



PARKS AND RECREATION COMMISSION MINUTES REGULAR MEETING



January 11, 2019

Natural Resources, Parks and Recreation Department
3500 West River Road, Tucson, Arizona

Quorum having been established, Vice Chair Johnson called the meeting to order at 9:32 a.m. on January 11, 2019.

Commissioners present were Jan Johnson (Vice Chair), Damion Alexander, Peter Chesson (via Skype), Enrique Serna, Richard Barker, Anita Kellman, Victor Rivera, Carol Kovalik and Robert Owens. Chair Michael Lundin was absent.

Staff present were Robert Padilla, Karen Simms, Ron Odell, Robin Hadden, Brian Powell and Ann Khambholja.

Those present recited the pledge of allegiance.

Consent Agenda

A motion was made and seconded to approve the November 9, 2018 minutes. The motion passed.

COMMISSION DISCUSSION/ACTION REQUEST

1. Informational update Chuck Catino Award nominations: Mr. Robert Padilla informed the commission that, to date, four nominations had been received for the Chuck Catino award. He also informed them that NRPR would review the applications for adherence to the award criteria and present all completed nominations to the commission at the next meeting scheduled for March 8, 2019. Commissioner Kovalik asked Mr. Padilla to give the commission some background on the award and Mr. Padilla informed her that Mr. Chuck Catino was a former Parks and Recreation Commissioner who was a tireless advocate for recreational facilities in the Green Valley area. Mr. Catino's volunteer efforts including fundraising and securing various in kind contributions by various organizations led to the creation of Canoa Preserve Park in Green Valley. After his passing the commission decided that to honor his legacy, an annual award would be given to an outstanding volunteer.
2. Informational update from the Operations Division: Mr. Ron Odell informed the commission about a few of the projects his division has been working on, namely the Catalina Community Center parking lot, fencing at Lawrence Park, replacement of a play structure at Denny Dunn Park and the infield improvements at Field#3 at Arthur Pack Park. Mr. Odell also informed them that NRPR maintains the Loop on behalf of RFCD which funds approximately 20 miles of pavement preservation annually. The Operations division supervisors conduct asphalt inspections of the Loop in April and October noting the problems, like pot holes, cracks, striping, etc. that are found. Then working with NRPR's GIS division, the surface quality along with problems are mapped, which keeps track of sections

that have been previously completed. Commissioner Kovalik asked whether the repair work was hop-scotched, done consecutively, or whether it depended on the evaluations of the Operations Division. Mr. Odell informed her that since this is funded by RFCD, it is their decision, but where there are hotspots, they are attended to promptly. This program recently started in April and the second asphalt inspection was conducted this past October.

3. Informational update from the Natural Resources Division: Ms. Karen Simms informed the commission that the main goal of the Agua Caliente Pond project was to conserve water, reduce groundwater pumping, manage water depths and vegetation for wildlife habitats and restore historic views of the Catalina Mountains. The project will entail first managing aquatic species, after which the pond will be drained and re-contoured. A polymer sealant will be applied to prevent water loss through seepage. Once completed, the pond will be refilled. The pond will also be deepened to 6 – 10', resulting in increased aquatic habitat diversity and more open water. Some of the palm trees will be removed thus restoring the historic Catalina Mountain view. The footbridge to the island will also be replaced.

The main reason for this project is water conservation as the spring that once filled the ponds has had no measurable flow since 2014. In 2017 alone approximately 28.5 million gallons was pumped into the main pond and an estimated 30% - 50% seeped out of the bottom. Once complete, pumping of ground water will be significantly reduced due to the fact that seepage will be minimized. Since the pond contains no native fish, NRPR is opening the pond to fishing during the month of January. Native species will be introduced after renovation, with the exception of sterile grass carp that serve an important function of eating aquatic vegetation. Some of the red-eared sliders will be trapped and relocated to a turtle rescue in Phoenix. Commissioner Kellman asked about the palm trees that will be removed and was informed that the contractor could utilize them in other landscaping projects or carry out green recycling. Commissioner Kovalik asked about the turtles in Pond 2 and was informed that they would be moved back after renovation. She also asked how they would be protected during renovation and was informed by Ms. Simms that a biological monitor would be on site at all times during construction as well as when the palm trees are taken down to ensure there are no nesting birds in them. Commissioner Owens inquired about when the project would start and was informed that the aquatic part had already begun, but draining the pond would probably begin in March. Commissioner Alexander asked about the seepage and whether the water was really being 'lost'. Ms. Simms informed him that she did not know how long it took for the water to reach the aquifer and then be re-pumped again, and that some is lost to evaporation. There were no more questions.

