Forging Digital Pathways
to the Marine World.

Bear

MEET THE SEATTLE AQUARIUM

Puget Sound is just a small part of the world's ocean, but it's home to beautiful, complex, and unique marine life. Casting light on the singular beauty of the Puget Sound marine environment is the mission of the Seattle Aquarium.

Since it first opened its doors in 1977, the Seattle Aquarium has first and foremost sought to kindle in its visitors an appreciation for the ocean, and a renewed awareness of the need to protect it. One of the top ten most visited aquariums in the nation, the Seattle Aquarium houses animals in several major exhibits.

Visitors can watch clown fish playfully swim in and out of anemone, or watch schools of salmon flash around the slow progression of small sharks.
They can also attend any number of the community outreach activities hosted by the Aquarium, or learn more about the conservation and research efforts that happen across the wider Puget Sound.

The Aquarium offers visitors a hands-on, immersive experience of the Puget Sound. How influential that experience is is vital to the overall mission of the Seattle Aquarium; to inspire, to invoke awe, and to educate.
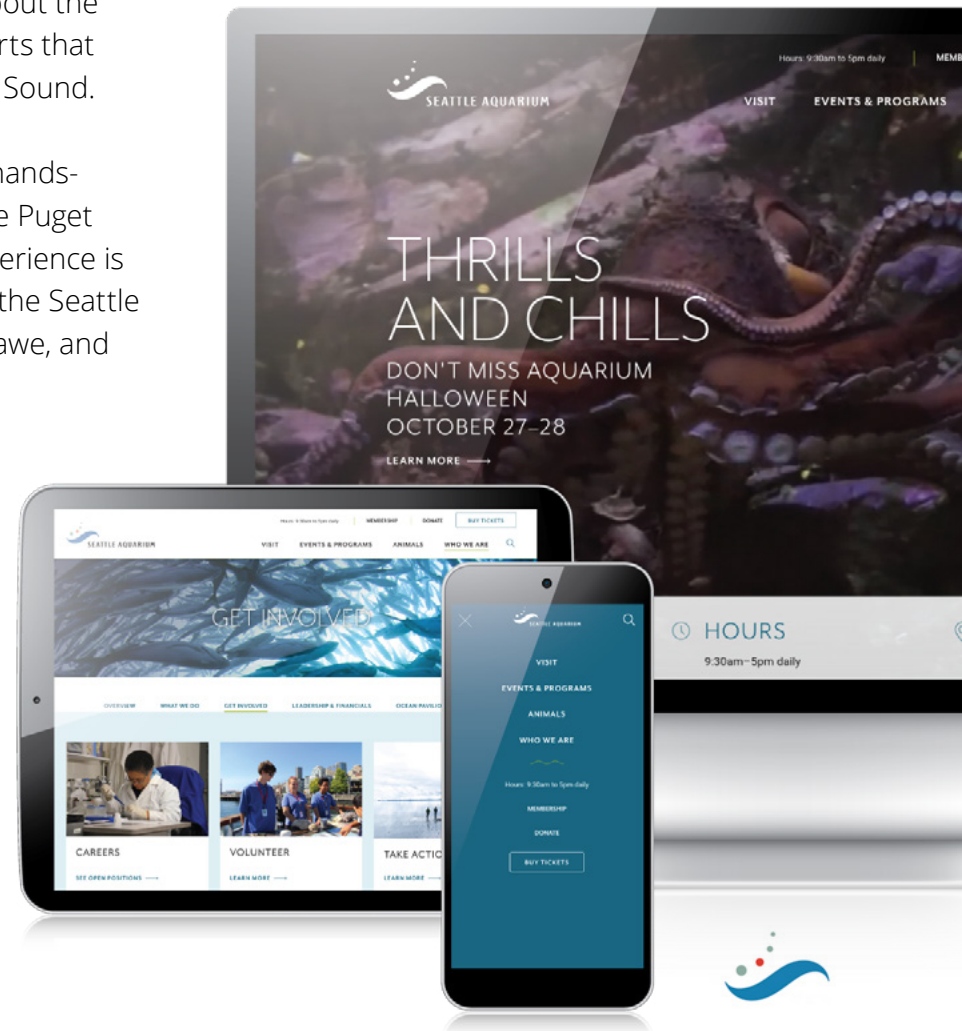
THE PROJECT

The Seattle Aquarium exists to connect visitors to the marine world, the aquarium itself bridging the distance imposed by nature. As the Aquarium is a gateway to the marine world, for years the Seattle Aquarium website had been a gateway to the Aquarium, providing visitors with crucial information on exhibits, research, donations, memberships, and events.

The Seattle Aquarium team knew that many visits - or prospective visits - first began with a visit to their website. Seattle Aquarium wanted to take their website even further. They wanted their website to become a better, more accessible informational resource, but also a tool that visitors could use to improve their tour of the actual Aquarium. They wanted to connect the digital and the physical, creating a more holistic, educational experience. The issue was the website itself, which was built for an older browsing experience.

In the years that it had been built, user expectations and website administration had changed completely. Although their website administrator made regular updates to content on the website, she was limited as to how far she could generate new layouts or content.

Once we met with the Seattle Aquarium team, they laid out the issue of their website in 3 points:

1. They needed a website that was completely accessible–in any language, to any screen, and across all browsing devices.
2. They wanted to update and modernize the design and UX of the website.
3. They wanted a website that would support ambitious content strategies, a website that was capable of enabling their website administrator and any other member of their team to easily manage content, media, create new layouts, and connect with other tools without having to struggle with code or HTML.

