

## USE CASE

# Ocean Live Monitoring: Scaling During a Storm

## Rapidly Migrating to a Cloud-Based Platform in an Environmental Emergency

One of Wowza's customers is the go-to source of live beach weather conditions for a loyal audience along the East Coast. When Hurricane Ian struck in October 2022, this live ocean monitoring company experienced an enormous surge in viewership. Its infrastructure wasn't equipped to handle such an increase in users monitoring the storm, so the brand rapidly [migrated to Wowza Video](#) to maintain its status as an important source of safety information.

CHALLENGES	SOLUTIONS	OUTCOMES
<p><b>Needed to immediately migrate to a cloud-based platform to accommodate a 1,086.93% increase in streamers</b></p> <p>Required increased bandwidth to reach said audience without sacrificing stream quality</p> <p>Sought more advanced functionality to sync live feeds with weather and wind data</p>	 <p><b>Wowza Video</b></p>  <p><b>Wowza Streaming Engine</b></p>	<p>Successfully migrated from Wowza Streaming Engine to Wowza Video within two hours</p> <p>Streamed to 36,608 people each day for four days, accommodating a significant spike in site traffic</p> <p>Improved stream quality and playback experience while scaling</p>

## Keeping Up With a Shifting Landscape

Have you ever checked traffic cameras for road conditions before leaving home? That's what this beach monitoring business does for the ocean. Surfers, kite surfers, sailors, wake boarders, and sun tanners alike can tune into any of its 35 live streams from well-positioned IP cameras before embarking for a day on the beach. These feeds are also synchronized with real-time wind and weather data from approximately 10 data collection stations.

The founder of this organization wanted to point publicly accessible webcams at the ocean in the late 1990s. Their original technology used JPEG push with dial-up before deciding a more advanced system was necessary to improve stream quality and reach a broader audience. The brand considered multiple options, including Flash, until it became one of Wowza's early customers in 2008.

"I was using a custom-built platform for the first ten or eleven years — which became, as you can imagine, quite antiquated and couldn't keep up with demand. It was useful for a while, but I eventually needed something with greater capacity and higher frame rates, especially when 15 to 30 frames per second and 4K became more commonplace," the company's founder explains.

Accommodated a  
**1,086.93%**  
increase in viewers

Migrated to  
Wowza Video within  
**2 HOURS**

Reached a total of  
**142,434**  
Viewers during  
Hurricane Ian



"Flash was too expensive, but I remember coming across [Wowza Streaming Engine](#) and it fit my needs perfectly. Back then cross-compatibility was a mess, but Wowza was a one-stop shop that I could use to control that aspect of things."

## Ensuring Reliability During a Crisis

This ocean monitoring business has built a loyal userbase over the years. However, the water sports and boating community is only so large, so the site wasn't equipped to handle thousands of concurrent viewers. When [Hurricane Ian](#) struck, thousands of East Coast residents turned to the company's website to keep a watchful eye on how the storm was affecting the beach areas closest to them.



When viewership on the organization's Wowza Streaming Engine server reached a greater capacity than it could handle (which is the same server its site runs on), the brand was faced with a decision: let this new influx of users deal with poor streams if not outright blow its infrastructure, or switch to Wowza's cloud-based platform, [Wowza Video](#), which would be capable of scaling to the increasing number of people trying to tune in. One option would impact the brand's reputation, and the other would allow it to capitalize on an important moment.

The company chose the latter. Wowza quickly migrated the business to Wowza Video, allowing 142,434 viewers to monitor the hurricane with its live streams and wind data.

"My site wasn't built for the masses, so my capacity was bottlenecked. The ability to pivot to a cloud-hosted platform within a matter of hours was exactly what I needed," the founder elaborates. "Instead of asking for more server capacity on Wowza Streaming engine when my feeds went viral, I knew I needed entirely new architecture to support unpredictable fluctuations in viewership." Not only did the Wowza Video platform have the bandwidth to support all these viewers, it also improved playback quality and reduced latency.

The live ocean monitoring company's reliable video feeds attracted attention from news outlets that used the site's data to report on the

storm. Wowza enabled the brand to stay afloat (pun intended), while also allowing it to distribute video clips of recent developments to media publishers keeping the country informed. What's more, the founder gained peace of mind knowing that the business was powered by a solution capable of immediate scaling.

## Powering Video With Wowza, Today and Tomorrow

Wowza is the solution you start with and the partner you scale with — and in this customer's case, that scaling came at an unpredictable time and level. From its early years of streaming to its largest broadcast to date in 2022, this beach surveillance company has relied on Wowza to power its continuous live streams and ensure smooth video delivery. Fortunately, the Wowza team was able to migrate the brand to Wowza Video within a two-hour period from when its founder first alerted the team of a streaming emergency.

**"Wowza saved me," the founder says. "It's always been the backbone of what I'm able to do. I considered a few other [competitors](#) back in the day, but everything kept coming back to Wowza. They continue to improve their products and the Wowza team is partnering with me to improve my workflow. I wouldn't even consider another option."**

Besides leveraging Wowza to easily scale, the company also benefits from the ability to redistribute live content as video on demand (VOD) assets. The founder is respectful of beachgoers' privacy, but when a whale breaches the surface or there's a new development in a tropical storm, they can easily record the stream and post it on YouTube.

The founder adds, "I feel secure knowing I'm already with a video company moving forward in the industry. There will be tremendous opportunity coming in the streaming space, so knowing I have the [flexibility](#) to expand and of makes me confident I won't ever be short of solutions or ways to make things better for my customers."

The business's viewership has returned to normal now that Hurricane Ian is over, but its founder feels confident in their ability to scale in no time. The brand's live feeds could become a viral and important source of information for the public again, so instead of having to react similarly each time a storm arises, the company is prepared to support future spikes in site traffic.

To learn more about how others are using Wowza streaming technology, visit [wowza.com](https://www.wowza.com).