Lower San Pedro Watershed
Shared History Timeline

Developed at the Lower San Pedro Watershed Conversation - Friday, August 25, 2017
Cascabel Community Center

Origin of the Shared History timeline

At the Lower San Pedro Watershed Conversation in August 2017, 38 residents, land managers, agencies and local organizations came together to record the shared history of the watershed. (For the purpose of this exercise, the Lower San Pedro Watershed was considered to extend north-south from the narrows of the San Pedro River to the confluence with the Gila River, and east-west from the Santa Catalina mountains to the Pinaleño mountains.) Participants in the Watershed Conversation wrote down events that they considered socially and ecologically significant, and then verbally shared them chronologically with the larger group (this was also video recorded).

The history recorded by the participants are not comprehensive, and other community members and organizations are encouraged to add to and even digitize the timeline using interactive software. Examples of digitized shared history timelines from other watersheds (that began with the same large group, butcher paper activity) include the Cienega Watershed Shared History and the Upper Gila Valley Shared History.

Guidance for Reading this Document

This document is a list of the events that the participants of the August 2017 Lower San Pedro Watershed Conversation recorded on paper. It is organized into time periods, and events are color-coded according to topic. Events that pertain primarily to **social/cultural/economic history are blue**, and events that pertain to **physical and ecological history are green**. The events are also labeled with categories, which include the following:

- ***Natural Events –*** Distinct natural events such as droughts, fires and earthquakes that affect the area's ecology and/or human communities.
- ***Riparian Conditions*** – Descriptions of the river, groundwater, and the floodplain, as well as flood events.
- ***Wildlife*** – Descriptions and events related to wildlife.
- ***Vegetation*** - Descriptions and events related to vegetation.
- ***Fire*** –Natural and prescribed burn events.

- ***National History*** – National-scale events that affected the local area.
- ***Local History*** – Events especially relevant to the Lower San Pedro River Valley.
- ***Mining*** – Events related to mining.
- ***Ranching*** – Events related to ranching, grazing, and grasslands.
- ***Agriculture*** – Events related to agriculture and food production.
- ***Infrastructure*** – Events related to roads, electricity, and transmission, and other infrastructure.
- ***Residential and Other Development*** – Events and descriptions of housing developments and other buildings, and land ownership related to development.
- ***Community Groups*** – Groups that have been established locally.
- ***Collaborative Efforts*** – Projects and plans that are conducted through partnerships between different groups.

- ***Conservation Lands, Designations, Restoration*** – Titles or ownership of areas that have been declared important for conservation and projects to restore such areas.
- ***Scientific Studies*** – Important studies of the natural resources that have been conducted in the Lower San Pedro River Valley.

Lower San Pedro Watershed Timeline

1540-1691

- ***Natural Events*** - Plants, fish, birds, mammals arrive [Pre-1540]
- ***Wildlife*** - The prehistoric mammal *Brontotherium* resides in the area (a *Brontotherium* track has recently been found in the valley).
- ***Local History*** - The Sobaipuri live in the area, near the Cascabel Community Center.
- ***Local History*** - The Hopi and Pueblo peoples inhabit the area (pottery shards from the Hopi inhabitation were found during the construction of the Cascabel Community Center in the 1980's).
- ***Natural Events*** - The Lower San Pedro River valley becomes a migration corridor for humans as well as animals; people have moved through the valley for 12,000 years.
- ***Vegetation*** - Ocotillo, Saguaro, agave, prickly pear are abundant, and are critical resources for people.

1692-1799

- ***Local History*** - Father Kino arrives on a Spanish expedition. [1692]
- ***Wildlife*** - Horses are introduced to the area.
- ***Riparian Conditions*** - The river is flowing.

1800-1899

- ***Riparian Conditions*** - The Lower San Pedro valley is characterized by fertile floodplains.
- ***Agriculture, Ranching*** - Surveys begin for farming and ranching.
- ***Riparian Conditions*** - Human use begins to affect the groundwater.
- ***Riparian Conditions*** - River headcuts/erosion.
- ***Vegetation*** - Wood cutting becomes a common practice in the valley, in order to support mining.
- ***National History*** - The United States completes the Gadsden Purchase, placing the area that is now southern Arizona in ownership of the U.S. [1853]
- ***Infrastructure*** - The Leach Wagon Road is established along the river, which was followed later by the Butterfield Stage Route (which went across the river and through the valley).
- ***Natural Events*** - A major earthquake originates north of the watershed, leading to many artesian eruptions along the San Pedro River. The river begins to flow underground in some places. [1870]
- ***Local History*** - The Old Camp Grant is built.
- ***Local History*** - The Camp Grant Massacre occurs, in which U.S. soldiers kill over 100 Apaches in Aravaipa Canyon. Afterwards, the Apaches are moved to the San Carlos Reservation. [1871]
- ***Ranching*** - Large cattle operations are established. [1870s-1880s]
- ***Vegetation*** - Tamarisk is introduced to the watershed. [Late 1800s]
- ***Natural Events*** - A major drought occurs, followed by the overharvesting of grasses and trees. [Late 1880s]
- ***Riparian Conditions*** - Headcuts and downcutting are observed in the San Pedro River and its tributaries.

