The birth and rise of the modern city of Phoenix can be traced back to the location of Pueblo Grande Museum. There were a few things that came together to allow this to happen. First, the site’s proximity to the Salt River, or Rio Salado, a perennial river was the most critical element. Without water, desert survival is difficult. Water is critical for the successful survival of any large settlement of people. The Salt River passes by salt banks in its upper reaches, which may have given it its name, but the water running through the Salt River Valley is not salty and is potable.

The Ancient Sonoran Desert People, that archaeologists have named the Hohokam, built an elaborate, sophisticated canal system. The canal system built and operated over hundreds of years brought water to large areas of the Salt River Valley through over 1,000 miles of main and lateral canals. This impressive canal system allowed the Ancient Sonoran Desert People to live for hundreds of years throughout the Salt River Valley, including the location where Pueblo Grande Museum now sits. The first Europeans to visit the Salt River Valley were following the river looking for beavers to trap; they found the river supported beavers and other wildlife. It was the traces of this earlier irrigation system that in the late 1860’s sparked the idea to try and reopen some of them to irrigate fields to the west of Pueblo Grande Museum and lead to an unsuccessful effort to have the Phoenix town site established just west of the museum.

Another element was the nearby Fort McDowell, where the Fort McDowell Yavapai Nation is now located. This

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Birthplace of Phoenix

A military fort provided a market for hay, grains, and produce the farmers were able to grow when canals began to bring the life-giving water to the fertile alluvial soil of the Salt River Valley. Over the next few decades the Phoenix town site was established in what we now call downtown Phoenix, and the stage was set for the city to grow to the leading metropolitan city in Arizona; and it all started right here where Pueblo Grande Museum now sits.

Because this story is often overlooked, or not known at all we’re looking for ways to include it in our exhibits, programs, and lectures. Least we don’t forget that Pueblo Grande is the birthplace of Phoenix.

Archaeology Expo 2014!

Mark your calendars - Saturday, March 29, 2014. The 2014 Archaeology Expo!, sponsored by the State Historic Preservation Office (SHPO) and hosted by Arizona State Parks, will be held at Catalina State Park. Located within the foothills of the rugged Santa Catalina Mountains on the northeast edge of Tucson, this State Park offers a rich history. Romero Ruin, located within the Park, is a large multi-component archaeological site that is open to the public. The site consists of the historic Romero Homestead, situated atop the remnants of a large, prehistoric Hohokam village. Join us on Saturday, March 29, 2014 to celebrate Arizona Archaeology at Catalina State Park.

The Archaeology Expo (Expo) is the feature event of Arizona Archaeology and Heritage Awareness month (AAHAM) which is March. The Expo is an occasion for visitors to interact directly with our preservation partners. Booths are set up and activity areas delineated that provide an atmosphere conducive to sharing information about archaeology and history. Although each Expo is unique, there are often tours to local archaeological sites, demonstrations of ancient technology, and displays of local history. Despite the differences from year to year, our collective purpose is to convey to visitors the importance of preserving archaeological and historical sites.

If you are interested in obtaining more information about AAHAM or the Archaeology Expo, please feel free to contact Kris Dobschuetz, SHPO Archaeological Compliance Specialist, at 602-542-7141, or by email at kdobschuetz@azstateparks.gov.
Arizona Water Use

Pueblo Grande Museum will be hosting a brown bag lecture series as part of the 3rd Annual Arizona Scitech Festival. Join us for one or all of our lectures discussing current research and discoveries of prehistoric and historic water use in Arizona. These lectures are free and open to the public. To learn more about the Arizona Scitech Festival visit azscitechfest.org.

