

COASTAL ARCTIC

LIFE AT THE TOP OF THE WORLD

This zone builds on the success of Arctic Shores and the Northern fur seals experience to create a comprehensive northern destination experience that will continue to transform the Edmonton Valley Zoo. Coastal Arctic is the third branch off the Waterways to the World and draws visitors into the beating heart of our global water systems – oceans.

Arctic Shores, while recently built, will be augmented by the addition of new species including Steller's sea eagles, Alaska marmots, Arctic foxes and puffins/murres. A pingo landscape feature will be retained and activated and the pathway through the experience will be improved for two-way circulation. This creates a world-class guest experience where visitors feel truly transported to coastal ecosystems that are inaccessible to so many people.

The zone stands out amongst Canadian zoos by showcasing arctic biodiversity with habitats for mammals, birds, fish, and invertebrates. A new Coastal Arctic Gallery allows guests to get up close with aquatic species including Arctic lumpfish and cod, learn about the importance of ice algae, experience surging coastal tides, and get underwater with marine mammals like Sea otters.

The pinnacle of the experience is the polar bear habitat. The Polar Bear Feasibility Study (see Appendix G) assessed the viability of welcoming polar bears to the Edmonton Valley Zoo. Based on the findings, the species is included in the Coastal Arctic Zone. Visitors will explore sweeping vistas where polar bears explore dynamic spaces with varied topography and water elements. Guests can observe the

bears underwater, adjacent to the sea otter habitat, enjoy barrier-free views over a moat into the terrestrial habitats, and view bears from the roof of the arctic gallery structure looking eye-to-eye with bears exploring high elevations.

The zone creates the opportunity to engage guests in timely conservation stories around climate change and human impact, and the actions required to sustain a healthy future for the arctic. The Edmonton Valley Zoo is well-positioned to create and further conservation and research partnerships, such as with the University of Alberta, and be a hub for arctic research. Frequently described as the *Gateway to the North*, Edmonton can lead the way in being a force for change and stewarding the future for iconic northern species and places.



EVZ IMAGE: ARCTIC SHORES



REFERENCE IMAGE: ARCTIC LUMPFISH



REFERENCE IMAGE: ARCTIC COASTLINE



REFERENCE IMAGE: ARCTIC FOX



REFERENCE IMAGE: SEA OTTER

VISITOR JOURNEY - COASTAL ARCTIC

Scottie and Sydney are a newly married couple in their early thirties. They are outdoor and nature enthusiasts, and self-described animal nerds. They are into wildlife photography and enjoy visiting the Edmonton Valley Zoo to practice techniques and see the animals up close. Scottie writes a nature blog and uses her social media to share quirky animal information with her photos. They are committed to a sustainable lifestyle and are always looking for ways to make a difference for wildlife.

"He's about to jump! Don't miss this shot"

Scottie looks through her camera, focus trained on the bear's every move. The bear pauses at the edge of the pool for just a moment before diving as gracefully as a 1500lb animal can into the crystal waters below. Her shutter clicks, capturing each frame as the bear makes the plunge.

"Got it."

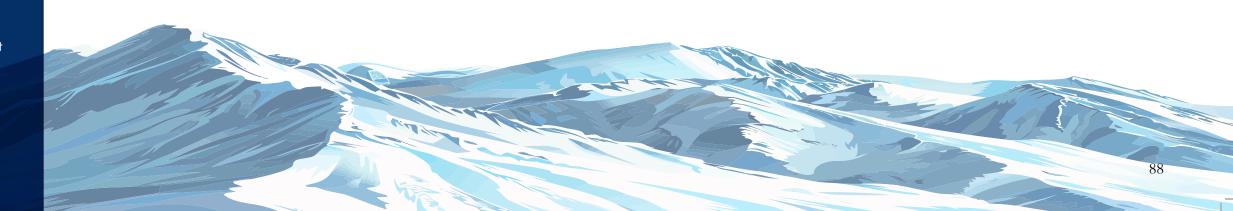
Taking wildlife photos is as much an art of patience as it is skill. Scottie and Sydney have spent the last half hour perched on a rock beside the pool, the angle perfect for capturing the full scale of the bear in the water. As regular visitors to the Edmonton Valley Zoo, they have learned the best times and spots to take photos. They have gotten to know the animals too, both their routines and typical rhythms, as well as their favourite spots. While they wait, they scan the QR code on the signage, keen to learn what the research team is up to. The partnership between the University and the zoo means they get access to the most cutting-edge research stories, both from the lab and the field.