The Aquarium wanted to connect the digital and the physical, creating a more holistic, educational experience.
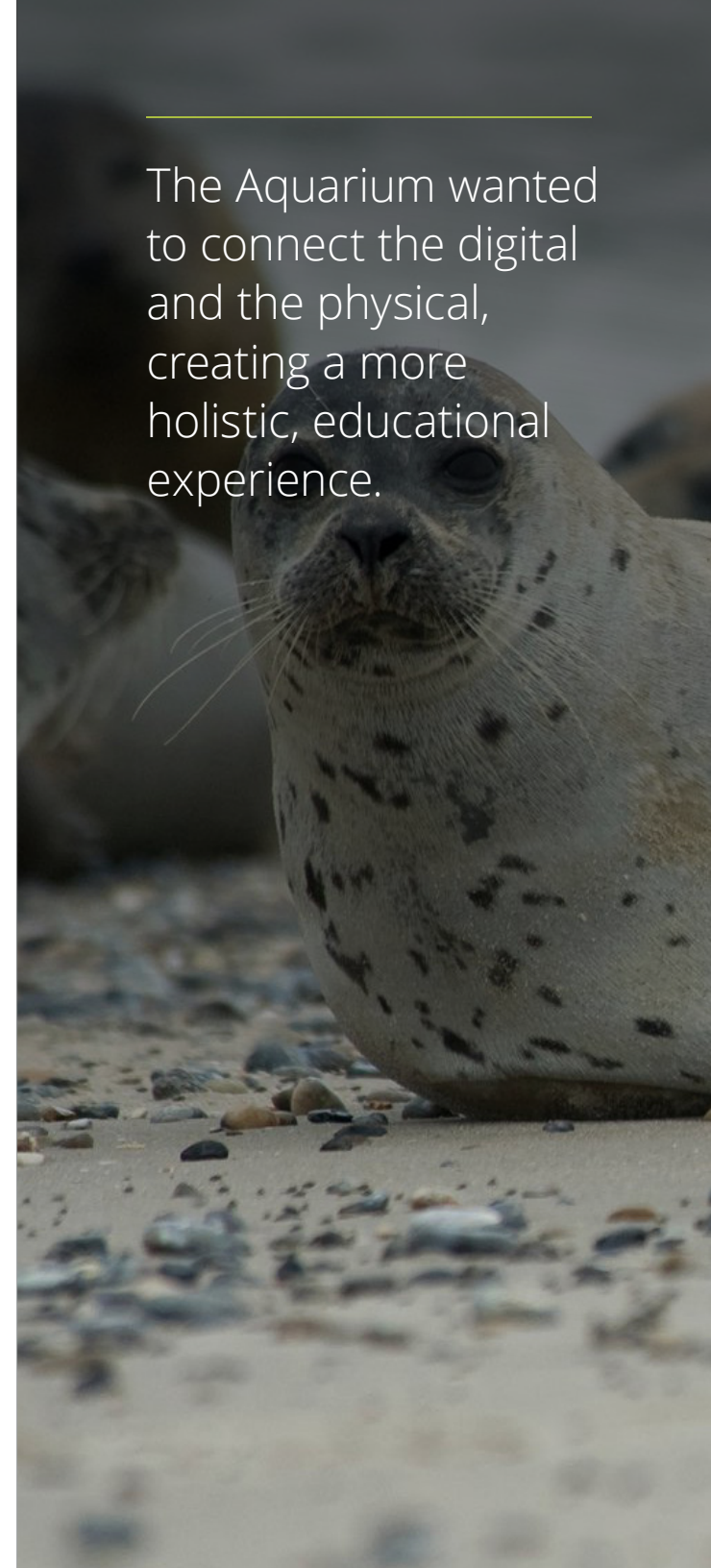
THE DIAGNOSIS

A new website, built on an entirely new CMS (Content Management System), with updated mobile responsive layouts and a modern web design.

Their website platform, Blackbaud NetCommunity, was too old to support a modern web design, preventing any significant updates to their UX.

80% of Seattle Aquarium's website visitors used mobile devices to browse their website. Their website only featured desktop layouts, which made navigating the site on smaller screens difficult.

Their website's platform, built on Blackbaud NetCommunity, was too old. In order to update content on their website, their administrator had to make all changes in HTML. It did not have an administrative interface capable of supporting the kind of in-depth content management work they wanted (and needed) to do on their website, and made managing more complicated media (embedded video or audio, for instance) much more difficult.

The outdated technical build of the website affected how they connected to other tools, and how they could update their content directly.

THE PROJECT

The Team

» **Alice Kelly**
Content Marketing Integrator

» **Brigit Schroeder**
Web Developer

» **Emily Goodeve**
Technical Project Manager

» **Greg Bear**
Solutions Architect

» **Matthew Simpson**
Sr. Front-End Developer

» **Sara Schultz**
Digital Marketing Analyst

» **Shawn Adler**
Front-End Developer

Design Partner: Fell Swoop

Seattle Aquarium engaged Fell Swoop as their design partner. Starting with a thorough knowledge of the perspective of the end user, the expectations and navigation patterns of prospective visitors to the Seattle Aquarium website, Fell Swoop created web designs featuring updated information architecture, feature-rich page layouts, and a custom branded theme.

