Vision Statement

ANIMALS ALWAYS – Our vision for the Saint Louis Zoo is a seamlessly integrated, world class conservation organization which links an engaged local audience and high-quality programs to our local, regional and worldwide wildlife conservation efforts.

Our Mission

The mission of the Saint Louis Zoo is to conserve animals and their habitats through animal management, research, recreation, and educational programs that encourage the support and enrich the experience of the public.

Three Keys
Animals Always, People Matter, Operational Excellence

Core Values

COMMUNITY: We create a healthy work community through our actions, attitudes, values and ethics.

CREATIVITY: We support the power of new, creative and innovative ideas.

OPENNESS: We share information freely and proactively.

INTEGRITY: We are truthful; we accept responsibility for our actions and hold each other accountable.

LIFE-WORK BALANCE: We support wellness, stability, fulfillment and enjoyment in our professional and personal lives.
Many thanks to Terry O'Conner for the 2017 Interpretive Master Plan Workshop Participants in the 2017 Process

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Interpretive Master Plan Purpose

The Interpretive Master Plan integrates planning for interpretation with the physical design of exhibits. It complements the Zoo Facilities Master Plan and supports the Zoo Strategic Plan. Included is a planning process template for staff to use when designing an interpretive renovation of existing exhibits as well as planning major new exhibits.

Zoo exhibit planning teams will use the Interpretive Master Plan as a guide to creating innovative exhibits that tell compelling stories of the Zoo’s global leadership in conservation and offer engaging experiences with animals that result in the affective transformation, that inspires visitors to care and act on behalf of animals.

The AZA Why Zoos and Aquariums Matter study (2007) affirmed that “...the vast majority of visitors to accredited zoos and aquariums perceived aquariums and zoos as places that care about animals and that play an important role in conservation.” However, the evolving power of social media to influence public opinion could alter that view, especially among younger people who may have a different view of zoos. “Saint Louis Zoo recognizes the need to be strategic and forward-thinking to ensure that the Zoo remains relevant to a new generation and attracts new audiences so that the Zoo retains the same level of future community support that it has today.”

Connecting effectively with audiences is crucial to the Zoo’s success.

The Interpretive Master Plan defines Saint Louis Zoo’s key conservation messages and is a strategy for cohesive communication of messages throughout the Zoo. Connecting effectively with audiences is crucial to the Zoo’s success. Communicating messages that speak to diverse audiences is essential as the Zoo seeks to engage the community in the local and global conservation work of its WildCare Institute and empower visitors to take environmentally responsible actions.
Need for an Exhibit Planning Process

Saint Louis Zoo initiated the work to establish an exhibit interpretive planning process in order to plan interpretation in conjunction with exhibit design rather than as an overlay added later. Having both occur in tandem will enable the Zoo to create a more effective exhibit story, better address the visitor experience, and integrate interpretive needs into the exhibit physical design.

The team agreed that the Zoo must create a logical process for integrating interpretive planning into the design of exhibits. A new staff position, filled by an individual with interpretive planning expertise, is needed to lead team members whose roles are well defined at the onset of the project. Staff expressed the need to articulate goals, objectives and outcomes, and to clarify the appropriate time in the planning process to consider education and evaluation.
Staffing and Budget Recommendation

Saint Louis Zoo has a rich legacy of engaging exhibits, among them McDonnell Polar Bear Point, Sea Lion Sound and Penguin & Puffin Coast, Grizzly Pidge and Primate Canopy Trails. The Zoo is planning a bold new Master Plan for all three campuses now. While new exhibits may be some years in the making, in the interim, exhibit planning is dynamic. When funding is secured, the pace of new exhibit design will accelerate.

Supporting the power of new, creative and innovative ideas is one of Saint Louis Zoo’s Core Values. The Zoo has embraced this new interpretive plan and is working toward a more cohesive approach to conservation messaging throughout the Zoo.

Creating world-class exhibits comparable in excellence to the Zoo’s WildCare Institute conservation initiatives and Education programs requires dedicated staff assigned to exhibit interpretive planning, with new expertise and skill sets that complement the talented staff team. It was strongly recommended that the Zoo create this position now in order to be ready for new exhibit planning and to improve the efficiency and effectiveness of the current exhibit interpretive planning process.

Exhibit Interpretive Planning Position

In order to provide informed options for Saint Louis Zoo’s new exhibit interpretive position, Terry O’Connor interviewed exhibit project managers and exhibit interpretive planning staff from five AZA institutions: Columbus Zoo & Aquarium, National Aquarium, National Zoo/Smithsonian Institution, Wildlife Conservation Society, and Woodland Park Zoo. We discussed exhibit interpretation within the organizational structure, content development/text writing, interpretive graphic design, and maintenance of exhibit interpretive elements. Key ideas that emerged from these conversations:

Organizational Structure

- All staff interviewed, with one exception, work within a dedicated exhibit planning and design department that includes design of physical exhibit elements, exhibit interpretive developers who write interpretive text, and graphic design staff who focus on exhibit interpretation. Woodland Park Zoo’s exhibit interpretive development staff are now part of the Education Department; exhibit design is a separate department.
- WCS said that an exhibit interpretive content developer could work either in Education or in Architecture and Planning; however, because an Education Department has so many competing pressures, having dedicated exhibit interpretive staff as part of their Exhibition and Graphic Arts Department (EGAD) is preferable for them. EGAD interpretive development staff work closely with the WCS Education Department, which is responsible for all live interpretive programs.
Organizational Structure

Architecture and Planning:

The Architecture and Planning office is responsible for the Master Planning and the design and construction process to implement the plans. Exhibit design and interpretation is a part of this responsibility.

The Director of Exhibits and Interpretation is responsible for exhibit concept development in conjunction with interpretive development as the two inform each other in the exhibit development process. This person is responsible for overseeing the exhibit design goals and exhibit interpretation through all phases of design and construction. This positions facilitates the design process and coordinates with the CORE team and Advisory Team. The architects and construction managers work closely the Director of Exhibits and Interpretation throughout the construction process for excellence in the final product.

With a high annual attendance, Saint Louis Zoo exhibit signs, interactives and other interpretive elements naturally show wear and sometimes break. The Exhibits and Interpretive Director checks exhibits to assess if maintenance is required, and works with the Landlords to make repairs. Repair costs are currently assumed by the Landlords, who budget for exhibit upkeep and maintenance.

In addition, the Director of Exhibits and Interpretation plans for updating interpretive content, and coordinates with Education on live interpretation, who ensures that it is accurate and current.

The Director of Exhibits and Interpretives is responsible for design experimentation, with tremendous potential to use emerging technology to support exhibit interpretation and conservation messaging. This will certainly increase the need for exhibit upkeep and digital support. Saint Louis Zoo is also committed to using emerging interpretive approaches that are informed by social science research.