"Is there an update on the behaviour study?"

Sydney reads out about the monitoring updates, comparing polar bear reactions to novel objects to help understand bear temperament and personalities. She is excited about an upcoming talk being held at the zoo that will share how the research is helping facilities understand and manage bears in human care, and what the implications are for wild bear monitoring.

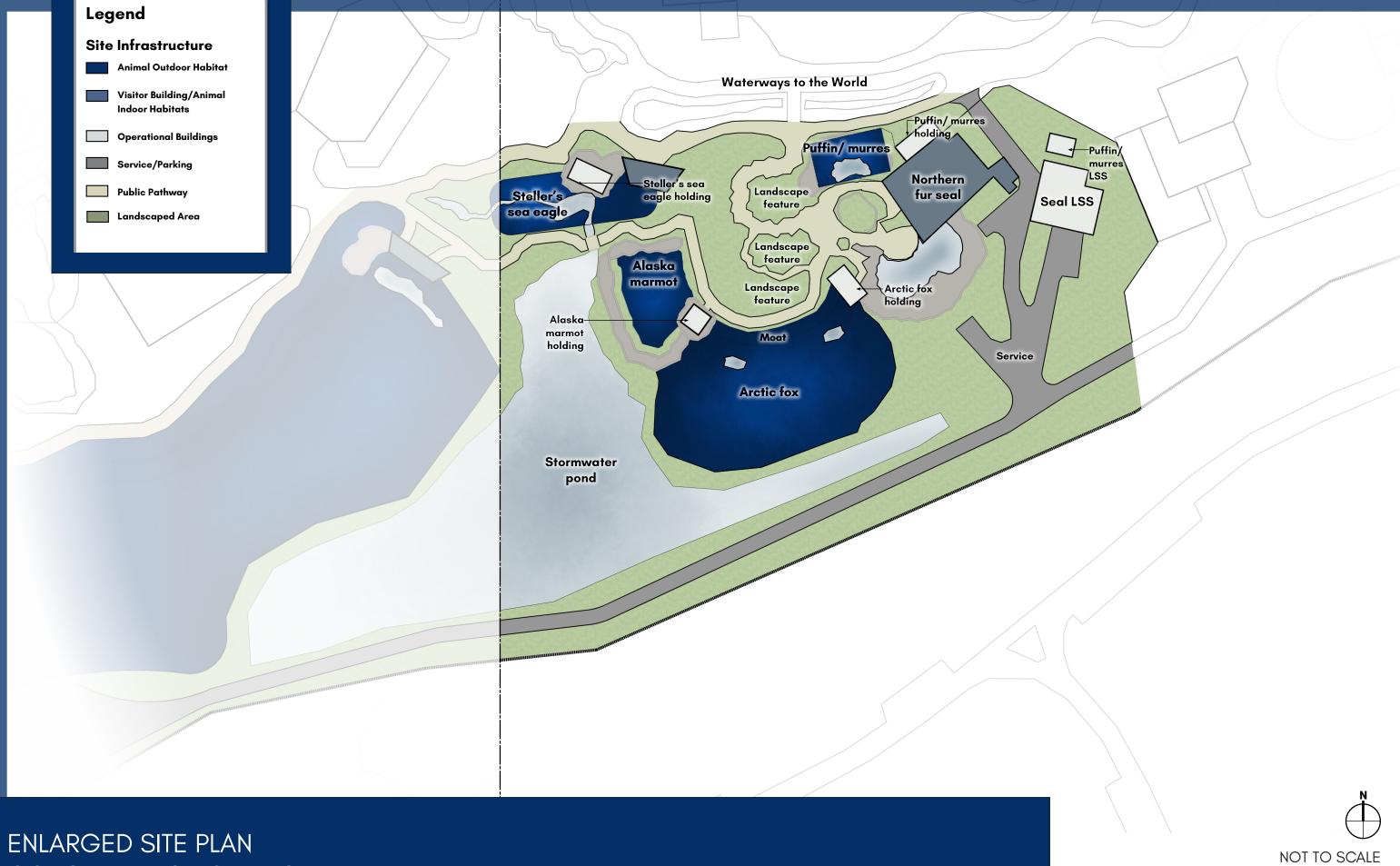
"It says there might be an opportunity for us to help with coding all the monitoring video. How cool is that?"