CALL TO THE PUBLIC: The following persons addressed the Commission:

Mr. Olen Warrick
Mr. Gary Moeller

Mr. John Cance
Mr. Joe La Tourrette
Mr. David Wrench
Mr. Curt Larson

Two letters addressed to the commission in support of the Tucson Estates Area Trails Plan were received from Ms. Sue Clark, President of Pima Trails Association and Mr. Jerry Boettcher, President of Southern Arizona Parks and Trails Association.

FUTURE AGENDA ITEM(S): Update on Colossal Cave Mountain Park (Diane Frisch, A&T)

ADJOURNMENT: As there was no further business to come before the commission, duly motioned and seconded, the meeting adjourned at 10:32 a.m.



**PIMA COUNTY
PARKS AND RECREATION
COMMISSION MEETING**

JANUARY 11, 2019

OPERATIONS DIVISION UPDATE

OPERATIONS DIVISION

Ron Odell-Division Manager

Steve Daigle - Assistant Division Manager			Tom Burklow - Assistant Division Manager		
ZONE 1 Shane Kyzer-TMS	ZONE 3 Roland Duarte-TMS	ZONE 5 Travis Frasier-TMS	ZONE 2 Chris Doak-TMS	ZONE 4 Reuben McClain-TMS	ZONE 6 Juan Ponce-TMS
Ann Day/NW YMCA Arthur Pack/Tortolita CDO River Park Catalina Christina-Taylor Green Coronado [IGA] Cortaro Bosque Denny Dunn Linda Vista Richardson Rillito Vista Santa Cruz River Park [Grant-to-Ina] Sunset Pointe Ted Walker	Arroyo Chico Branding Iron Eboney Moody/Cardinal Diversion Channel [East] Drexel Heights CC Lawrence Manzanita Manzanita Greenway Mission Ridge Picture Rocks Robles Ranch CC Star Valley Vesey Veterans/Three Points	Augie Acuna/Los Ninos Esmond Station Harrison Greenway Julian Wash McDonald Pantano-North Pantano-South Thomas Jay/Littletown	Canoa Preserve Centro del Sur CC Continental CC Diversion Channel [West] Downtown Paseo de Iglesias Santa Cruz River Park [Grant-to St. Mary's] Santa Cruz River Park [Mission] Santa Cruz River Park [South] Summit	Brandi Fenton George Mehl/Foothills Rillito Rillito River Park R3 Rillito River Park R4 Rillito River Park R5 Swan Wetlands Wash-Alamo	Casas Adobes Children's Memorial Curtis Dan Felix ETFW CC Flowing Wells Kory Laos BMX Meadowbrook NRPR Administration Prickly Park Rillito River Park R1 Rillito River Park R2 Wash-Pima Wash-Roller Coaster Wildwood

Projects:

- Catalina Community Center Parking lot
- Lawrence Park – Fence on fields #1 and #2
- Denny Dunn Park playground
- Arthur Pack Park - Field #3 infield makeover

The Loop:

- RFCD - Pavement preservation to approximately 20 miles of the CDO, Pantano, Rillito and Santa Cruz
- Pavement inspection in October
- GIS mapping

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Catalina Community Center Parking Lot



