



## Big building, green footprint

## Energy and water savings are built into every corner of the Pacific Seas Aquarium

When you go to build an aquarium at a zoo, you tell the architects right off that saving resources like water and power isn't a nice-to-do, it's a must-do.

"The new Pacific Seas Aquarium is not only a showcase for beautiful ocean animals, it's a concrete statement of our commitment to conserving the Earth's resources," said Zoo Deputy
Director John Houck. "We insisted that
it be as energy- and water-efficient
as possible—and it's a beauty. The
architects from EHDD and engineers
from TJP and PAE used baseline
LEED (Leadership in Energy and
Environmental Design) standards and
went up from there."

State-of-the-art features include:

 Drum filters that require less water than other methods for providing animal life-support systems.

- An air-source heat pump system that's suited to Tacoma's climate and is so smart that it can move heat from an exhibit or space that has too much warmth into another spot that needs it.
- Low-flow water fixtures.
- All new energy-efficient LED lighting.
- A rainwater capture system that's expected to supply more than 80 percent of the water needed for flushing toilets.

"We could show our guests pages and pages of specifications on the energy-efficient features built into the Pacific Seas Aquarium," Zoo Operations Manager Fred Ramey said. "But we think there are two things with which our guests will be most impressed. The water we put back into the Sound is cleaner than when we drew it out. And we're working closely with Tacoma Power to make our operation as energy- and cost-efficient as possible."





# Kait Rhoads art: It takes a village to make glass jellyfish

In Kait Rhoads' Seattle studio, four people are making a jellyfish. Focusing intently, they thread glass circles onto long steel tentacles, weaving copper wire to keep the pieces in place. It's a tedious job. But the atmosphere's upbeat. Rhoads' helpers are part of something big—creating a sculpture for the Pacific Seas Aquarium.

It took many hands to create "Salish Nettles," Rhoads' sculpture of three giant glass jellyfish that now hangs in the aquarium's high atrium.

It is one of four artworks commissioned for the aquarium through Metro Parks Tacoma's Public Art program, which dedicates money from large capital projects for art.

The jellies involved a community of people: Rhoads supervised the Museum of Glass hot shop crew and teen glassblowers from Tacoma Hilltop Artists to create the cylinders, then a cold glass worker to cut them into cross-sections and a color specialist to arrange their order. She worked with a foundry to make the steel skeleton, and with engineers to calculate hanging points.

The result is a piece of beauty that everyone owns, just like the ocean that inspired the art in the first place.

# From sea turtles to sharks, caring for nearly 600 species is all in a day's work for our zoo veterinarians

Azul is calm and peaceful as Dr. Karen Wolf listens to the rhythm of his heart using an instrument called a Doppler flow detector, which senses his pulse.

She peers into the 14-year-old sea turtle's eyes with an instrument called an ophthalmoscope, designed with magnification and a light at the end so Wolf, the Zoo's head veterinarian, can see if all the structures inside are as they should be.

And she gently moves his neck and examines his shell, or carapace, and flippers to assess other aspects of his overall health.

Zoo staff aquarists, who specialize in the care of aquatic animals, get measurements of his shell and body.

X-rays show the detail of his flippers and the bones in his skeleton.

"He looks fantastic," Wolf proclaims following physical exams of Azul and his brother, Sunny. The two green sea turtles, now swimming in the Baja Bay habitat of the Pacific Seas Aquarium, are the first of their species at Point Defiance Zoo & Aquarium.

"We evaluated them from head to tail, took X-rays and blood samples," Wolf says. "We now have a baseline of their health so we can monitor them. They are a very long-lived species, and we will track their health over time with annual physicals."

Aquarists, in the meantime, keep careful watch daily on the sea turtles—and every other animal in the Pacific Seas and South Pacific aquariums. That's thousands of fish and invertebrates, plus two reptiles.

Wolf and her veterinary team—an associate veterinarian, an intern veterinarian and a veterinary technician—are responsible for the overall health and top-notch care of more than 10,000 animals representing nearly 600 species. And they range



in size from 4½-ton elephants to 280-pound tigers to tiny fish whose weights are measured in mere grams.

Opening a new aquarium adds an extra layer of work because of the specialized care each fish, invertebrate or reptile needs as it goes through a quarantine period prior to being moved to its new home, Wolf said. This ensures that every animal is healthy and free of the parasites that commonly attach themselves to fish, Wolf said.

She and Associate Veterinarian Dr. Kadie Anderson are members of the American Association of Zoo Veterinarians and the American Association of Fish Veterinarians.

