



Oregon Zoo Bond Citizens' Oversight Committee

Oregon Zoo – Conservation Hall
Wednesday, Nov. 14, 2018
3 to 5 p.m.

Oregon Zoo Bond
Citizens' Oversight
Committee Meeting

Nov. 14, 2018

Minutes

MINUTES

MEMBERS PRESENT

Susan Hartnett (Chair)
Dan Aja
Naomi Bishop
Heidi Goertzen
Daniel Hauser
Jill Mellen
Javier Mena
Chin See Ming
Kevin Spellman
Dick Stenson
Emma Stocker
Karen Weylandt

AFFILIATION

Spectator Venues, City of Portland
Banfield Pet Hospital
California State University, Northridge (professor *emerita*)
Confluence Wealth Management
Oregon Center for Public Policy
Research Biologist
Affordable Housing, City of Beaverton
Smith Freed & Eberhard
Spellman Consulting, Inc.
Retired healthcare executive; community volunteer
Emergency Management, Portland State University
Retired from Providence Health & Services

MEMBERS ABSENT

Laurel Brown
Cynthia Johnson Haruyama
Nan Heim
Kate Jones (Resigned 11-14-2018)
Robyn K. Pierce
Katherine A. Porras
Ruth Shelly
Christine L. Taylor

AFFILIATION

Facilities and Property Management, Portland State University
Oregon Japanese Garden
Nan Heim Associates; Oregon Zoo Foundation Board of Directors
Morley Capital Management
Pierce, Bonyhadi & Associates
Meyer Memorial Trust
Portland Children's Museum
Oregon Dept. of Justice (12/19/18: Miller Nash Graham and Dunn)

ELECTED OFFICIALS AND STAFF

Shirley Craddick
Scott Cruickshank
Julie Fitzgerald
Caleb Ford
Kate Giraud
Sarah Keane
Jim Mitchell
Don Moore
Joel Morton
Linnea Nelson
Heidi Rahn
Marcia Sinclair
Grant Spickelmier

Metro Councilor
General Manager, Metro Visitor Venues
Oregon Zoo Foundation Executive Director
Metro Assistant Finance Director
Oregon Zoo Bond Project Manager
Oregon Zoo Finance Manager
Oregon Zoo Bond Construction Manager
Oregon Zoo Director
Metro Senior Attorney
Oregon Zoo Bond Program Coordinator
Metro Asset Management and Capital Planning Program Director
Oregon Zoo Marketing
Oregon Zoo Education Curator

A. Welcome / Introduction

Susan Hartnett, Oregon Zoo Bond Citizens' Oversight Committee Chair, opened the meeting at 3:03 p.m., and members and guests introduced themselves.

Chair Hartnett reviewed several member updates. Javier Mena took a new position with the City of Beaverton as affordable housing manager. He will continue serving on the Oversight Committee. Kate Jones took a new job in Los Angeles, so has resigned from the Committee. Chair Hartnett will retire on March 6, followed by six to eight weeks off, and then will continue working half time. She will continue to serve on the Oversight Committee.

Ruth Shelley was not present, but Dec. 31 will be the end of her term on the Oversight Committee. Chair Hartnett and Heidi Rahn will present her later with a framed gift and certificate of appreciation. Members acknowledged Ms. Shelly as a great chair and organized leader who set up the committee to complete its work and process in a successful way. She has been very positive, and did an exceptional job with preparing the annual report and presenting it to the Metro Council. Councilor Craddick also praised Ms. Shelly, and indicated that the zoo Oversight Committee will serve as model for the new Affordable Housing bond oversight committee. Chair Hartnett thanked Ms. Shelly especially for her help with transitioning to chair.

B. Approval of Sept. 12, 2018, Oversight Committee meeting minutes

Members approved the minutes of the Sept. 12, 2018, Oregon Zoo Bond Citizens' Oversight Committee ("Oversight Committee" or "the Committee") meeting.

