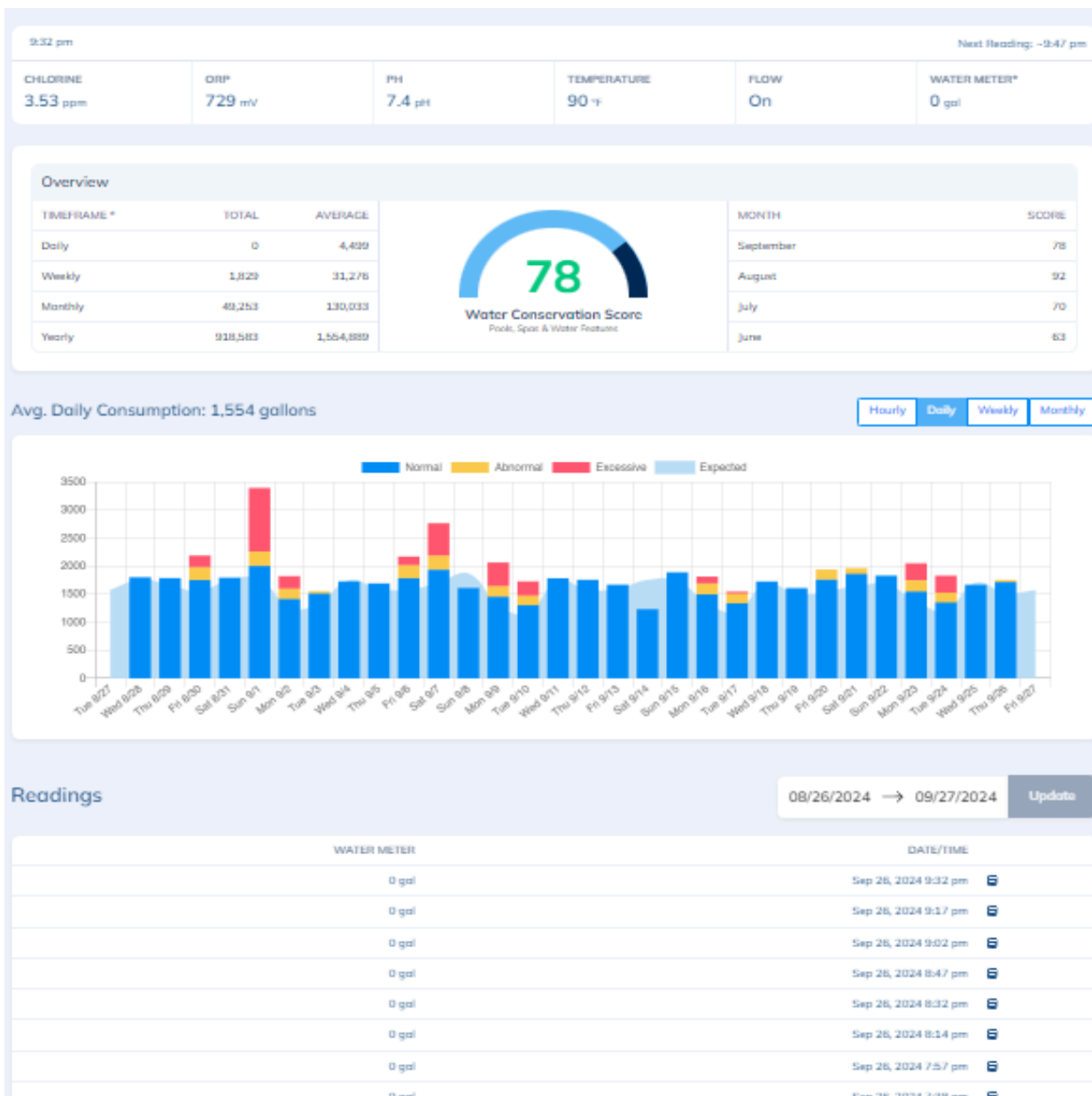
The Body of Water (BoWs) page offers a detailed view of water consumption for a specific Body of Water. This page enables properties to analyze data in depth, identifying trends, potential issues, and making forecasts for efficient water management.