We sat in with Aquarium and Fell Swoop during the initial design process to talk about the reality of functionally implementing the design, making sure we were available for any feature-to-budget clarifications to keep the website within Seattle Aquarium's determined budget.

The Timeline

Project Start: March 2018   **Launch Date:** June 2018

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
Design	Mobile First Design + UX Guidance								Budget Ends
Site Building / Environments	Environments / Setup								
		Site Building							
Development			Theming						
								Polish	
Content			Manual Content Migration						Post deploy sprints
						Training			
						Analytics			

Total Transparency and Complete Collaboration

Tracking Development Scheduling

Seattle Aquarium was provided with a user account and access to JIRA, the development team's scheduling tool. At any point in time members of their team could log in, and see exactly what the Bear Group team was working on.

Weekly Meetings

During the build of the Seattle Aquarium project, the Technical PM met with their team to cover and demo completed work, and to show how the project was progressing toward its anticipated launch. Any questions about the project or concerns about work so far were addressed, and if needed, documented and put before the developers.

Team Trainings

The Seattle Aquarium team experienced in-depth training for how to manage their website directly. Rather than a long training toward the end of project, these trainings were parsed out during the build, and hosted when a recent piece of the website had been completed. Alice, our content integrator, also created an in-depth documentation of the management of their website in the instance they had a question in the future or wanted to train new team members.

" It was a perfect good storm, in terms of designs being on time and a client who was definitive in what they wanted. It's fun to work on fun content, just the content alone was inspiring to work with. "

EMILY GOODEVE
TECHNICAL PROJECT MANAGER

BUILDING THE WEBSITE: A NEW CMS

We chose to build Seattle Aquarium's new website on Drupal, version 8.0.

» **Drupal is open source.**
Seattle Aquarium can easily make direct changes to their website at any depth, and determine how their website is hosted (which determines security, SEO, and uptime).

» **Drupal is a modular system.**
Enabling functions, even complex functions, on a Drupal website is as simple as enabling and disabling a plugin.

» **Drupal has an active core team, and an engaged online community.**
Drupal will continue to undergo security and functionality updates over the years. Drupal 8.0 would continue to be supported for a significant length of time.

» **Drupal has free modules.**
Available modules built and thoroughly tested by the Drupal community mean that if the Seattle Aquarium wanted to update their website with a new functionality in the future, it's likely a module has already been built to enable it, saving them significant time and money in the future.

» **Drupal offers a complete administrative suite.**
Drupal would feature tools similar to those used on social media: image fields, WYSIWYG tool bars, drag and drop functionalities, in order to manage complicated content management functions like URL creation, building and updating website menus, metadata for search, and even building and organizing new layouts for new pages on the website. They could do these things directly, on the page itself, instead of having to edit in static HTML.

» **Drupal has built in language detection and cascading negotiation rules.**
A visitor can be directed to the correct site based on their browser language setting, their location, their manual preference, and other settings automatically. Managing localized or translated content and creating alternative pages to be displayed is also an easy management task.

" We were also overhauling all of our internal systems– our email communications database, CMS, online ticketing–and we wanted a CMS platform that could connect to all these different services easily, which made us lean more towards a Drupal website. "

PAMELA LAMON
DIGITAL MARKETING MANAGER

CREATING A NEW WEBSITE

During the project, we set up secure environments that we could safely build in and test without affecting Seattle Aquarium's live site. The entire project was completed without any downtime or disruption.

The Build

Step 1: Emily, the Technical Project Manager who oversaw the entire development project, created new layouts on the website following direction from Seattle Aquarium and Fell Swoop.

Step 2: Based off of the wireframes given to us from Fell Swoop's design team, and insights from Seattle Aquarium, our front-end developers Matthew and Shawn implemented them on the site, transforming bland on basic pages on Drupal to fully themed Seattle Aquarium web pages.

Migrating Content from the Old Website

Alice, our content integrator, assisted the Seattle Aquarium team by migrating all designated content from Seattle Aquarium's old website and formatted it into the new layouts.

" It was pretty seamless. Greg sat in on some of our meetings in the beginning, so it felt like we were working with both of you guys [Bear Group and Fell Swoop] all along. Someone was always available to contact, so there was a lot of crossover. "