C. Monthly Project Updates

1. **Education Center** – The zoo Education Center recently was earned two sustainable design accolades: It achieved Leadership in Energy and Environmental (LEED) Platinum certification from the U.S. Green Building Council. This is the highest of the council's standards, and is believed to be one of few zoo buildings in the U.S. to achieve Platinum status. The inclusion of the Coffee Crossing café made it even more difficult to achieve Platinum due to its intensive energy usage.

On Nov. 2, the Portland Chapter of American Institute of Architects awarded Opsi Architecture with the Architecture 2030 award recognizing the Education Center's design excellence aimed at reducing greenhouse gas emissions (net-zero energy operations). The support from the Oregon Zoo Foundation securing a grant from the PGE Renewable Development Fund for additional solar panels helped make this possible. Staff are still monitoring for net-zero energy operations, but noted that even with cloudy weather, the Education Center is still producing more power than it is using. Energy use is monitored digitally and reported on a dashboard display. The monitoring for net-zero must continue for a year. So far, sustainability trends are way up with electricity production, with the extra electricity from the Education Center going back out onto the zoo grid. On some days, the electricity produced is 150 percent of what the Education Center is using. Congratulations to the team for these successes.

This week the zoo paid the last bill to Fortis Construction for the Education Center, which triggers a 30-day limit to submit a Construction Management/General Contractor report to the Metro Council, and will be shared with the Committee in December. That contract only had 6 percent in change orders total (with solar panels taken out), which is a very low percentage for such a project.

2. **Polar Passage/Primate Forest/Rhino (PPR)** – The interpretives package is finalized, and a presentation on that will follow later in the agenda. The schedule is still showing some cautions, but that should clear soon. The project has permit intake at the city Nov. 15. Bids for subcontractors for the main project went out today, with bids due Dec. 11. The zoo is required to do a Type II Land Use Amendment for the new planned café and storage building, since the new café is moving 110 feet from its previous location (Bear Walk Café). Demolition of the primate building is in progress and going well. The old polar bear and sun bear habitats have been demolished. This has really changed the zoo central landscape. The demolition ran into a lot of hidden asbestos piping, but expects to have gotten the last of it today. The project is still under budget on that piece.
3. **Interpretive Experience** – The Interpretive project does not include interpretives for PPR, since the PPR interpretives are included with the project design. The remaining work for the Interpretives project is to install a final wayfinding kiosk when PPR is nearly complete, and complete evaluation of PPR interpretives in the year following its opening.
4. **Percent-for-Art** –The commissioned artwork for Polar Passage – the Melting Ice Bear sculpture and two polar bear benches – is still being fabricated by the Dam de Nogales artist team, and is scheduled to be shipped this winter. It will be stored at the Expo Center where the zoo will rent space for it until it is installed in 2020.
5. **Electrical Infrastructure** – The new generator on the Lower Service Road was installed last week. The budget still shows caution due to the low contingency of 6 percent and the unknown amount of damaged underground electrical conduit that will need to be replaced to pull new feeders.

D. Program Status and Financial Information at a Glance

Ms. Rahn reviewed the current budget for Polar Passage/Primate Forest/Rhino, building off of the presentation at the Sept. 12, 2018, Oversight meeting. It was discussed then that the current cost estimate is \$2.3 million over budget. Staff answered questions the Committee raised at that meeting and came up with four possible budget scenarios. Staff previously thought the project would have subcontractor bids on the main project by this meeting, but now will not get bids until Dec. 11. Since the Committee is not scheduled to meet again until February, staff would like guidance now from the Committee regarding what to do in each budget scenario.

Administrative Costs – Also at the September meeting, Caleb Ford presented a draft memo on updated administrative overhead costs, and has now provided a final version of that memo for today’s meeting. Zoo bond administrative overhead costs include program administration, bond issuance costs and Metro central services support. Currently \$7.2 million is budgeted, but staff now believe total administrative costs will be \$8.85. That is an increase of \$1.65 million. Part of the increase is due to the program running a bit longer than planned. Mr. Ford noted that the central services allocation is sacrosanct, and all departments have to comply the same.

