

COCHISE COUNTY

Engineering & Natural Resources

Board of Supervisors
Work Session
February 7, 2023



Public Programs...Personal Service

COCHISE COUNTY

Engineering Division Updates



Public Programs...Personal Service

COCHISE COUNTY

Special Event Permitting



COCHISE COUNTY

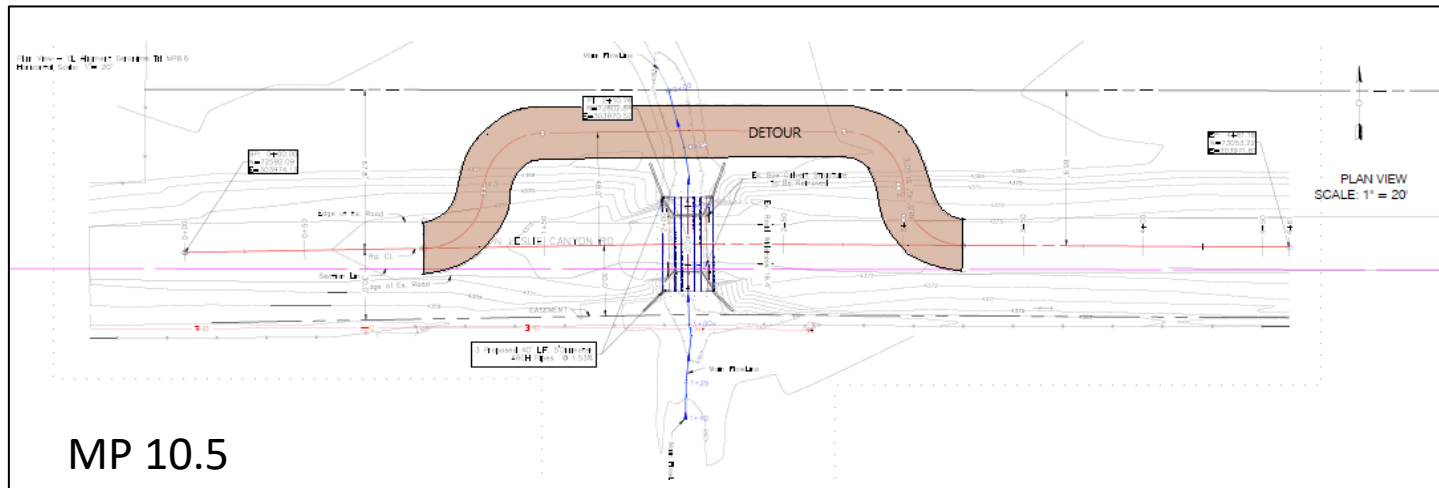
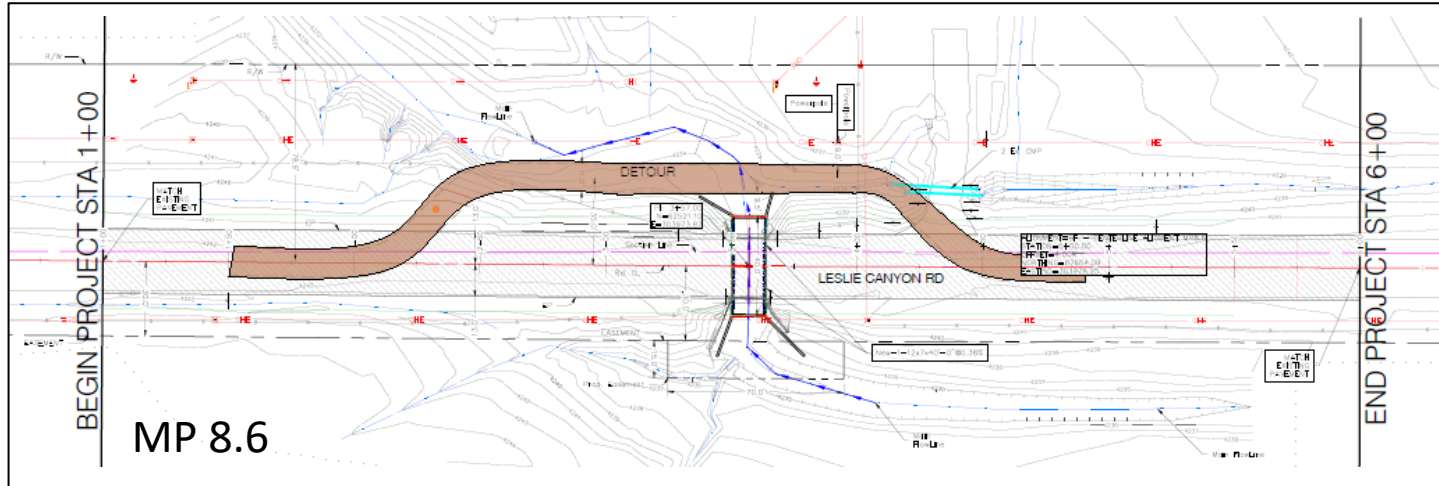
Signing

