





Campus Master Plan
June 2022

Planning Participants

California Living Museum*

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^{*} Additional CALM Staff and Foundation members participated in select workshops throughout the planning process, providing valuable input on the overall assessment of the CALM campus, identifying key existing assets, defining future vision objectives, and developing concepts for select future capital projects.

Foreword

Since 1983, the California Living Museum (CALM) has grown from a grassroots effort to a beloved, accredited zoological facility that brings California wildlife and conservation to the forefront of the Kern County community. Acting as both a wildlife rehabilitation center and zoo, CALM exists to educate the public on the amazing flora and fauna that thrives in California.

One of the only zoological facilities operated by a County Office of Education, CALM works hand in hand with the Kern County Superintendent of Schools to educate students and adults alike; currently hosting over 20,000 students annually through our doors on school field trips. In collaboration with the CALM Foundation, we inspire guests to look at wildlife with new perspectives and intentions. It is our hope that we motivate each visitor to help make a personal commitment to the betterment of our planet.

As CALM expands and embraces new techniques and practices in animal care and husbandry, we will continue to not only create new animal-centered guest experiences but make renovations to older onsite facilities. The following Master Plan acts as a blueprint to make those dreams a reality.

With the support of our amazing community, CALM will offer expansive aid to wildlife and a top-notch experience for every guest who comes through our doors. With community, conservation and commitment in mind, CALM intends to utilize this Master Plan to create a facility that leaves an imprint on visitors that lasts a lifetime.

Thank you for your continued support in our efforts,

Meg Maitland

Director, CALM

Help Us Help Wildlife









Overview & Planning Process

This report presents a conceptual plan for how the California Living Museum can be developed over the next 15 years. Concepts for the various project zones are backed by both "mission" drivers, such as showcasing California wildlife and bolstering CALM's rescue and rehab program, as well as "site" drivers through the utilization of the site's unique bluffs and rolling hills.

Led by CLR Design (CLR), a series of three interactive workshops gave the Zoo's executive team, Board of Directors, and staff an opportunity to think critically and creatively about campus-wide needs, big picture vision and the role that the Zoo will play as a regional attraction. This seven-month process began in September 2021 with an initial workshop to understand the needs and goals of the Zoo. Successive workshops focused on concept testing by way of plans, sketches, imagery, and narratives to thoroughly vet ideas. CLR presented these concepts to the workshop participants, documented feedback, and refined ideas for preparation of the final Master Plan Booklet in the Summer of 2022.

During the first Workshop, the Planning Team identified the following Mission Strengths and Site Attributes, that helped inform the direction of the Campus Plan:

Mission Strengths

- Commitment to education and conservation (especially local/CA species)
- Community asset
- Operational support from City
- Motivated Board desire to grow and improve as an institution
- Rescue, Rehab and Release program
- Offer unique more intimate experience (different than the larger LA and San Diego Zoos)

Site Strengths

- Land rich developed core with large potential expansion zones east and west
- Beautiful Kern River edge setting and foothills backdrop
- Mature trees at core of campus
- New train ride and mining town settlement attraction
- Nice collection of animals mainly focused on North America
- Parking for guests plenty of space
- New mountain lion habitat is more representative of desired exhibit type in the future – spacious, natural geology, streams and pool, shade, more modern holding, etc.

Site Challenges

- Somewhat removed from downtown
 Bakersfield with few other draws this end of town (minimal lunch spots, minimal shopping, no other attractions, etc.)
- Parking plenty of area but need better surfacing and shade
- No sense of arrival, flow from parking to core could be improved
- Exhibits smaller existing habitats with aging containment and facilities, somewhat static and could be more interactive for guests and the animals, too much chain-link and hard materials in sight-lines
- Education program is critical but need better venues and more staff to meet goals
- Bear and Bighorn Sheep Habitats could be improved for these stars of CALM
- Rescue and Rehab program is an asset to the community and CALM but needs dedicated entry and likely additional support space, i.e. yards with shade





WORKSHOP #2
OCTOBER 2021

Concept Testing Feedback
Zoo Comments
Zoo Internal
Project Analysis

WORKSHOP #3
NOVEMBER 2021

Concept Testing Feedback Master Plan Development Preferred Concept PROGRESS MTC

Draft Final Master Plan

INAL PLAN

⊞⊠

Final Master Plan
Priority/Budget Review

FINAL

JUNE 2022





Master Plan Drivers & Conceptual Framework

Through the workshop process, several key drivers and priorities for CALM's master plan began to emerge:

"I've Never Seen California Like This"

Rather than try to expand CALM's animal collection to more exotic animals that may not be well-suited to central California's environment, the decision was made to continue to showcase Californian ecology, but with a level of focus and intention that more comprehensive institutions are unable to provide.

Expand and Improve Wildlife Rehabilitation Program

As the only wildlife rehabilitation center in the Bakersfield area, CALM's rehab program plays an important role and the consensus was to make the program bigger, better, and more prominent. By highlighting the incredible work the CALM's wildlife rehab program accomplishes, the Zoo's contributions and actions towards conservation.





Adventure Education Concept

Expanded Animal Land Use and Mixed Species Habitats

Opportunity to provide more enriching habitats with more comprehensive environmental transects through a particular region of CA, such as desert, montane, riverine, coastal, etc.

Flow

The existing campus has been developed somewhat haphazardly over the last several decades. Overall facility master plans have been developed but there's a lack of consistency with implementation and execution of projects and programs. Test new circulation systems with hierarchy including a new primary path, secondary and tertiary trails the loop back to key hubs. Look for opportunities to create dedicated perimeter service roads.

Arrival Experience

CALM offers a lot upon entry, however the core parking area, drop-of zone, and flow from a primary gathering area to the core of the campus lacks some very basic geometries that will allow for better circulation for everyday guests as well as busy school group days and events. These enhancements envisioned can help with stay time, earned revenue at the gate, and guest satisfaction overall (return visitation, membership sales, etc.).

Hubs

Review opportunities to create strategic zones throughout the campus that "stack" several components such as shade, food and beverage, guest comfort (restrooms, seating, misters, etc.), views of animals and landscapes, and ideally, secondary/tertiary loop back trails so each hub is utilized multiple times. This could be a key consideration if the campus were to grow over time – expanding in to the west and east lots.