The bond program pays Metro for its portion of the central services, such as accounting, legal, risk, human resources, Metro Council, etc. Each department within the agency pays its portion of the “pie” based on the same formula. Cost allocation for central service support is proportional to program activity and expenditure levels. Staff recently discovered, however, that one of the prior central services transfers from the bond program was off by a significant amount. Of the \$8.85 million projected for zoo bond administration, the central services transfer is projected at \$5.85 million. In preparation for the end of the program, Metro’s finance director agreed to cap that

amount so that it will not exceed \$2.2 million from this point on. This gives the program a high level of confidence that it will not need to change this forecast again.

One caveat is the potential arbitrage liability. Metro issued tax-exempt bonds. Arbitrage is an Internal Revenue Service penalty for when you borrow at one rate and then don't spend the money fast enough and earn interest at a higher rate. This situation has been caused due to the delay in construction. Staff have a current arbitrage rebate estimate of \$56,000, and that is anticipated to increase over the next two years. But the arbitrage is not an issue for the program budget since the program is earning more in interest. So it may be a necessary to tweak the administration budget later when arbitrage costs are fully known. Chair Hartnett asked if the program is reserving money for paying arbitrage. Mr. Ford indicated that the program has adequate resources to pay it, and the liability will never exceed the interest earned.

Kevin Spellman noted that half of the administrative costs are now going to Metro for central services support. In his opinion, perception-wise, in the public's view, that increase is not so good. He does not have any issue with the level of staffing, which he feels is remarkable. But he cautioned that it is important to be cognizant of the perception of repeated administrative cost increases. For sure it is a lesson-learned, and will apply to other bond programs. At 6 percent, it is still within range of other bond programs' administrative spending. But when staff has to keep explaining another increase, he feels that is a problem.

Emma Stocker asked about why the cost allocation is based on a US Department of Transportation, when this is not a transportation project. Classrooms and animal habitats are not the same as transportation. Mr. Ford explained that the formula is not based on transportation, but rather looks at a whole host of items, from which a basis is set. It is applicable to all Metro programs, not just the bond program. For the new Metro affordable housing bond, administrative costs charged to the bond are limited to 5 percent, per the bond measure. Administrative costs above that will be picked up by the Metro general fund resources. The purpose was to create confidence in the public, to approve the bond measure.

Polar Passage/Primate Forest/Rhino Budget Options – Ms. Rahn used a PowerPoint presentation (a copy of which is included with the record) to outline the PPR budget options. Since the project budgets were established in 2011, the program has seen significant construction cost escalation, and it is remarkable that the program has unallocated funds at this late stage. In 2017 the Committee made a recommendation to reallocate a significant portion of the unallocated funds. For that process the Committee established three guiding principles for allocating funds, and those principles still apply to the current allocation process.

She summarized the answers staff provided to the questions from the Sept. 12 meeting. After thorough conversations with the zoo, the zoo wants to make sure all of the habitats get built as designed. Zoo director Don Moore said that if the team value engineers out one more thing from PPR, they will be taking out items for revenue production or animal welfare. So the zoo does not want to cut any more. The zoo is prepared to pick up some of the bond program additional costs, if needed, including the master plan update, land use permit, and any close-out project "fixes" that arise with operation of the new projects. The bond program had allocated \$1 million for a close-out fund to fix items that showed up after operation, but has only spent less than \$25,000 to date.

The total remaining available program resources is \$4.7 million. The new allocation for administrative overhead would use \$1.65 million of that. This would leave \$3.05 million available for allocating to the PPR budget, if needed.

Scenarios – The PPR budget is estimated to be \$2.3 million over the current budget, but since total costs will not be known until after subcontractor bids are received in December and reconciled in early January, staff presented four possible budget scenarios:

Scenario A: Construction cost is within the current budget at \$33 million or less.