With new species to the Zoo, such as Sunny and Azul, they consult text books, read relevant journal articles and touch base as needed with other veterinarians around the world to ensure they're aware of any potential problems to watch for and new treatments that may be available.

"We put the same dedication, the same preparation into caring for every species we have here at the Zoo," Wolf said.





## Journey through the Pacific Seas Aquarium

We think you'll say "Wow!" over and over as you embark on a wondrous journey through the new Pacific Seas Aquarium.

We believe you'll be inspired by the sea turtles, hammerhead sharks, spotted eagle rays, mesmerizing jellies and thousands of other sea creatures in the 35,000-square-foot building, the largest capital project in the Zoo's 113-year-history.

Zoo members have the opportunity for a special preview from 9:30 a.m. to 7:30 p.m. on Sept. 4 and 5.

"We are tremendously excited and proud to open this state-of-the-art aquarium, which will eloquently tell the story of our ocean, the animals that live there and our critical interdependency with the seas." said Alan Varsik, director of Zoological & Environmental Education for Metro Parks Tacoma. "We think a journey through the Pacific Seas Aquarium will be exciting and inspirational, motivating our guests to take action that can lead to a healthier ocean."

# Oceans of Wonder



## A voyage of discovery

From the moment you walk you through the doors, you will embark on a voyage of discovery. Look for an eye-level glimpse of hammerhead sharks; be amazed by impossibly long-legged Japanese spider crabs; and marvel at hypnotic schooling fish before descending the first in a series of ramps—as if going deeper underwater.





#### Jelly Gallery, life under the Narrows and more!

Gaze at colorful, undulating jellies in several exhibits and be mesmerized as you stand before a self-contained acrylic globe containing jellyfish. It's one of only two in the U.S.

Peek into the world of life beneath the Tacoma Narrows bridges, watching a wolf eel, rockfish and lingcod swim around the replica of a rusted girder; see California sheephead, a leopard shark, a California moray eel, and other coastal sea animals playing peek-a-boo through a tall kelp forest; and ogle a giant Pacific octopus across the way.



#### Peer into Northwest Waters

Stroll over to the stunning Northwest Waters habitat, reflecting life in Puget Sound. It teems with rockfish, ratfish, salmon, sturgeon, lingcod, a wolf eel, and a stunning palette of other animals.

## Get hands-on in the Tidal Touch Zone

The Tidal Touch Zone is a hands-on area in which you can get closer than ever to the sea, feeling the rough texture of sea stars, the spikiness of sea urchins, and the hardness of crab shells.



## Be wowed by Baja Bay

Move down another wheelchair and stroller-friendly ramp to Baja Bay, the aquarium's show-stopping, 280,000-gallon home to green sea turtles, scalloped hammerhead sharks, and spotted eagle rays—three enthralling species new to our Zoo. An array of tropical fish swims among them, a spellbinding aquatic ballet of motion and color. You will watch through a 32-foot-long acrylic viewing window that arches over your head.











## More animals to join Pacific Seas throughout the year

Think of the Pacific Seas Aquarium opening on Sept. 7 as a Fall Preview, with more excitement to be added in the coming months, all leading up to a Spring Celebration next year.

There are still finishing touches to get just right. And while thousands of animals have already moved into their new Pacific Seas homes, hundreds more will be added throughout the rest of the year.

You'll want to come back often to see what's new to your Zoo.



## Pacific Seas Aquarium built to inspire generations of ocean conservationists

Zoo Operations Manager Fred Ramey knows exactly why he's involved in the construction of the new Pacific Seas Aquarium. And why he believes it will be an instant hit.

It's the pull of the sea.

The lure of the ocean and humans' connection to it will draw guests in, and they'll be immediately immersed in a world so intriguing and inviting, they'll be inspired to help keep the planet's seas healthy, he says.

Ramey, the father of a 10-year-old daughter and a 3-year-old son, thinks the biggest magnet in the building is the Tidal Touch Zone, where quests will connect hands on with the ocean by touching an array of interesting sea animals.

"Kids will not want to leave," Ramey

predicts. And that's a great "problem" to have, he adds. The first step in future generations learning to care about the ocean is helping them get to know the creatures that live there.

That goes for adults, too.

Awed by the beauty and diversity of thousands of colorful and interesting sea animals, you'll enter the Waves of Change gallery. Here, in an interactive space, you'll be invited to become a steward of the ocean and pledge to take a range of actions, including:

- Skipping the straw: Saying no to plastic straws can keep them from entering waterways and eventually cluttering the ocean, where they can damage or even kill sea animals.
- Using reusable shopping bags: Single-use plastic bags find their way out of the waste stream and into the sea by the truckload where they can harm birds and other sea life.