Flex Habitats

Not only can mixed species habitats allow for more enriching environments for guests, animals and staff, but the ability to link spaces (flex habitats) for animals with somewhat comparable holding requirements can open up an entirely new layer of circulation and utilization. Animals will have more space to explore and search, longer corridors to trek and track. It can all be planned in a compelling way and even choreographed from day to day so there's much more animal movement and interaction for guests.

Campus Ecology

With the land-rich CALM campus, there are many opportunities to better manage natural resources, reduce energy usage, and conserve water. Although this is a dry region of the valley and state, storm water can still be managed on site through natural passive systems and landscapes. Power can be harvested via solar and wind. Water reclamation and treatment facilities can reduce potable water usage with habitats and other facilities. There are many opportunities to consider and even local partnerships to explore.

Adventure Education

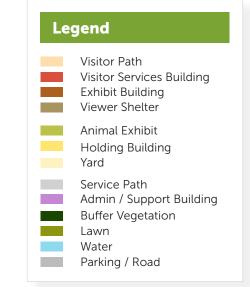
Education is such a key programmatic aspect to the CALM experience and mission. With multi-dimensional integrated thinking, spaces in and around an educational center and throughout the entire CALM campus can become dynamic learning places and experiences that connect back to the mission. These multi-use spaces, integrated into surrounding landscape areas, habitat edges, and unique places in buildings, provide more than "classrooms" – they create dramatic and immersive educational adventures with unique views and experiences that connect kids to animals, plants, and nature.





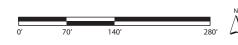
Existing Campus





5.5 Acre
0,500 S
4,000 S
4,100 S
4,100 S
2,000 S
6,100 S
21,000 S
1,500 S
11,700 S
8,800 S
4,500 S
4,000 S
2,800 S
4,300 S
4,200 S
6,300 S
52,150 S
37,350 S
0,000 S
3,400 S
3,500 S
600 S

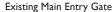
Total Animal Habitat Land Use 97,800 SF / 10%