Vivo Property / Activity Pool 99

WATER SAFETY **WATER CONSUMPTION** ALARMS LOGS AVERAGES CHARTS MANUAL READINGS EQUIPMENT PROFILE

+ Manual Reading Fe

By selecting the Body of Water from the property page you'll be directed to the Body of Water details page. Click on **Water Consumption**, to be taken to the Body of Water's consumption page.



Breakdown of information on the Body of Water Consumption page

Overview

The screenshot shows a control panel with the following data:

9:32 pm						Next Reading: -9:47 pm
CHLORINE 3.53 ppm	ORP 729 mV	PH 7.4 pH	TEMPERATURE 90 °F	FLOW On	WATER METER* 0 gal	

The 'Overview' section contains a table of water usage and a 'Water Conservation Score' of 78.

TIMEFRAME *	TOTAL	AVERAGE	Water Conservation Score 78 Pools, Spas & Water Features		MONTH	SCORE
Daily	0	4,499			September	78
Weekly	1,829	31,276			August	92
Monthly	49,253	130,033			July	70
Yearly	918,583	1,554,889			June	63

Current Readings- displays the most up-to-date readings from the controller with the ability to add manual readings, fetch a new reading, and current status into the controller. We now have the option to add a water meter reading in manual readings.

Water Meter

WATER METER READING

Timeframe: displays running totals and averages of water usage for the specific body of water. This data remains fixed and does not adjust when different date ranges are selected, providing a consistent overview of historical water consumption.

- Total Daily/Weekly/Monthly/Yearly reflects real-time water usage for the current day, week, month, and year on that specific body of water. This is a running total.
- Average Daily/Weekly/Monthly/Yearly represents the water usage over all time, calculated as the daily, weekly, monthly, or yearly average since the water meter was installed on that specific body of water.

Water Conservation Score: is a metric that evaluates a body of water's efficiency by comparing the size (in gallons) and type of similar bodies of water at other properties. Pools are evaluated against other pools, spas against spas, ensuring an accurate assessment of water efficiency relative to bodies of water of comparable scale and feature. The Water Conservation Score resets at the start of each month to provide up-to-date insights.

Scale Color Status:

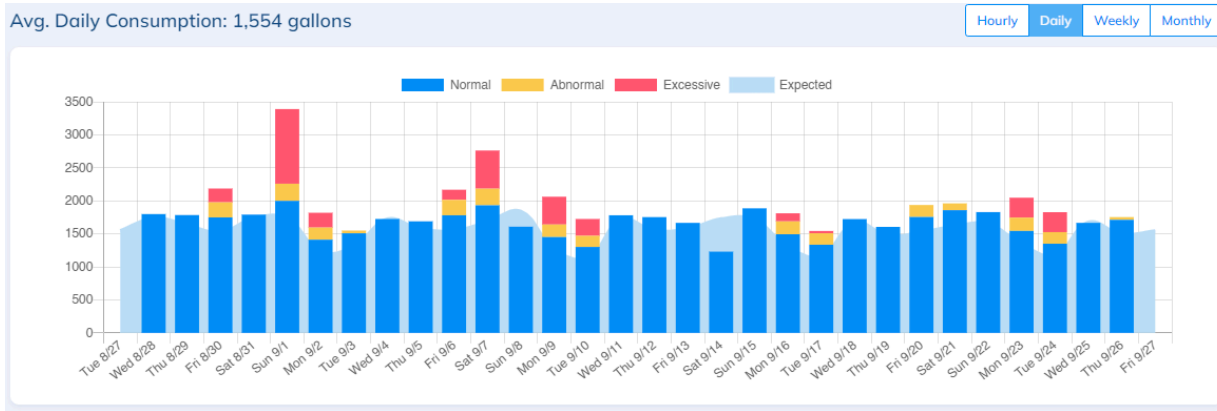
Green= 75-100

Yellow= 50-74

Red=0-49

Month: displays previous Water Conservation Scores to compare with the current score. This feature helps identify trends over time and spot any unusual patterns or deviations in water safety performance.

