



## BOARD OF SUPERVISORS AGENDA ITEM REPORT

Requested Board Meeting Date: 9/20/2022

*\*= Mandatory, information must be provided*

Click or tap the boxes to enter text. If not applicable, indicate "N/A".

**\*Title:**

**A RESOLUTION OF THE PIMA COUNTY FLOOD CONTROL DISTRICT BOARD OF DIRECTORS ENDORSING THE SANTA CRUZ RIVER MANAGEMENT PLAN**

**\*Introduction/Background:**

The Pima County Regional Flood Control District (District) will ask the Board of Supervisors to endorse the Santa Cruz River Management Plan as summarized in the Summary Report.

The Santa Cruz River Management Plan from Grant Road to Pinal County joins a growing list of large-scale planning studies undertaken in recent years by the District to update drainage and flood hazard information in Pima County and in municipal jurisdictions. These studies have been carried out in cooperation with the local jurisdictions in which the study areas are located. The Santa Cruz River Management Plan study area overlaps both the Town of Marana and City of Tucson's corporate limits and many other stakeholders' areas of interest. The District precisely pursued this document to provide a singular management strategy to the Santa Cruz River as it drains through multiple jurisdictions.

The District commissioned a regional river management plan for the Santa Cruz River, Grant Road to Trico Road, in February of 2018 with the objective to develop a management strategy to balance flood risk management, drainage infrastructure protection, water recharge, recreation, public safety, education opportunities and riparian habitat preservation. Later on, the study limits were extended to the Pinal County Line because of the need for a terminus for the floodplain modeling.

The need for this study originated from the District's participation in the A Living River: Charting Wetland Conditions of the Lower Santa Cruz River project and their understanding of the competing land uses along this corridor. As the primary agency charged with regulating the use of land within this floodplain, the District became the natural agency to lead this project.

**\*Discussion:**

The Santa Cruz River is one of the largest watercourses in Southern Arizona by watershed size at 3,503 square miles. The headwaters of the Santa Cruz River drain south into Mexico from the San Raphael Valley in eastern Santa Cruz County and eventually turns west and then back north to flow into the United States and Arizona, before flowing through the study area affectionately known as the Lower Santa Cruz River. The Santa Cruz River has been the lifeblood of civilization in the region (now known as Southern Arizona) for centuries and continues to be a source of life for habitat, species, and the human population.

Following the Existing Conditions Report, the Project Team embarked on concurrent tasks of infrastructure assessment, maintenance evaluation, and floodplain mapping. The Infrastructure Assessment and Maintenance Evaluation Report (IAMER) (Vol. 2) summarized the condition and functionality of flood control infrastructure. This analysis could not be done without re-analyzing the hydraulics of the Santa Cruz River to evaluate the impacts that evolving land-use, changing topography, and new infrastructure had on the flood risk inundation of

the river. The hydraulics were modeled using HEC-RAS software in both 1D and 2D, where appropriate, to provide a seamless updated hydraulic model for District use in regulating the corridor. The results of the hydraulic analysis were documented in a report call the Technical Support Data Notebook (Vol. 3).

The Project Team conducted a comprehensive stakeholder involvement process that went on throughout the life of the project and was especially influential in the alternative selection process. Input from corridor stakeholders came in the way of problems and opportunities that they marked on maps at working group meetings. It also came from visioning charrettes and interactive weighting and ranking exercises. The stakeholder feedback, in combination with the reports, became the driving force for developing the problems and opportunities list, which started at 110 items and was subsequently narrowed to 54 items on the Alternative Seed List. The stakeholder involvement process is detailed in its own separate document entitled Stakeholder Engagement Summary.

The alternatives analysis component of the project was the longest duration, beginning with identifying problems and opportunities and finishing with the selection of 16 structural and 4 non-structural alternatives. Final selected structural alternatives were advanced to a conceptual design and associated construction cost estimate. The Alternative Selection Report (Vol. 4) summarizes the stakeholder's involvement, the selection of ranking criteria, the application of the ranking criteria and the resulting projects, both structural and non-structural, to be moved forward for implementation.

**\*Conclusion:**

The Project Team prepared an Implementation Plan (Vol. 5) that was designed to prioritize the projects, place them in a planning period, identify possible funding sources and be a budgeting tool for the public agencies in the corridor. Projects were placed in one of three planning periods: Short-term, Mid-term and Long-term. With no dedicated funding source, this implementation plan is dependent upon the creative nature of the agencies that will participate in implementation. Some projects are already moving forward at writing of this report, and clearly, available funding will drive the schedule of the remaining projects.