- ***Local History -*** The great-grandparents of Maria Troutner come to the valley from Mexico for farming and ranching. [1880] The great-grandfather's job is delivering mail. Maria's father is then born in 1900 in Mammoth, and her mother is born 1910 in Cascabel. Maria is born in Tucson, and brought to Cascabel 10 days later.
- ***Local History -*** The great-grandfather of Bob Rogers, named Clairidge, homesteaded the east end of Aravaipa Canyon. [1888] They were some of the first to bring goats to Upper Aravaipa; at one time, they had upwards of 25,000 goats.

1900-1959

- ***Natural Events -*** El Nino events occur, and Arizona water use laws are based on these unusually high water levels. [1907-1908]
- ***National History -*** Arizona formalizes prior appropriation as its surface water law system. [Early 1900s]
- ***Local History -*** High rain years cause a peak population of new settlers. The Willcox population begins to grow. [1917]
- ***Natural Events -*** Drought occurs, effects exacerbated by groundwater pumping by settlers.
- ***Vegetation -*** Buffelgrass is introduced in the Lower San Pedro watershed.
- ***National History -*** The Colorado River is adjudicated, and the Colorado River Compact follows. [1922]
- ***Wildlife -*** The last known grizzly bear in the Rincon Mountains is killed by humans. [1922]
- ***Riparian Conditions -*** A large flow event occurs in the San Pedro River, causing changes in its morphology. [1925]
- ***Wildlife -*** The last known jaguar in the Rincon mountains is killed by humans. [early 1930s]
- ***Conservation Lands & Designations*** - Saguaro National Monument is established. [1933]
- ***Natural Events -*** A moderate statewide drought occurs. [1932-1964]
- ***Mining -*** The Tiger mine is built in Mammoth.
- ***Agriculture -*** Much of the floodplain is cleared for agriculture.
- ***Infrastructure -*** Electricity infrastructure is built in the watershed for the main purpose of groundwater pumping.
- ***Community Groups -*** The Redington NRCD is formed. [1947]
- ***Riparian Conditions -*** Hot Springs Canyon scours in flood events. [1950]
- ***Scientific Studies -*** Humphries conducts a biological survey of numerous tributaries to the San Pedro river, noting the vegetation. [1950s]
- ***Mining -*** The San Manuel Mine is established. [1952]
- ***Residential and Other Development -*** Small homesteaders begin to sell out to amalgamated interests. [mid-1950s to present]
- ***Vegetation -*** Scrub mesquite begins to spread to abandoned agriculture fields. [Mid-1950s]

1960- 1979

- ***Infrastructure -*** A road plan for the San Manuel mine is proposed. The road is never constructed, but three large bridges that still exist between Cascabel and Benson are built. [1963]
- ***Scientific Studies -*** Minckley begins conducting fish surveys begin in Aravaipa Canyon. These surveys have been carried out twice per year since, and he seven native fishes identified in the first survey remain today. [1964 to present]