Existing Campus - Site Images & Analysis













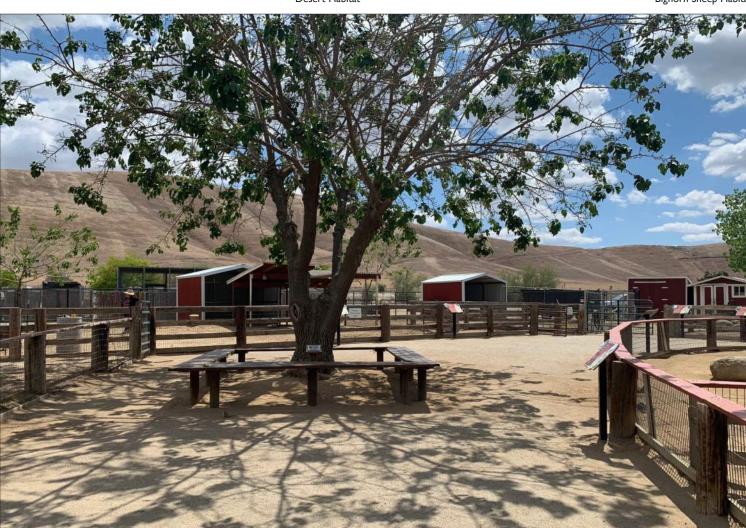
Cats of California







Core of CALM Campus with Natural Shade Trees







Campus Master Plan



APPROXIMATE LAND USE AREAS

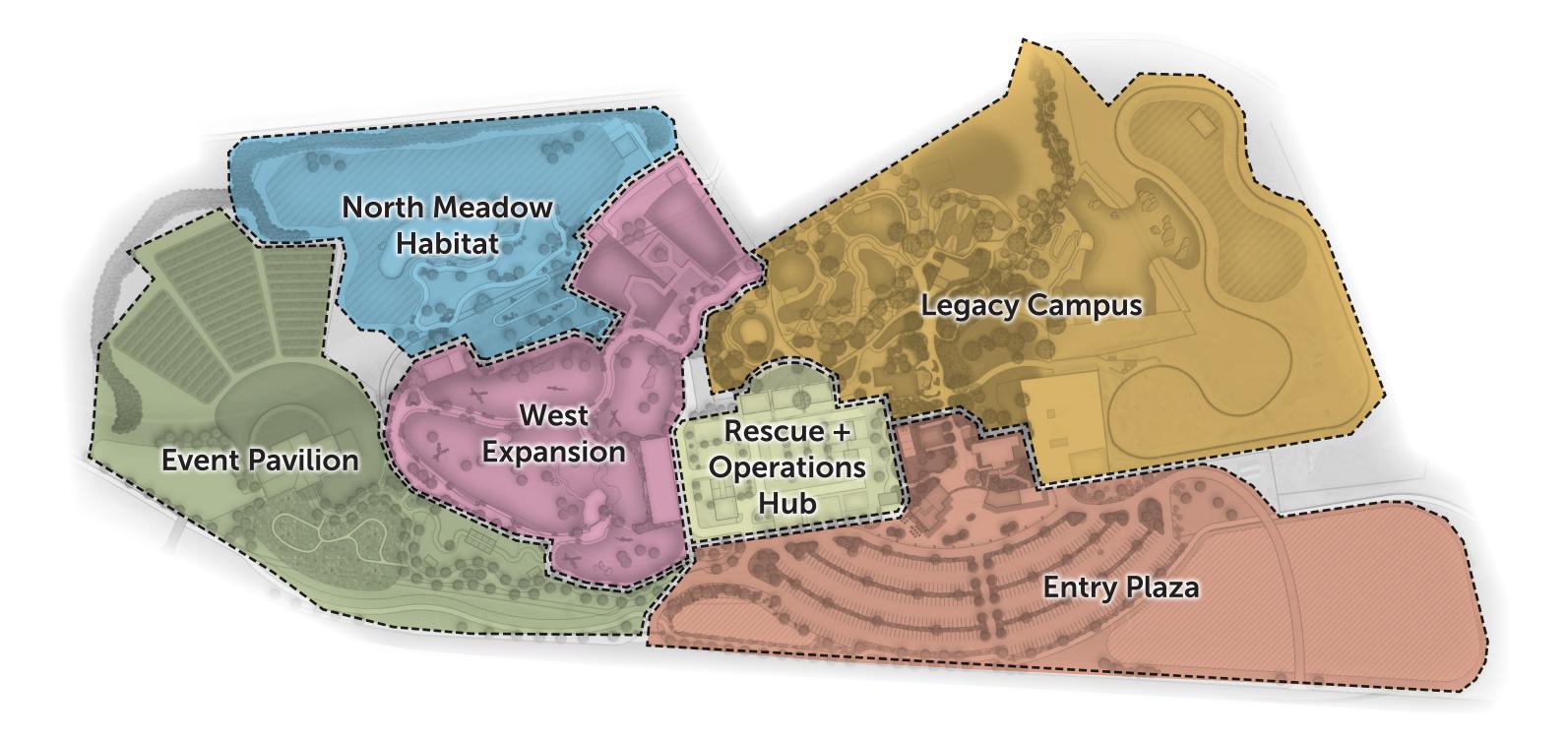
Overall Developed Campus

Legend

63.5 Acres

Master Plan Overview

Project Zones







Entry Plaza

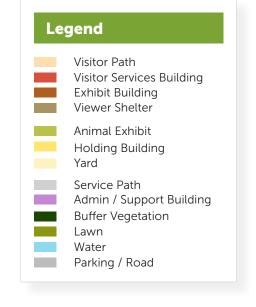
By reorganizing the geometry of the parking lot and expanding the plaza, CALM's improved entry experience will increase safety, boost revenue, and improve overall guest satisfaction.

Key Concepts:

- circulation geometry, visibility, and flow to the new entry gateway
- More evident gateway to the arrival drive.
- Easy car loop and guest drop-off
- Dedicated bus route, drop-off and direct Zoo entry for school groups
- New Entry Village including ticketing, guest services, gift, and second-level administrative offices

- Redevelop parking and overflow lots for ideal Coffee shop / quick-service restaurant outside Zoo gates to capture passing bike traffic and boost revenue
- Improved landscape, sculpture, and signage. Repurpose the existing Entry Building as the Education Hub, including flexible classroom spaces, storage, and other programming needs
 - New small-animal exhibit just after gateway

Program 4,038 SF Gift Shop / Cafe / Admin Ticketing / Guest Services 2,168 SF Flex Habitat 3,930 SF Temp Holding 1,650 SF









Entry Plaza - Conceptual Rendering



Education Building Enhancements

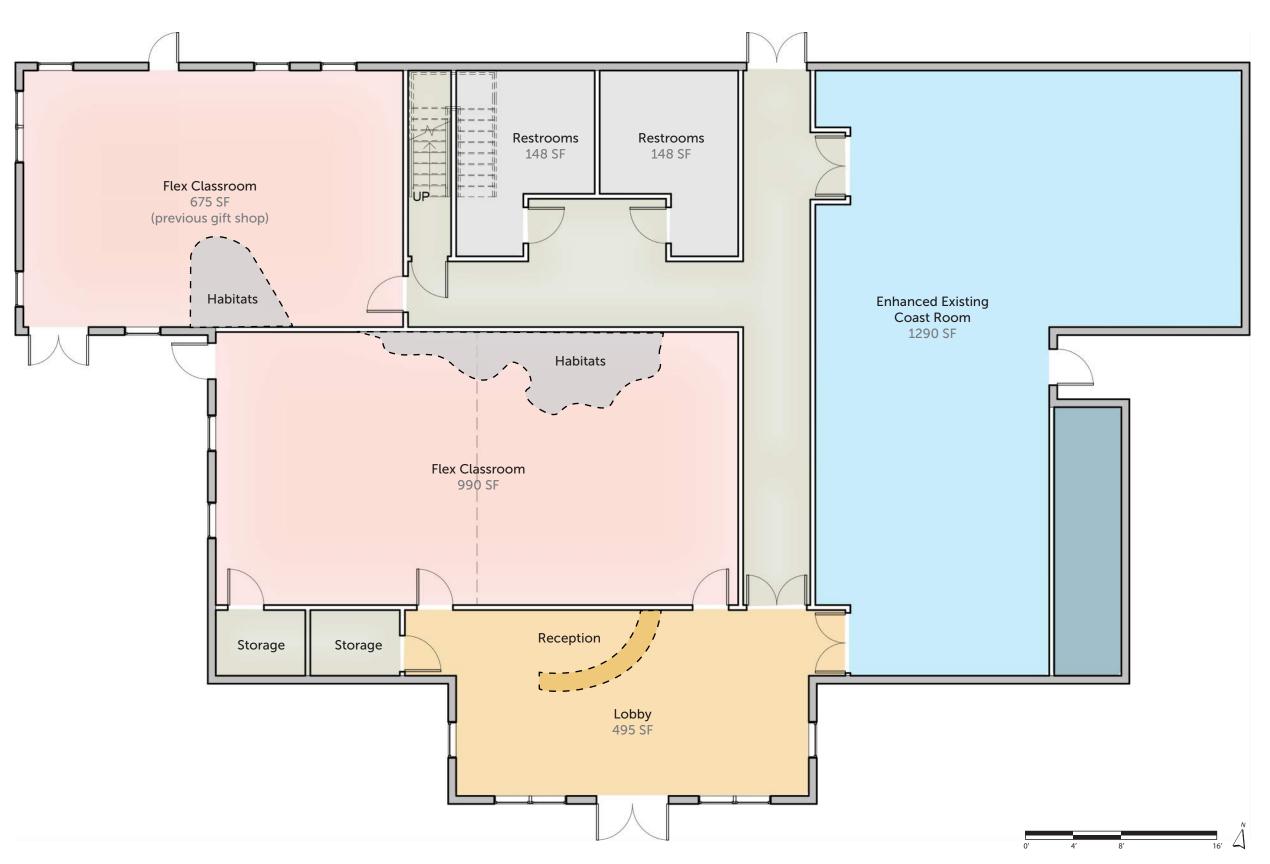


Enhance/Expand the central space for classroom use and other special events



Maintain/Enhance the existing Coast Room







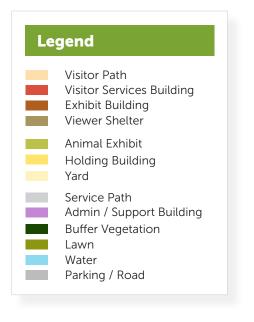
Rehabilitation & Animal Operations Hub

With an increased focus on CALM's mission to rescue, rehabilitate and release local wildlife, it was important to develop a true Rescue and Animal Operations Hub to optimize its expanding animal care operations as well as showcase this important work to visitors.