**MARIKA WEGERBAUER**
WEB ADMINISTRATOR

Old website
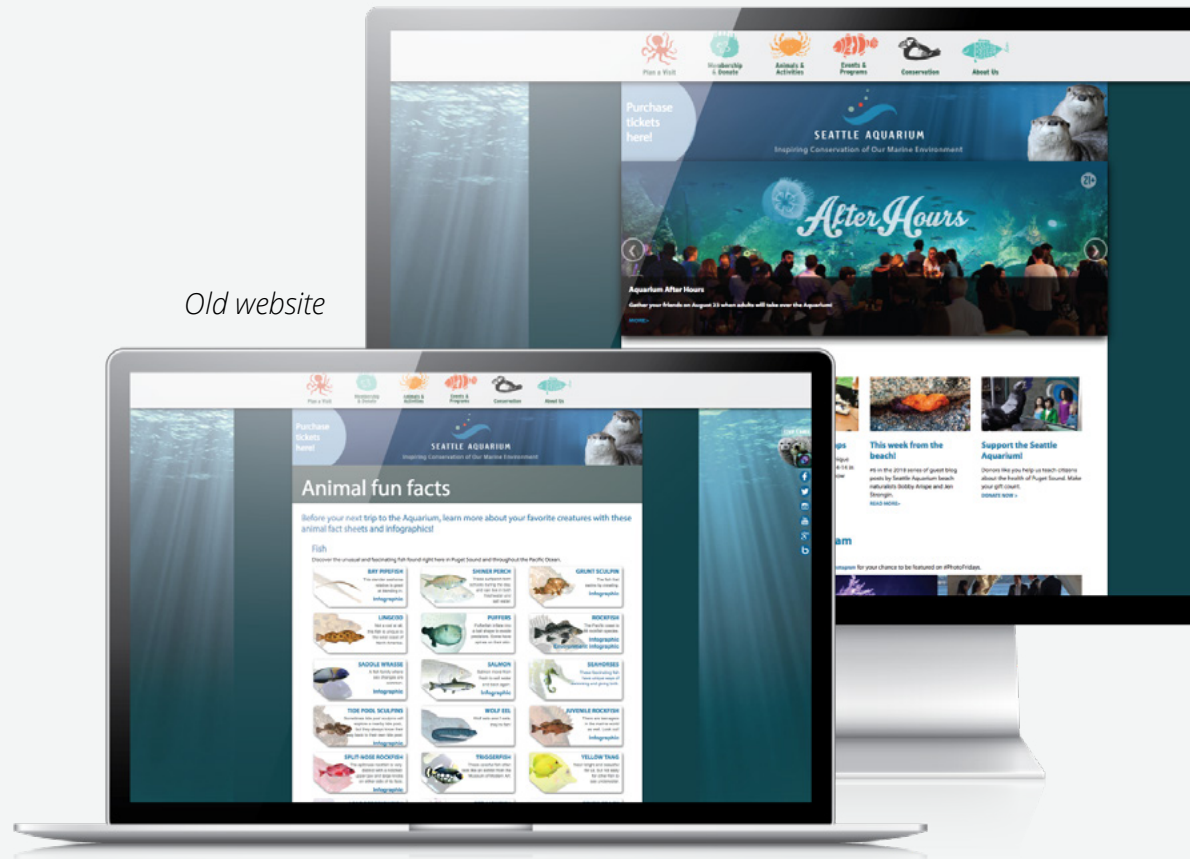
UPDATE API'S AND RE-CONNECT SYSTEMS

The Seattle Aquarium website was connected to several external systems which needed to be re-connected with the new build. Connections can be organized into two categories: links to separate domains and systems embedded directly on the website via API's.

We created text fields in targeted areas (specified pages, events in the event calendar) to make transitions from the Seattle Aquarium website to payment and event registration websites smoother, and enabled Seattle Aquarium's team to designate where those links could be placed.

Separate Domains:

» Eventbrite Event Management
» ACME Payment Transactions
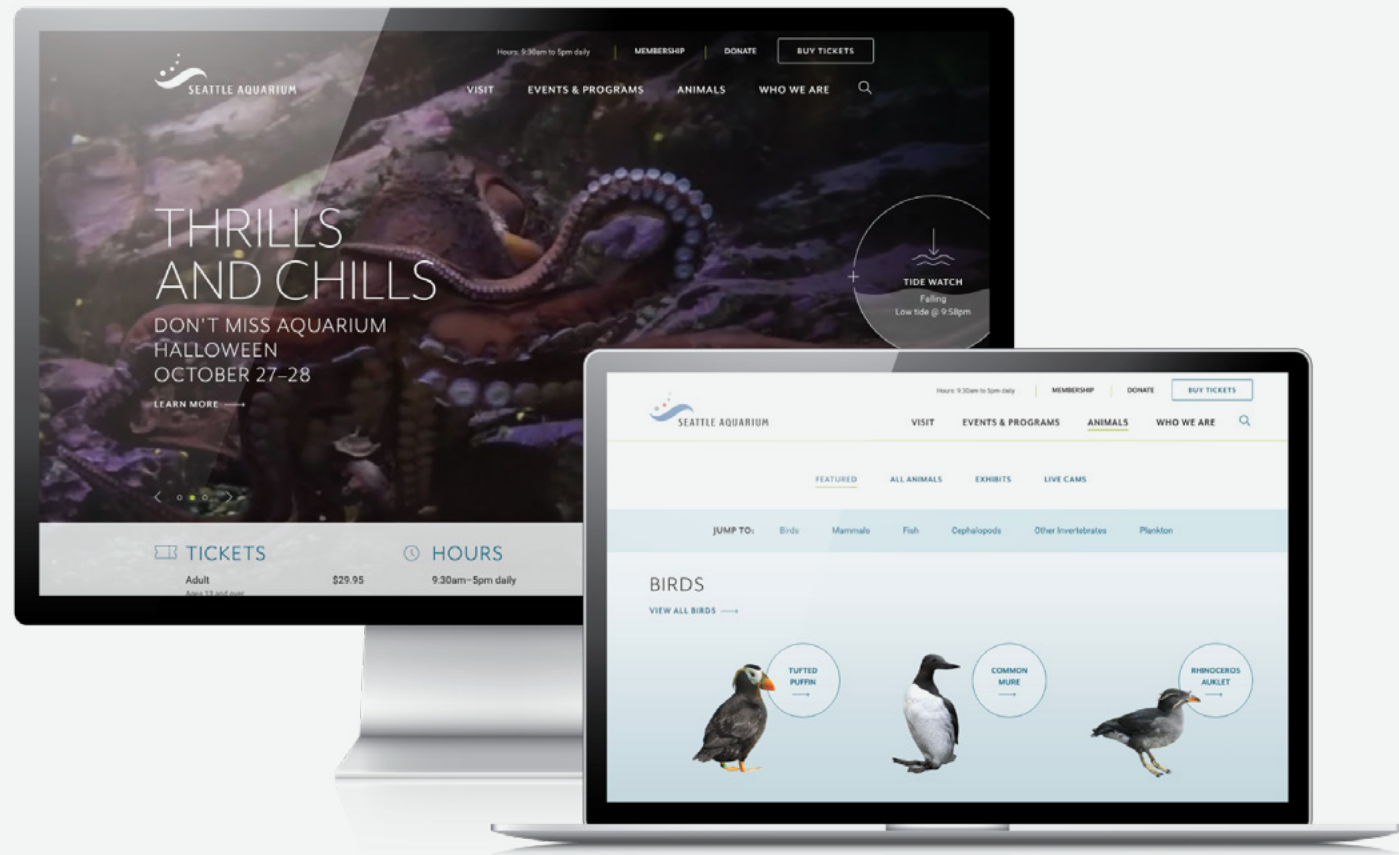
EMBEDDED API'S

