

Sahuarita Farms
Land/River
 MASTER PLAN



Farmers Investment Co. (FICO)

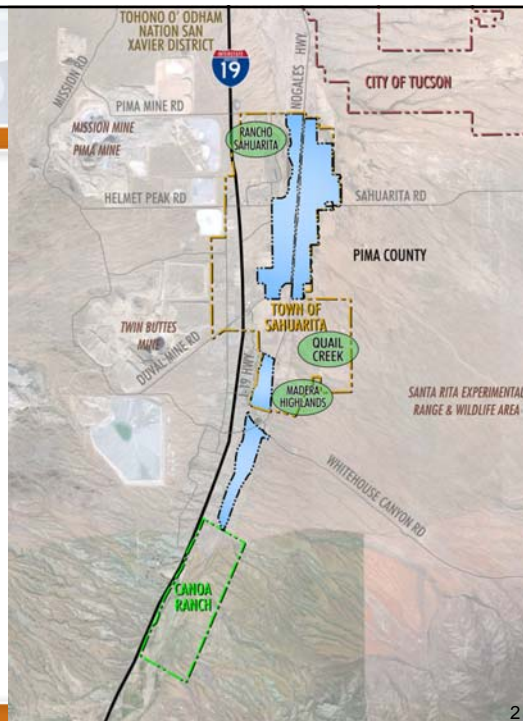
Continental Farms

*Planning & Zoning Commission Study Session (River Master Plan)
 January 25, 2012*

Sahuarita Farms
Land/River
 MASTER PLAN

FICO Property

- 7,000 acres total area
- 6,000 acres in Town of Sahuarita
- 1,000 acres in Pima County
- 12 miles of river through FICO property (single owner)
- ~9 linear miles in Sahuarita
- ~3 linear miles in Pima County



Urbanization Over Last 20 Years

- La Posada, Rancho Sahuarita, Madera Highlands, Quail Creek, Walden Grove High School, Green Valley (not shown)
- Roadway crossings, bridge improvements, utility corridors



Madera Highlands



Rancho Sahuarita



Walden Grove HS



La Posada

Sahuarita/Green Valley
 Urbanization Over Last 20 Years

- Population grew by over 300%
 - 1990: Population 17,000 (U.S.Census)
 - 2010: Population 47,000 (U.S.Census)
- Opportunity to plan now



Green Valley Development



Rancho Sahuarita

County Planning Process

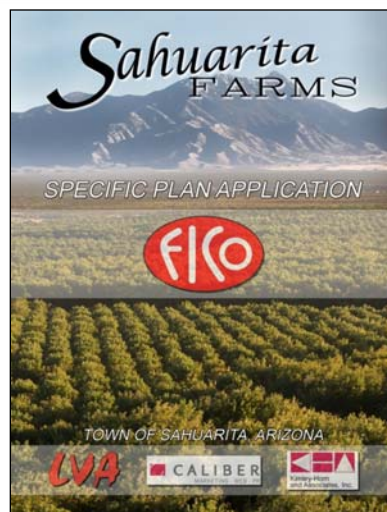
- April 2011: Submitted CPA
- June 2011: P&Z CPA study session
- August 2012: P&Z modified CPA timeline:
 - January: RMP study session
 - February: P&Z public hearing
 - April: BOS action
- Summer/Fall 2012:
 - Specific Plan Zoning and RMP