In the future, the Director of Exhibits and Interpretation may have an annual budget for interpretive exhibit maintenance throughout the Zoo. As the number of exhibits expands with two campuses, regular maintenance of interpretive elements may require staff time dedicated to this function; that position would report to the Director of Exhibit and Interpretation. Other potential future positions that would report to the Director of Exhibits and Interpretation would be a dedicated Content Writer and Graphic Designer.
Zoo Audiences

More than three million people visit Saint Louis Zoo every year, making it one of the top attended zoos in the country. One-third of those responding to an audience research interview were tourists (Saint Louis Zoo, Amy Niedbalski). There is a tremendous civic pride in St. Louis, and residents refer to Saint Louis Zoo as “our Zoo.” There is a high degree of trust in this institution and overwhelming community support for the Zoo.

Diversity

The Zoo’s multiple educational outreach programs serve a diverse audience of children and adults in schools, libraries and other community venues, yet 90% of visitors to Saint Louis Zoo are Caucasian and about five percent are African American, which is not representative of the surrounding community. The number of English language learners (especially Bosnian residents) in St. Louis is growing, yet the ethnic diversity is such that it would not be possible to select one other language for bilingual interpretation on Zoo signs. The Zoo team suggested having a sign translated in several languages to welcome visitors.

Why People Visit

When asked why they visited Saint Louis Zoo, visitors responded (multiple reasons were possible): Interest in seeing the animals (92%), Entertainment (83%), Be outdoors on a nice day (81%), Educational learning experience (63%), Bring children on a family outing (62%), and Interest in conservation (54%). Special events, tourism and bringing out-of-town visitors were also cited.

St. Louis residents have a great historical attachment to the River City. The Zoo could tap into the spirit of St. Louis as the gateway to exploration.
Zoo and Aquarium Visitors

Authors of the Why Zoos and Aquariums Matter study (Falk et al., 2007) suggest that most people visit zoos and aquariums for many reasons, yet on any given visit, they typically have one main motivation. The following is quoted, with edits, from the study:

- **Experience Seekers** are primarily satisfied by visiting the Zoo as an important site—it is the thing to do (for example, when a new exhibit opens). **Implications:** These visitors are not necessarily knowledgeable; they “collect” experiences, and may be tourists. Experience Seekers in the Why Zoos and Aquariums Matter study showed significant positive change in both cognition and affect as a result of their visit.

- **Spiritual Pilgrims/Rechargers** are primarily seeking a contemplative and/or rejuvenating experience. **Implications:** The Zoo can provide areas for rest and reflection, and offer some programs at quieter times of the day or year for these visitors.

- **Explorers** are curiosity-driven. They want to learn more about whatever they might encounter. **Implications:** Provide Explorers with new or surprising offerings, such as temporary exhibits or in-depth programs. Create more challenging experiences for them.

- **Facilitators** are focused primarily on enabling the experience and learning of others in their accompanying social group. **Implications** are that Saint Louis Zoo should offer:
  - Opportunities for social interaction at exhibits, such as talking with staff
  - Places for regrouping and processing of their visit
  - Tools for parents to support their children’s learning

- **Professional/Hobbyists** feel a close tie between the institution’s content and their own professional or hobbyist passions. Some individuals are more interested in the way the exhibit is presented, rather than in the content. **Implications:** These visitors are likely audiences for premium programs and are a great source of volunteers, members and donors.

Zoo visitors may be part of different categories on different days, depending on their circumstances and social group—each visit is unique.

- **Spiritual Pilgrims/Rechargers** are primarily seeking a contemplative and/or rejuvenating experience. **Implications:** The Zoo can provide areas for rest and reflection, and offer some programs at quieter times of the day or year for these visitors.

Saint Louis Zoo can offer several types of interpretive experiences to meet the needs of each of these kinds of visitors.

**Quoted Source:** Why Zoos and Aquariums Matter (Falk et al., 2007)

**Reference:** Thriving in the Knowledge Age (Falk and Sheppard, 2006)
The *Why Zoos and Aquariums Matter* study also found that most visitors:

- Know a lot about basic biological concepts. Therefore, interpretation can focus more on “specific conservation and natural history messages. Most visitors are ready to be more engaged in advocacy efforts.”

- Found that their experience supported and reinforced their values and attitudes towards conservation.

- Had increased feelings of seeing themselves as part of the conservation solution as a result of their visit. **Implications:** Saint Louis Zoo can expand its conservation messaging, suggest specific actions, model environmentally responsible behaviors, and provide opportunities to engage visitors in practice.

- Said that their visit experience strengthened their connection to nature. **Implications:** Saint Louis Zoo can continue to interpret the value of conserving animals and wild places; encourage visitors to explore nature with children; and provide opportunities to make them more comfortable and knowledgeable in nature exploration.

- Perceived aquariums and zoos as places that care about animals and that play an important role in conservation. **Implications:** These findings support one of the Zoo’s overarching interpretive goals, “To demonstrate the dedication and passion of Saint Louis Zoo for the welfare of animals in our care and in the wild.”

**Visitor Experience**

AZA’s Framework for Zoo/Aquarium Social Science Research (Fraser et al., 2010) reflects on a compilation of zoo and aquarium research studies. Social exchange is a motivator for many zoo and aquarium visitors. Other components of a peak visitor experience are:

- Feeding/contact
- Eye contact
- Animals approaching
- Up-close viewing
- Providing enrichment
Interpretation

In his 1957 book *Interpreting our Heritage*, Freeman Tilden first defined interpretation as “an educational activity which aims to reveal meanings and relationships through the use of original objects, by firsthand experience, and by illustrative media, rather than simply to communicate factual information.” Among his six principles of interpretation are:

- “Any interpretation that does not somehow relate what is being displayed or being described to something within the personality or experience of the visitor will be sterile.”
- “The chief aim of interpretation is not instruction, but provocation.”

The National Association for Interpretation (NAI) defines interpretation as “a mission-based communication process that forges emotional and intellectual connections between the interests of the audience and the meanings inherent in the resource.”

Based on this definition, the AZA Creating Successful Exhibits course defines interpretation for zoos and aquariums as: “making emotional and intellectual connections between your visitors and your collection.”

Jeffrey Bonner indicated that a central theme for interpretation can be what zoos do for conservation, and specifically, what Saint Louis Zoo is doing for conservation. The affective (emotional) piece is the greatest outcome of a Zoo visit. Our Zoo is making the world a better place.

Interpretive planning is determining exhibit interpretive goals and objectives, defining outcomes for visitors, and planning experiences that will achieve them. Every interpretive element of an exhibit (physical design elements, signs, interactives, touchable items and live interpretation by staff and volunteers) should support the Big Idea and interpretive goals of the exhibit. Collectively, these visitor experiences should result in the intended outcomes.

Interpretive Planning Terminology

The Big Idea describes in one sentence what an exhibit is about (and not about). In her 1996 book *Exhibit Labels: An Interpretive Approach*, Beverly Serrell defines this as: “The big idea provides an unambiguous focus for the exhibit team throughout the exhibit process by clearly stating, in one non-compound sentence, the scope and purpose of an exhibition.” Summative evaluation will reveal if visitors exiting the exhibit are able to state clearly what the exhibit is about, which Serrell states “provides strong evidence for immediate impact—comprehension and personal significance.”