Email Marketing

Emma: We integrated Emma with the Seattle Aquarium website. Seattle Aquarium can now create webforms and embed email fields directly in their website and from their administrative suite.

Webcam Streaming Services

CamStreamer: CamStreamer's integration with Seattle Aquarium's website allows them to use a content management functionality we built in their website to easily embed videos on any page they chose."
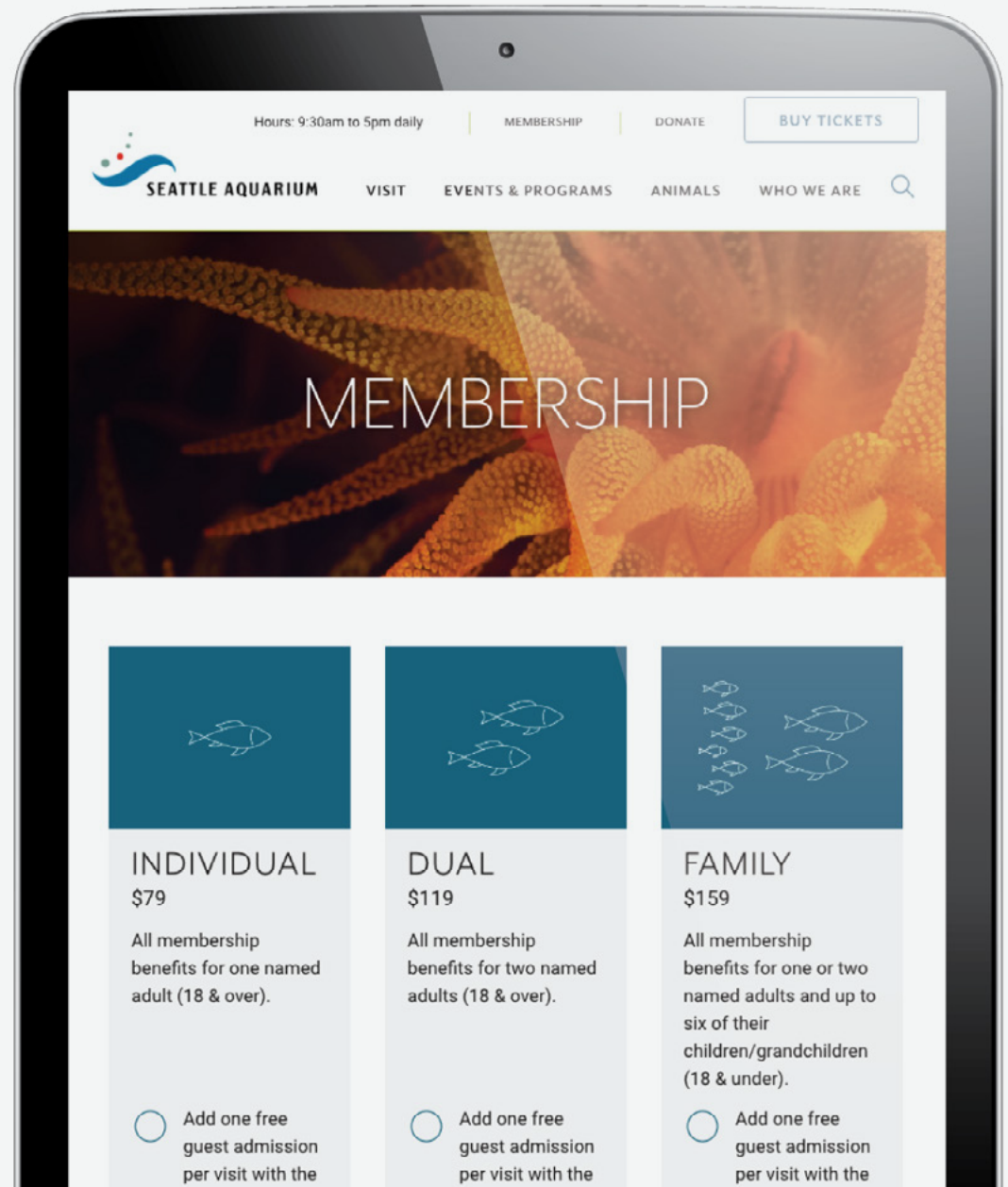
THE TIDE WIDGET

On the front page of the Seattle Aquarium website, you'll see a floating "Tide Watch" widget. This widget is one of many examples of how Seattle Aquarium included interactive elements on their website to connect users to their local marine environment.