COASTAL ARCTIC - EAST



FUNCTIONAL PROGRAM

The complete functional program including: sizes, components, levels of service requirements, critical asset identification and risk is included in Appendix B.

The functional program largely reflects new or modified infrastructure. Existing infrastructure to be maintained is discussed on page 127, with modifications and removals to current infrastructure further described in Appendix C.

PROGRAM AT-A-GLANCE

- Northern fur seal, harbour seals (current Arctic shores)
- Steller's sea eagle habitat
- Arctic fox habitat
- Alaska marmot habitat
- Puffins/murres habitat
- Polar bear habitat
- Sea otter habitat
- Coastal arctic gallery with indoor aquatic animal habitats
- Viewing shelters & high bear view
- Life Support System/Filtration buildings for sea otter and polar bear habitats, and puffins/murres
- Stormwater improvements including stormwater pond

POTENTIAL SPECIES

Northern fur seal / Callorhinus ursinus

Harbour seal / Phoca vitulina

Polar bear* / Ursus maritimus

Sea otter* / Ehydra lutris

Puffins & Murres* / Uria ssp and Fratercula ssp

Arctic fox* / Vulpes lagopus

Alaska marmot* / Marmota broweri

Steller's sea eagle*/ Haliaeetus pelagicus

Arctic lumpfish and Arctic invertebrates in Coastal Arctic Gallery*

(*Peary Caribou / Rangifer tarandus pearyi - option in lieu of Woodland caribou)

* Indicates new species





VISITOR JOURNEY

Veronica and James have been visiting the Edmonton Valley Zoo for more than 40 years. They grew up in Edmonton, raising four children in a bungalow in Grandview. Their children loved the Storyland Valley Zoo, and they have fond memories of bringing the whole family to ride the train and see the animals. They have two great-grandchildren now, and they bring them to the zoo whenever they come to visit.

"Papa, my feet are so tired, I can't walk any more."

James picks Abigail up as they reach the plaza. She's been a trooper today, little legs carrying her all over the zoo. They have spent hours exploring, playing, watching the animals, and eating snacks. Nana and Papa are tired too but spending the day with the grandkids always gives them an energy boost. Nana looks back at Sawyer.

"Time to go buddy."

Sawyer stuffs his new nature leader book into his backpack. He spent over half an hour in Conservation Education Centre watching the frogs today, and he can't wait to bring the book for show and tell, teaching his classmates everything he learned.

"Nana, when I grow up, I'm going to be a frog biologist!"

As they walk back to the car, Abigail rests her head on Papa's shoulder, eyes drooping.

"What was your favourite thing today Papa?"

Papa pauses, thinking about when her mom was little and asked him the same question. Years have gone by, the Edmonton Valley Zoo has changed so much, and yet the answer is the same.

"I loved spending time with you at the Zoo, little one."