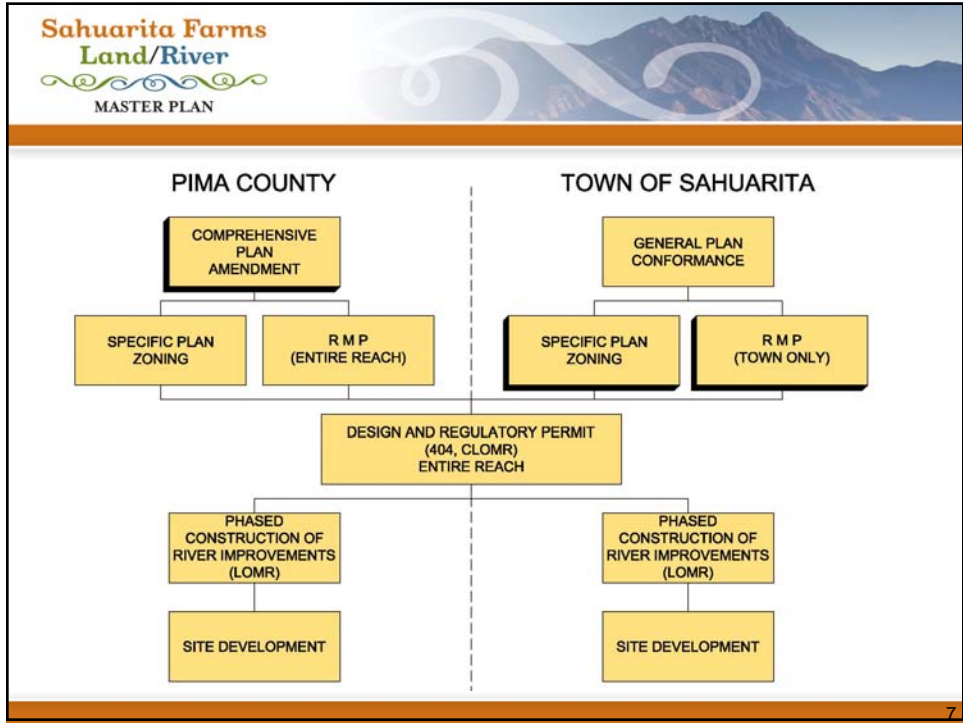
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Town Planning Process

- April 2011: Specific Plan and RMP
 - No general plan amendment
- February 2012: Revisions and addendum to SP and RMP
- Town review: Spring-Summer 2012
 - County to review and comment on RMP within Town
- Town action: Fall 2012



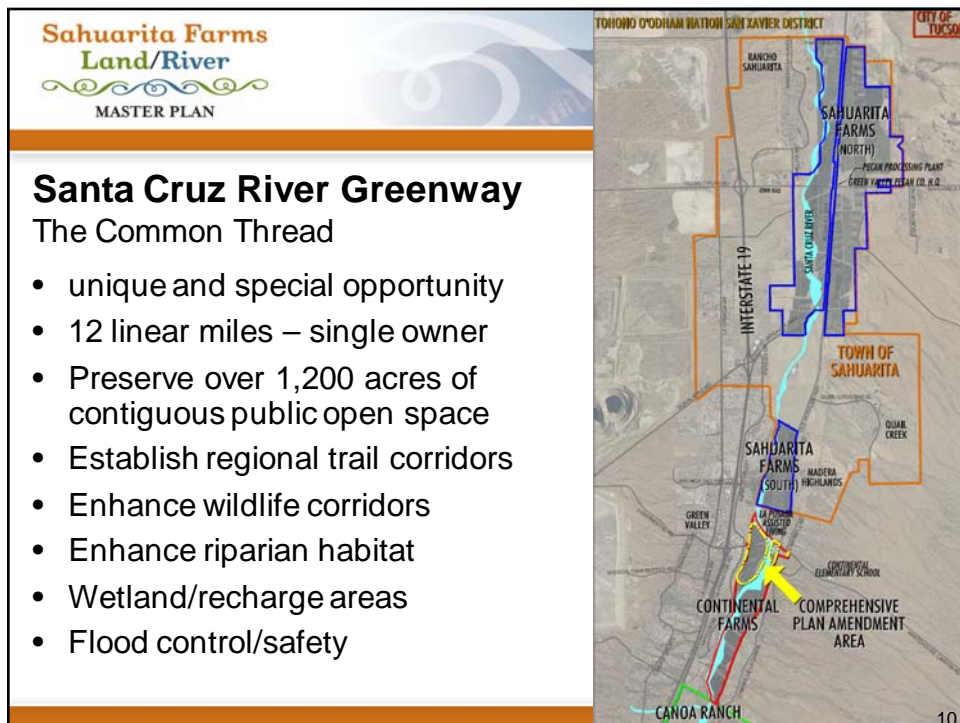
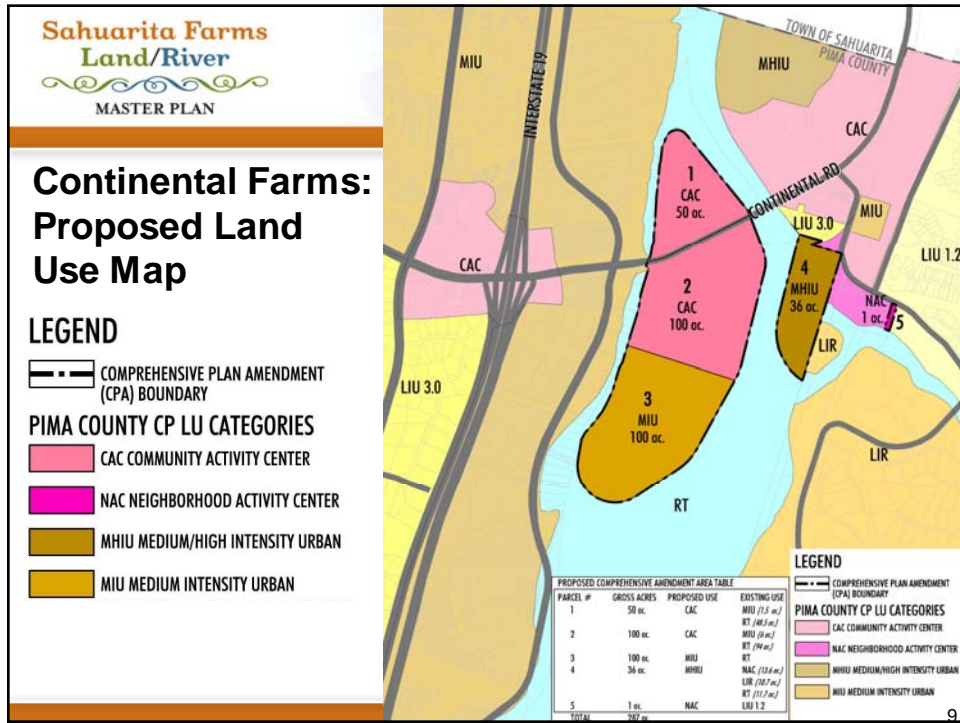
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Sahuarita Farms Land/River MASTER PLAN