The widget shows current and predicted tide levels. When it's clicked, a window opens to show a more detailed tide report.

The widget is fully responsive, formatted to resize and reposition itself based on the user's screen size. Tidal reports are automatically updated using data from the National Oceanic and Atmospheric Administration (NOAA).

Brigit, our Web Developer, custom built the widget. She enabled the widget to have administrative functionality - allowing website administrators to modify it using simple form fields - as well as match the custom theme of the rest of the Seattle Aquarium website.
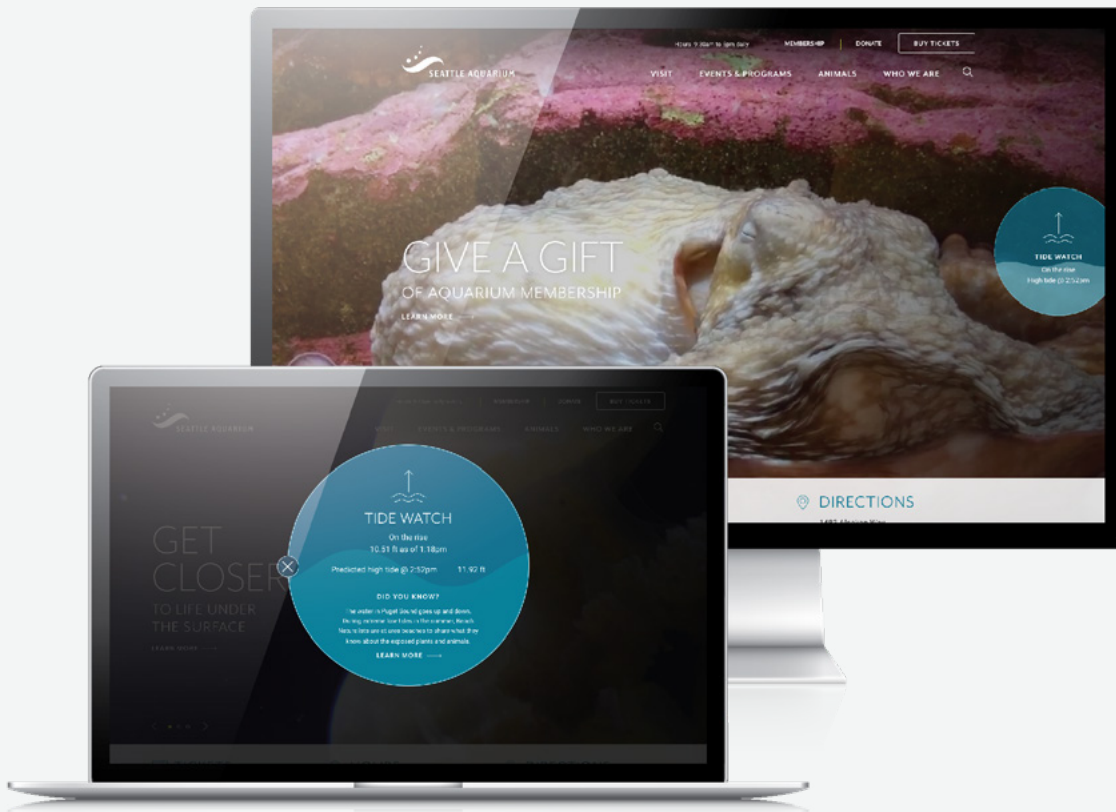
ONE WEBSITE, ONE BLOG