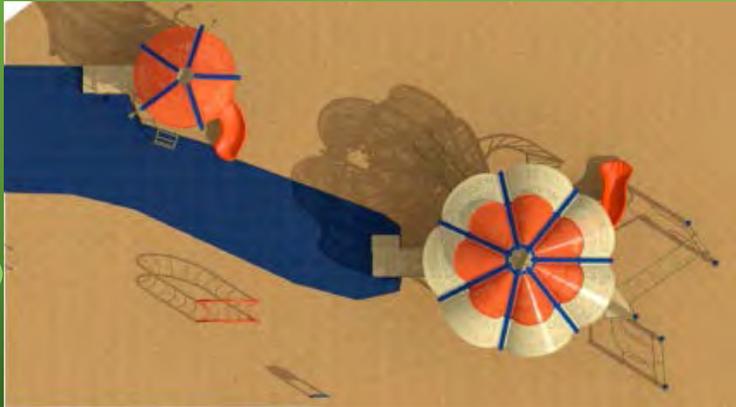


Lawrence Park – Fence on Fields #1 and #2





Denny Dunn Playground



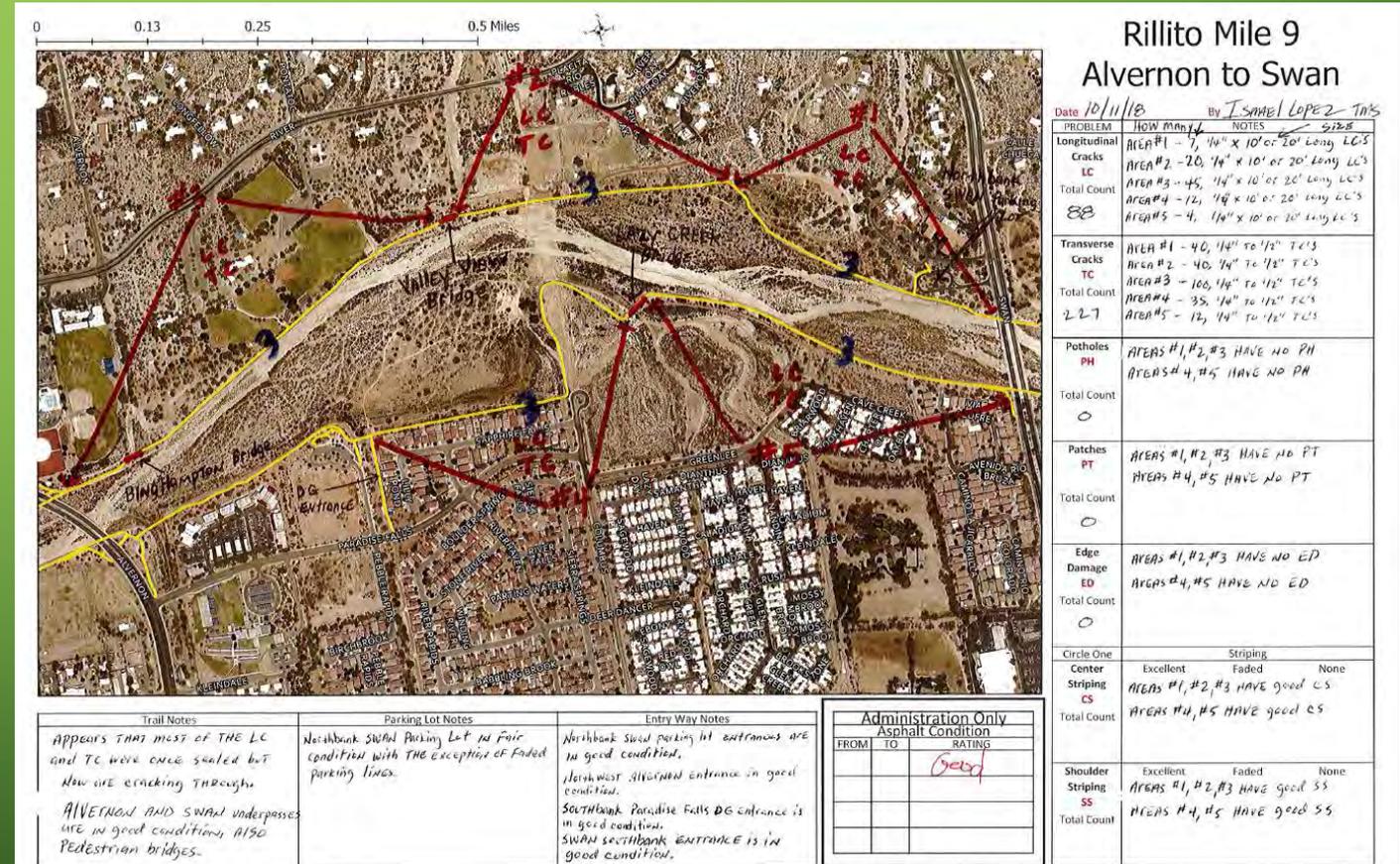


Arthur Pack Park – Field #3 Infield Makeover



The Loop:

- RFCD - Pavement preservation to approximately 20 miles of the CDO, Pantano, Rillito and Santa Cruz
- Pavement inspection in October
- GIS mapping



The background is a light blue gradient with several realistic water droplets of various sizes scattered across it. The droplets have highlights and shadows, giving them a three-dimensional appearance. The text is centered in the middle of the image.

