



House Capital Investment Committee

John Frawley, Director



MINNESOTA ZOO



**We connect people, animals
and the natural world to
save wildlife.**



2021 Bonding Request



Capital: \$9 million

- Animal Hospital Renovation (\$5 million)
- Reopen the Nocturnal Trail (\$4 million)

Asset Preservation: \$15 million

- Lakeside Plaza Replacement Project
- Address outdated mechanical, electrical and life support systems.
- Update restrooms to meet ADA requirements, egress codes, and guest expectations.
- Repair and replace deteriorated bridges, trails and roads throughout the site.
- Repair animal exhibits and support buildings, including roof and skylight replacement.

Total Request: \$24 million

Renovate the Animal Hospital



THURSDAY, JANUARY 30, 2020

MINNESOTA

STAR TRIBUNE • B3

AROUND THE METRO

After surgery, he's back to stealing hearts, fish

Minn. Zoo sea otter thrives after groundbreaking flipper amputation.

By ERIN ADLER
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Behind the scenes at the Minnesota Zoo, Rocky the sea otter swims laps around his pool, dives for mussels and fluffs up his tail.

The 12-year-old marine mammal was busy Wednesday doing typical otter snuff, zoo staffers said, despite likely becoming the first of his species to undergo groundbreaking surgery to remove a flipper.

"You'll see him move around in the water like he never had a back flipper," said Dr. Lesanna Lahner, a Minnesota Zoo veterinarian. "I don't think he minds one bit."

Rocky is one of three sea otters at the Apple Valley zoo, along with male companions Capers and Jasper. He developed an infection on a webbed foot last summer from a bite injury. Vets gave him antibiotics but the infection migrated upward, eventually eroding the cartilage in his knee.

"We could tell it was painful for him," said Melanie Oerner, supervisor of the zoo's marine mammal department, adding that Rocky was eating less and



Photos by ANTHONY SOUFFLE - anthony.souffle@startribune.com

Rocky spent time in his off-exhibit area Wednesday at the Minnesota Zoo. Dr. Lesanna Lahner said she knew the flipper surgery was successful when he began grooming his coat and eating.

staying in the water more.

Lahner decided to try performing surgery earlier this month on the 70-pound animal. It was daunting, she said, but she was confident she "had the support and experience in the field to be able to do something new."

Limb amputation is common in cats and dogs, Lahner said, but no one had heard of a flipper amputation on an otter. She compared it to a human undergoing knee replacement.

"The surgery likely hadn't been tried for several reasons. When taken out of water for long periods, otters overheat, Lahner said, and their gastro-

intestinal tract stops working.

When Rocky got too warm during the four-hour surgery, Lahner said she put ice on his paws and in the unique pockets otters have in their armpits.

Another challenge is sealing a wound when an animal will be immediately returned to the water. Lahner said she learned an effective technique through previous work, using multiple layers of sutures and sewing the stitches in a cross pattern.

"I do wish I could have used one of those cones, but I'm pretty sure he'd have it off in about 10 minutes," she said, referring to the collars often

worn by dogs and cats after surgery.

Lahner said she knew the surgery was successful when Rocky began grooming his coat and eating.

'Ball of energy'

Dr. Mike Murray, director of veterinary services at the Monterey Bay Aquarium in California, gave Lahner credit for thinking outside the box. The surgery required the vet's confidence and the animal's trust, said Murray, who is also Lahner's mentor.

"It's a pretty invasive, radical surgery with a lot of moving parts," he said. The posi-

tive outcome will encourage other vets to try complicated surgeries that would take even longer, he said.

Rocky, a northern sea otter, came to the zoo from Alaska after he was orphaned in 2007. He's the dominant male of the zoo's otter trio and has developed a distinctive white face as he's aged, Lahner said.

Like other sea otters, Rocky is a "little ball of energy" with amazing strength and powerful jaws, Oerner said. He once picked up a 100-pound boulder from the floor of his pool, prompting staff to glue it down, she said.

Otters are smart, she said,

and recognize staffers by voice and smell. Each responds when his wooden nametag—a star, for instance—is held up during training.

Once hunted to near extinction for their fur, sea otters have made a comeback but are still threatened. They act as a keystone species, one that other plants and animals depend on to keep the ecosystem in check.

"If you're looking for an animal to carry the conservation flag for the ocean, you're not going to get more charismatic than a sea otter," Murray said.