Seattle Aquarium had previously been managing their blog on a separate website, under a separate URL (blog.seattleaquarium. org). Following Fell Swoop designs, we migrated the blog to be controlled from the same administrative panel as the rest of the website, making content creation easier. All blog posts were migrated to the new website and formatted by Alice.
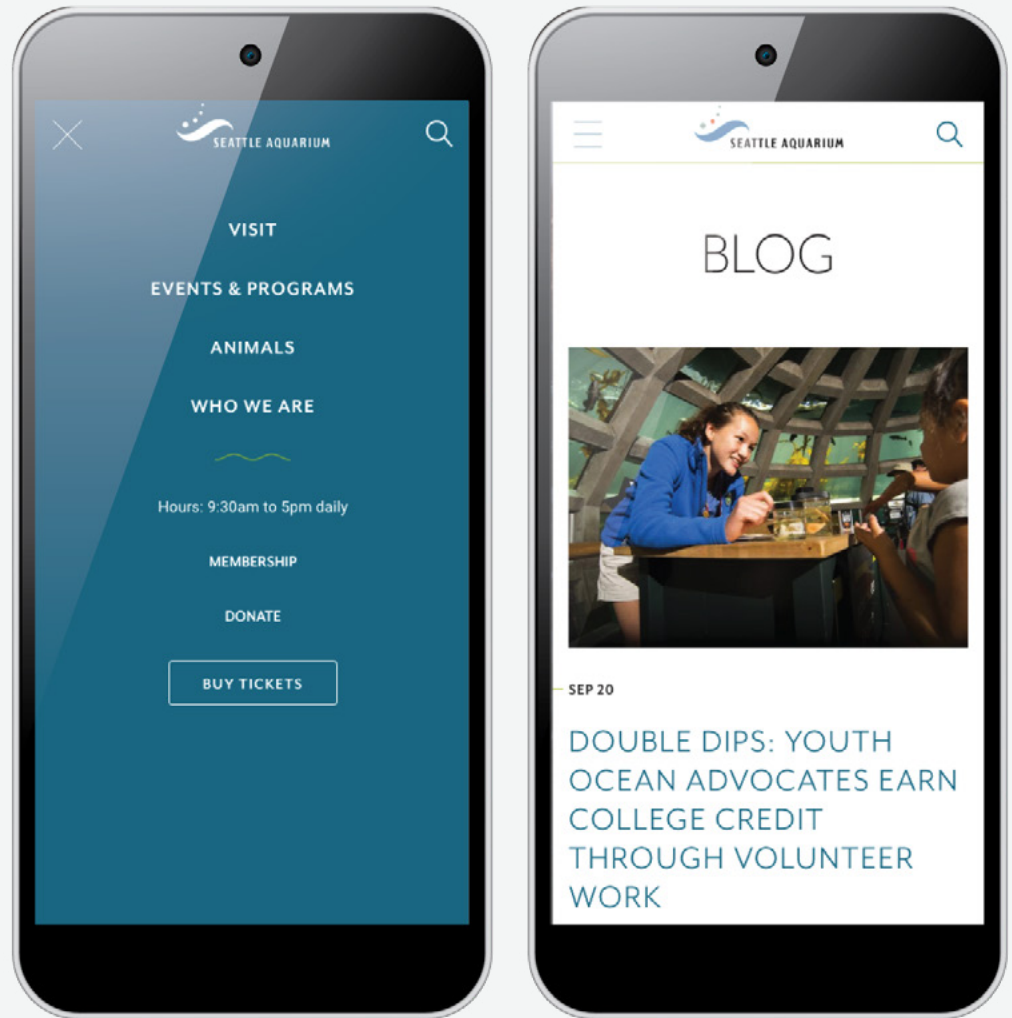
Optimizing for Search

As part of the customization of the administrative suite, we setup content types, menus, categories, blocks, contact and survey forms, on-page search optimization tools, file attachments of any type, all necessary core and contributed modules, user roles, and access levels. Support for Google Tag Manager, Google Maps, and an unlimited number of web forms are both provided via stable community modules.

We will also use a meta tag module for SEO purposes as well as a sitemap module that can be generated in the admin panel.

Analytics

Website tracking systems were put into place, and reporting was started by Sara, our Analytics expert.

Systems:
» Google Analytics
» Google Tag Manager
» Google Search Console

Reporting:
» Added Seattle Aquarium Facebook pixel as a tag in Google Tag Manager
» Added multiple landing page tags in Google Tag Manager based on the URL's provided
» Resubmitted the updated sitemap to Google Search Console
» Added Google Analytics to the site thru Google Tag Manager
» Confirmed the new site was tracking and reporting correctly in Google Analytics

" We currently had a blog up that was on Wordpress, but the security aspects of Drupal were really appealing to us. It was also open source and had more community resources to support it. "

PAMELA LAMON
DIGITAL MARKETING MANAGER

MOBILE RESPONSIVENESS

At an established breakpoint (480px) the website adapts to a new layout, adjusting all other components on the page including the background video, colorbox, hover states and other UX special effects.
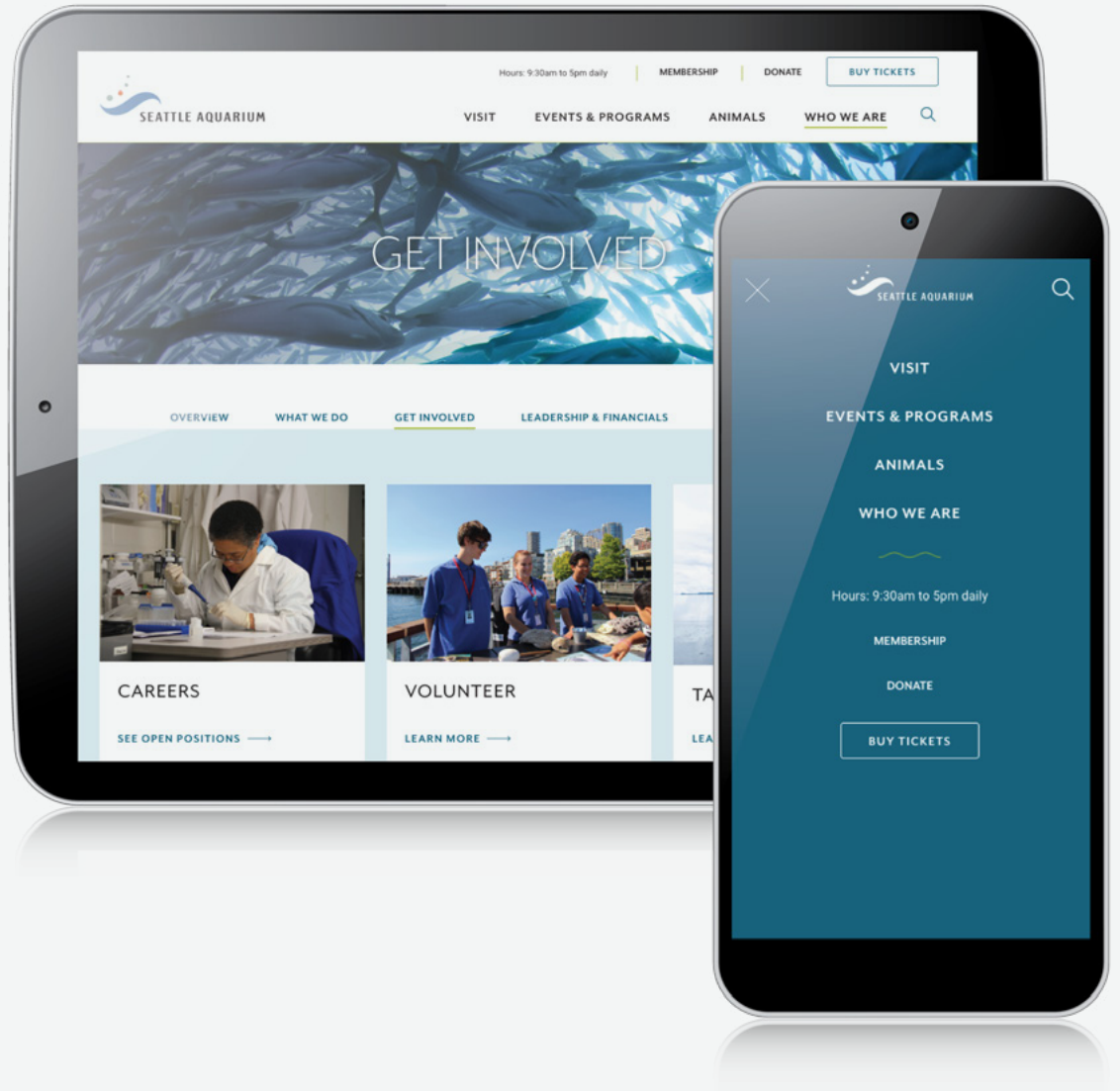
A SUCCESS STORY