- ***Infrastructure -*** The Arizona Highway Department does final planning for a highway crossing the San Pedro river and connecting to Highway 77. Communities oppose the road, and it is never built. [1967]
- ***Riparian Conditions -*** As a result of an adjudication effort for seven western states, the Army Corps of Engineers aims to capture as much river runoff as possible, and authorizes the removal of all vegetation along major rivers and streams in Arizona. An initial vegetation removal project is a 15-mile stretch along the San Pedro River on the Gila River Indian reservation. Controversy over channelization ensues, and the Carter administration discourages further planning of vegetation removal projects. The entire plan is abandoned in 1968.
- ***Infrastructure -*** The Southwest Water Plan is signed, which includes Central AZ Project, and leads to the construction of the Charleston Dam. [1968]
- The City of Tucson purchases three ranches to transfer water from the Lower San Pedro River basin to the next basin west. The Colorado River adjudication, however, declares that water cannot be moved between basins, and the City of Tucson could never directly receive that water. [1960s]
- ***Conservation Lands & Designations*** - Cohesive actions are taken to conserve wildlife in the Aravaipa area. A landowner named Clifford Woods is pressured to sell his property for development that would benefit from tourism. Instead, Woods transfers his land to the Defenders of Wildlife. This property remains as conservation lands, and is part of the Aravaipa Conservation Management Plan. [Late 1960s]
- ***Conservation Lands & Designations*** - Edward Abbey, working for Defenders of Wildlife, is the first caretaker of a ranch in Aravaipa. [1972]
- ***Conservation Lands & Designations*** - The Endangered Species Act is signed into law, and critical habitats are designated. [1973]
- ***Scientific Studies -*** The University of Arizona conducts a year-long study of breeding birds in the 7B mesquite bosque. [1973]
- ***Natural Events -*** A drought occurs. [1973-77]
- ***Wildlife -*** Bighorn sheep are reintroduced in Aravaipa. [1975]
- ***Conservation Lands & Designations -*** The Arizona Academy of Sciences, for Arizona's Office of Economic Planning and Development, identifies four areas on the San Pedro River as proposed natural areas. [1976]
- ***Wildlife -*** The last known Mexican wolf is killed by humans in east Aravaipa. [1978]
- ***Conservation Lands & Designations*** - The US Fish and Wildlife Service identifies the Lower San Pedro as a unique wildlife ecosystem of Arizona. [1978]
- ***Scientific Studies -*** Dr. Bob Omar and students at Arizona State University study the vegetation of Aravaipa Canyon. [1970s-1980s]

1980-1989

- ***National History -*** Arizona passes the Groundwater Management Act. [1980]
- ***Local History -*** The first Cascabel Fair is held. [1981]
- ***Residential and Other Development –*** The City of Tucson, having realized it could not use the water from the properties it acquired in the Lower San Pedro River basin, sells the property to developers. [1982]
- ***Conservation Lands & Designations*** - The Nature Conservancy acquires Muleshoe Ranch. [1982]
- ***Local History -*** Local residents begin building the Cascabel Community Center. [1984]
- ***Natural Events -*** A major flood occurs, resulting in a nearly-perennial stream running through the valley. [1983]

- ***Scientific Studies -*** Rich Glinski conducts a raptor survey along entire length of the river. [1983]
- ***Scientific Studies -*** Hunter and Corman of Arizona State University conduct riparian bird surveys along the river to see how their use of cottonwood-willow habitat is related to their use of similar habitat in the Rio Grande River basin. The study shows a gradient tolerance of Southwestern Willow Flycatcher for using tamarisk; it does not use tamarisk on the lower Colorado River, but does use it at higher elevations. [1983]
- ***Fire -*** Saguaro National Park initiates a prescribed burn program in Rincon Mountains.
- ***Riparian Conditions -*** The ATV revolution begins, and large portions of the drier part of the Lower San Pedro River become raceways for ATVs. [mid-1980s]
- ***Scientific Studies -*** Susan Skragan conducts a study that establishes the Lower San Pedro River Valley as a major bird corridor in the west.
- ***Conservation Lands & Designations*** - Pima County purchases the Bingham Cienega. [1988]

1990-1999

- ***Ranching -*** Conservation ranching becomes common.
- ***Scientific Studies -*** Diana Hadley conducts an ecological survey of Aravaipa Canyon. [1991]
- ***Community Groups -*** Pat and Jim Corbett arrive in the valley, and create Saguaro Juniper and the Cascabel Hermitage Association (which eventually become the Cascabel Conservation Association).
- ***Wildlife -*** Wet years occur, and beavers re-introduce themselves to the Lower San Pedro River from the Gila. [1980s-1990s]
- ***Conservation Lands & Designations*** - The Bureau of Land Management purchases land in the river corridor.
- ***Natural Events -*** A 100-year level flood occurs, making it difficult to cross roads in the valley. The entire San Pedro River runs for three months. [1993]
- ***Infrastructure -*** Telephone service infrastructure is established. [1993]
- ***Vegetation -*** Scouring causes cottonwood and willows to appear in wet years.
- ***Conservation Lands & Designations*** - The Nature Conservancy and Pima County enter into an agreement in which Buehman Canyon is acquired by TNC, Pima County conducts the water monitoring. [Early 1990s]
- ***Conservation Lands & Designations*** - Saguaro was introduced as a National Park. [1994]
- ***Conservation Lands & Designations*** - The Southwestern Willow Flycatcher is listed as endangered. [1995]
- ***Collaborative Efforts -*** Prescribed burns at Muleshoe Ranch mark first large cooperative effort between The Nature Conservancy and the Bureau of Land Management. [1990s]
- ***Collaborative Efforts -*** Thirty people come together to purchase the land the City of Tucson had purchased and sold for development. The group starts a ranch, which became the first the first ranch owned by Saguaro Juniper.
- ***Collaborative Efforts -*** The Bureau of Land Management works with the local community to create a Cascabel Ecosystem Management Plan. [1996]
- ***Fire -*** A prescribed burn is implemented in Aravaipa.
- ***Agriculture -*** Agricultural practices are retired on the 7B Ranch. [Mid-1990s]
- ***Local History -*** Maria Troutner met a teacher from Pennsylvania (Gene Troutner), and they together purchase land next to Maria's uncle's ranch. On this six-acre property, there is a historic bomb shelter that was used in the 1960s during the Cuban Missile Crisis. Today, a solar array remains in the front yard. [1999]
- ***Mining -*** The San Manuel Mine stops pumping water. [1999]