Continental Farms: Plan Amendment Area

- 287 acres of cultivated farmland
- Outside primary river corridor
- Development to east, north and west
- Freeway interchange ¼ mile to west





What is a River Master Plan?

- Comprehensive plan for long-term management of Santa Cruz River
- Regulates river improvements and long-term maintenance of the river
- Guides development of land within and adjacent to the river
- Provides framework for future regulatory review/approval



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Components of a River Master Plan

- Hydrology
- Biology
- Cultural Resources
- Habitat Restoration
- Recreation
- Recharge/Wetlands
- River Improvement Concept



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SCR Existing Conditions

- Relatively narrow main channel: 20' – 200+ feet wide
- Wide and shallow floodplain: 1.5 miles wide in some areas
- Ephemeral through this reach
- Has conveyed 40,000+ cfs during floods



Sahuarita Road looking south



Duval Mine Road looking south

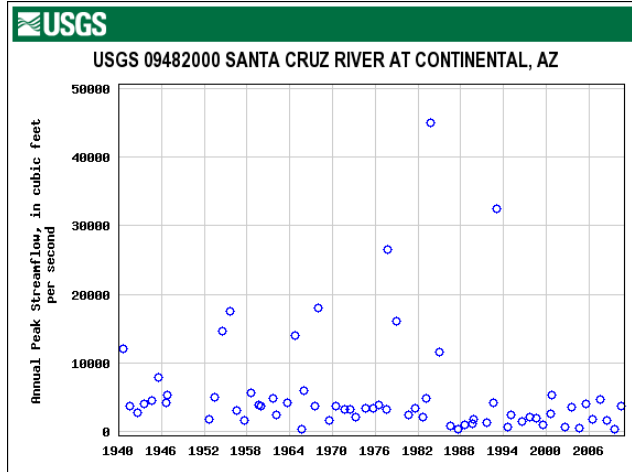


SCR Existing Conditions

- Existing orchards within the floodplain
- Farm berms and floods have modified historic drainage pattern
- Many existing bridges not built for 100-year flood
- Tributary washes channelized, narrowed and/or sheet flow



