Riparian Preservation and Restoration Listening Session Santa Cruz River Basin Restoration Sites

Brittany Choate Research Assistant, Water Resources Research Center July 29, 2011 WRRC Brown Bag

Presentation Contents

 Overview of restoration sites located in the Santa Cruz River Basin
 Planned, in-progress, and complete
 Identify water needs of these sites
 How may Conserve to Enhance (C2E) help?



Water saved through water conservation



Water delivered to river enhancement sites



Watershed Management Group

Watershed Management Group

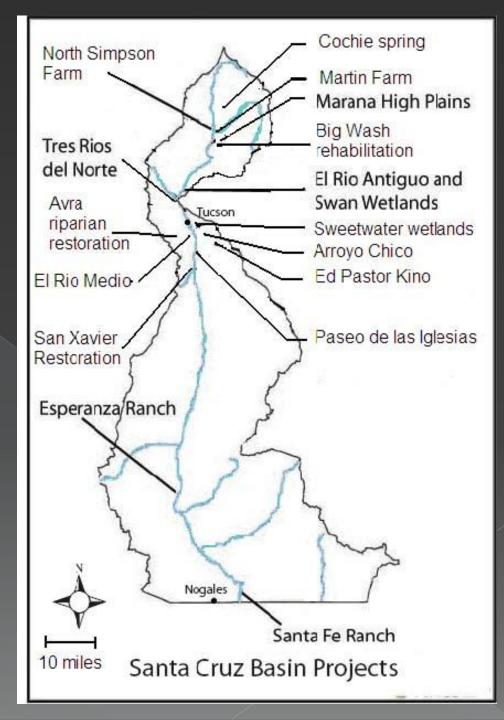
Presentation Resources

- "Riparian Restoration Efforts in the Santa Cruz River Basin"
 - > 2009 Report by Julie Fabre, Claire Cayla

• "Projects to Enhance Arizona's Environment"

>2006 Report by Sharon Megdal, Kelly Mott Lacroix, Andrew Schwarz

Santa Cruz River Basin Site Locations



Sites, according to Restoration Report, that may need water

Arroyo Chico

Avra Riparian Restoration and Groundwater Replenishment Project

Cochie Spring

El Rio Antiguo

El Rio Medio

Esperanza Ranch

Marana High Plains Effluent Recharge Project

Martin Farm

North Simpson Site

Paseo de las Iglesias

San Xavier Indian Reservation Riparian Restoration

Santa Fe Ranch Restoration Area

The Big Wash Rehabilitation Project

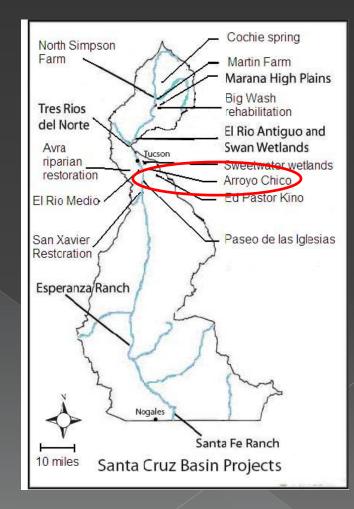
Project Phases, as of 2009

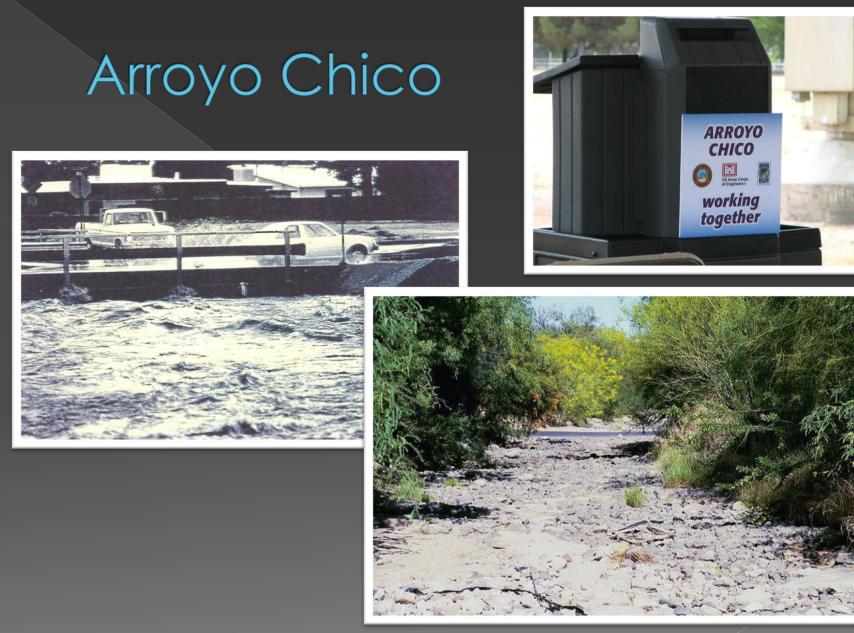
	1984	1994	1995	1996	1997 19	98 199	99 2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Sweetwater Wetland									•					•		
Marana High Plains																
Ed Pastor Kino			•													
Swan Wetland																
North Simpson			•													
San Xavier Reservation					·											•
Tres Rios del Norte			·													
Santa Fe Ranch																
El rio Medio																
Paseo de las Iglesias																
El Rio Antiguo																
Arroyo Chico																
Cochie Spring																
Esperanza Ranch																
Martin Farm																
Avra Riparian restoration																
Big Wash																
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Arroyo Chico

Phase

- In progress, nearing completion
- Project Goal/Driver
 - Multi purpose flood control facility for riparian enhancement
 - Reduce flood damage for properties along Arroyo Chico
- Water Source
 - Plan to purchase from Tucson Water





