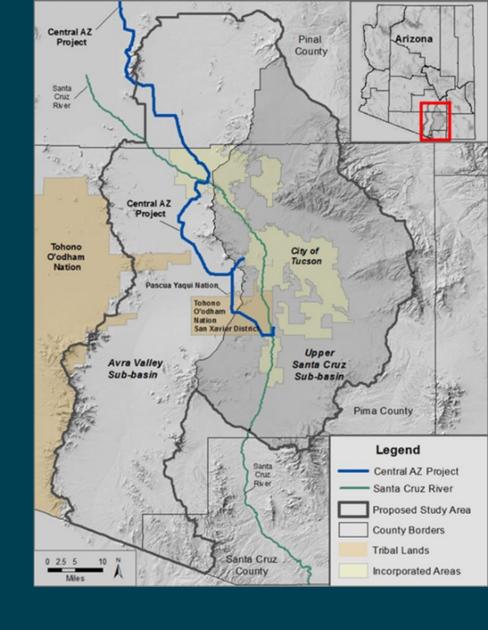


# Lower Santa Cruz River Basin Study

Adaptation Strategy Workshop #2 - Day Two February 23, 2021

**Marie Light, Pima County** 



## Day Two Agenda

9:00	Welcome, Review of the Day	Marie Light
9:05	Information needed by Reclamation to develop high-level cost and benefit estimates for Adaptation Strategies,	Mark Spears, Reclamation
9:15	Explanation of Breakout Groups and Maps	Kathy Jacobs
9:20	Breakout group discussions to refine adaptation strategies  Each pre-assigned group will discuss strategies for one of the following areas of concern:  Sabino Canyon and Tanque Verde Area Cañada del Oro and Saddlebrooke Area Southeast Tucson, Vail and Cienega Creek Area Green Valley and Sahuarita Area  Structure of discussion: What is missing? What should be removed? Details to be considered within each location and option	Facilitated by Kathy Jacobs, Eve Halper, Kathy Chavez and Neha Gupta
9:55	Break	
10:05	Breakout Groups Continue - Second area of concern	Facilitated by Kathy Jacobs, Eve Halper, Kathy Chavez and Neha Gupta
10:40	Reassemble in plenary and share findings/discuss path forward  Refinements/additional strategies Refinements for specific areas  Discussion of priority Adaptation Strategies to be evaluated for each area Identify 3 top priority Adaptation Strategies in each area, by consensus	Facilitated by Kathy Jacobs
11:40	Next steps: Concept Level Analysis of Costs/Benefits/Considerations (request for volunteers)	Eve Halper
12:00	Adjourn	

### List of Supporting Materials Sent by Email

- Workshop Agenda
- Management Objectives
- Climate and Growth Scenario Assumptions
- Evaluation Criteria
- Adaptation Strategies w/ Description
- Overview Map

- Groundwater Elevation change Maps for Scenario B (Best) and Scenario F (Worse) for 2020 - 2060
  - Cañada Del Oro and Saddlebrooke
  - Cienega Creek Vail
  - Green Valley Sahuarita
  - Sabino Canyon Tanque Verde

### Places to get/send more information:

Reclamation's website for the Lower Santa Cruz River Basin Study:

https://www.usbr.gov/lc/phoenix/programs/lscrbasin/LSCRBStudy.html

Chat box during the workshop

Email address after the workshop:

bor-pxa-lscrbs@usbr.gov

#### Adaptation Strategies Cost Estimates

- Cost estimates will be high-level and additional detail provides better cost estimates
- Provide specific components, if known, while refining the strategies
- While assumptions and details will be determined at a later stage, consider them while refining the strategies
- Ultimately, the assumptions and details will provide the basis for quantifications needed to estimate capital, operation and maintenance costs

# Examples to Consider When Refining Strategies (quantity & assumptions to be developed later)

- Natural Channel Design
  - channel lengths
  - o number of check dams
  - other structures
- Watershed and Riparian Protection
  - Acres of tree enhancement
  - Acres of prescribed burns
- Reduce Local Groundwater Pumping
  - Numbers of meters
  - Numbers of monitoring devices

- Maximize Wastewater Use
  - numbers of gray water systems
  - o number of enhanced treatment projects
  - Number of package plants
- Maximize Stormwater Use
  - Number & length of collector berms & pipes
  - Numbers of check dams
  - Numbers of cisterns
- Improve Water Delivery
  - Lengths of pipes
  - Numbers of pump stations
  - Numbers and sizes of reservoirs

# Explanation of Breakout Groups and Maps

- You will be placed in one of 4 facilitated breakout groups
- Each group will discuss 2 "areas of concern," one before and one after the break
- If you have comments about an area that you were not assigned to, feel free to email them to Eve and they will be incorporated into the workshop summary
- If you have comments that can't be shared in the breakout, record them in the chat and the notetakers will save the chat in their notes before the breakout ends

# Explanation of Maps

- You have been provided with handouts, which include a summary map and 2 (best and worse case) maps for each area of concern
- You also were sent management objectives, evaluation criteria, and a table called Adaptation Strategies to Address Imbalances Between Supply and Demand
- We recommend that you open the "Adaptation Strategies" word doc for your own use during the meeting, and only if possible, also have a map for your area of concern open in a separate window or screen
- In order to facilitate conversation, please keep your cameras on so you can see the people in your breakout

#### Groups 1 (Cañada del Oro, Vail) and 2 (Tanque Verde / Sabino)

Group 1 - Last Name	Group 1 - First Name	Group 2 - Last Name	Group 2 -First Name
Baeza	Kimberly	Bingham	Matt
Felix	Fred	Bodner	Gita
Kennett	Bailey	Canfield	Evan
Kocsis	Heide	Carey	Austin
MacAdam	James	DuBois	James
Pablo	Sally	Evilsizor	Catherine
Saxe	Greg	Gabaldon	Arturo
Spears	Mark	Hullinger	Ashley
Taylor	Mark	Light	Marie
Teyechea	Maya	Odefey	Jeff
Wilson	Wally	Ogata	Irene
Zamora	Hector	Shipek	Catlow
Zucker	Claire	Snyder	Margaret
Felix	Fred	Wong	Brian

Group 1: Canada del Oro, Vail

Facilitator: Neha Gupta Notetaker: Melanie

Alvarez

Group 2:

Green Valley, Tanque

Verde -Sabino

Facilitator: Eve Halper

**Notetaker: Valerie Swick** 



#### Group 3 (Cañada del Oro, Green Valley) and Group 4 (Tanque Verde / Sabino)

Group 3 – Last Name	Group 3 - First Name	Group 4 - Last Name	Group 4 - First Name
Black	Kevin	Begay	Velma
Boyle	Erin	Collins	Molly
DeMaria	Eleonora	Day	Mark
Holler	Eric	Elmer	Matt
Loyer	Melodee	Fonseca	Julia
Manuel	Justin	Goldman	Jonathon
McVie	Christina	Greenland	Doug
Meixner	Tom	Lansey	Kevin
Murphy	Mark	Little	Val
Philbin	Asia	Mahmoudi	Jalal
Villegas	Selso	Montgomery	Susan
		Volpe	Kip
		Yockey	Jeff

Group 3:
Canada Del Oro / G

Canada Del Oro / Green

Valley

Facilitator: Kathy Chavez

Notetaker: Lisa Rivera

Group 4:

Vail/Tanque Verde-Sabino

Facilitator: Kathy Jacobs

Notetaker: Jaimie Galayda