Scenario B: Project costs exceed the budget by up to \$3 million, with the costs covered by the \$3.05 bond program resources.

Scenario C: Project costs exceed the budget by up to \$4 million, with the costs covered by the bond program resources and \$1 million from the zoo's Renewal and Replacement Fund for the following year. This would defer all of the zoo's capital repairs for that year.

Scenario D: Project costs exceed the budget by more than \$4 million, with no funding available for costs above \$37 million and requiring scope reductions.

Since Scenario D would require scope reductions, staff hopes to not have to go there. But they have to show that they have a plan for that case. Potential scope reductions, such as the storage building (\$350,000) and café (\$1.5 million), would have dire impacts to the zoo guest experience. The storage building would likely be cut before the café. The previous Bearwalk Café was part of the primate building that has been demolished, so the PPR project is replacing it. When asked if it would be possible to build part of the café, staff said it would be possible to build a shell, or space for food carts.

The bond program does not need to take a formal budget action to use the bond and zoo funds for PPR. Program staff will still go to Metro Council for approval of any reallocation of program resources, but that is a separate process than getting budget appropriation under local budget law.

The PPR project still has 10 percent contingency built into the project budget, and will keep that in contingency. The program has needed that on most of its projects to date.

Mr. Spellman commented on the program resources and proposed administrative reallocation: If the zoo has decided that the current PPR design is what it needs, and it gets to the point of having to cut some scope, it feels like Metro is being held harmless in the process. The \$1.65 million overage for increased administrative overhead is coming out of the building funds, instead of taking it out of Metro. Metro could have budgeted appropriately for central services, and did not. Perhaps the zoo should say to Metro that it needs some of that central services money.

Chair Hartnett said the Oversight Committee could certainly point this out. Mr. Spellman is coming back to his point about public perception and the timing of this administrative increase being a concern. It is potentially taking away from zoo's long-term viability and goodwill with the community.

Joel Morton commented that the zoo is Metro, one and the same. Saying that Metro should pay some of the central service costs may be out of the Committee's charge.

Mr. Spellman further explained that Metro had the opportunity to put an adequate amount in the budget for administration, and did not. Chair Hartnett noted Mr. Spellman's suggestion, and will not exceed the Committee's authority, but will consider how to communicate the concern and recommendation.

Chin See Ming asked about the \$3.05 million available for remaining projects, as noted on the second page of the PPR budget options memo. He asked if it should be \$2.95 million, since some has already been spent on the Close-out fund. Staff agreed that it should be \$2.95 million since the Close-out project budget will remain at \$100,000, although staff expects costs to be less than that. Only \$25,000 has been spent to date.

Councilor Shirley Craddick asked about the zoo being an enterprise fund, and what that means. Mr. Morton explained that it has a different allocation that allows the zoo to keep the money it makes, to save it up for its own capital needs. He said it is not the Oversight Committee's authority to make recommendations on how Metro allocates budgets among other Metro departments.

Scenario D is a difficult scenario, in which there would likely be lots of discussions. There are many things that the zoo and Metro could consider.

Dick Stenson said that the program got to this point with great intentions of the staff, and perhaps it needs to split the difference of the administrative increase with Metro. If it gets to Scenario D, he recommended having conversations to leave the project whole.

Chair Hartnett summarized the options. Scenarios A and B are easy. Scenario C gets into taking funds from the zoo's replacement budget. If it gets to Scenario D, her guess is it will not be a quick check-in with the Committee. But rather, the Committee will need to have conversations, and will want to know that the bond program has scraped the bottom of the barrel before making PPR scope reductions. The issue may need more work before ending up in front of the Metro Council.