**\*Recommendation:**

**The District recommends that the Board of Directors adopt the attached resolution, which:**

- 1. Endorses the Santa Cruz River Management Plan Grant to Pinal County and its components, the Existing Conditions Report, the Infrastructure Assessment and Maintenance Evaluation Report, the Technical Support Data Notebook and the Alternative Selection Report;**
- 2. Directs the District to implement the recommendations from these reports, including maintaining, repairing and upgrading any deficiencies to District facilities, and revising the Flood Insurance Rate Maps.**
- 3. Endorses the Implementation Plan and directs the District to work with stakeholders to creatively identify funding sources to implement the final alternatives. It is understood that the responsibility to fund the alternative does not lie solely with the District or Pima County.**

**\*Fiscal Impact:**

\$0

**\*Board of Supervisor District:**

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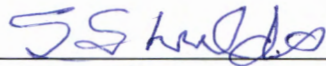
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Department Director Signature: \_\_\_\_\_



Date: \_\_\_\_\_

8/12/22

Deputy County Administrator Signature: \_\_\_\_\_



Date: \_\_\_\_\_

8/15/2022

County Administrator Signature: \_\_\_\_\_



Date: \_\_\_\_\_

8/15/2022

**RESOLUTION NO. 2022-FC\_\_**

**A RESOLUTION OF THE PIMA COUNTY FLOOD CONTROL DISTRICT  
BOARD OF DIRECTORS ENDORSING THE SANTA CRUZ RIVER  
MANAGEMENT PLAN:**

**The Board of Directors of the Pima County Flood Control District finds:**

1. The Pima County Flood Control District (District) is authorized to provide regional support regarding the assessment, planning, design, and construction of drainage and flood control improvements that reduce or mitigate flood hazards.
2. The District's long-term goal is to establish operational control of the regional watercourses, including the Santa Cruz River, Rillito Creek, Canada del Oro, and Pantano Wash and has acquired the majority of the Santa Cruz River north of Grant Road to Avra Valley Road.
3. In February 2018, the Board authorized the District to develop a regional management plan for the Santa Cruz River from Grant Road to the Pinal County line for the purposes of balancing flood risk management, water recharge, recreation, public safety, education opportunity, and riparian habitat preservation.
4. In September 2019, the District completed the floodplain modeling using updated technique and current topographic information, an assessment of the existing infrastructure to determine maintenance and repair needs and to identify deficiencies, and identify property ownership gaps where the District lacks operation control. These documents are entitled, the Technical Support Data Notebook, the Infrastructure Assessment and Maintenance Evaluation Report, and the Existing Conditions Report, respectively.
5. The District established a comprehensive group of stakeholders to discuss the various competing priorities on the Santa Cruz River. Through a very detailed process that included identifying problems and opportunities on different portions of the river, the stakeholders and the District arrived at a list of potential project alternatives. This alternative list was further vetted to a final list of sixteen structural and four non-structural improvements. This report, entitled the Alternative Selection Report, was completed in June 2021.
6. The District conducted a public survey online through January, 2021 which elicited 1,180 responses, which showed 83% of the public agreed with, or partially agreed with, the proposed improvements.

7. The final phase, the Implementation Plan, was completed in December 2021 and prioritizes the projects, places them in planning periods and identifies potential funding sources. It will be up to the jurisdictions, District and the various stakeholders to identify funding sources, however, the Plan establishes a common vision for the Santa Cruz River.
8. The Pima County Flood Control District Advisory Committee endorsed the Santa Cruz River Management Plan Grant Rd. to Pinal County and its implementation on December 15, 2021 in a unanimous vote.

**NOW, THEREFORE, BE IT RESOLVED,** that the Board of Directors hereby:

1. Endorses the Santa Cruz River Management Plan Grant to Pinal County and its components, the Existing Conditions Report, the Infrastructure Assessment and Maintenance Evaluation Report, the Technical Support Data Notebook and the Alternative Selection Report;
2. Directs the District to implement the recommendations from these reports, including maintaining, repairing and upgrading any deficiencies to District facilities, and revising the Flood Insurance Rate Maps.
3. Endorses the Implementation Plan and directs the District to work with stakeholders to creatively identify funding sources to implement the final alternatives. It is understood that the responsibility to fund the alternative does not lie solely with the District or Pima County.

**PASSED AND ADOPTED** this \_\_\_\_ day of \_\_\_\_\_, 2022.

\_\_\_\_\_  
Chair, Board of Directors

ATTEST:

\_\_\_\_\_  
Clerk of the Board

APPROVED AS TO FORM:



\_\_\_\_\_  
Deputy County Attorney