The exhibit storyline is a narrative that describes what the exhibit is about and how the story unfolds as visitors move through the exhibit.

Themes are written as one sentence and support the Big Idea or exhibit main message. Each theme tells a story. Primary themes, like story “chapters,” enable the exhibit story to unfold.
Interpretive Framework

Overarching Interpretive Goals

Saint Louis Zoo interpretive planning team members will establish goals specific to each new exhibit. The following overarching goals for exhibit interpretation will guide that development.

Saint Louis Zoo’s umbrella interpretive goal is to demonstrate that we care in all the things we do: conservation, social responsibility and sustainability.

Saint Louis Zoo cares about…

Goal 1: Animal Welfare
To demonstrate the dedication and passion of Saint Louis Zoo for the welfare of animals in our care and in the wild

Goal 2: Our Visitors
To provide fun, innovative experiences that create lasting memories and inspire awe and appreciation for the amazing diversity of life on Earth

Goal 3: Affective Transformation
To strengthen people’s emotional connection to animals that nurtures empathy and belief in their power to effect positive change through conservation action

Goal 4: Global Wildlife Conservation
To engage our community in the conservation work of the Zoo and its WildCare Institute that conserves species, protects wild habitats and empowers local communities

Goal 5: A Sustainable Future
To empower our community to join us in taking meaningful actions to conserve wildlife, wild places and other natural resources

“A powerful exhibition idea will clarify, limit and focus the nature and scope of an exhibition and provide a well-defined goal against which to rate its success.”

— Beverly Serrell, Exhibit Labels: An Interpretive Approach
Overarching Interpretive Outcomes

As a result of their experience at Saint Louis Zoo exhibits, visitors will:

Know

• Agree that Zoo staff provide excellent care to ensure the physical and emotional welfare of animals
• Recognize that Saint Louis Zoo is actively engaged in conservation programs at the Zoo and in the field
• Recognize that Saint Louis Zoo is a global leader in conservation
• Acknowledge that they have taken a conservation action by visiting the Zoo today
• Affirm that they know how to take action to help animals
• Indicate three actions they can take as individuals and on a community level to help wildlife

Feel

• Feel an increased emotional connection to one or more Zoo animals
• Feel increased pride in Saint Louis Zoo
• Feel a part of the Saint Louis Zoo team for their support of our conservation work here and in the wild
• Indicate that they feel a connection to the communities served by our WildCare Institute
• Believe that they can take action that will make a difference for wildlife

Do

• Indicate their intention to:
  >> Tell family and friends about their enjoyable Zoo experience
  >> Return for another visit
  >> Take specific actions(s) to conserve natural resources
  >> Take specific action(s) in their own communities to protect native species
  >> Vote for environmentally-responsible actions and policies
  >> Support Saint Louis Zoo and our WildCare Institute

Long-term Outcomes

• Young people will become the next generation of conservation and Zoo advocates
• Populations of endangered animal species in our care and in wild places will become sustainable
Overarching Exhibit Interpretive Themes

Animals
- Adaptations: Animals and plants have amazing adaptations that enable them to survive in their environment.
- Basic Needs: Animals have basic needs just as people do: air, clean water, food, a home, and a place to rear their young.
- Families: Both animals and people live in different kinds of families—discover how animals' care of their young and other family members is the same or different than ours.

Ecosystems
- Connections: Plants, animals and people are interconnected within the ecosystems in which they live.
- Biodiversity: Every species has an important role in its ecosystem—conserving the Earth's biodiversity is essential to maintain the balance of nature.

Saint Louis Zoo
- We Care: We care about animals here and in their native habitats.
- Animal Welfare: Saint Louis Zoo staff provide excellent care to meet the physical and emotional needs of our animals.
- Collaborating for Conservation: Saint Louis Zoo collaborates with partners to ensure sustainable populations of animals through Species Survival Plans, protecting wild species, and conserving habitats.
- WildCare: Saint Louis Zoo’s conservation work through our WildCare Institute in Missouri and around the globe is making the world a better place for wildlife and for people.

Conservation Action
- Join Us: Please join Saint Louis Zoo in taking conservation action to protect wildlife and natural resources.
- Your Actions Matter: Your decisions to conserve natural resources and your consumer choices make a big difference for wildlife survival.
- Lasting Solutions: Lasting conservation solutions balance the needs of local people and wildlife.
Saint Louis Zoo Interpretive Principles

Innovation

• Saint Louis Zoo is committed to experimentation: trying innovative new approaches, assessing their effectiveness through evaluation, and making any needed adjustments.

Inclusiveness and Diversity

• Cultural interpretation portrays contemporary world cultures with sensitivity and respect.
• Zoo interpretation uses a variety of approaches to address the needs of different ages, learning styles and reading abilities.
• Zoo exhibit planning considers interpretive elements that are accessible to people with disabilities.

Conservation Solutions

• Saint Louis Zoo interprets conservation issues in ways that are relevant to audiences.
• Zoo interpretation does not minimize conservation problems; however, we share success stories whenever possible to give visitors hope.
• Interpretation focuses on conservation solutions and how individual and collective actions can help.

Personal Connection

• Saint Louis Zoo recognizes the power of personal connection: we create a great visitor experience and convey messages through live exhibit interpretation and visitor interaction. The effectiveness of this approach is confirmed by audience research.
• Zoo interpretation seeks to create a greater understanding of shared conservation issues by connecting our visitors to people in the global communities we work with through WildCare Institute programs.
• Staff and volunteers share their passion about wildlife and conservation with Zoo visitors.
• Interpretation at Saint Louis Zoo sparks curiosity and conversations, opening visitors to the possibility of thinking differently.

Impact

• Interpretation at Saint Louis Zoo is designed to create age-appropriate impact for visitors: creating a closer connection to animals, sharing joy and wonder, sparking curiosity, provoking critical thinking, and empowering conservation action.
• The Zoo is committed to measuring impact through audience research and evaluation and making changes to interpretation based on evaluation and research.
Interpretive Guidelines

Cultural Interpretation

- Use a “first voices” or other culturally-appropriate approach
- Cultural interpretive elements should be in public spaces (not within animal areas)
- Seek the advice of cultural advisors to ensure that exhibit interpretation is authentic and respectful

Media and Technology

- Craft messages first and select media that best convey those messages
- Use technology when it is appropriate to tell the story, not for its own sake

Interaction

- Consider opportunities for more animal-focused, parent-child activities
- Provide children’s activities to allow caregivers time to interact with more adult-focused content
- Incorporate parallel play activities (mirroring behavior encourages empathy)

Emotional Engagement

- Consider opportunities for visitors to touch and feed animals
- Incorporate opportunities to talk with keepers
- Illustrate how the Zoo provides excellent care for animals: feeding, enrichment and training
- Tell stories that are personalized:
  - Animal life, family life, and how these animals are like me
  - People whose lives have been impacted by WildCare programs
  - Individual Zoo staff and their work
- Affective transformation can be an emotional reaction that is so strong that people are inspired to take action

Element Placement

- Placement of interpretive elements should augment and not conflict with animal viewing
Exhibit Design Considerations

Design considerations for future exhibits to accommodate interpretive needs and enhance the visitor experience:

Animal Encounters
- Close-up viewing, eye-to-eye contact
- Exhibit conditions that allow visitor-animal interaction

Accessibility
- Universal design—accessible to all ages and abilities. This includes viewing that is accessible to children and those in wheelchairs.