Friday, January 31
Time: 11:30 a.m. to 12:30 p.m.
Guest Speaker: Bruce G. Phillips, M.S., EcoPlan Associates, Inc.
Topic: An Interdisciplinary Approach to Understanding Canal Dynamics

Friday, February 7
Time: noon to 1 p.m.
Guest Speaker: Kathy Henderson & Connie Darby
Topic: A New Type of Water Control Structure in Hohokam Canals

Friday, February 14
Time: noon to 1 p.m.
Guest Speaker: Gary Huckleberry, Ph.D.
Topic: Why We Study Prehistoric Canals: A Geoarchaeological Perspective

Wednesday, February 19
Time: noon to 1 p.m.
Guest Speaker: Jerry Howard, Ph.D.
Topic: An Ancient Legacy to the Modern World – Prehistoric Irrigation in the Salt River Valley

Friday, February 28
Time: noon to 1 p.m.
Guest Speaker: Jonathan Mabry
Topic: The Origins of Irrigation in the Sonoran Desert

Opportunity Knocks

Have you always wanted to be a published author? If so here is your chance – write and submit an article to Pueblo Grande Museum’s newsletter. Your article should be related in some way to the museum’s mission. The topic for our spring 2014 issue of the newsletter is Recycling: More Than a Current Trend. Submit all articles to Newsletter Editor Laura Andrew at laura.andrew@phoenix.gov.

Or if you want to chat about a great idea give me a call at 602-495-0901.
Probing Desert Wetlands

By Bruce G. Phillips, EcoPlan Associates, Inc.

EcoPlan Associates, Inc., conducted archaeological investigations at the site of Punta de Ambar, a Hohokam farmstead as part of a recent project in south Phoenix. The site is on the active late-Holocene floodplain, a zone impacted by episodic flooding and a shifting Salt River channel. River cobbles in channel deposits at the base of an excavated trench suggest a braid of the Salt River meandered through the project area during prehistory. Very thin caliche accumulations on the undersides of some rocks reflect deposition around 2,000 to 5,000 years ago. It is possible that the bend in the river later influenced the depositional environment, allowing regular flooding of the area, leaving sandy sediments.

The exception is a distinct layer of dark, heavy clay in the northern portion of the site. Such deposits frequently indicate the presence of wetlands, or cienegas, and have been documented in the Salt River Valley, the Tucson Basin, and elsewhere in the Southwest. At the time the cienega existed, the land was relatively stable and the water table was high, possibly creating marshes along extensive reaches of the river. The cienega would have attracted wildlife, harbored edible plants, and provided a reliable water source. Site residents may have chosen to camp near the wetland and possibly farmed its banks.

Establishing a chronology of fluvial deposits is critical to understanding a rapidly changing environment and the opportunities afforded residents of Punta de Ambar. In such a dynamic landscape, it is possible that the site occupation and cienega are centuries apart. To investigate this, we excavated a single long trench through the project area, allowing an uninterrupted exposure of the stratigraphic record, and providing a baseline for landscape reconstructions. Cienegas develop as the environment changes. A multi-disciplinary analytical approach will be used to reconstruct the evolution of the wetland. Pollen and diatoms (single-celled algae with silica cell walls) show vegetative communities; mollusks and ostracodes (nearly microscopic crustaceans) reflect aquatic zoology. Soil organic content indicates thriving riparian zones versus floodplain forbs and shrubs. Soils chemical analyses will be used to assess the fertility of deposits and how suitable they are for agriculture. Bulk-soil samples were collected at regular intervals through the cienega clay and horizontally across it. Control samples were taken beyond. Subsamples for each of

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The Importance of Water

By Holly Young, Curator

For a culture that developed in this arid state, Hohokam designs can practically make you seasick.

Water is of paramount importance to the people who live in the Sonoran Desert, both past and present. Anyone who has spent much time outside in Arizona, especially during the summer, knows that the desert practically steals water from your body.

The Hohokam have long been acknowledged as masters of shell work. Shell itself may have been a powerful water symbol. Carved frog/toad motifs are sometimes found on stone bowls, but the vast majority of frog/toad depictions are carved in shell.

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Probing Desert Wetlands

the techniques described above will be separated and analyzed. The resulting data will be synthesized and the landscape reconstructed. It is possible that anthropogenic effects will be detected, such as the presence of pollen from domesticated plants along the margins of the wetlands, or spikes in nitrogen or phosphate levels due to farming and waste. Archaeologists will use the modeled landscape to better understand the artifacts and features encountered during data recovery, and how those people responsible for the deposits related to their environment.