AGUA CALIENTE PARK

POND 1 RESTORATION PROJECT

POND 1 RESTORATION PROJECT

PURPOSE AND NEED

- **Water Conservation** – reduce groundwater pumping
- **Wildlife Habitat** – manage water depths & vegetation
- **Restore Historic Views**



POND 1 RESTORATION PROJECT

ACTIONS

- **Manage Aquatic Species**
- **Drain Pond**
- **Recontour Pond**
- **Apply Polymer Sealant**
- **Refill Pond**



POND 1 RESTORATION PROJECT

RESULTS

- Significant reduction in groundwater use from over 14 million gallons lost annually to under 500,000 gallons lost annually
- Water depths increase from 4-6 ft max to 6-10 ft max, resulting in increased aquatic habitat diversity, reduction in cattail spread, and more open water
- Restoration of historic Catalina Mtn views and replacement of footbridge to island





ONE TIME ONLY OPPORTUNITY!
For a Limited Time, Agua Caliente Park Pond One
will be Open for Pole Fishing only
January 2-31, 2019



Help us remove all the bluegill and largemouth bass before the start of the pond restoration project!

- No fishing license required!
- No limit on bluegill, bass, and catfish. Please do not take grass carp.
- Recommend using top-water lures or weedless lure.
- Fish samples have been tested for heavy metals and are within safe limits for consumption.
- Cleaning fish on site is not allowed.
- Follow park rules and signs.
- Park Hours: 7 a.m.-Sunset
- Parking is limited, first come, first serve. NO parking on Roger Road.
- Information: www.pima.gov/nrpr/AguaCaliente or 520-724-5000



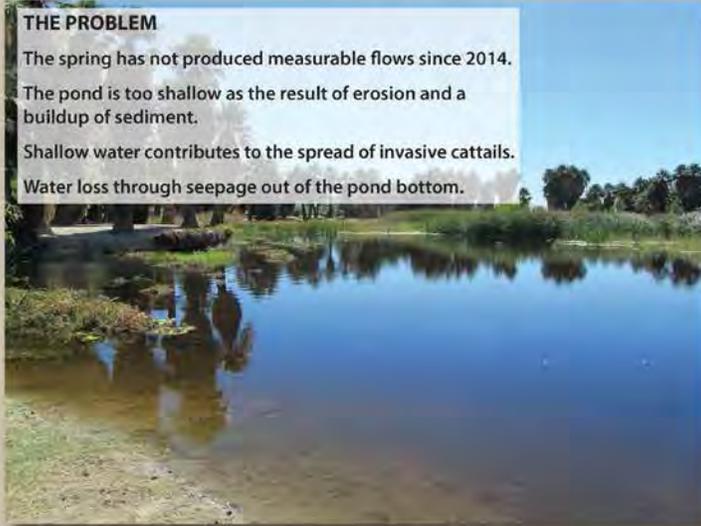
Trouble in Paradise

Water conservation is the focus of a multi-stage process to address the long-term sustainability of the pond.