Circulation
- Circulation that is comfortable for visitor movement, accommodating crowds, and emergency access
- Prevent strollers from blocking paths or egress
- Consider how the space works for different sized groups (re: diversity and inclusion)

Interpretive Needs
- Pull-out spaces for keeper chats, training demonstrations, interpreters, onsite programs and school groups
- Space for parallel play experiences
- Sculpture and crawl-through experiences
- Sustainability of interpretive elements
- Placement of graphic/video elements at different heights so that large groups can see
- Flexibility: ability to change elements as needed

Visitor Amenities
- Water fountains
- Places to sit for rest/reflection, observing animals, or watch children playing
- Shade
- Shoulder season shelter

Functional Space
- Access to electrical power, digital support structure like Wi-Fi
- Lighting (including night lighting if needed)
- Water for maintenance, horticulture and hand washing (if visitors are touching animals)
- Event space needs
Interpretive Media

The following section incorporates workshop discussions, staff interview comments, and design ideas from other institutions.

Graphic Panels

**Content:** Staff commented that the Zoo should not overwhelm people. “Make the message simpler and more appealing.” Suggestions for sign content include basic facts, how we manage animals, challenge visitors by asking questions, and continue to interpret climate change. Balance a little information on signs with live interpretation. Signs should be fun! One person suggested that the Zoo should not try to accommodate all learning styles in each exhibit area, but address different learning styles and provide varied experiences throughout the Zoo.

**Design:** Selected staff comments on design of graphics included that the Zoo has good universal elements of species ID signs, which were derived from the Zoo’s audience research. Staff suggestions included that the Zoo use principles of environmental graphic design, and ensure that we address ADA issues with font, point size and contrast. Additional comments recognized the need for design aesthetic and technical knowledge on materials and suggested that the Zoo can encourage exhibit excellence by not limiting ourselves (e.g., by adhering to a color scheme for the whole Zoo).

**Temporary Signs:** Standards exist for the style and “look” of temporary messaging. The team suggested that the Zoo revisit these guidelines.

**Text writing:** Workshop discussions and staff interview comments reflect a lack of consensus on text writing for interpretive graphics. Communications is currently responsible for text writing, providing an impartial third party. While staff value having a professional writer, some also feel that having someone in this role with animal experience would be helpful. Other staff commented that writing styles for marketing, publications and for interpretive graphics are not the same.
Unique Exhibit Zones

Visitors visiting Saint Louis Zoo journey to different areas of the world where they can experience amazing animals, unique habitats and a diversity of cultures. The new exhibit areas in the Zoo’s Master Plan offer a world of opportunity to create an extraordinarily memorable sense of place. Graphic design can help set the stage, distinguishing each zone from another. It is useful for visitors to use some familiar visual cues that thread through the whole Zoo (such as wayfinding, animal ID content and conservation action signs). However, using a different palette of materials, sign shapes, framing, patterns and color to create an identity for each exhibit zone evokes the region and landscape, and provides cultural ambience that adds to the visitor experience. Within each zone the Zoo can use a variety of sign types that have a consistent design and color palette.

Life of a Sign

Saint Louis Zoo graphic designers use their expertise to select materials and techniques appropriate to the sign type, its location and anticipated longevity. The Zoo will need to plan for replacement of “permanent” signs as information becomes dated.

Voice

Signs relate the stories of the exhibit. Who is the storyteller? Using a consistent voice throughout interpretive elements of an exhibit helps to unify the experience. To attract and engage readers, the voice can be an enthusiastic guide who reveals fascinating information, provides an insider’s perspective, points out what to look for, and asks questions. This voice is passionate about animals, Saint Louis Zoo’s conservation leadership, and invites readers to help.

The tone can be friendly and conversational, conveying scientific information in a way that is accessible to visitors. It is as if each visitor had the benefit of walking through the exhibit with a live interpreter. In her presentation, “Adventures in Label Land,” interpretive designer Judy Rand discusses “label” writing at the Monterey Bay Aquarium. They chose the voice of an insider who told stories, had a sense of humor, answered questions, and knew how to hook the audience. Rand describes the voice of the exhibit as “the ideal companion,” as if the visitor were accompanied by a knowledgeable guide who answered questions and told interesting stories.

For cultural interpretation around climate change, the Zoo currently uses first voices in Polar Bear Point to enable individuals to speak for their own community and culture. This was a unique opportunity to foster successful conversations around climate change in this exhibit, an approach supported by social science research. Future exhibits will require similar thoughtful consideration of the way voice, conservation messages and interpretive outcomes support each other.
Sign Text

Flat panel graphics and other sign types must attract visitors to the message. Captioned images and/or illustrations support the concept and help to tell the story. A catchy title or question invites visitors to take a closer look and a subhead conveys the main point. Less is more. What do visitors need to know? Signs should anticipate what will interest visitors and answer their questions. Front-end and formative evaluation will help inform this content. Using less text (50 words or less per block) and more engaging language makes it more likely that visitors will read the sign. Layering text in blocks enables visitors to see the primary messages, even if they do not stop to read the entire sign during this visit.

Consideration of reading level of primary messages (lower level) and secondary messages (higher) is important.

Accessibility

Making signs accessible to those with low vision (including some older visitors) requires consideration of ADA requirements and consideration of color, contrast and point size of text.

A few guidelines recommended by the Smithsonian Institution’s Accessibility Program (adapted from material for AZA’s Creating Successful Exhibits course):

- If an entry panel describes the habitat and experience, add an audio component for low vision visitors. The description should include an overview of the exhibit’s big idea and main messages.
- Tactile elements, audio buttons and other elements in interpretive media visitors should be located at a consistent height and the same orientation within a graphic for low-vision visitors.
- Use “easy access” buttons for touchscreens and interactives (rather than a mouse or track ball for navigation).
- Apps, websites and smart phones are great tools for addressing accessibility in exhibit content.

Using audio, captioned videos, tactile objects and scents are other tools for inclusion, making exhibits accessible to all visitors. Suggested resources on accessibility are included in the reference section of this document.
Hierarchy of Interpretive Sign Types

The following are suggestions for types of exhibit interpretive signs:

**Habitat Entry sign:** This sign type is a gateway to an exhibit zone, typically in conjunction with an iconic architectural element. A strong visual statement, the entry lets visitors know that they have arrived and that they are transitioning to a different place. An entry sign may be thematically shaped, with design, materials and color evoking a sense of place. It includes the zone name and may briefly communicate what lies ahead.
**Animal ID sign:** This sign identifies the species (with or without its scientific name) and provides basic information about habitat, conservation status and other brief, interesting information. Saint Louis Zoo has an effective design for animal species identification, and has used different materials (including tiles in the Flight Cage/Cypress Swamp) to enable visitors to identify animals in multi-species exhibits. Other techniques include a field guide notebook, laminated card that visitors carry, a Serrell star wheel, or screens used in indoor exhibits.
Story Signs

**We Care:** Saint Louis Zoo has, as its overarching interpretive goal, to illustrate that the Zoo cares. The Zoo can create a specific sign type to tell stories about animal care including husbandry, enrichment, training, veterinary care, and relationships between keepers and animals. These can be placed near a video monitor showing a behind-the-scenes glimpse, or a video could be used in lieu of the sign.