- ***Scientific Studies -*** Wet-dry mapping of the San Pedro River begins. [late 1990s]

2000-2009

- ***Scientific Studies -*** Julie Stromberg of Arizona State University conducts additional studies work on the hydrology and geomorphology of riparian plants in the river corridor.
- ***Natural Events -*** Drought and climate change become significantly noticed in the area.
- ***Conservation Lands & Designations*** - The Nature Conservancy retires groundwater pumping at the 7B Ranch; TNC also conducts a grassland assessment. [2002]
- ***Collaborative Efforts -*** The Arizona Department of Fire Management and the State Department of Corrections coordinate on a Firewise assessment on private properties in the valley, and provide crews to thin mesquite bosques and create fire breaks. This cooperative work, which is supported by grants, continues today. [2002]
- ***Natural Events -*** The Bullock Fire occurs. Catalina Wash fills with debris from erosion, blocking water from reaching the San Pedro River. [2002]
- ***Natural Events -*** The Bingham Cienega burns. [2003]
- ***Natural Events –*** The Aspen Fire occurs. [2003]
- ***Infrastructure -*** The BHP Copper smelter is taken down. Discussions begin regarding solar plants, but none are built.
- ***Conservation Lands & Designations*** - The Salt River Project acquires lands along San Pedro River around Mammoth and San Manuel for the conservation of Southwestern Willow Flycatcher and Western Yellow-Billed Cuckoo.
- ***Conservation Lands & Designations*** - The Nature Conservancy is contracted by Resolution Copper to manage 7B Ranch, 3000 acres of desert uplands, river bottom, and mesquite bosque. [2005]
- ***Community Groups -*** The Cascabel Working Group is formed as an effort to bring together the whole community to address the I-10 bypass proposal (and later the SunZia project).
- ***Riparian Conditions -*** The largest flood on record hits Aravaipa Canyon; the river flows at 28,000 cubic feet per second (it normally runs at about 10 cfs). [2006]
- ***Riparian Conditions*** - Groundwater levels at the Bingham Cienega decline. The water table was once at 5 feet below the surface, and today it is 57 feet below the surface.
- ***Residential and Other Development*** – Plans are developed for 30,000 homes in San Manuel to be built on BHP property.
- ***Conservation Lands & Designations*** - The Pinal County Open Space and Trails Plan is adopted [2007]. In 2009, the trails plan is adopted into the County's long-term Comprehensive Plan.
- ***Conservation Lands & Designations*** - The Nature Conservancy acquires Cobra Ranch. [2007]
- ***National History –*** The Great Recession begins. [2008]
- ***Infrastructure -*** The I-10 bypass proposal is turned down. [2008]
- ***Infrastructure -*** The SunZia transmission line is proposed initially to the federal agencies, along the same route as the proposed I-10 bypass. [2008]
- ***Community Groups*** - A large group of landowners begin discussing the management of the Pinal County piece of the San Pedro River. The group includes TNC, ASARCO, BHP, and Resolution Copper. These conversations eventually end without tangible progress.
- ***Conservation Lands & Designations*** - National Audubon declares Lower San Pedro and its surrounding floodplain as a Global Important Bird Area. [2008]
- ***Community Groups -*** A collaboration of site managers forms following the bird-related designations. The group still meets.