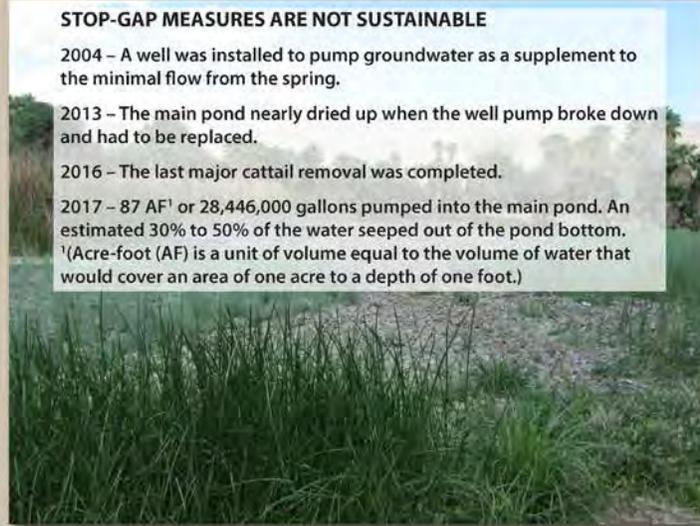
THE PROBLEM

- The spring has not produced measurable flows since 2014.
- The pond is too shallow as the result of erosion and a buildup of sediment.
- Shallow water contributes to the spread of invasive cattails.
- Water loss through seepage out of the pond bottom.



STOP-GAP MEASURES ARE NOT SUSTAINABLE

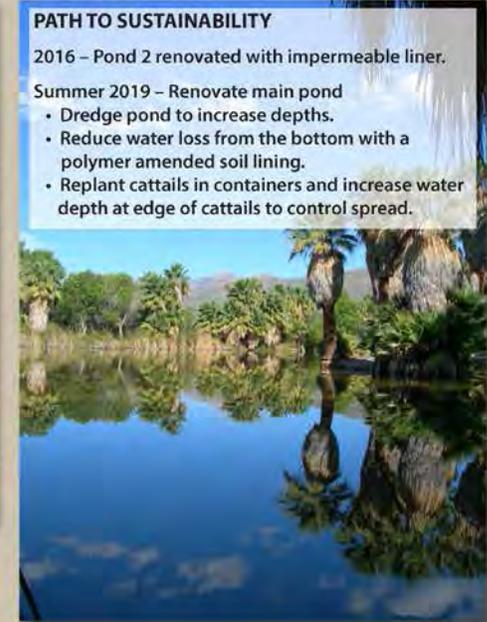
- 2004 – A well was installed to pump groundwater as a supplement to the minimal flow from the spring.
 - 2013 – The main pond nearly dried up when the well pump broke down and had to be replaced.
 - 2016 – The last major cattail removal was completed.
 - 2017 – 87 AF¹ or 28,446,000 gallons pumped into the main pond. An estimated 30% to 50% of the water seeped out of the pond bottom.
- ¹(Acre-foot (AF) is a unit of volume equal to the volume of water that would cover an area of one acre to a depth of one foot.)



▲ August 2013 main pond nearly dry

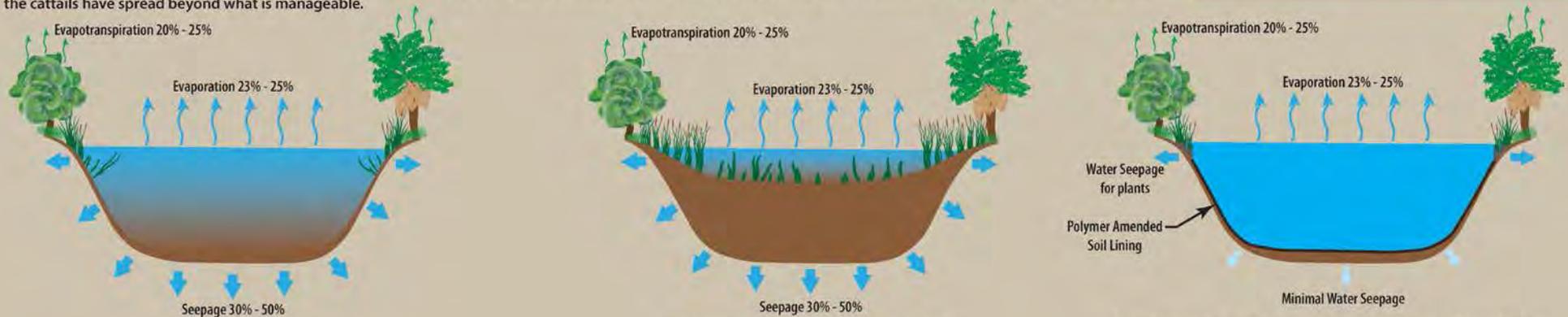
PATH TO SUSTAINABILITY

- 2016 – Pond 2 renovated with impermeable liner.
- Summer 2019 – Renovate main pond
 - Dredge pond to increase depths.
 - Reduce water loss from the bottom with a polymer amended soil lining.
 - Replant cattails in containers and increase water depth at edge of cattails to control spread.