Key Concepts:

- New two-story commissary and animal
 quarantine building with intern housing above
- New OWCN under construction and step towards bolstering the facilities and operation
- Dedicated entry/exit to avoid animal drop-offs going through the main gate
- Larger/more outdoor yards with shade and natural substrates
- New indoor small animal (mammals, birds, etc.) holding and staff support facility, including outdoor yards for maximum flexibility
- New guest trail anchoring east side, can be part of everyday experience or (fee-based) behind the scenes tour

Program	
Commissary	4,146 SF
Quarantine	4,146 SF
Rehab	2,335 SF
Vet Support	1,200 SF
Animal Holding	1,200 SF
Ambassador Animal Habitat	
Ambassador Animal Mews (x3)	3,575 SF
Large Mammal	3,200 SF
Avian Yards	3,200 SF
Quarantine Yards (x2)	1,062 SF
Rehab Yards (x2)	962 SF
Flight Aviaries (x3)	3,000 SF
Vet Support Yards (x2)	1,107 SF
Animal Holding Yards (x2)	1,107 SF
Ambassador Animal Yards (x3)	1,197 SF









Rehabilitation & Animal Operations Hub - Conceptual Rendering





Legacy Campus





Key Projects:

Central Promenade

A revamped central pathway enhances visitor comfort through the use of shade trees, garden edges, benches, misters, and more. Special paving creates hierarchy in the site's circulation system

Woodland Trail

With the previous residents moved out to new, larger habitats, the northeast end of the Legacy Campus can be re-purposed to exhibit existing smaller collection animals in a more modern way, while incorporating "adventure education" through unique play features embedded into the landscape.

Snack Hub

A new visitor central hub with snack station and seating deck, overlooking central stream and ravine, as well as new habitats.

Reptile Renovation

The building shell of the Herpetarium is in decent condition and will benefit from an interior refit to modernize the exhibits inside with more varied enclosure sizes and even a peek-a-boo window into the life support systems for the waterfall exhibit outside.

Bighorn Sheep Expansion

By adjusting the barriers of the existing Bighorn Sheep exhibit, the visitor experience can be vastly improved through optimized sight-lines and more immersive viewing, and bringing the animals closer to the train tracks across the ravine for an exclusive train experience.

Riparian Zone

A refurbished riparian zone replaces the aging Shorebirds exhibit, and includes mixed species or flex habitats for birds and small mammals found within a riparian transect.



nack Hub



Riparian Zon



Woodland Tra



Legacy Campus **Animals**



Bighorn Sheep Legacy Campus



Western Pond Turtle Herp Building



Golden Eagle Aviaries



Pronghorn Train Loop New Animal



Pelican Riparian + Shorebirds



American River Otter Riparian New Animal



Coot Riparian + Shorebirds



EgretRiparian + Shorebirds



American Badger Woodland Trail



Bobcat Woodland Trail



Gray Fox Woodland Trail



Raccoon Woodland Trail



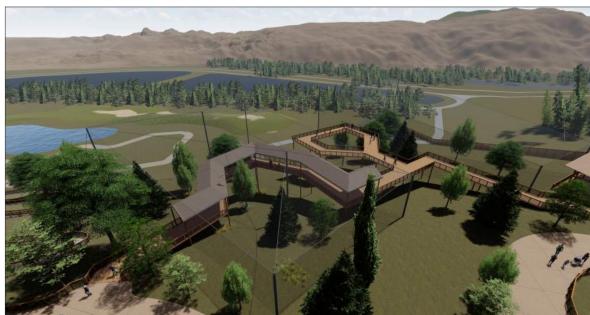


West Expansion

This major new land use expansion to the west of the developed CALM Zoo site was designed in a way that compliments and supports the CALM mission and its natural landscape. Modern zoological habitats, animal welfare, and guest experiences through the use of rotational habitats, activity-based habitats, and immersive landscapes were all considered during the development of this zone. The main visitor path follows the ravine in the natural landscape, providing stunning vistas as the wolf and bear habitats rise up along either side.

Program	,
Bear Holding	10,760 SF
Bear Tunnel Building	4,5000 SF
Aviary 1 Barn	915 SF
Aviary 2 Barn	915 SF
Wolf Holding	2,380 SF
Bear 1	84,500 SF
Bear 2	25,145 SF
Bear 3	22,630 SF
Aviary 1	18,826 SF
Aviary 2	21,133 SF
Wolf Ridge	36,450 SF

Le	gend
	Visitor Path Visitor Services Building Exhibit Building Viewer Shelter
	Animal Exhibit Holding Building Yard
	Service Path Admin / Support Building Buffer Vegetation Lawn Water Parking / Road









Flight Aviary

Flight Aviary

Key Projects:

Wolf Ridge

An elongated exhibit offers the chance to see a pack of wolves showcasing their natural behaviors as they run through the woods or

Bear Flex Habitats

New bear zone with expansive, immersive, and enriching habitats and opportunities to "flex" between brown and black bear

Bear Tunnel

A tunnel beneath the bear habitat provides an opportunity to get visitors underground and out of the heat, a key concern during the planning process. This cave experience showcases animals that require more temperature and light control, such as bats, ringtail cats, pocket gophers, reptiles, and/or various insects.

Flight Aviaries

By leveraging the site's unique bluffs overlooking the Kern River, 200' long aviaries provide enough space for raptor and California Condor flight. A parallel visitor deck takes advantage of the slope and allows for canopy level views of birds and vistas to the north with an enclosed walk-through segment.



Bear Flex Habitats



Volf Ridge



Flight Aviarie





West Expansion - Conceptual Rendering





West **Expansion Animals**



Cooper's Hawk NW Aviaries



Beaver Bear Pond



Black Bear Flex Bear Habitats



North American Brown Bear Flex Bear Habitats New Animal



Burrowing Owl NW Aviaries



California Condor **NW** Aviaries



Great Horned Owl NW Aviaries



Peregrine Falcon NW Aviaries



Red Tail Hawk **NW** Aviaries



Turkey Vulture NW Aviaries



Wolf Wolf Ridge New Animal



Miner Cat Tunnel New Animal





Event Pavilion

A new, multi-purpose event barn provides opportunities for expanded programming and rental revenue for CALM while celebrating the agricultural heritage of the region. Beautiful entry gardens offer an ideal location for photography sessions, and a large veranda overlooks the browse fields and animal habitats beyond. Relocating the contact farm to this area makes sense programmatically and creates opportunities for privatization during events.