- Updating Posts to Square Tubing:
 - Charleston Road Square Tubing (Completed)
 - Installation of 386 Anchors and Posts
 - Davis Road Square Tubing (Ongoing)
 - Installation of 273 Anchors and Posts
- Nighttime Inspections (Winter):
 - Checking for retroreflectivity of existing signs and pavement markings
 - Western Portion of County Complete (St. David, Benson, J-Six, Mescal, Sierra Vista, Hereford, Huachuca City, Whetstone)
 - Currently working central portion of County



COCHISE COUNTY

Leslie Canyon Structures Design - Detour -



COCHISE COUNTY

Neighborhood Traffic Management Program (NTMP)

- NTMP is used for citizen concerns and traffic management of local roads.
- Analyzes Road Traffic Volumes and Speed.
- Currently performing an NTMP study on San Xavier (Sierra Vista) and Rogers Avenue (Naco). This includes traffic counts, speed studies, and possible placement of temporary speed humps.



COCHISE COUNTY

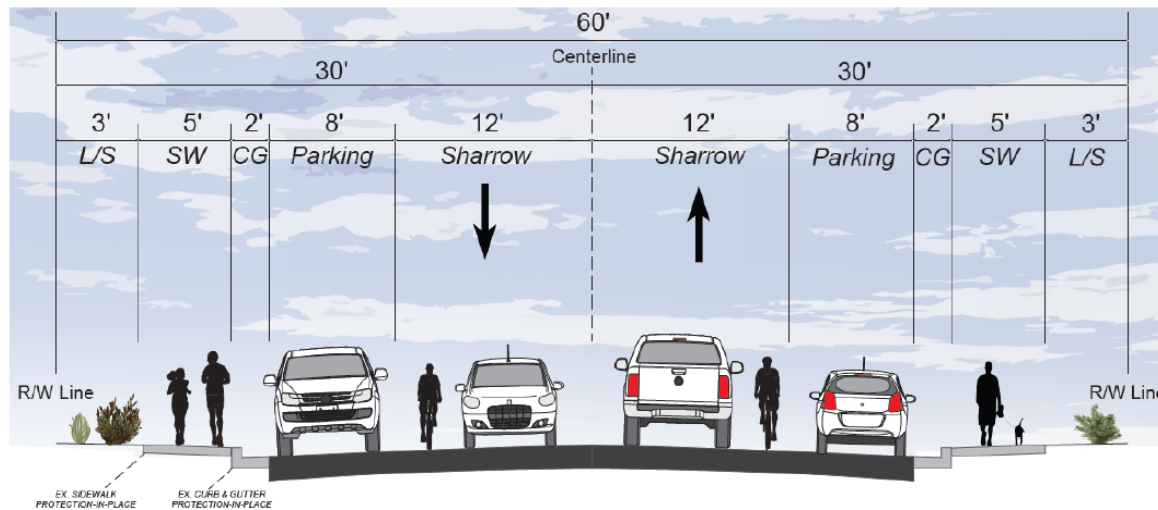
- Naco Highway
 - Arizona State Transportation Board
 - Richard Searle, Vice-Chairman
 - Santa Cruz, Cochise and Greenlee Counties – District 3
- Road Easements & Right-of-Way Widths
 - Subdivision Plat
 - Record of Survey