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Renovate the Animal Hospital



Surgery room doubles as
Intensive care



Renovate the Animal Hospital



Renovate the Animal Hospital



MINNESOTA ZOO

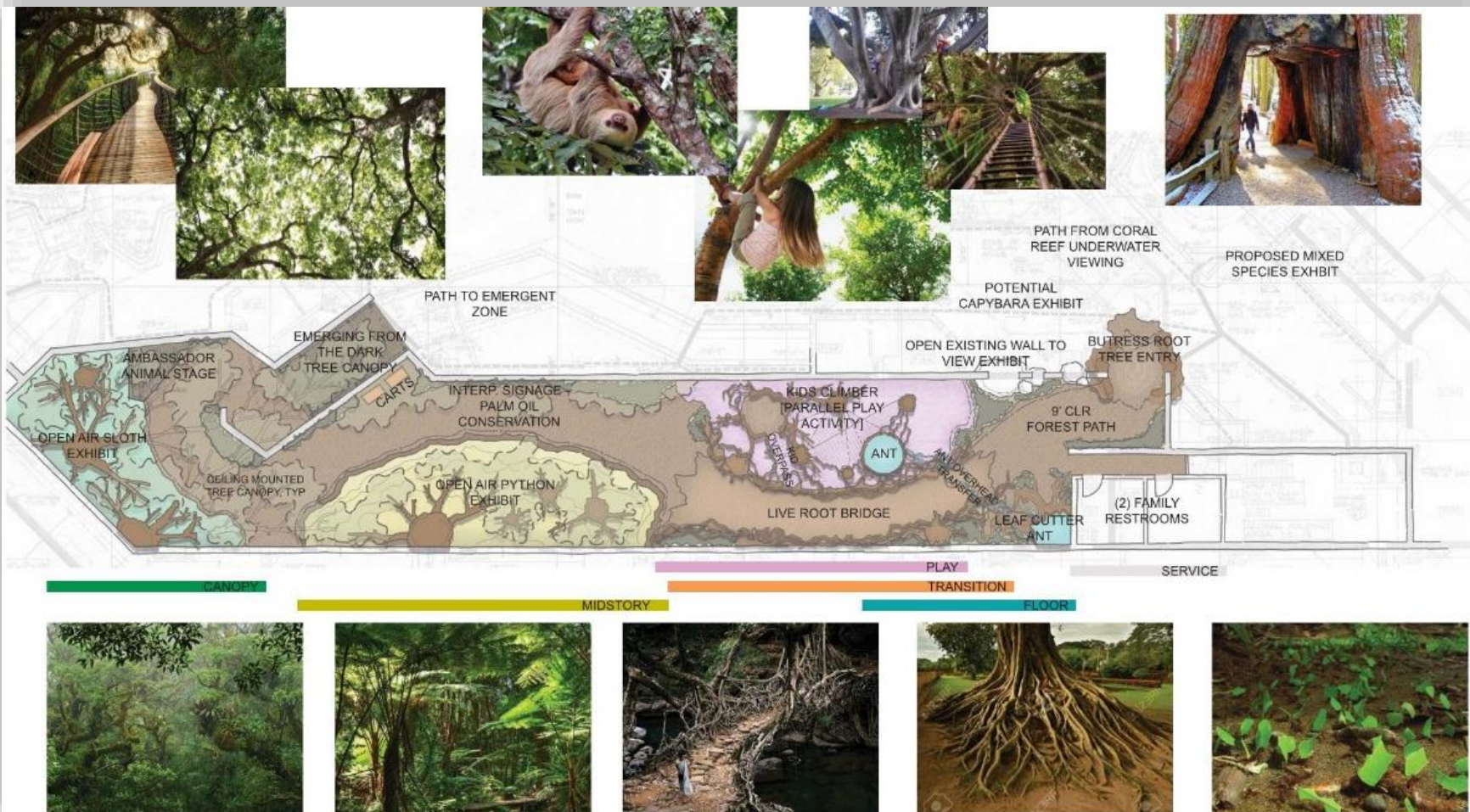




MINNESOTA ZOO

Reopen the Nocturnal Trail

(closed for 10 years)



Lakeside Plaza Replacement



45-year old infrastructure that connects the Zoo to its main lake

Guest gathering and eating space outside Call of the Wild food area

Includes the outdated “snow monkey ramp” that is not ADA compliant

2012 study noted failing infrastructure; repairs made and failed

2019 study determined while still safe for use, load/public gathering limit was needed and implemented

More assessment is needed to determine final cost, but is expected to cost about \$10 - \$15 million

Lakeside Plaza Replacement



Asset Preservation