 Choosing ocean-friendly: Selecting seafood caught with

practices that ensure sustainable stocks of fish and shellfish

"We want a visit to the Pacific Seas Aquarium to be an exciting, immersive experience," Conservation **Engagement Manager Karen Povey** said. "We think our guests will feel as if they're in the ocean while watching sea turtle brothers Sunny and Azul swim by, marveling at hammerhead sharks, or staring with wonder at the graceful movements of our eagle rays."

Metro Parks Board of Commissioners President Andrea Smith put it this way:

"The Pacific Seas Aquarium is much more than a building filled with animals that inhabit the seas; it's a vessel for change," she said. "We are confident that generations of guests will be inspired to take action to improve the health of the ocean—and the lives of the creatures that live there."



## Be part of history with a taxdeductible gift supporting the **Pacific Seas Aquarium**

schooling Pacific herring

Thanks to the vision and generosity of our community, Point Defiance Zoo & Aquarium will open the new 35,000-square-foot Pacific Seas Aquarium on Sept. 7. A bond issue passed by generous Tacoma taxpayers is funding the bulk of the aquarium construction costs.

But you can play a personal role, too.

"The Zoo Society is in the final phases of raising \$4.2 million to help make the new aguarium the very best—and most amazing space it can be for our donors, members and guests," said President Sue Mauermann. "We are getting closer to our goal every day-but we could use your help."

"The mission of conservation is at the heart of the Pacific Seas Aquarium, where families will experience the power and fragility of our oceans and learn how we can protect this precious resource together," she added.

The underwater world of the state-ofthe-art Aquarium will feature exciting exhibits that connect us to conservation in new, innovative ways. Guests will walk under an array of fish and other sea animals in the beautiful Baja Bay exhibit, which is home to scalloped hammerhead sharks, green sea turtles and spotted eagle rays. Visitors also will get up-close views of jellies, and have the opportunity to gently touch a wide variety of marine life.

You can support this critical mission by donating to the final fund-raising effort for this world-class community asset. Through your gift, children and adults will be inspired to care for our ocean for generations to come.

The time is now! Get details and make your tax-deductible gift today at thezoosociety.org.

Thank you. We're certain you're going to love the new Pacific Seas Aquarium. It's going to make a big splash!

So cute! Seize the day to adopt a sea animal

You can be an ocean conservation superstar by adopting a cuddly, large size green sea turtle, scalloped hammerhead shark or spotted eagle ray. Your Zoo Parent donation of just \$60 entitles you to:

- A stuffed plush animal
- A certificate of adoption
- A 5x7 photo of your animal
- An animal fact sheet

You also will be secure in the knowledge that you're helping The Zoo Society support the work of your Zoo. To learn more, go to thezoosociety.org/adopt.



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# Members' Pacific Seas Aquarium previews set for Sept. 4 and 5

We've said before that Zoo membership has its privileges—and they don't get any more exciting than this. All Zoo members will have the opportunity to visit the Pacific Seas Aquarium before it opens to the public on Sept. 7.

Member Preview Days are scheduled on Sept. 4 and 5 from 9:30 a.m. to 7:30 p.m.

With the stunning aquarium—the largest capital project in the Zoo's history—about to open, now is a great time to renew your membership, or to give a membership for those newlyweds, new parents or new grandparents in your family.

And remember, all memberships come with an ocean full of perks, including a

10 percent discount in the Gift Shop; a 20 percent discount to Northwest Trek Wildlife Park; and a 50 percent discount on tickets to Zoolights.

Renew online at **pdza.org/membership** or call 253-404-3635.

# Get information about Wild Rewards during Member Preview Days

Our new Wild Rewards plan to enhance the Zoo membership experience is nearly ready to launch. Look for our Visitor Services team at a Wild Rewards table during the aquarium Member Preview Days. They'll have details about exciting perks coming soon.

# Sea turtles at your wedding? It will be possible in the new Pacific Seas Aquarium (Just don't expect them to be the ring bearers)

Looking for a memorable wedding location? Seeking the perfect spot for a retirement party or holiday party?

There are many locations in the Pacific Seas Aquarium for events large and small. And they are now available for booking in late 2018 and 2019.

What could be better than celebrating a landmark life event than in the company of some of the world's most majestic and colorful animals? Plus, you'll be supporting a world-class conservation organization.

To book your event, email **pdzasales@lancercatering.com** or call 253-404-3823.