- ***National History -*** The US Department of the Interior establishes the America's Great Outdoors Initiative, and the Treasured Landscapes Initiative. [2009]

2010-Present

- ***National History -*** The Landscape Conservation Cooperatives begin. [2010]
- ***National History -*** The Great Recession ends. [2011]
- ***Local History -*** The USFWS proposes a collaborative conservation initiative, which includes the possibility of a wildlife refuge on the Lower San Pedro. [2011]
- ***Collaborative Efforts*** - The Malpai Borderlands collaborative and the Altar Valley Conservation Alliance convene a panel discussion in San Manuel, strongly encouraging Cascabel to collaborate more with federal partners.
- ***Collaborative Efforts*** - The Arizona Land and Water Trust begins cooperative water leases to landowners on the Lower San Pedro River. [2012]
- ***Community Groups -*** The Lower San Pedro Initiative (LSPI), a joint effort of the Redington and Winkleman NRCDs, formed to counter the proposed wildlife refuge. The group later explored the mitigation bank concept for benefit of water conservation for the San Pedro Watershed (in the form of brush/mesquite control).
- ***Vegetation -*** A large dieback of cottonwoods occurs at from P-Z Ranch to Dudleyville for unexplained reasons. [2012]
- ***Conservation Lands & Designations*** - The Arizona Game and Fish Department establishes the Lower San Pedro River Wildlife Area. [2012]
- ***Conservation Lands & Designations*** - Pima County acquires properties in the valley: A7 ranch [2004], 6 Bar Ranch [2006], and M Diamond Ranch. [2013]
- ***Conservation Lands & Designations*** – Pima County acquires Buehman Canyon from The Nature Conservancy. [2013]
- ***Vegetation -*** Further dieback of long stretch of cottonwoods is observed at the confluence of the San Pedro River and Aravaipa Creek. [2014]
- ***Riparian Conditions -*** Studies show a decline in groundwater recharge; depth to groundwater levels drop precipitously.
- ***Conservation Lands & Designations –*** The Yellow-Billed Cuckoo is listed as an Endangered Species.
- ***Scientific Studies –*** Yellow-Billed Cuckoo surveys begin on 7B Ranch, with great success in detecting birds. [2015]
- ***Riparian Conditions –*** Hot Springs no longer scours in flood events. [2015]
- ***Natural Events -*** Hurricane Odile occurs, affecting southern Arizona. [2015]
- ***Infrastructure –*** Pinal County paves three miles of the river road to Pima County.
- ***Collaborative Efforts -*** The Madrean Watershed of Landscape Conservation Design process is initiated. The Desert Landscape Conservation Cooperative is convening a process for three pilot areas to participate in the Landscape Conservation Design process, and the Transboundary Madrean Watersheds are one of those pilot areas.
- ***Riparian Conditions -*** Hot Springs Canyon no scours flood events.
- ***Infrastructure -*** The Arizona permit is issued for the SunZia transmission line. As a result, Aravaipa and Oracle activists join with those in Cascabel. [2015]
- ***Community Groups –*** The Aravaipa Watershed Conservation Group is formally established. [2016]
- ***National History –*** Donald Trump becomes the President of the United States. [2017]
- ***Residential and Other Development*** – The Apache Sky Casino near Dudleyville is built. [2017]

- ***Conservation Lands & Designations*** - SRP acquires the San Pedro River Preserve for conservation of the Southwestern Willow Flycatcher and Yellow-Billed Cuckoo. [2017]
- ***Natural Events –*** higher than normal monsoon rains occur. [2017]
- ***Riparian Conditions -*** Beuhman and Kielberg Canyons both flowed into the San Pedro River for the first time in many years. [2017]
- ***Conservation Lands & Designations*** - As part of Multi-Species Cons Plan, all Pima County fee lands in San Pedro River Valley are now conservation easements. [2017]
- ***Fire –*** The Burro Fire burns in Upper Buehman Canyon. [2017]
- ***Scientific Studies –*** Wet-dry mapping begins on the 7B Ranch. [2017]
- ***Scientific Studies -*** Mapping effort of the San Pedro River from Benson to Winkleman, in anticipation of the arrival of the Tamarisk Leaf Beetle. [2017]

Into the Future

- ***Natural Events –*** The Tamarisk Leaf Beetle is anticipated to arrive in the Lower San Pedro River Valley. [2022-2027]
- ***Infrastructure -*** A decision on the SunZia lawsuit is expected from the Court of Appeals [2017].
- ***Collaborative Efforts –*** The Madrean Watersheds Landscape Conservation Design pilot project is expected to be completed. [2019]