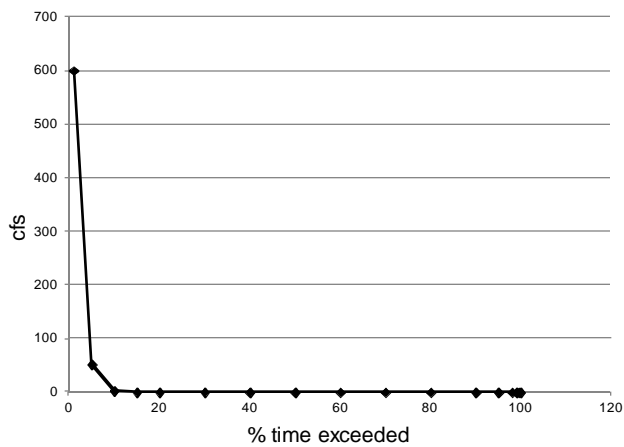
USGS Gauge Data - SCR at Continental



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USGS Flow Duration - SCR at Continental

% Time Exceeded	Flow Rate cfs
1	600
5	52
10	2.9
15	0
20	0
30	0
40	0
50	0
60	0
70	0
80	0
90	0
95	0
98	0
99	0
99.5	0
99.9	0



Data from 1941-46, 52-85, 92-96

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SCR Existing Conditions

- Downstream of property, river is very incised, continued degradation, compromised habitat value



North of Pima Mine Road

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SCR Existing Conditions

- Upstream of property, river is very flat, wide floodplain, habitat values highly variable



South of Continental (Canoa Ranch)

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SCR Photos



North of Sahuarita Road Bridge



South of Sahuarita Road Bridge



SCR Photos



Continental Bridge looking north



Tributary channel at Continental Farms



SCR Existing Conditions

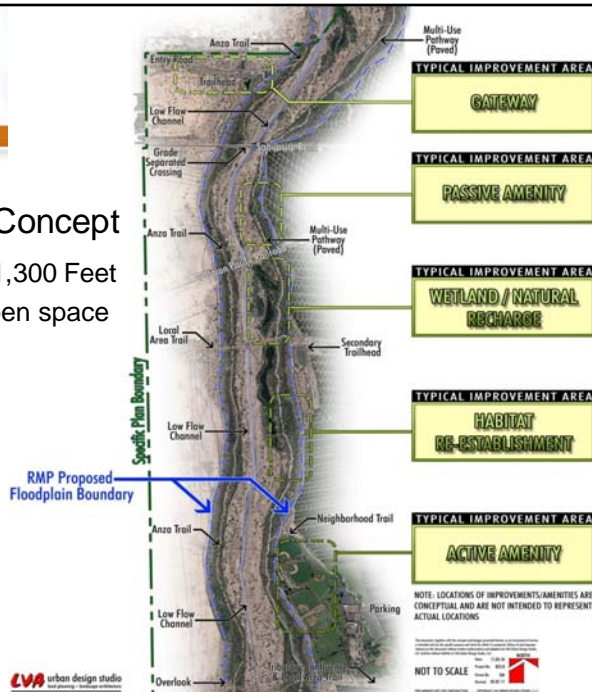
- SCR at Congress: narrow channel design, low habitat values



Congress Looking South

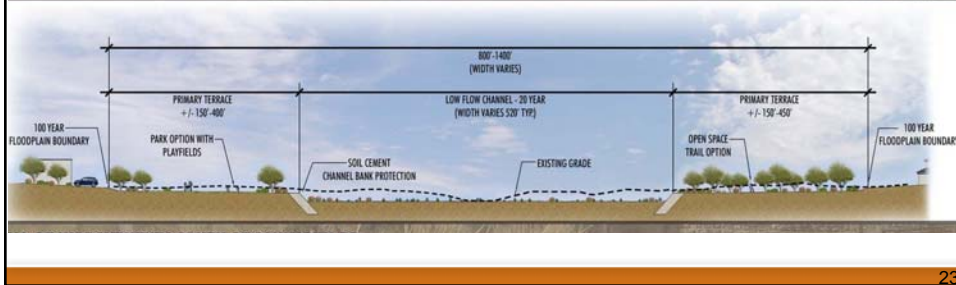
Sahuarita Farms Proposed River Plan Concept