**Habitat:** This sign type can be used near the zone entry to convey the exhibit theme and provide context for visitors to understand the exhibit’s interpretive content. Use habitat signs throughout the zone to tell stories about wetlands, the African savanna, forests and other habitat types. Stories here can illustrate how animals are adapted to survive in these environments and interpret animal and plant interactions such as pollination.

**Behaviors:** These concept signs can interpret behaviors of one or more species, such as predator-prey relationships, comparative primate food-gathering strategies, or bird communication.

**Theme:** This sign type will be used to tell stories of the topics selected to support the exhibit’s themes, including human cultures of the area, and can be used with appropriate cultural artifacts and ambient music.

**Interactive:** This sign type has an interactive element or touchable object mounted on or near it (not all interactives require a sign). The sign type has brief, simple text with instructions and/or a labeled illustration to explain the concept.

**Kids:** The Zoo may want to consider very simple, colorful and fun graphics in some areas as versions of the more adult-focused story graphic and/or to focus early readers’ attention: “Look for, can you find,” etc.

**Conservation:** This story sign type will interpret a solutions-focused approach to relevant conservation issues and how Saint Louis Zoo is helping. Conservation signs can convey success stories and illustrate the impact of how visitors’ specific actions can make a difference. With public Wi-Fi, visitors can link to more information. A “You can Help” or similar icon designed for this sign type can alert visitors to these suggestions around the Zoo. Visitors can use their mobile phone to snap an image as a reminder (future technology use can enable the Zoo to create a curated reminder for visitors and enable them to record their actions on the Zoo’s web site).

**Sustainability:** Saint Louis Zoo plans to tell its own sustainability story, modeling these behaviors for visitors and inviting them to join the Zoo in taking action. A specific sign type could signal these stories and attract visitor attention around the Zoo.

**WildCare:** Signs, video and/or content on a Zoo app will interpret the work of the Zoo’s WildCare Institute and provide specific suggestions on how visitors can help. These could have a common element with “We care” signs to link the Zoo’s animal collection to its field conservation work.
Interpretive Master Plan | SIGN TYPES AND STORY SIGNS
Other Sign Types

The following sign types are also used for interpretation:

Keeper Notes: The Zoo can create a consistent sign system for easily updatable keeper notes to convey authentic, “inside scoop” information that comes directly from those providing animal care. A weather-protected system can be used in outdoor areas.

Action: The Zoo can create a smaller vignette sign type to convey simple conservation actions and their impact. These can be used in areas such as cafés, restrooms and other locations.

Plant Identification Small signs are used to identify iconic trees and other plants, especially those with conspicuous blossoms or other noticeable features.

Program Announcement sign: These signs call visitors’ attention to the time and location of a Keeper Chat and may be set out by staff on the day of the talk.

Videos

Staff commented that longer videos typically do not engage visitors; instead, clips should average 60-90 seconds. At animal exhibits, videos should not distract from the live animal experience. The team recommended that the Zoo consider where people have time to watch videos, such as when queuing for the train and at a restaurant.

Technology

The Digital Engagement Collaborative (DECOlab) at Saint Louis Zoo explores the potential of emerging technology to enhance exhibit interpretation and engage visitors. Information is on SharePoint. Stephen Leard gave a presentation on digital tools (augmented reality, virtual reality) during our final interpretive planning workshop. Content and stories will always be the most effective component of effective engagement—technology comes second.

Saint Louis Zoo currently uses an app for wayfinding and could consider developing an app for interpretive content. As of this workshop, public Wi-Fi (200 access points around the Zoo) and location-based services will soon be available at Saint Louis Zoo. Visitors will receive a prompt on their device inviting them to join our Wi-Fi, and the Zoo can use this to share content.

To adopt and use these media effectively to engage visitors, the Zoo must have the infrastructure and resources, including designated staffing, to support rapidly-changing technology.
Conservation Issues, Messages and Actions

Conservation Message Communications

- The Zoo needs to create a communications plan for conservation messages.
- Communicate conservation messages both internally and externally.
- The Zoo can run parallel ad campaigns every year: one to promote conservation and one to drive attendance.
- Staff discussed, but did not reach consensus on whether Today, Tomorrow, Together needs a tag line--do audiences understand this?

Message Communication and Consistency

The interpretation committee can coordinate the messages among exhibits. For example, climate change is the primary message at Polar Bear Point—the committee can determine which messages are to be conveyed at other exhibits.

Everything at Saint Louis Zoo (e.g., special events, P.R., marketing, education programs, shows, retail, IT and A.V.) should be compatible with the Zoo’s mission and have a consistent message.
Saint Louis Zoo Conservation Issues

Condition: Human impact
• Human population growth
• Political instability
• Poverty
  ➯ Food insecurity
  ➯ Lack of economic benefit and education

Human-Wildlife Competition and Conflict
• Poaching, illegal wildlife trade
• Overhunting
• Conflict with predators and crop eaters
• Unsustainable seafood harvesting
• Invasive species of plants and animals
  ➯ Domestic cats prey on native wildlife
• Decline of wildlife health and fitness
• Disease transmission

Unsustainable/Inequitable use of Global Natural Resources
• Oil and natural gas resource exploration, extraction

Water Scarcity and Pollution
• Overuse of water
• Water scarcity
• Pollution
  ➯ Insecticides/herbicides
  ➯ Oil/other chemicals
  ➯ Plastics
• Sedimentation

Habitat Loss
• Loss, fragmentation and degradation of habitat:
  ➯ Deforestation
  ➯ Large-scale agriculture
  ➯ Local land use/agricultural practices
  ➯ Livestock ranching/grazing
  ➯ Loss of pollinators
  ➯ Dredging wetlands
  ➯ Development, roads, dams
  ➯ Mining
  ➯ Lack of watershed protection
  ➯ Desertification

Lack of Connection to Nature
• Lack of awareness of the importance of healthy ecosystems to human survival
• Children and families disconnected from nature

Climate Change
• Fossil fuel use, \( \text{CO}_2 \) emissions
• Effects on terrestrial and marine ecosystems and global climate systems
• Specific impacts on Missouri and the region

Loss of Biodiversity
• Human-accelerated rate of species extinction
• Loss of genetic diversity
• Sustainability of species in Saint Louis Zoo’s collection
Saint Louis Zoo Overarching Conservation Messages

We care, here and in the wild.

• Dedicated, knowledgeable Saint Louis Zoo staff care deeply about the welfare of our Zoo animals and provide excellent care to ensure their physical and emotional health.