COCHISE COUNTY

Theater Drive Inventory and Roadway Assessment

Cost Category	Estimated Cost
Design	\$300,000
Construction Materials/Installation (pavement, curb & gutter, drainage, etc.)	\$1,393,558
Miscellaneous Costs (administration, right-of-way/easements, survey, mobilization, contingencies, etc.)	\$861,957
Total	\$2,555,515



COCHISE COUNTY

Moson Road Pre-Scoping Study

MOSON ROAD PRE-SCOPING COST ESTIMATE - HEREFORD RD TO HWY 90					Michael Baker INTERNATIONAL		MOSON ROAD PRE-SCOPING COST ESTIMATE - HEREFORD RD TO HWY 90					Michael Baker INTERNATIONAL	
PRELIMINARY CONSTRUCTION COST ESTIMATE					01/27/2023		PRELIMINARY CONSTRUCTION COST ESTIMATE					01/27/2023	
ITEM #	ITEM DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL								
1	REMOVE EXISTING BITUMINOUS SURFACING	81,254	SY	\$ 1.00	\$ 81,254	16	FURNISH & INSTALL CONCRETE BOX CULVERT, 4' X 10'	150	LF	\$ 600.00	\$ 90,000		
2	ROADWAY EMBANKMENT, INCL. HAUL FROM LOCAL PIT	49,500	CY	\$ 10.00	\$ 495,000	17	FURNISH & INSTALL CMPA PIPE CULVERT, 4'-7.5" X 14'	300	LF	\$ 875.00	\$ 262,500		
3	SUBGRADE PREPARATION	141,613	SY	\$ 3.00	\$ 424,839	18	FURNISH & INSTALL CMPA PIPE CULVERT, 4'-7.5" X 15'	150	LF	\$ 925.00	\$ 138,750		
4	SAWCUT EXISTING PAVEMENT	22,020	LF	\$ 1.50	\$ 33,030	19	FURNISH & INSTALL CMPA PIPE CULVERT, 5'-2" X 16'	1,050	LF	\$ 1,050.00	\$ 1,102,500		
5	CONSTRUCT ASPHALT PAVEMENT, 5-1/2" ACC	44,759	TN	\$ 140.00	\$ 6,266,260	20	FURNISH & INSTALL CMPA PIPE CULVERT, 5'-2.5" X 17'	750	LF	\$ 1,200.00	\$ 900,000		
6	CONSTRUCT AGGREGATE BASE, 6" ABC	25,837	CY	\$ 60.00	\$ 1,550,220	21	FURNISH & INSTALL CMPA PIPE CULVERT, 5'-9" X 18'	525	LF	\$ 1,300.00	\$ 682,500		
7	CONSTRUCT ASPHALT OVERLAY, 3" ACC	4,832	TN	\$ 140.00	\$ 676,480	22	FURNISH & INSTALL HEADWALL, MAG 501	20	EA	\$ 15,000.00	\$ 300,000		
8	PLACE STRESS ABSORBING MEMBRANE INTERLAYER	30,675	SY	\$ 12.00	\$ 368,100	23	STRIPING, 6" YELLOW THERMOPLASTIC	69,950	LF	\$ 0.40	\$ 27,980		
9	CONSTRUCT RIPRAP EROSION CONTROL PAD ON GEOTEXTILE FABRIC	23,490	SF	\$ 11.50	\$ 270,135	24	STRIPING, 6" WHITE THERMOPLASTIC	83,950	LF	\$ 0.40	\$ 33,580		
10	RELOCATE/RESET EXISTING MAILBOX	68	EA	\$ 120.00	\$ 8,160	25	TRAFFIC CONTROL (8%)	1	LS	\$ 1,168,000	\$ 1,168,000		
11	FURNISH & INSTALL NEW TRAFFIC SIGN ASSEMBLY	223	EA	\$ 500.00	\$ 111,500	26	MOBILIZATION (10%)	1	LS	\$ 1,576,000	\$ 1,576,000		
12	FURNISH & INSTALL CMP PIPE CULVERT, 36"	1,500	LF	\$ 115.00	\$ 172,500	27	CONSTRUCTION CONTINGENCY (5%)	1	LS	\$ 1,734,000	\$ 1,734,000		
13	FURNISH & INSTALL HERCP PIPE CULVERT, 34" x 53"	1,200	LF	\$ 300.00	\$ 360,000	28	CONSTRUCTION ADMINISTRATION (10%)	1	LS	\$ 1,907,000	\$ 1,907,000		
14	FURNISH & INSTALL HERCP PIPE CULVERT, 38" x 60"	300	LF	\$ 375.00	\$ 112,500								
15	FURNISH & INSTALL HERCP PIPE CULVERT, 43" X 68"	300	LF	\$ 425.00	\$ 127,500								
MOSON ROAD IMPROVEMENTS - PRELIMINARY CONSTRUCTION COST ESTIMATE										\$ 20,899,034			