Browse garden growing fields create a great backdrop and can provide browse enrichment for CALM's animal collection, as well as an opportunity for special guest experiences (feebased encounters for browse harvesting and animal feedings).



Flex-use Event Barn Look & Feel







Event Arrival Gardens **Plants**



Clarika Amonea Aurora



Eschscholzia Californica Alba



Gilia Tricolor



Gilia Tricolor Bed



Phacelia Viscida



Nemophila Baby Blue Eyes



Nemophila Menziesii Snow White



Playstemon Californicus



North Meadow Habitat

The North Meadow utilizes the site's naturally flat plains to create an expansive mixed species habitat that could feature Tule Elk, Mule Deer, White-Tail Deer, and possibly even Bison. With enough space to spread out and roam, these species could successfully cohabitate while providing visitors with a true environmental transect view of a central Californian plain.

Key Concepts:

- Meadow trail down the bluff offers an adventure experience for guests willing to make the trek, while a funicular could provide a more accessible option
- Central pond provides an element of habitat theater for guests as various species utilize this landscape feature
- Animal pens and shelters on the northeast end of the exhibit for animal husbandry and easy access to service roads
- Vegetated buffer to control sight lines of reservoir beyond











North Meadow **Animals**



Tule Elk North Meadow



Bison North Meadow



Mule Deer North Meadow

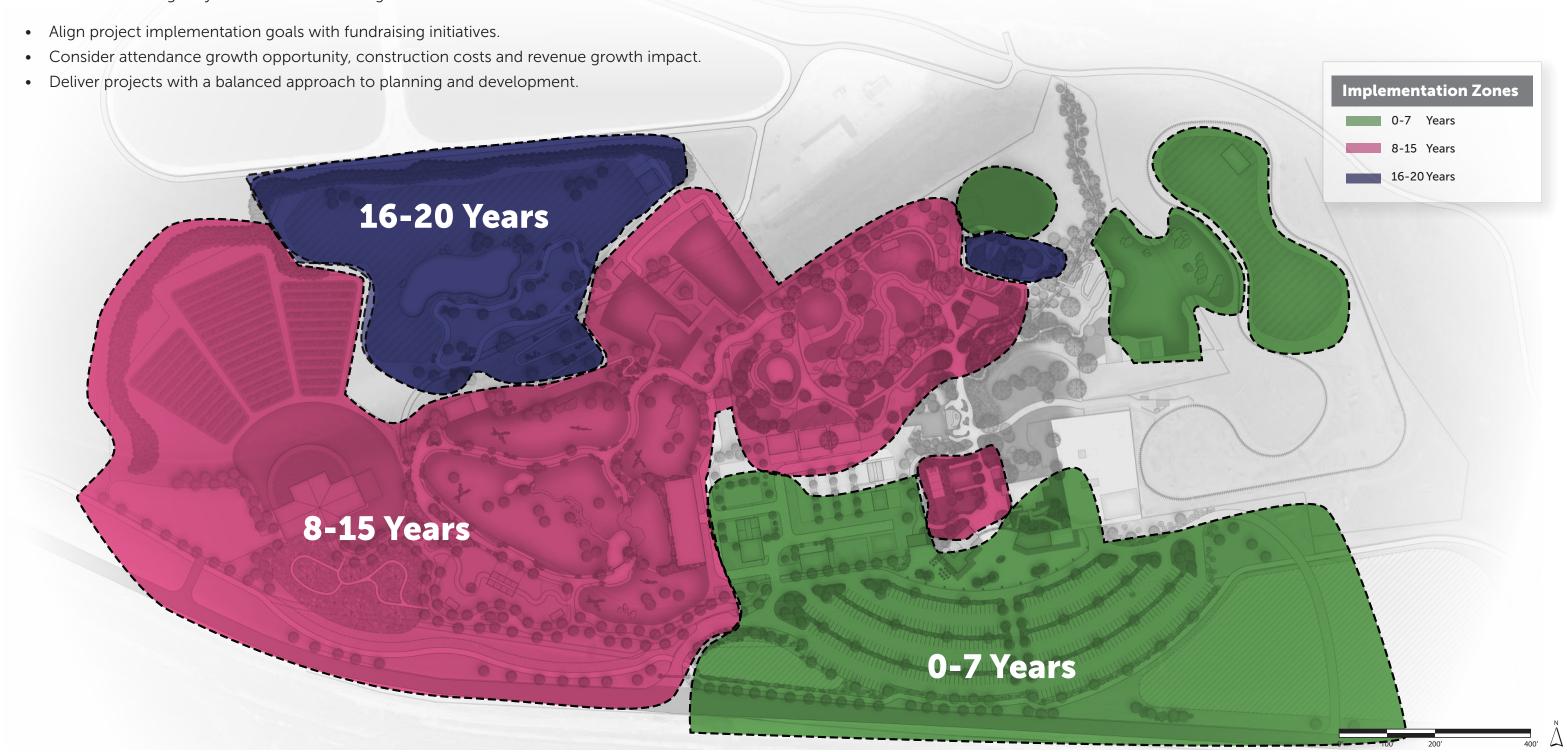


Implementation

Implementation Overview

The implementation plan was developed to address the Zoo's most critical needs including animal. The balanced approach to planning and development focuses on the programmatic needs of the welfare, guest experience, revenue generation, and infrastructure while proposing a feasible sequence. Zoo and categorizes projects in to three distinct categories such as exhibits and attractions, strategic relative to funding and operations. This plan is ambitious and includes several new project concepts services, and infrastructure. Each category is vital to the long term physical and financial stability of that will be implemented over the next twenty years and beyond. To move forward successfully, the Zoo must act strategically based on the following recommended criteria:

the campus and needs to be addressed throughout the planning and implementation process





0-7 Years

CALM's immediate priorities within the next seven years will be Phase 1 of the Rehab & Operations hub, the Entry Plaza and Parking, as well as expanding the Bighorn sheep exhibit. **Entry Zone** New parking and vehicular circulation Entry Plaza Guest Services & Ticketing Building Gift Shop, Cafe, & Admin Building Renovation of the Education Building Rehab Entry Gateway Animal Operations & Rehab Hub (7) Commissary Building with indoor quarantine and 2nd floor intern housing Rehab Building Veterinary Support Building (10) Animal Holding Building (11) Flight Aviaries (12) Large Mammal Yards (13) Avian Yards Other Projects (14) Bighorn Sheep Expansion 15) Future Exhibit (16) Event Space