• Saint Louis Zoo works to conserve rare and endangered species through our collaboration with other accredited zoos in Species Survival Plans, and we invest staff time and money in field conservation programs to protect animals and their wild habitats.

• Saint Louis Zoo WildCare Institute creates conservation solutions that benefit both animals and people in Missouri and around the globe.

Saint Louis Zoo connects people to animals and nature.

• Saint Louis Zoo is a window to the wild. Visiting the Zoo offers close encounters with animals that inspire awe and wonder in people of all ages, and provides nature experiences that are important for children’s health and development. We inspire and prepare visitors to get outside and explore nature in their community.

Zoo science helps save animals.

• Scientific studies led by Saint Louis Zoo improve animal care and benefit animals in the wild.

Your Zoo visit makes a difference for wildlife.

• Your support makes Saint Louis Zoo’s work possible. By visiting the Zoo today, you helped to support Saint Louis Zoo’s work in animal welfare and conservation—thank you!

Saint Louis Zoo is continually working to conserve natural resources—you can, too!

• Your actions and consumer choices help protect animals and our planet. Please join us and learn how you can be an agent of change.
Environmental Literacy Messages
(Adapted from AZA and workshop discussions)

- People everywhere are part of nature, not separate from it—our lives are connected to animals and plants within natural ecosystems.

- Natural systems make life on Earth possible by regulating our climate and cycling water, oxygen, carbon dioxide and soil nutrients.

- Healthy ecosystems provide essential services that sustain life on Earth. These include fresh air, water purification and flood control, soil and oceans that produce food, pollination and decomposition.

- We have the responsibility to care for the Earth that we share with wildlife, to leave a healthy planet for our families and future generations.

- Many conservation success stories demonstrate that people have the power to save animals and wild places if we all make the choice to take action.

AZA zoos and aquariums educate visitors and our communities. We connect people to nature. We inspire people to care and take conservation action.

- Some animal species have so few individuals remaining in their wild habitat that their future depends on zoo-based management.

Messages about Sustainability of Collections

- Populations of animals here have a role to play in conservation. For some of these species, zoos are essential for their survival.

- We do not take animals from the wild. We collaborate with other zoos to exchange/manage animal populations.

- It has never been more important for zoos to commit space and resources to maintain populations of animals.

- Zoos are evolving. We should interpret why zoos have larger populations now and fewer species, and why this is important to animal conservation.
Saint Louis Zoo Conservation Issue-related Primary Messages

Unsustainable/Inequitable use of Global Natural Resources
  • Using the Earth’s natural resources sustainably enables people and animals to survive and thrive.

Habitat Loss
  • Sustainable practices ensure that people can make a living while protecting animals and wild habitat.
  • Leave some space for wildlife—our future depends on it.

Climate Change
  • Choosing to reduce energy use and supporting renewable energy resources will help to slow the rate of climate change and its effects on people and the environment.

Human-Wildlife Competition and Conflict
  • People can coexist with wildlife if we balance human needs with practices that protect animals and their habitats.
  • By refusing to buy exotic pets and products made from wild animals, you can help stop the illegal wildlife trade that endangers animal survival.

Water Scarcity and Pollution
  • Reducing water use at home and in the yard saves this precious natural resource for people and wildlife.
  • Keeping toxic chemicals and plastics out of our water keeps people and animals safe.

Lack of Connection to Nature
  • Experiences in nature enrich our lives and are important for our health.
  • Spending active, unstructured time in nature simulates children’s imagination and creativity, builds their self-confidence, and promotes good health.

Loss of Biodiversity
  • Biodiversity, the variety of life on Earth, is inspirational and essential to human existence.
  • Our daily lives, health and economy depend on the plants and animals that allow healthy ecosystems to function.
  • Individual actions and daily consumer choices make a difference for animals and people; together, people can save endangered species.
Appendix:
Saint Louis Zoo Exhibit Interpretive Planning Process Template

Goals for the Exhibit Planning Process

- To establish an inclusive planning process for every new or renovated exhibit that seeks new ideas, involves staff with the relevant expertise at the appropriate times, and uses their time well.

- To create a streamlined exhibit planning process in which staff have clearly defined roles and responsibilities, and feel empowered to make decisions appropriate to their expertise.

- To maintain an atmosphere of respect, collaboration and teamwork that enables creativity to flourish and encourages innovation and excellence.

- To ensure that messages throughout the Zoo are consistent and effective.
Integrating Exhibit Interpretation into Exhibit Design

Planning Process Principles:

- **Interpretive Planning from the Beginning**: We will fully integrate interpretive planning into exhibit design from the beginning.

- **One Design Team**: Those working on exhibit interpretive planning will be part of the overall exhibit design team, rather than a parallel working group. The core exhibit planning team as a whole will work on interpretive planning through most of Concept Design. An interpretive sub-team will then work to develop the interpretive content to present back to the full core team.

- **All Exhibits**: The planning process we create applies to all new exhibits and renovations throughout the Zoo with the exception of the Insectarium (so that the process does not delay their work with frequently changing species). The process should be scalable for larger and smaller projects.

- **Plan Ahead**: We will know our collective exhibit development/renovation priorities for the coming year so that we can factor this into our work plans.

- **Establish Goals**: We will begin by establishing overall goals for the exhibit, in preparation to issue the Request for Qualifications (RFQ) for the architectural firm.

- **RFQ Timing**: We will issue the RFQ for the interpretive specialist at the same time.

- **Team Concept Design**: Architects and interpretive consultants will work on the concept, and work together to incorporate exhibit interpretation through all design phases.

- **Creative Innovation**: We support the power of new, creative and innovative ideas (Core Value).

- **Inclusion**: We will solicit ideas broadly, consider them, and filter them until the team eventually works with the best ideas.

- **Open to New Design Ideas**: We will not limit the new design team by current style standards—all exhibits should not have to look the same or have the same color scheme. Future exhibits will be more highly themed.

- **Consistent Visual Cues**: We use branding to provide consistent visual cues for visitors. Design teams can propose changes, but they should be justified within that branding.
Getting Started

1. Establish an exhibit planning team
The exhibit planning team will consist of a core team and advisors who are involved at various stages of the planning. It may be advantageous to add some members to the core team further along in the process. Which positions are represented on the core team may vary, depending on the focus, size and scope of the project, and how much time staff members can allocate to serving on the exhibit team. Key considerations:

• **Balance**: The core team should be representative. While no one department should be weighted more than another, some Zoo departments include multiple functions.

• **Efficiency**: If the core team has several members, they may determine that sub-teams will meet on specialized topics, and report back to the whole team, in order to work efficiently and use everyone’s time well.