In August 2018, Seattle Aquarium's website was successfully launched. Mobile responsive, fully accessible, and featuring a new, modernized theme. And, perhaps the biggest relief, it was now easier than ever for the Seattle Aquarium to directly manage their website's content, pushing the performance of their website even further.

"It's been miles easier than it was before," Marika Wegerbauer, Seattle Aquarium's Web Administrator said. Creating impressive new page layouts is much simpler, due to "just the ease of use of the paragraph blocks already built out. It would have all been coding, CSS in the past. I can upload content in 30 seconds when before I had to do a lot of work in the back end."

"It's so much easier to organize content and publish. You can easily post across multiple pages without a manual entry on each page," said Pamela Lamon, Seattle Aquarium's Digital Marketing Manager.

The capabilities of a more sophisticated CMS have enabled the Seattle Aquarium team to push their content even further. "Our goal is definitely to expand the website. Our number one goal is always to drive traffic to the aquarium, and to nurture sales and donations. So we're trying a variety of content that tells our stories a little bit better. We're heading into different directions on learning conservation efforts and sustainability here at the aquarium, and are able to tell those stories more visually with pictures and video," said Pamela.

The launch of the website has been happily met with positive responses both from visitors to the Seattle Aquarium as well as members of the Seattle Aquarium team. "We showed it to our executive team and we were expecting all these scary questions, and everyone was just in awe," Marika said.

"Everyone loves it, we didn't even announce it and we've already had staff go to our website and ask (they overheard us talking about it) 'Are you working on the website? It looks so amazing!'" Pamela said.

" It's been miles easier than it was before. "

MARIKA WEGERBAUER
WEB ADMINISTRATOR
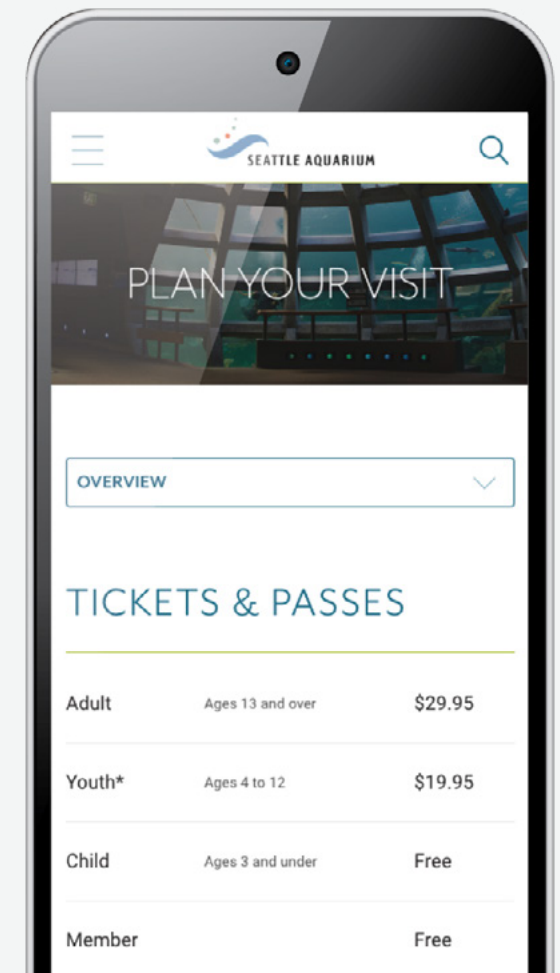
Custom without compromise.

Bear