PGM Mission Statement

Pueblo Grande Museum is an archaeological site museum and repository. We collect, preserve, research, interpret, and exhibit cultural materials from the site of Pueblo Grande and the Greater Southwest. The museum, part of the City of Phoenix Parks and Recreation Department since 1929, is dedicated to enhancing the knowledge of prehistory, history, and ethnology of inhabitants of the Southwest, and promoting a greater understanding of the diversity of cultures past and present, for our guests and the citizens of Phoenix.
Hohokam Water Management at La Ciudad

By Gary Huckleberry, Ph.D., Geoarchaeological Consultant Tucson, Arizona

Native Americans have an enduring legacy of dryland adaptation in the Southwest extending back thousands of years. The archaeological record documents that subsistence success for many indigenous communities was related to skilled management of water.

La Ciudad is a Hohokam village located at the northern edge of the Salt River floodplain that was occupied for approximately 800 years. Residents relied heavily on irrigation agriculture supplemented by the bounty of the Sonoran Desert. La Ciudad had two primary sources of water. One was Salt River water delivered by large earthen canals originating several miles to the southeast near Pueblo Grande. The other source was seasonal flooding in desert washes and hill slopes that extended south and west from Camelback Mountain and the Papago Buttes. Washes crossing La Ciudad probably only flowed a couple times per year, mainly during the summer monsoon, and although these floodwaters caused damage to the canals, this runoff was an additional source of water during a time of maximum demand.

Recent archaeological excavations by Logan Simpson Design Inc. at a land parcel known as the Frank Luke Addition provided additional insight into Hohokam water management at La Ciudad. Although the area has been heavily disturbed, archaeologists identified two Hohokam canals. The best preserved canal dated AD 800–900 and was traced approximately 400 feet in a southwestern alignment. This canal apparently diverted water from a main canal located upslope of the project area and distributed it towards fields located west of La Ciudad.

Several hand-excavated depressions that formerly held water were also identified. Storage features supplied by canals are referred to as "reservoirs" whereas those excavated to capture surface runoff are "retention basins". Four shallow reservoirs were identified at the Frank Luke Addition. These features only stored a few dozen gallons of water at a time and likely served the domestic needs of small families. A relatively large hand-excavated basin dated AD 700–750 was also identified, but it appears to have captured natural runoff rather than canal water. Irregular shape and

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Who’s New

Take a minute and introduce yourself to the two newest members of the Pueblo Grande Museum team – Kathy and Willie.

My name is Katherine Thompson and I am working in Visitor Services as a trainee from the Phoenix Indian Center. I am a Navajo. My clan is the Water Edge People (Taba’haa) and Red Running into Water (Tachii’nii). I would like to thank everyone at Pueblo Grande Museum for welcoming me. On my first day here I realized that I had opened a new door to a new world. I look forward to continuing to work and learn from you all.

My name is Wilfred Emerson. I am from Fort Yuma, California, and I am a member of the Quechan Indian Nation. I am working as a maintenance worker / groundskeeper for the next four months at Pueblo Grande Museum through the Phoenix Indian Center’s Training program. I am very grateful to be part of this wonderful staff.

Hohokam Water Management at La Ciudad

the underlying caliche soil suggest that the feature began as a borrow pit but later acted as a retention basin. At maximum capacity, it could have stored approximately 9000 gallons of water and supplemented domestic water needs within the community.

Archaeological excavations provide insight into how the Hohokam managed their hydrological resources in a water-scarce environment. The primary source of water at La Ciudad was from the Salt River delivered by canals and stored in reservoirs. Local runoff during the summer monsoon was a secondary source of water that was captured in retention basins. By utilizing perennial and ephemeral sources of water, the residents of La Ciudad were able to

Hohokam borrow pit at the Frank Luke Addition that later captured local run-off (scale is 1 m). Photograph courtesy of Logan Simpson Design Inc.

successfully grow food and sustain their community for approximately eight centuries — five times longer than the present age of Phoenix.
Here are excerpts from a group of second graders that recently visited the museum…

I loved the hohokam houses and the farm area and the art craft and the ruin and the Donut rock and the salt river and the tools of hohokam. Kady

I loved coming to your Museum. My favorite part of the Museum was the lives of ho ho come, sea shell craft, hoho come houses, Salt River, Ball field, Lunch....Genesis

I loved the art craft and farm area and map of the salt..... it was the best thing I have ever done in my life. Jeremiah

The tor was osum when we went into the pithoussle!... Caiden

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