Consumption Chart



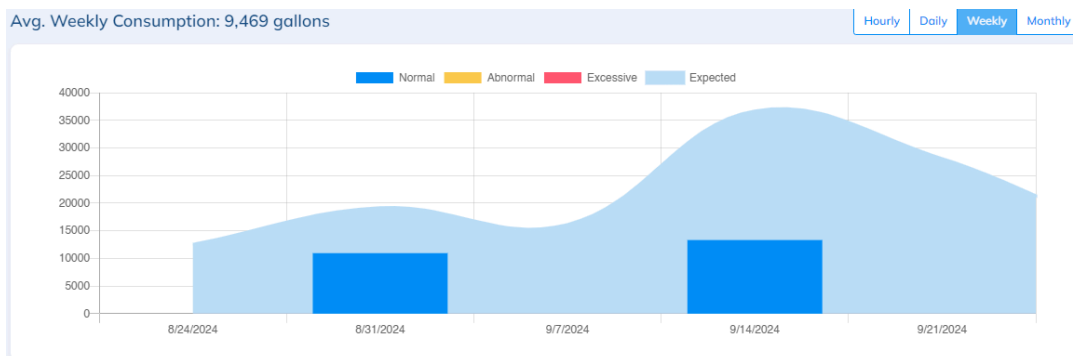
Color Scale

Dark Blue	Normal		Based on historical data collected from property
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Light Blue	Expected	Baseline	Based on historical data collected from property

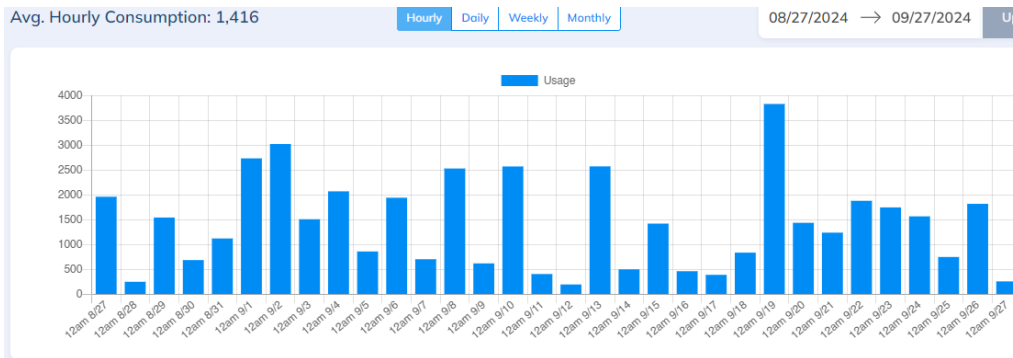
Data

- Data is collected from the specific body of water.
- Displays data based on selected date range, allowing full customization of the time frame to suit specific analysis needs.
- The chart updates dynamically when switching between Hourly, Daily, Weekly or Monthly views, while still reflecting data from the selected date range. The Hourly chart is real time data with no expected baseline. Baseline data for Daily/Weekly/Monthly:

	With Historical Data	Without Historical Data
Daily	The same day of the week for 14 weeks	Prior 14 days
Weekly	The same week of the year for the past 4 years	Prior 4 weeks
Monthly	The same month of the year for the past 3 years	Prior 3 months



- There is no expected historical data for hourly charts. Hourly charts only show real time data.



Readings

Readings 08/26/2024 → 09/27/2024 Update

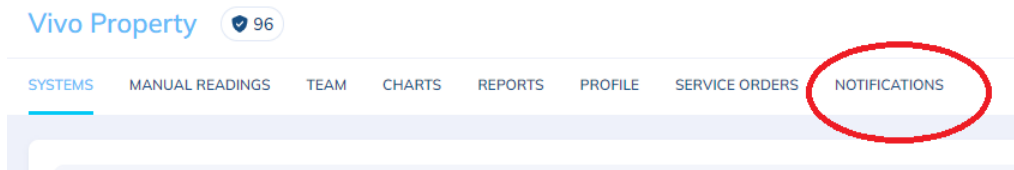
WATER METER	DATE/TIME
0 gal	Sep 26, 2024 9:57 pm
127 gal	Sep 26, 2024 9:24 pm
0 gal	Sep 26, 2024 8:48 pm
0 gal	Sep 26, 2024 8:14 pm
0 gal	Sep 26, 2024 7:42 pm
0 gal	Sep 26, 2024 7:12 pm
119 gal	Sep 26, 2024 6:42 pm

- Controller water meter data imported into VivoPoint every 30 minutes.
- Displays readings based on selected date range, allowing full customization of the time frame to suit specific analysis needs.