Photos from PCFCD (http://rfcd.pima.gov/projects/arroyochico/compilation.htm)

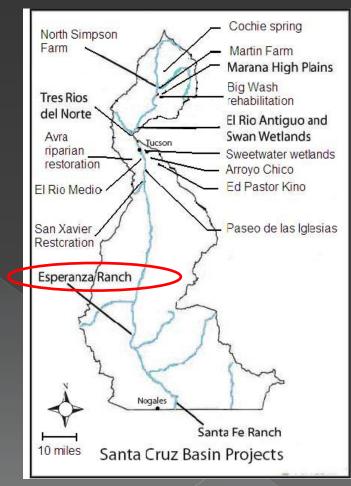
Esperanza Ranch

Phase

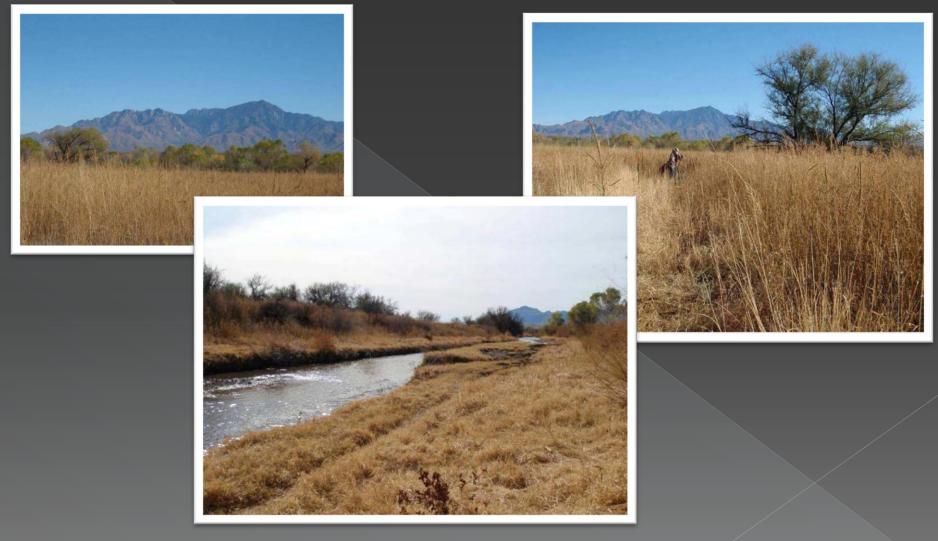
- > Restoration in progress
- Project Goal/Driver
 - Effluent flow for riparian enhancement
 - > Stabilize erosion prone areas
 - > Engage the community

Water Source

 Relies on intermittent effluent flow from Nogales International WWTP, no contract



Esperanza Ranch



Photos from Mr. Kroesen, December 2008

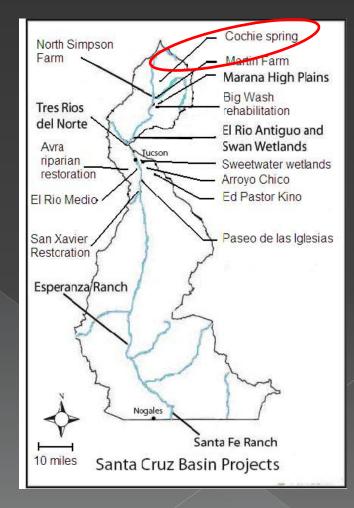
Cochie Spring

Phase

- Monitoring and maintenance
- Project Goal/Driver
 - Habitat restoration and enhancement of historic homestead in Pima County

Water Source

Relies on storm water



Cochie Spring





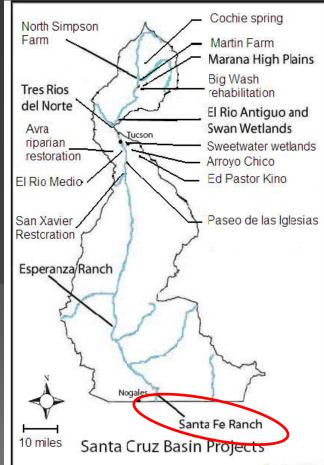


Photos from HikeArizona.com (http://hikearizona.com/photoset.php?ID=9479) and Tucson Audubon Society website.

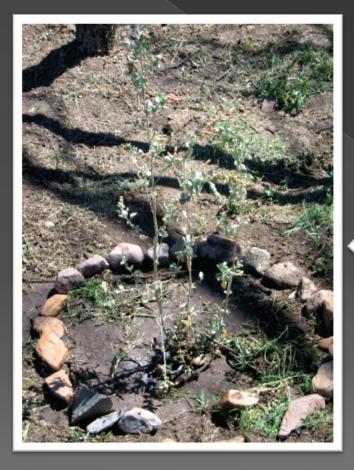
Santa Fe Ranch Restoration Area

Phase

- Monitoring and outreach
- Project Goal/Driver
 - > Erosion control
 - Riparian restoration
 - Revegetate the area
 - Increase public awareness of riparian system and values
- Water Source
 - Irrigated by a well that is currently being used to irrigate pasture, WT lowering



Santa Fe Ranch Restoration



Images from the Santa Fe Ranch Restoration Area website (http://santaferanchfoundation.org)

Thank you!

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Thank you!

References

- "Riparian Restoration Efforts in the Santa Cruz River Basin"
 - > 2009 Report by Julie Fabre, Claire Cayla
- http://ag.arizona.edu/azwater/publications.php?page num=2&limit=10&type=
- "Projects to Enhance Arizona's Environment"
 >2006 Report by Sharon Megdal, Kelly Mott Lacroix, Andrew Schwarz

http://ag.arizona.edu/azwater/publications.php?page num=4&limit=10&type=