Karen Weylandt asked if there is a degree of confidence in general contractor Lease Crutcher Lewis' estimate of \$2.3 million. Jim Mitchell explained that the estimated construction \$2.3 million overage includes the early work package of \$4.75 million. That work came in under budget at bid, and the project is maintaining great allowances on it so far. The main package bid will be about \$28 million. Mr. Mitchell believes the project has a conservative estimate. The project has two bid walks coming up in November, and lots of subcontractors appear interested. He does not think we are seeing any slowdown in the market right now. The project budget includes 3.5 percent construction escalation, and \$800,000 built in for design and engineering contingency. The City of Portland building permit potential delay is sounding less risky. Intake at the city is scheduled for Nov. 15, and staff will know more then. The city did not balk when previously Mr. Mitchell said he would like the permits by January (but now, the project will be submitted much later than planned at the time of that conversation).

Chair Hartnett asked how the PPR project differs from other projects. Mr. Mitchell said it is similar in that it has concrete and steel, prefabricated concrete panels that are brought in, and lots of caging. Local companies do not have the expertise for the specialized caging and are not that interested. The team accounted for that in the budget.

Chair Hartnett asked if members are comfortable enough with the Scenarios. Staff will check in if the bids are in Scenarios A, B and C range. If at Scenario D, it will probably be later in the year to figure out how to keep the project whole without undesirable outcomes. The Committee can have a vote via email in early January, if necessary, after the bids from Dec. 11 have been reconciled.

E. Program Schedule

Some portions of the PPR project will be completed before others. The Rhino habitat is scheduled to be completed in the fall of 2019, the café in December 2019, Primate Forest in August 2020 and Polar Passage in November 2020.

F. Committee Annual Report – subcommittee selection

Chair Hartnett discussed the Committee's annual report to the Metro Council. It is a very important product of the Committee, and will cover the calendar year 2018. She acknowledged staff's help in compiling the committee's input, making it easy for members. In the past, two subcommittees – finance and projects progress – have been formed to write the report. They use the recommendations from the prior report as a guidepost for the next report. Staff prepares a report to track the status and progress on each recommendation throughout the year. Chair Hartnett and Ms. Rahn have also talked about a possible restructure of the report format when the program is moving into a completion stage, potentially creating a short report body with longer appendices. They would like the final report to have a different structure. She suggested going one more year with the current format, but is open to discussing it. If they are going to change the format this year, she would need commitment from members to undertake that change. The past process has been for one to two meetings of each subcommittee. Generally the chair works with the final edits, and staff provides a lot of help. Heidi Goertzen suggested this year cleaning up some of the redundancies in the report.

Members volunteered for the two subcommittees:

Finance: Heidi Goertzen, Daniel Hauser and Javier Mena.

Project Progress: Kevin Spellman, Emma Stocker, Chin See Ming and Naomi Bishop.

Chair Hartnett may or may not attend the subcommittee meetings. Staff will reach out to subcommittee members to schedule meetings, and keep the report preparation moving forward.

Councilor Craddick asked if the Committee has begun to think about recommendations for the future, and not just the next two years. What would you do differently if you were to reorganize this group? Especially since Metro has another bond measure now, it would be helpful to capture that type of info. The Council depends on this Committee as the public persona, and success depends on this Committee. The Council wants it to be successful. The work done on this Committee influences other bond programs, and the Council appreciates the feedback from the zoo Oversight Committee. It would be useful to capture some of that in this process, separate from the formal report, and timely for the new affordable housing bond.

G. Polar Passage, Primate Forest and Rhino Interpretives

Polar Passage – Grant Spickelmier, zoo curator for the Inspiration, Learning and Action team (formerly known as the Education department) reported on the interpretives planned for Polar Passage, Primate Forest and Rhino. The focus of new team name is the same as the focus of the interpretives for these habitats: to help people be inspired, learn and take action. Staff is working with Main Street Design, a consultant on the CLR Design team, to develop the interpretives. Marcia Sinclair from zoo Marketing is also on team, and keepsers that provide lots of content expertise and

experience with the guests and what guests need. (A copy of his PowerPoint presentation is included with the record.) He reviewed the four interpretive themes for the project:

1. Polar bears and their habitats are amazing.
2. Polar bears are struggling with the effects of climate change.
3. Our keepers and bears work together as partners in conservation science.
4. You can make a difference for polar bears.