ASSUMPTIONS:

- Pipe culvert lengths are estimated at 75 feet
- Paved shoulder pavement structure matches the roadway lane sections
- Each identified cost item includes material, labor and equipment for complete in-place construction
- Cost Estimates are in 2022 dollars



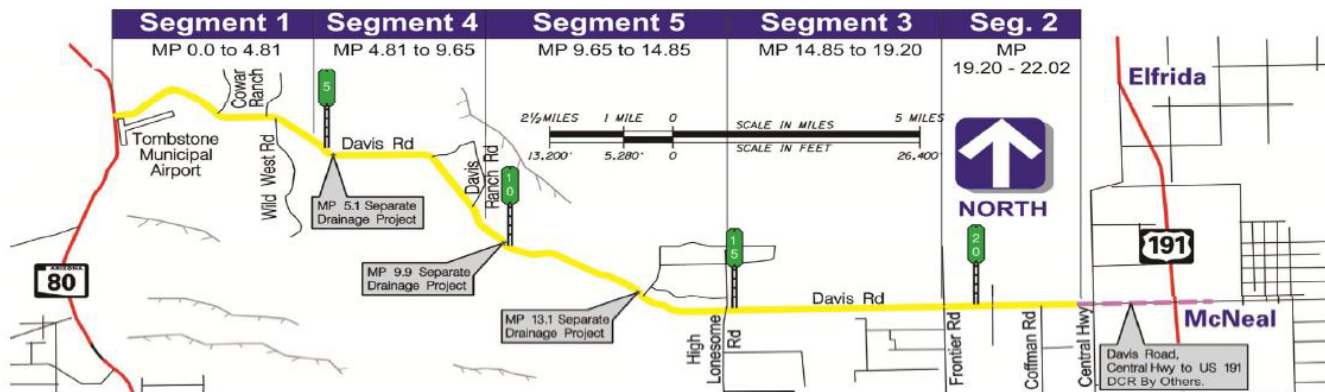
Davis Road

- RAISE Grant application is being developed for the 22 mile section of roadway between Highway 80 and N Central Highway.
 - Acquire Right-of-Way
 - Design Plan
- Davis Road Milepost 5 & 13 approved for \$2,893,000 through Senator Kelly's Discretionary Funds in the 2023 Spending Bill.
- Central to US191
 - Acquiring Right-of-Way
 - Completing 100% Design