• **Effectiveness**: The core team should be staffed so that the team has sufficient representation to make or recommend decisions, consulting with advisors as needed.
One Example of an Exhibit Core Team

- Project Manager—Director, Exhibits & Interpretation
- Architecture and Planning—has overall responsibility for the project, schedule, budget and external consultants
- External design consultant team/Interpretive consultant (optional)
- Curator—the client/charge of collection management and a conservation advocate
- Zoological Manager—is the animal/keeper advocate
- Vice President of Animal Collection (optional)
- General Curator—Zoo animal collections and conservation advocate
- Audience Research—Visitor Outcomes experts
- Education—Interpretation—Interpreter and Docent advocate, Education Liaison, Volunteer Representative)—Visitor/Education Advocate

Additional Consultants: specialized knowledge; e.g. cultural advisor, representatives of target audiences (e.g., teen advisors)
Staff Advisors to the Core Team

- Animal keepers
- Information Technology (or Core Team, as needed)
- Visitor Operations (Guest Services, Food Service (catering, events, restaurants) Rides, could be advisors or join the core team later in the process)—visitor advocate
- External Relations (Could be an advisor or join the core team later)—Marketing as the exhibit promotional advocate, Development—Fundraising Writing and Graphic Support
- Facilities Management (or Core Team)
- Horticulture (or Core Team)
- Nutritionists
- Researchers
- Veterinarian
- WildCare Institute Director and Center Directors
- Gift Shop
- Grounds staff
- Finance

Need to Review and Approve:

- Vice President, Animal Collections
- Campus Director (or Core Team if relevant WildCare Centers are involved)
- CEO

Keep Informed

- All Vice Presidents (gift shop, et al.)
- Strat Ops
- Zoo staff
- Volunteers (with clear guidelines on what to share with visitors)

Interpretive Sub-Team

The full exhibit core team will participate in interpretive planning through most of Concept Design. An interpretive sub-team can then work to develop the interpretive content to present back to the full core team. Interpretive sub-team members will include: the project manager; potentially an interpretive planning consultant for large, new projects; Curator, Education and Interpretation; Creative Services, and a text writer. This sub-team will involve advisors and external cultural advisors as needed to inform their work.
2. Clarify exhibit team member roles

Each member of the core team has an important role as an advocate for the exhibit. A designated visitor advocate, for example, will view each decision in terms of what it will mean for the visitor experience. Other team members will of course consider this as well; however, the visitor advocate has the responsibility.

Considering and discussing varying points of view is normal and important within teams. However, it is each advocate’s ultimate obligation to consider what is best for the success of the exhibit. The project manager’s role is to work with the team to achieve consensus.

Suggested tasks for core team members as part of their advocacy role are included at the end of this document.

3. Establish overall goals for the exhibit

Establish what Saint Louis Zoo wants to accomplish with this exhibit (new animal facilities, attendance increase, community engagement, sustainability, conservation, etc.). What does success look like? Gather other information and determine needs that could help inform the external exhibit design team.

4. Engage external consultants to join the team

Issue RFQs and select the architectural and interpretive consultants. The team will determine the need and appropriate timing to bring in other specialist consultants or advisors (such as a cultural advisor).

5. Review Design Considerations for Future Exhibits

The core team can review the design considerations for future exhibits to accommodate interpretive needs and enhance the visitor experience.
Concept Design Phase

Exhibit Interpretive Planning
The exhibit core team will develop an interpretive plan framework in context, and can begin by understanding the site (and any restrictions), the budget for interpretation (draft), and what is known about the collection plan.

The Big Idea/Main Message
The core team will begin by determining what this exhibit is about—and what is it not about. A Big Idea narrows the focus of the exhibit story. Create one sentence (that visitors will understand) that describes the Big Idea or main message of the exhibit.

Exhibit Storyline
The exhibit storyline is a narrative that describes what the exhibit is about and how the story unfolds as visitors move through the exhibit. This document can be useful to Development staff.

Front-end Evaluation
Conduct front-end evaluation (audience research) to learn what audiences know or want to learn about the subject, identify misconceptions, understand their attitudes/values about animals and relevant conservation issues, and determine their interest in taking action. Test audience(s) response to the Big Idea/main message.

Themes and Topics
Themes and topics are different. Themes are written as a complete sentence and support the Big Idea/main message. Each theme tells a story. Primary themes, like story “chapters,” enable the exhibit story to unfold. Example:

**Topic:** Ecological significance  
**Theme:** Grizzly bears are essential to maintaining a healthy environment.

**Supporting this theme:**
- As top predators, grizzly bears help regulate prey populations.
- Grizzly bears help plants reproduce by spreading seeds from fruits they eat.

This is an iterative process. Do the themes and topics support the Big Idea? If not, re-evaluate the Big Idea if needed or revise the themes.
Interpretive Goals

What does Saint Louis Zoo want to accomplish with this exhibit related to the visitor experience, conservation action, etc.? Consider how this exhibit can support Saint Louis Zoo’s overarching interpretive goals:

Saint Louis Zoo cares about:

**Goal 1: Animal Welfare**
To demonstrate the dedication and passion of Saint Louis Zoo for the welfare of animals in our care and in the wild

**Goal 2: Our Visitors**
To provide fun, innovative experiences that create lasting memories and inspire awe and appreciation for the amazing diversity of life on Earth

**Goal 3: Affective Transformation**
To strengthen people’s emotional connection to animals that nurtures empathy and belief in their power to effect positive change through conservation action

**Goal 4: Global Wildlife Conservation**
To engage our community in the conservation work of the Zoo and its WildCare Institute that conserves species, protects wild habitats and empowers local communities

**Goal 5: A Sustainable Future**
To empower our community to join us in taking meaningful actions to conserve wildlife, wild places and other natural resources

Outcomes

What will happen as a result of the new exhibit (what does Saint Louis Zoo want visitors to leave with)? Outcomes should be measurable. These statements will be used to evaluate the effectiveness/success of the exhibit in meeting the goals.

Messages

Considering the Big Idea or main message, what are the most important messages that the exhibit team wants visitors to take away with them? Revisit the overall Saint Louis Zoo conservation messages and conservation issue-related messages relevant to the exhibit. Select three to five messages, including the main message.

Learn, Feel and Do

The core team will consider what visitors will learn (cognitive), feel (affective) and do (behavioral) at the exhibit that will support the goals and result in the desired outcomes. List as many as possible, then rank (by voting, using dots, etc.) to select the most important ones. This is an iterative process—revisit the Big Idea/main message to determine how these support this message.

Note: Some interpretive planners refer to these as goals, and/or use the term objectives interchangeably with outcomes. Choose whatever terminology is right for Saint Louis Zoo and use it consistently within the team.
Experiences
At this point, the core team can continue to plan, or an interpretive sub-team can propose experiences and present recommendations to the core team. However, getting broad participation in this process to garner many ideas will be advantageous.

Brainstorm the kinds of experiences that will enable visitors to learn, feel and do what you selected. Consider different ages and learning styles—what will be appealing to young children and their caregivers; which experiences can offer interaction within families/social groups. Do not limit your creativity initially by thinking of the practicality or the budget (that comes later). List as many as possible, then rank (by voting, using dots, etc.) to select the most important ones.

Schematic Design/Design Development Phases

Select Media
With recommendations from the interpretive sub-team, the core team will assess which media can best convey messages and provide the selected experiences, e.g., signs (graphics or electronic media), touchable items, interactive games, whole-body parallel play, video or emerging technology, etc. Using technology is not always the better answer. Consider which experiences and messages are better delivered via live interpretation by staff and volunteers, and review the staffing and budget implications.