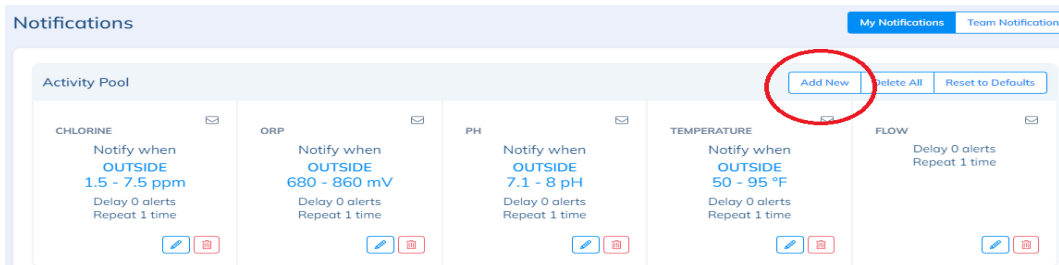
Water Consumption Notifications

How to set up notifications for water consumption parameters.

- 1) Sign in VivoPoint. <https://app.vivopoint.com/login>
- 2) Click the property you want to set up notifications for on the left side of the screen.
- 3) Click **Notifications** on the property page at the top .



- 4) Pick the body of water that you would like to get notifications for and click **Add New**.



5) A new screen will pop up and choose **Automated** in the drop down.

READING TYPE

▼

Automated

Manual

6) On the next screen fill out: Trigger- **Water Meter**

Notification Setting: Activity Pool

READING TYPE
Automated ▼

* TRIGGER
Water Meter ▼

THRESHOLD
Adaptive ▼

* THRESHOLD
Excessive (30+% above expected) ▼

* DELAY
0 ▼

* REPEAT
0 ▼

* NOTIFY BY
Email ▼

[Submit](#)

7) Threshold options:

- Above: Notification will be sent when water consumption is above customized set point.

THRESHOLD
Above ▼

* THRESHOLD
1544
Suggested 1544 gallons

- Adaptive: Notification will be sent when water consumption is abnormal or excessive. based on historical water usage trends. Options:

- i) Abnormal
- ii) Excessive

THRESHOLD
Adaptive ▼

* THRESHOLD
Excessive (30+% above expected) ▼

* DELAY
0 ▼

* REPEAT
0 ▼

Abnormal (15-29% above expected)

Excessive (30+% above expected)

- Below: Notification will be sent when water consumption is below the customized set point.

THRESHOLD

Below

*THRESHOLD

1544

Suggested 1544 gallons

- Outside: Notification will be sent when water consumption is outside customized low and high values.

THRESHOLD

Outside

*LOW VALUE

*HIGH VALUE

- 8) Fill out delay, repeat and notify by based on user preferences.
- 9) Hit **Submit**. Notification will appear with the Body of water on the Notification page.

Activity Pool					
	Add New	Delete All	Reset to Defaults		
<p>CHLORINE</p> <p>Notify when</p> <p>OUTSIDE 1.5 - 7.5 ppm</p> <p>Delay 0 alerts Repeat 1 time</p>	<p>ORP</p> <p>Notify when</p> <p>OUTSIDE 680 - 860 mV</p> <p>Delay 0 alerts Repeat 1 time</p>	<p>PH</p> <p>Notify when</p> <p>OUTSIDE 7.1 - 8 pH</p> <p>Delay 0 alerts Repeat 1 time</p>	<p>TEMPERATURE</p> <p>Notify when</p> <p>OUTSIDE 50 - 95 °F</p> <p>Delay 0 alerts Repeat 1 time</p>	<p>FLOW</p> <p>Delay 0 alerts Repeat 1 time</p>	<p>WATER METER</p> <p>Notify when</p> <p>ADAPTIVE 30+% above expected</p> <p>Delay 0 alerts Repeat 0 times</p>

Water Meters without a Water Conservation Score

The following water meters will not have a water conservation score.

- Boilers
- Irrigation Systems
- Cooling towers
- Backwash
- Splash Pads

This is due to the lack of water meter data to form clusters for comparison.