These are not overtly expressed but what drives the messaging. The team also develops a set of outcomes that will be measured, such as has been done with previous bond projects. Visitors will first see the conservation research center where husbandry and research work are being done to help climate and polar bear scientists to help bears in the wild. The interpretives will show how Oregon Zoo polar bears contribute movement and metabolic data on energy use, and will honor former zoo polar bears Tasul and Conrad with their paw prints. A graphic table will show where in the world polar bears live, and convey that they live on sea ice, and don't live on land that much.

Outside the conservation center will be the *Melting Ice Bear* sculpture being created by the commissioned artist team of Veronica and Edwin Dam de Nogales. It will complement the interpretives and convey an emotion that the world could be losing these bears, but there may still be hope to protect them. The sculpture will be made of aluminum, to tell the story of recycling.

At the deep water pool view, the poles of the viewing structure will be wrapped with images of sea ice creatures, and a wall illustration will show the food web. A display on paddle power will show how it takes a lot more energy for bears to swim than to walk. Swimming for too long can put them into a nutrient-deficit situation, where they are burning more than they are taking in.

The bears' hunting strategy will be shown. Climate change will be explained as a carbon blanket, with a crank that visitors can turn to see the increasing effects. The team is working with the Oregon Museum of Science and Industry using a new technology that will enable visitors to hear the ice cracking and stories from the ice. A smell port will provide an opportunity to connect with the bears. The team did consider the idea of allowing visitors to dump buckets of ice for the bears, but the keepers decided against it due to the cost of making ice and it not being a sustainable practice.

Members asked if staff is concerned that people will put things in the smell port. Staff said it was carefully designed to protect the bears from that. Near the event space, two bear benches, also commissioned artwork from the Dam de Nogales team, will be playful additions.

Primate Forest – Since chimps and orangutans have to live in the trees, the Primate Forest interpretives is all about the trees. And their tree habitat is in danger. The interpretives will have three primary themes:

1. Human caused deforestation is the most significant environmental challenge facing primates around the world. We can make a change!
2. Apes are incredible, intelligent and highly adapted for life in the forest.
3. Oregon Zoo is committed to providing an enriching environment for the primates in our care.

The identity graphic will be built out of wood, possibly from a local company that repurposes tropical hardwood. In the chimp day area will be Meet the Apes information and a life-size graphic

that will be nice for photo opportunities. Visitors will be able to identify and get to know each primate, and the displays will be changeable to reflect changes over time. Another panel will show chimp communication, with sound interaction and facial and body language. Chimps as social and playful creatures will be explained, and the chimps will have mock termite mounds in their habitat. Chimps create nests at night in the trees and will have hammock nests in their habitat. Nests will be provided for young guests to play in.

Orangutans' opposable thumbs and tool making will be shown. Visitors will be able to listen to male orangutans' long calls that can travel a kilometer to declare territory and attract mates. Habitat loss and deforestation will be addressed. The search for hardwoods and palm oil are large drivers of deforestation. Interpretives will give guests concrete things they can do to reduce this impact.

Rhino Habitat – Rhino interpretives will be developed in-house by the zoo. The themes will emphasize the zoo's science-based care for rhinos. Research showed that visitors cannot hear about our conservation work until they are absolutely certain the zoo is taking great care of the animals. The four primary themes will be:

1. Black rhinos at Oregon Zoo thrive under our respectful, science based care.
2. Black rhinos have many amazing adaptations that help them survive
3. Oregon Zoo supports black rhino conservation
4. Our community is working to protect rhinos and other African wildlife from illegal trade

The rhinos will have a mud wallow to stay cool. Interpretives will talk about the rhino horn, how rhinos use it and how the demand for rhino horns is driving them to extinction. Only 5,000 black rhinos remain. A huge black market funding terrorist activity is on the rise, not in decline. Guests will learn what they can do locally to reduce that impact. The annual *Bowling for Rhinos* fundraiser will be celebrated in the interpretives. Since 1990, it has raised \$330,000 in Oregon, and more than \$7 million internationally to protect endangered rhinos. Visitors will be encouraged to get involved.