THE TIME HAS COME TO RENOVATE THE MAIN POND

The main pond at Agua Caliente Park has been managed in ways that slow the spread of cattails and sediment in order to maintain open surface water, vital riparian and aquatic habitat, cultural and historic resources, and natural beauty. Despite these efforts, the main pond has been filling with sediment and decaying plant material and the cattails have spread beyond what is manageable.



As ponds age they fill with sediment and organic matter.

They become smaller and shallower ponds. This is the stage where the main pond is today.

After Renovation – Water conservation goals are achieved when seepage from the pond bottom is near zero and cattails are contained.

Water Conservation



Water loss due to seepage has long been an issue at Agua Caliente Park, a more efficient strategy is needed.

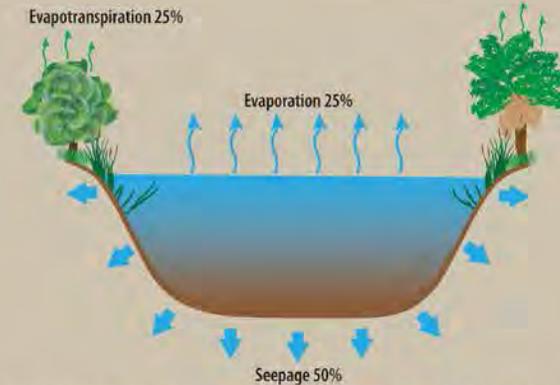
A Brief History

- In 2002, the Tucson community supported “take no action” over the alternative to create a wetland or cienega.
- At that time, the spring sustained the pond system.
- The spring dried up; now groundwater is used to fill Pond 1.
- Too much groundwater is required.
- Add losses due to seepage; “take no action” is no longer feasible.
- The County will curtail the water loss, but will maintain Pond 1 and Pond 2.

Pond System Modifications

- In 2016, Pond 2 was renovated to prevent seepage.
- A black High-Density PolyEthylene (HDPE) liner was installed in Pond 2.
- In 2019, a liquid polymer emulsion liner will be applied to Pond 1.
- Seepage losses will be dramatically curtailed.

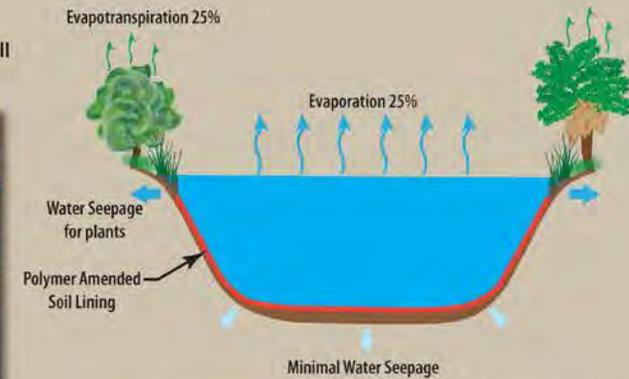
The Path to Sustainability



CURRENTLY: 14 million gallons of water annually seep out of Pond 1

Benefits

- Pumping of groundwater will be significantly reduced because seepage from Pond 1 will be minimized.
- Because overall water losses will be minimized, Pond 2 will also be kept full.
- Greater visibility of the pond surface will result from the removal of selected palms and cattails.
- These changes will result in wildlife habitat improvements and provide more open water for migrating waterfowl.
- The historic character of this Tucson treasure will be restored.



SEAL THE POND: Save millions of gallons of groundwater



Concept Plan – Changes to Come

Water conservation is the focus of this restoration project.



- LEGEND**
- Native trees to remain
 - Selective vegetation removal to restore historic views or encourage native trees
 - Selective vegetation removal for construction needs
 - Vegetation removal by cut
 - Key view
 - Proposed shoreline vista
 - Bridge replacement
 - 1 Create wildlife island
 - 2 Remove cattails
 - 3 Create cienega habitat, 4" pond depth

- NOTES**
1. Shore is labelled to be pushed out in areas where native trees or palms on the pond edge are scheduled to remain. This buffer will protect their roots from construction.
 2. All palms along the pond edge where the public has access are proposed to have the frond skirt pruned for public safety.
 3. 88 of these palms are proposed to be removed. Pruning the skirt fronds has a secondary benefit of preventing bats from nesting before the removal.