8-15 Years

CALM's intermediate priorities will focus on expanding the campus to the west and providing exciting new exhibits, experiences, and revenue opportunities. **Legacy Campus** (1) Small Mammal Habitat 2 Amphitheater Renovation (3) Snack Hub (4) Ambassador Animal Mews and habitat **Woodland Trails Habitats** (5) 5 new small mammal exhibits (6) Renovated existing bear habitat Riparian Habitats (7) Renovation of existing Shorebirds exhibit (8) 2 new small mammal / riparian exhibits **West Expansion** 9 2 Flight Aviaries (10) 3 Flex Bear Habitats & Support Barn (11) Wolf Ridge Habitat & Support Barn **Event Pavilion** (12) Event Pavilion, Decks, & Lawns (13) Contact Farm (14) Native Plant Garden (15) Browse Fields





16-20 Years

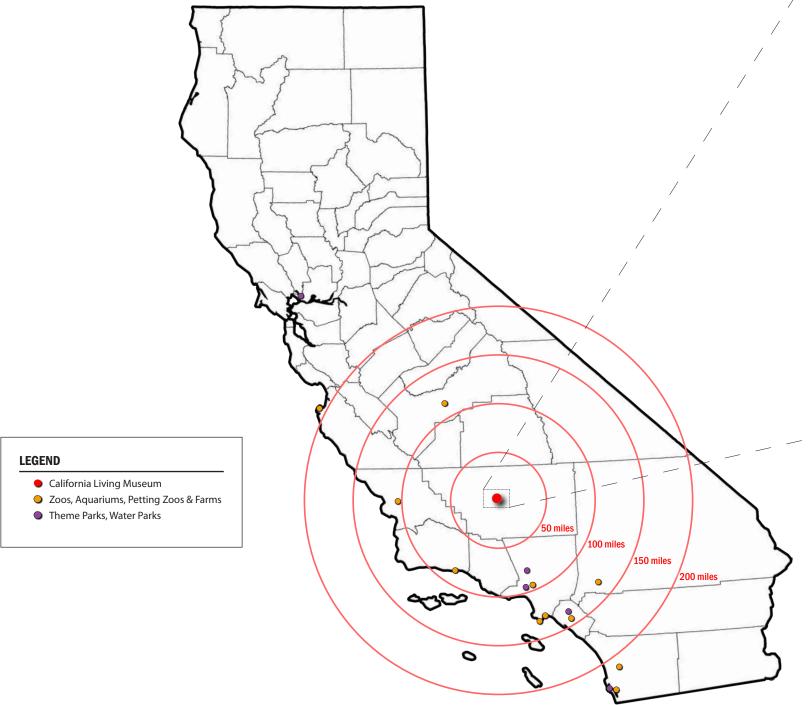


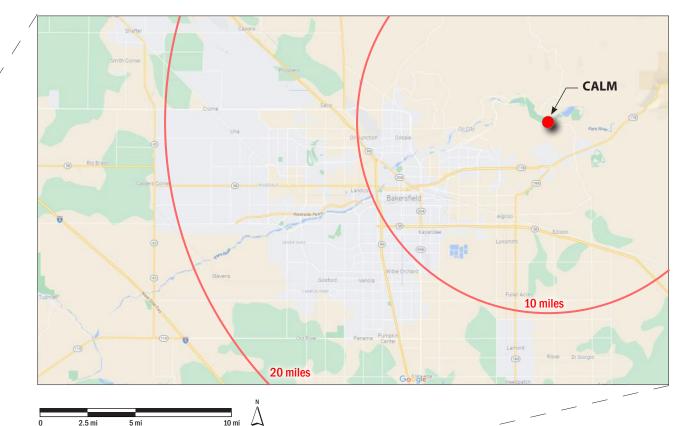




State & Local Context

Situated nearly equidistant between the LA Zoo and Fresno Chaffee Zoo at just over a 100-mile drive from each, CALM has an opportunity to become a destination attraction with a unique focus on the ecosystems found in California and the greater Southwest. In conjunction with its extensive wildlife rehabilitation program, CALM serves as a key conservation education institution for the local Bakersfield and Southern San Joaquin Valley community.





NEIGHBORING ATTRACTIONS	
Six Flags Magic Mountain	92 miles
Universal Studios Hollywood	116 miles
Los Angeles Zoo	118 miles
Fresno Chaffee Zoo	123 miles
Charles Paddock Zoo	134 miles
Cabrillo Marine Aquarium	150 miles
Aquarium of the Pacific	150 miles
Disneyland	150 miles
Santa Ana Zoo	160 miles
Big Bear Alpine Zoo	182 miles
Monterey Bay Aquarium	235 miles
SeaWorld San Diego	242 miles
San Diego Zoo	244 miles
San Diego Zoo Safari Park	245 miles
Six Flags Discovery Kingdom	310 miles