COCHISE COUNTY

Davis Road: State Route 80 to Central Highway



Davis Road Oversized Load (1/26/2023)



COCHISE COUNTY

Davis Road Oversized Load (1/26/2023)

- Length: 178'
- Width: 18.5'
- Height: 19.7'
- Weight: 462,762 lbs
(231 tons)



COCHISE COUNTY

Flood Control District



Public Programs...Personal Service

Flood Control District

- Citizen Concerns
- Floodplain Regulations
- Commercial Reviews
- Project Updates



Floodplain Regulations

- Community Rating System (CRS)
 - Received 100% correctness rating for 2022 construction certification
 - Preparing 5-yr cycle detailed CRS Report
 - Finalizing updates to FCD Regulations to assist with reaching level 8 CRS rating



Commercial Reviews

- Development plans
- Land disturbance
- Drainage Analysis



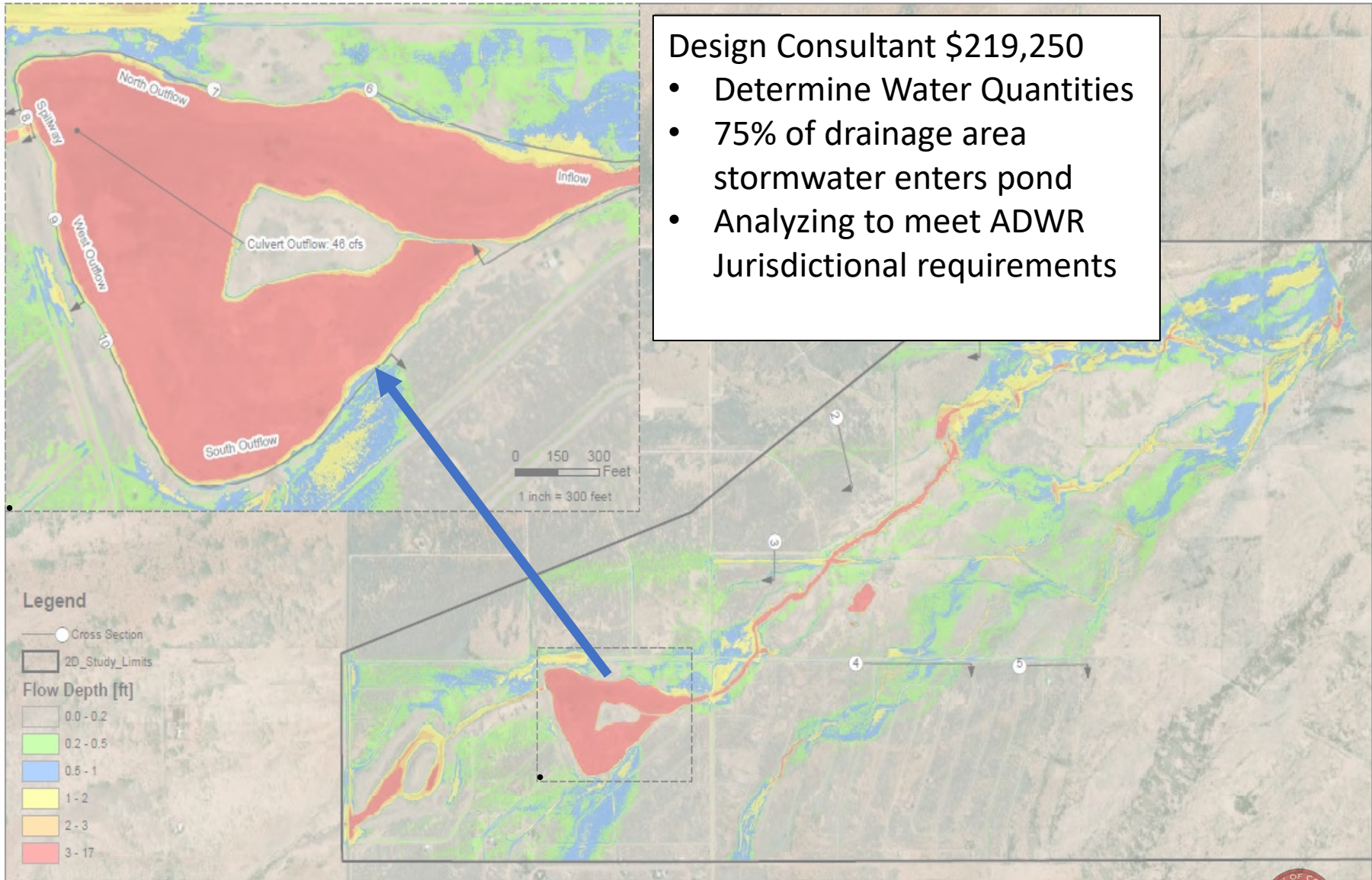
Project Updates

- FEMA Mapping
- Municipal Separate Storm Sewer System (MS4) Water Quality Sampling
- Projects



Design Consultant \$219,250

- Determine Water Quantities
- 75% of drainage area stormwater enters pond
- Analyzing to meet ADWR Jurisdictional requirements



COCHISE COUNTY Bay Acres



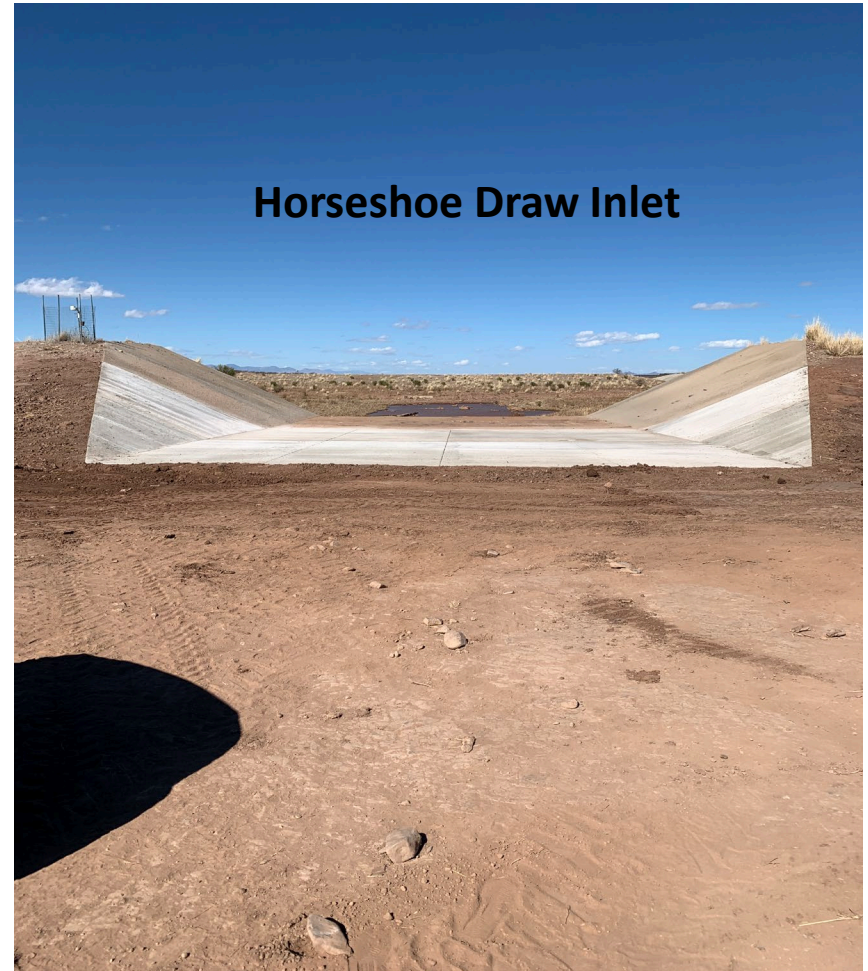
- **Design Consultant \$261,791**
- **Field Survey with consultant to verify wash crossing locations**
- **Initial Water quantity and floodplain mapping analysis**
- *Right-of-Way Acquisition*
- *NEPA Clearance*