Budget
The core team will reconcile selected experiences and proposed media with the available budget. What can the Zoo afford, staff and maintain? Are there options that may interest potential donors? If the planned interpretive elements exceed the available budget, which elements are the most important? The team can list these in three categories to make the determination: (A) essential to the story/experience; (B) adds to the experience but are not essential; and (C) great to have if we have the budget. The core team will decide which element(s) to eliminate, or use “value engineering” to provide a comparable experience using less expensive media.
Exhibit Flow and Balance: Part I
The core team will review the interpretive plan and site plan layout to consider the flow and balance of experiences and media throughout the exhibit. Signs and other interpretive elements should complement the animal viewing experience.

Research, Writing and Graphic Design
Assigned staff from the interpretive sub-team (a new text writer position or the interpretive consultant) will produce the first draft of text for exhibit graphics and complete treatments for AV or multimedia elements. Designers will begin design, graphic layout, and source images and illustrations.

Formative Evaluation
Zoo audience research staff will conduct formative evaluation to test selective interpretive elements such as interactives and games with target audiences. They will use inexpensively mocked-up graphic panels to test language, images and layout with Zoo visitors to determine if they understand the concepts, messages and vocabulary, and if signs are readable and attractive to audiences.

Use the results of formative evaluation to make needed revisions to the interpretive content.

Exhibit Flow and Balance: Part II
When changes are completed, the core team will re-visit the exhibit flow and balance of interpretive elements, and adjust placement if needed.

Construction Documents Phase

Final Text and Design
Assigned staff (the text writer or interpretive consultant) will write the final copy for exhibit graphics and produce final scripts for video/other AV. Designers will complete design of graphics and interactives, graphic layout, and create graphics production files for fabrication.

During this final design phase, the interpretive planning team can create a training plan for staff and volunteers to prepare for the exhibit opening.
Suggested Exhibit Planning Team

Member Roles

The following are suggested roles for each internal core team member (external consultants are also part of the core team):

**Project Manager/Facilitator:** The Project Manager is the team facilitator. His/her role will be to:
- Coordinate with Architecture and Planning and work with design consultants
- Schedule team meetings
- Prepare meeting agendas
- Facilitate the planning process
- Work with the team to achieve consensus and s/he will make decisions when appropriate
- Be the conduit for information exchange between the team and the CEO, and share his direction and guidance with the team.
- Ensure that meeting decisions are documented
- Ensure that the team stays on task and on schedule
- Share meeting notes with the team (these may or may not be provided by external design team)

**Curator(s)**
Role: Collection Management/Conservation
- Advocate (Role overlaps with that of the Zoological Manager)
- Collection planning in coordination with other curators
- Ensure AZA guidelines and specifications for exhibit design, night room, den access and containment are met
- Animal acquisition coordination with SSP Permitting
- Animal transport and quarantine
- Work with relevant WildCare Director, conservation partners
- Advise interpretive consultant/exhibit developer on content and conservation issues

**Zoological Manager** (*Role overlaps with that of the Curator*)
Role: Animal/Keeper Advocate
- Physical and emotional needs of collection animals
- Life support systems
- Daily care needs/routines
- Enrichment in exhibit design
- Shifting
- Keeper access and safety
- Keeper prep areas and other work spaces
- Keeper talks
- Advise interpretive consultant/exhibit developer on animal care

**Architecture and Planning**
- Has overall responsibility for the project, schedule, budget
- Manages consultant selection process
- Contract administration
- Coordination with construction
- Team representative to Strat Ops
- Coordinates with the Project Manager on team planning
- Coordinates punch list
**Education** *(Interpretation, Education Liaison, Volunteer Representative)*
Role: Visitor/Education Advocate
- Audience user groups (families, early childhood, schools, teachers)
- Learning styles
- Universal design/accessibility
- Education programs
- Messages
- Staff exhibit interpretation
- Interpreters, Docents, (Volunteers)
- Teens
- Coordinate with interpretive consultant/exhibit developer

**Visitor Operations** *(Visitor Services for information, and Housekeeping)* Could be Advisors or join the core team later in the process
Role: Visitor Advocate
- Circulation
- Amenities, benches
- Safety
- Emergency access

**Facilities Maintenance**
Role: Operations Advocate
- HVAC and other systems
- How the exhibit will be serviced and maintained, window cleaning
- Garbage/recycling pick up
- Service vehicle access
- Daily staff access, special access (crane, major maintenance)

**Horticulture** *(Initial Core Team or later in the process)*
Role: Landscape/Plant Advocate
- Landscape planning and/or coordination with landscape designer
- Irrigation plan/coordination with irrigation contractor
- Plant location and acquisition
- Work with Veterinarian and Zoological Manager to ensure toxic species are not planted in exhibits or within visitor reach; and plan for browse as needed
- Soil acquisition
- Tree protection during construction
- Advise interpretive consultant/exhibit developer on Horticulture interpretive planning
- Plant installation
- Daily plant care access
- Equipment access (tree work, crane in deadfall, etc.)

**External Relations** *(Could be an Advisor)*
Role: Exhibit Promotional Advocate, Audience Research
- Media campaigns
- Promotions with Partners
- External communications
- Collateral media

**Interpretive Planner:** Saint Louis Zoo typically does interpretive planning and writing in house. For a large, new exhibit, the Zoo could contract with an interpretive consultant (either through the exhibit design firm or independently). With the growth of future new exhibits, this could become a staff position:
Interpretive Consultant or Exhibit Developer (future)

- Coordinates with the team to develop the interpretive framework: goals, outcomes, themes, topics, story line, learn, feel and do experiences
- Develops interpretive elements
- Media recommendations
- Research
- Content development
- Coordinates with team members/other staff experts on content
- Writes graphics text, labels
- Coordinates with Creative Services on image selection, illustration
Design Considerations for Future Exhibits

Design considerations for future exhibits to accommodate interpretive needs and enhance the visitor experience:

**Animal Encounters**
- Close-up viewing, eye-to-eye contact
- Exhibit conditions that allow visitor-animal interaction

**Accessibility**
- Universal design—accessible to all ages and abilities. This includes viewing that is accessible to children and those in wheelchairs

**Circulation**
- Circulation that is comfortable for visitor movement, accommodating crowds, and emergency access
- Prevent strollers from blocking paths or egress
- Consider how the space works for different sized groups (re: diversity and inclusion)

**Interpretive Needs**
- Pull-out spaces for keeper chats, training demonstrations, interpreters onsite programs and school groups
- Space for parallel play experiences
- Sculpture and crawl-through experiences
- Sustainability of interpretive elements
- Placement of graphic/video elements at different heights so that large groups can see
- Flexibility: ability to change elements as needed

**Visitor Amenities**
- Water fountains
- Places to sit for rest/reflection, observing animals, or watch children playing
- Shade
- Shoulder season shelter

**Functional Space**
- Access to electrical power
- Lighting (including night lighting if needed)
- Water for maintenance, horticulture and hand washing (if visitors are touching animals)
- Event space needs