CALM Site

West Parcel

Main Parcel

East Parcel

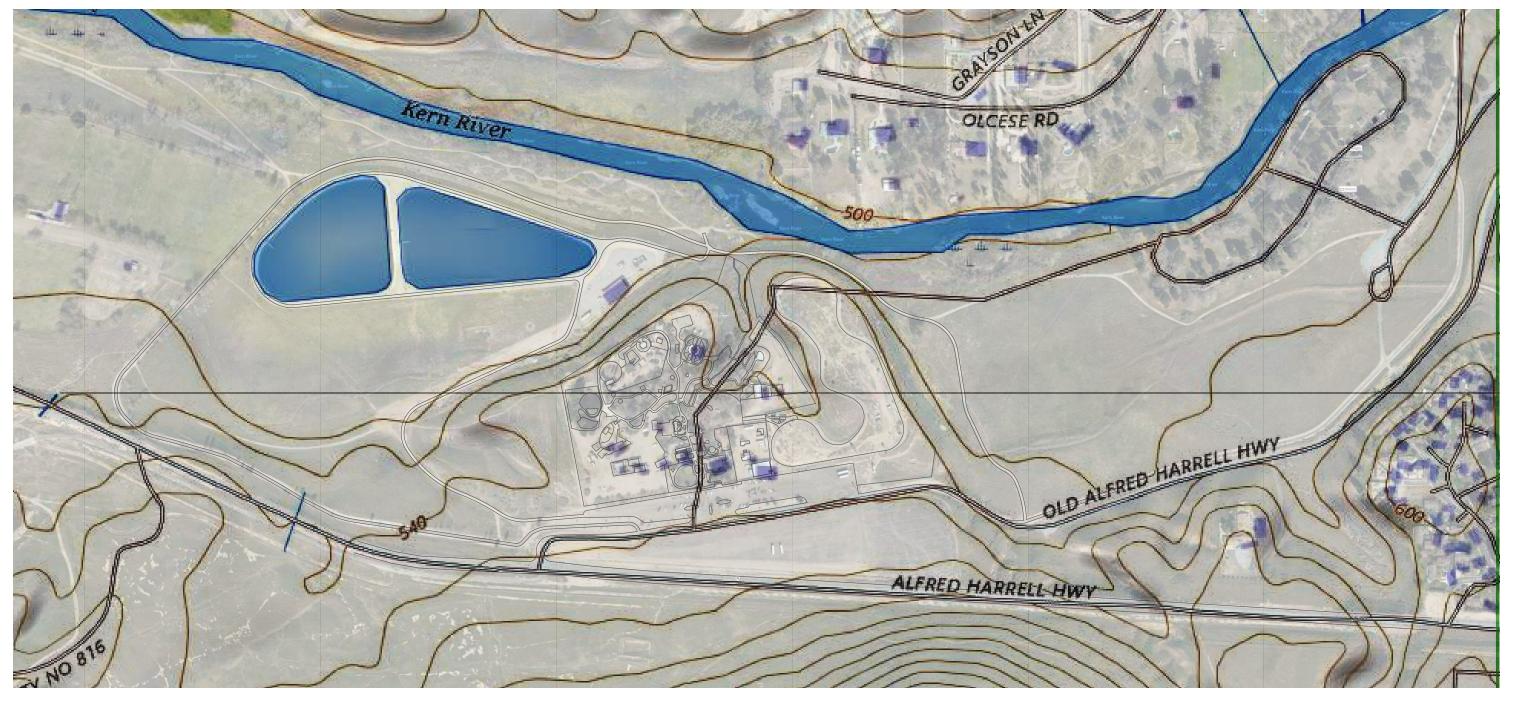








Inventory & Analysis - Site Topography



West to East Land Form Section



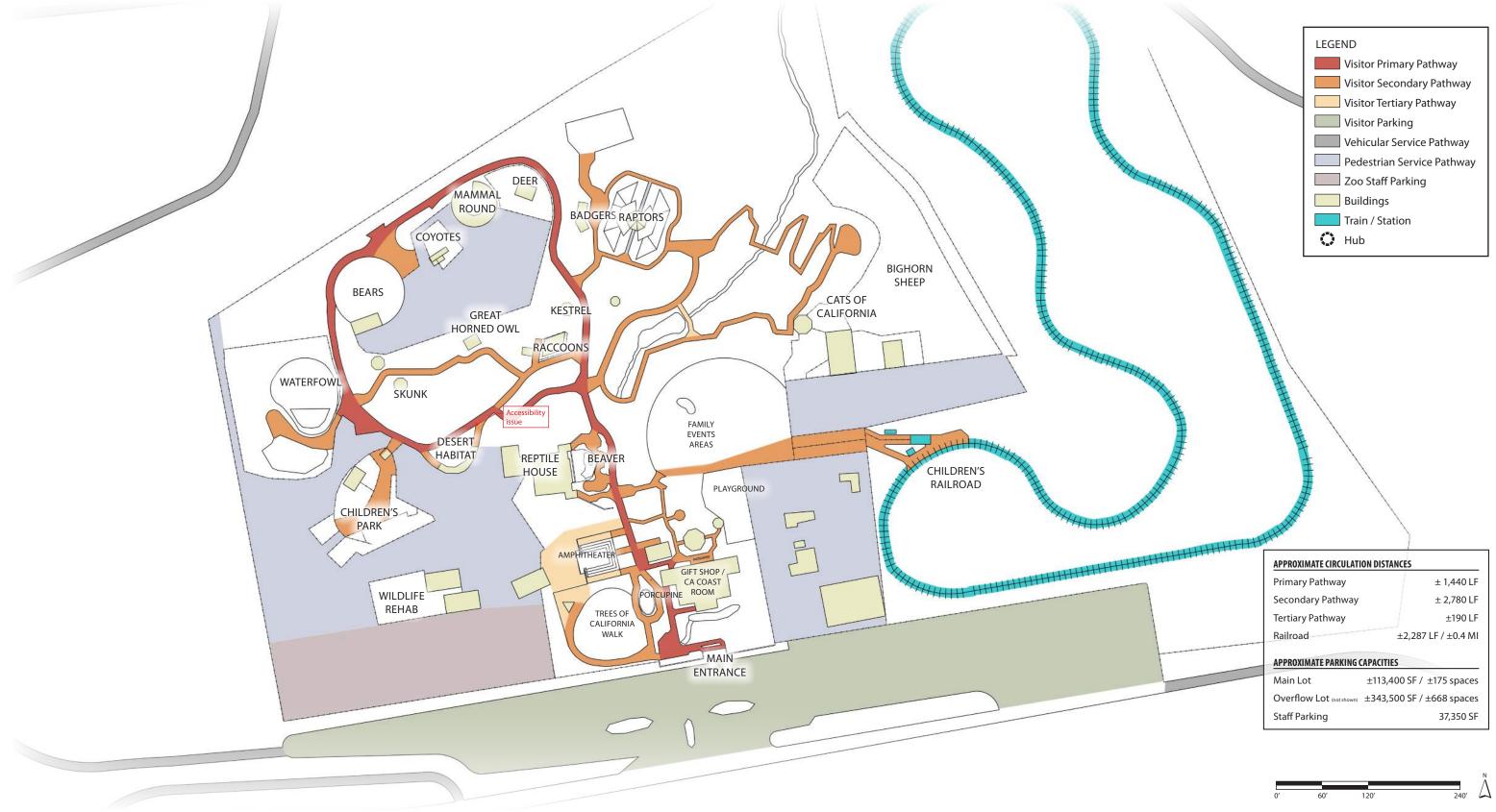


Inventory & Analysis - Existing Conditions Plan





Inventory & Analysis - Circulation



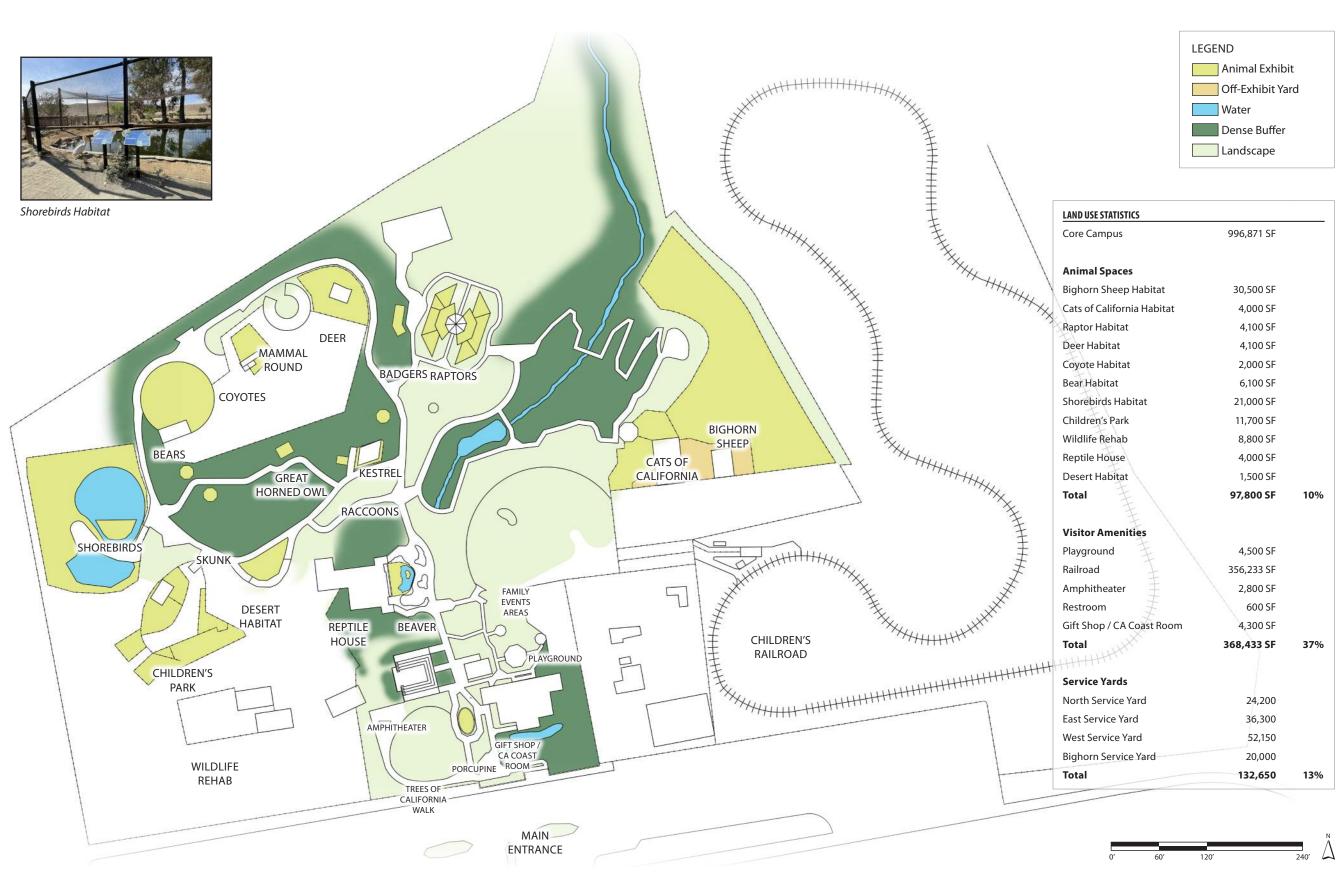
Inventory & Analysis - Habitat Land Use



Bighorn Sheet Habitat



Cats of California







Inventory & Analysis - Current Collection Plan

Ecoregional Representation

Coati

Coyote **Black Bear**

Red Fox American Black Tailed Beaver Mule Deer

MEDITERRANEAN

Badger Opossum **Fisher** Raccoon **Gray Fox** Ringtail Cat

Mountain Lion Striped Skunk

Island Fox

Porcupine

MAMMAL

Woodpecker **Bald Eagle**

Western Screech **Barn Owl**

Red Tailed Hawk

Bobcat

Canada Goose **Great Blue**

Cooper's Hawk Heron Mallard **Greater Egret**

Rose-ringed Great Horned Parakeet Osprey

Golden Eagle Crow Black Crowned

Western Gull Night Heron **American Coot Burrowing Owl**

American **Red Shouldered**

American Robin Herring Gull **American White Green Heron**