Jill Mellen commented that the interpretives are so impressive and encourage action, and she can't wait to see them. She suggested using "science" instead of "research" when talking about polar bear conservation, and staff agreed.

One member asked about Jane Goodall who was so influential in the first zoo habitat, and if there would be any chance to learn about Jane Goodall, or be inspired by her. Mr. Spickelmier said that most likely, the interpretives will tell that story. Her early way of working with the chimps is not what the zoo does now, but her story can still be shared. Dr. Moore indicated that the zoo is asking Ms. Goodall for three things: a statement on the zoo's care for primates, information about why she would not choose to be a chimp in the wild, and a presence on the website. The zoo is also reaching out to her team to invite her to the Oregon Zoo for a pub talk to open the habitat.

Julie Fitzgerald reported that OZF will receive a \$100,000 cash gift for Primates in January. The donor was so impressed with the animal welfare aspects of the new habitat.

Karen Weylandt asked about the difference of black and white rhinos. Northern white rhinos are now extinct. Southern white rhinos remain, but black rhinos are more endangered than the remaining whites. The interpretives will have something to show the difference.

H. Zoo Update

Don Moore, Oregon Zoo director, gave an update. He thanked the Committee for its great conversation today on PPR project. Last year Portland Parks and Recreation produced a master plan for Washington Park that talked about having a pedestrian trail along the train right-of-way from the zoo area to the Rose Garden, and the issue of the train has been in the media lately. It showed the trail in place of train. The zoo has a long-term lease on the train tracks, and the zoo will have input on the train and trail. There is a requirement to show a safety assessment of the whole track and train station, and not just the two areas where the tracks have slumped. But the zoo's priority is getting the bond projects done on time.

One of the zoo's African painted dogs recently gave birth to 12 puppies. The first-time mom is taking great care them. Based on the Species Survival Plan national guidelines, the zoo is taking hands-off approach for the first two litters. The zoo plans to bring red pandas back and have them in the previous amur leopard habitat. The zoo is slated to get two new tigers, which may be sisters. The zoo is getting two new lemurs, which are close to the African dogs.

A recent polar bear study came out, a peer-reviewed paper, that showed that swimming for the bears is metabolically more difficult than previously thought. The zoo's own polar bear swim chamber is allowing scientists to better tell the story of the polar bears and their threatened habitat. The zoo will be sharing that message with visitors in the new PPR project.

The zoo is now offering science pub talks each month, with food and drink available. Tonight is one on Condors, and tickets are \$15. ZooLights starts next week and runs until Jan. 5, 2019. Committee members are invited to attend with their families for the employee ZooLights night. The zoo is offering BrewLights for adults on Nov. 27 and 28, with 40 different beer vendors, and attendance capped to keep lines short. He wished everyone a happy thanksgiving with their families.

Julie Fitzgerald reported that OZF is having a great time with fundraising, and going forward, everyone will hear good things about it. Contributors really want animals to have a great habitat.

I. Adjournment

Chair Hartnett adjourned the meeting at 5:07 pm.

Upcoming 2019 meeting dates –Wednesdays, 3 to 5 p.m.:

Feb. 13, 2019 Conservation Hall, Education Center, Oregon Zoo
May 8, 2019 Conservation Hall, Education Center, Oregon Zoo
Sept. 11, 2019 Conservation Hall, Education Center, Oregon Zoo
Nov. 13, 2019 Conservation Hall, Education Center, Oregon Zoo