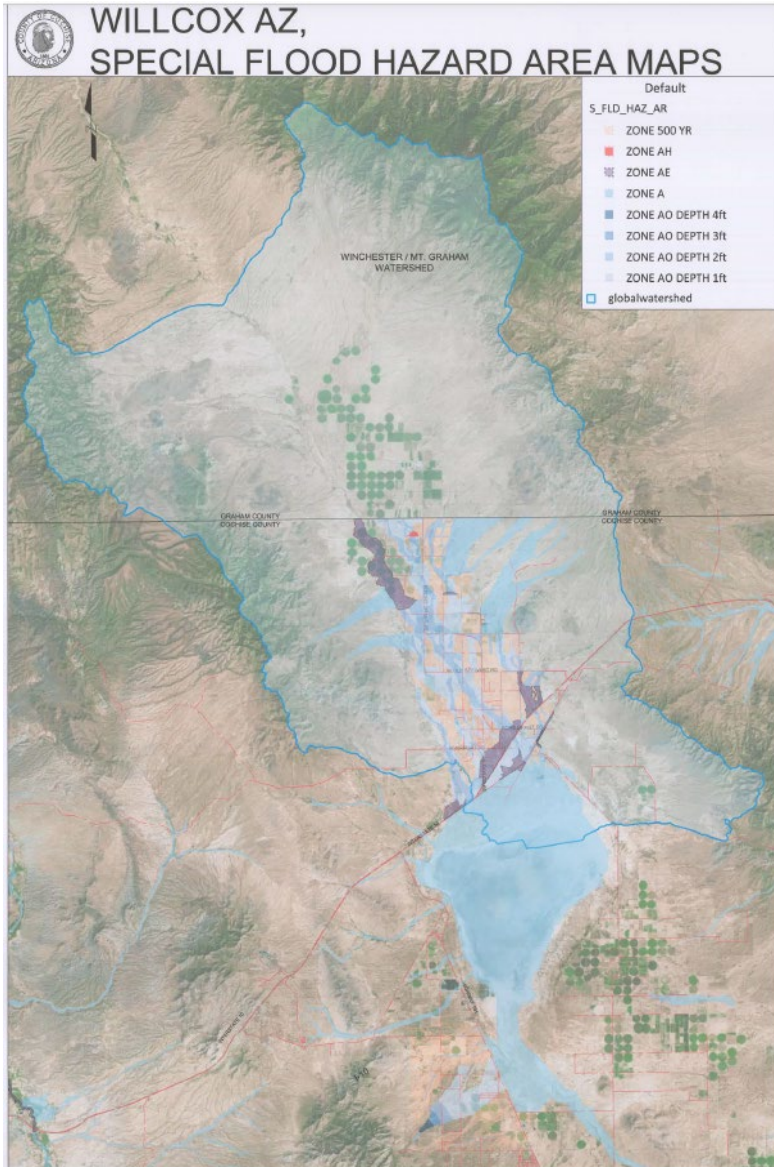
COCHISE COUNTY

Upper San Pedro Valley Projects

- Coyote Wash
 - Design Consultant \$330,000 FCD
 - REPI Construction Grant \$1,500,000
- Riverstone
 - REPI Grant \$900,000
 - City of Sierra Vista
- **Horseshoe Draw**
 - **Maintenance Repair for inlet weir (completed)**
- Bisbee Effluent
 - Design Concept Report \$345,000
 - \$250,000 Grant & \$95,000 FCD



COCHISE COUNTY



- Cochise Stronghold
 - Drainage Analysis
- Watershed Studies
 - Willcox Basin \$250,000 (Pending BRIC Grant)
 - Elfrida (USACOE Grant)



Questions ?