- Average corridor width ~1,300 Feet
- 1,200+ Acres of public open space
- Multi-use opportunities
- Flood protection
- Recharge capability
- Management of drainage
- Wildlife corridors
- Habitat enhancement



Cross Section Concept, South of Sahuarita Road Bank Protection with Upper Terrace

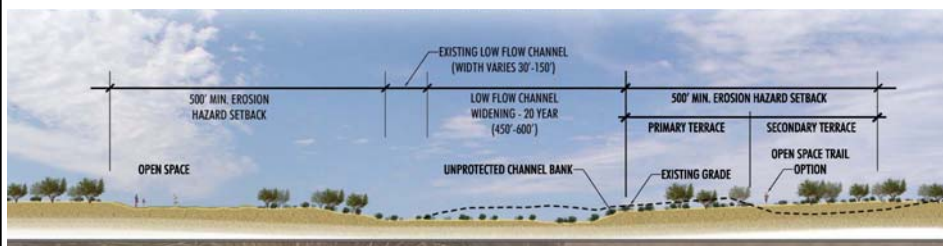
- 5' -7' high bank protection, approx. 500' wide primary floodway corridor
- 150' – 425' wide upper terraces, re-vegetated, habitat, trails, wetlands
- 800' – 1,400' wide total floodplain corridor



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Cross Section Concept, North of Sahuarita Road Unprotected Bank with 500-foot Erosion Hazard Setback

- Unprotected low-flow banks (approx. 500' – 600' wide)
- 500' minimum erosion hazard setbacks
- Re-vegetation, habitat, wetlands, trails



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Continental Farms Proposed River Plan Concept

- Maintain primary river corridor
- Excavate and fill west of river channel
- Erosion hazard setback (EHS) of 500 feet
- Multi-use (no structures) within EHS
- Drainage feature to protect Continental Road bridge



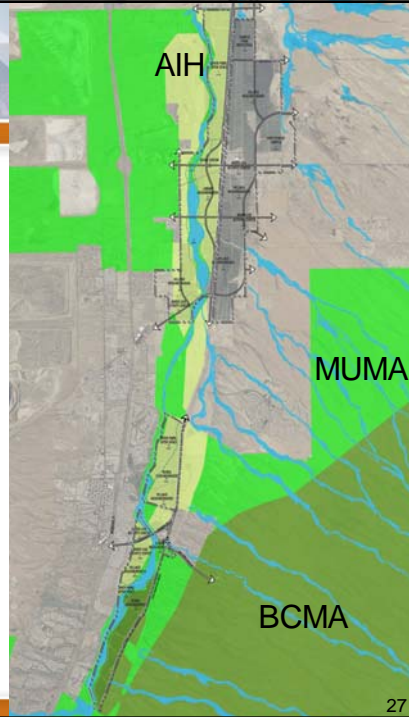
Benefits of River Improvements (Four “R”s)

- **R**iver Management – flood control and public safety
- **R**estoration – habitat enhancement
- **R**echarge –groundwater management & sustainable yield
- **R**ecreation – active and passive connected public amenities



CLS Designations

- Important Riparian Area: 665 ac.
- Biological Core Management Area: 431 ac.
- Multiple Use Management Area: 354 ac.
- Agricultural In-Holdings: 2,322 ac.
- Outside CLS: 3,142 ac.
- Bulk of CLS designation tied to lands that will be managed by RMP



Environmental/Biological

- Holistic view of river - environmental planning opportunities
- Preservation of cultural/agricultural landscapes
- Water use reduction over time
- Sustainable wildlife and riparian habitat enhancements
- Interconnected trails and recreational amenities
- Framework to achieve regional conservation goals



Early Development: Llano Grande Trailhead
and Anza Trail: AZ Centennial 2012

- Public/Private Partnership
- Dedication of Anza Trail
- Ultimate connection to Elephant Head Road



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