Steller's Jay **Turkey Vulture** **MONTANE**

Coati Coyote **Black Bear** Red Fox **A**merican **Black Tailed**

Beaver **Mule Deer Badger** Opossum

Fisher Raccoon **Gray Fox Striped Skunk**

Mountain Lion Bobcat

Porcupine

Great Blue

Red Tailed Hawk Woodpecker Western Screech **Bald Eagle**

Barn Owl Canada Goose

Cooper's Hawk Heron **Mallard Greater Egret**

Great Horned Rose-ringed Parakeet Owl **Osprey**

Golden Eagle Crow **Black Crowned American Coot**

Night Heron American **Burrowing Owl** Kestrel

Ferruginous Hawk **American Robin Red Shouldered** Steller's Jay

California Green Heron Condor

Turkey Vulture

DESERT

Black Tailed Coyote Mule Deer

Black Bear Raccoon **A**merican

Badger **Bobcat**

Gray Fox

Beaver

Mountain Lion

Porcupine

Woodpecker **Bald Eagle**

Rose-ringed Parakeet

Western Scrub

Golden Eagle American

Kestrel **American Robin**

Roadrunner

Turkey Vulture Red Shouldered Hawk

Desert Tortoise

Red Tailed Hawk Western Screech Owl **Barn Owl** Cooper's Hawk **Great Horned** Owl **Osprey**

Striped Skunk

Crow **Burrowing Owl Ferruginous**





EPTIL