Before



After



View from entry seating



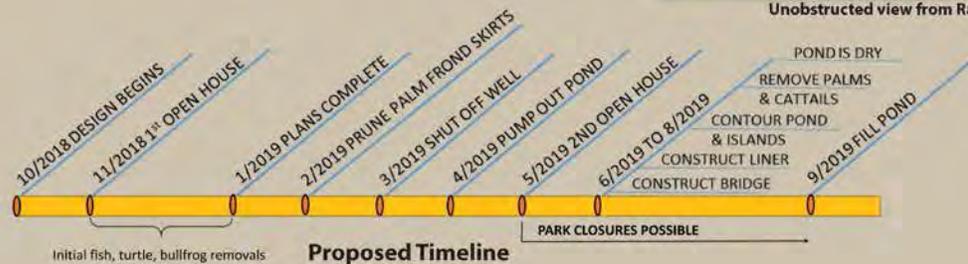
View along north path – Native trees have more space to grow



Unobstructed view from Ranch House to Island



- Widened viewshed
- Cienega
- Shoreline vista
- 2 Cattails contained in concrete planters



Initial fish, turtle, bullfrog removals

- Pumping of groundwater will be significantly reduced because seepage from Pond 1 will be minimized.
- The underlying water table, that is currently falling, could recover some volume.
- Greater visibility of the pond surface will result from the removal of selected palms and cattails.
- These changes will result in wildlife habitat improvements and provide more open water for migrating waterfowl.
- The historic character of this Tucson treasure will be restored.

Pond Restoration – What about the Wildlife?



Agua Caliente Park is an important wildlife sanctuary.

Just as humans flock to the park for its cool shade and water, wildlife does too, which makes the park a haven for hundreds of species of mammals, birds, reptiles, amphibians, and fish. The pond restoration project will disturb the habitat for many of these species, but Pima County has been working to ensure that the disturbance to wildlife is minimized or mitigated during the restoration.



Western Yellow Bat
Photo: © J. Cheng

The dead “skirts” of palm trees are habitat for one of the uncommon bat species in our area, the yellow bat. Because a few dozen palm trees must be removed as part of the restoration project, Pima County is looking to reduce harm to the yellow bat by trimming the palm skirts during the winter when yellow bats are not known to be residing in the park.



Timing – the drawdown of the pond’s water level will begin after the spring migration for birds, thereby ensuring that migratory ducks and other waterfowl will have left for their breeding sites to the north. Meanwhile, water will continue to be delivered to keep Pond 2 full so any of the resident waterfowl could move to Pond 2.

American Wigeon
Photo by Doris Evans

Currently, all the fish in the pond are non-native, meaning they have been introduced to our region. The pond hosts populations of introduced blue gill, bass, tilapia, koi, catfish, and mosquito fish. As we prepare for the renovation, all of these fish will be permanently removed from the pond.

Pima County intends to introduce native species to the pond after renovation. Native species to be reintroduced include the native Gila topminnow, which performs the important job of consuming mosquito larva. An exception to the native-species focus will be Pima County’s continuation of a program to stock the pond with sterile, non-reproducing grass carp that serve an important function of eating aquatic vegetation. The grass carp currently at the park will be moved to Pond 2 during the restoration of Pond 1.



The heron can’t do it all! Pima County is exploring several options for removing non-native fish before the pond is drained for restoration.

Great Blue Heron
Photo by Doris Evans

In the summer monsoon you will see that the ponds at the park provide habitat for scores of native toads. Unfortunately, there is also a thriving population of invasive bullfrogs that have a voracious appetite (they even eat bats). The pond renovation provides a rare opportunity to reduce or eliminate bullfrogs from the ponds.



American Bullfrog
Photo by Doris Evans



Red-eared Sliders
Photo by Susan Knoll

A popular feature at the park are the dozens of red-eared sliders basking in the sun, but too much of a good thing has become a problem. Starting in the Fall of 2018, Pima County staff will begin live-trapping turtles, with the intention of relocating some individuals to a turtle rescue facility in Phoenix.