

EBID



Environmental Flows in Elephant Butte Irrigation District

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E-Flow in E-BID

Riparian Restoration

Goal: To supply surface water to historic floodplain for purposes of growing a mosaic of native riparian habitat including open woodlands, dense riparian shrub, meadows and grasslands



E-flow Options in E-BID

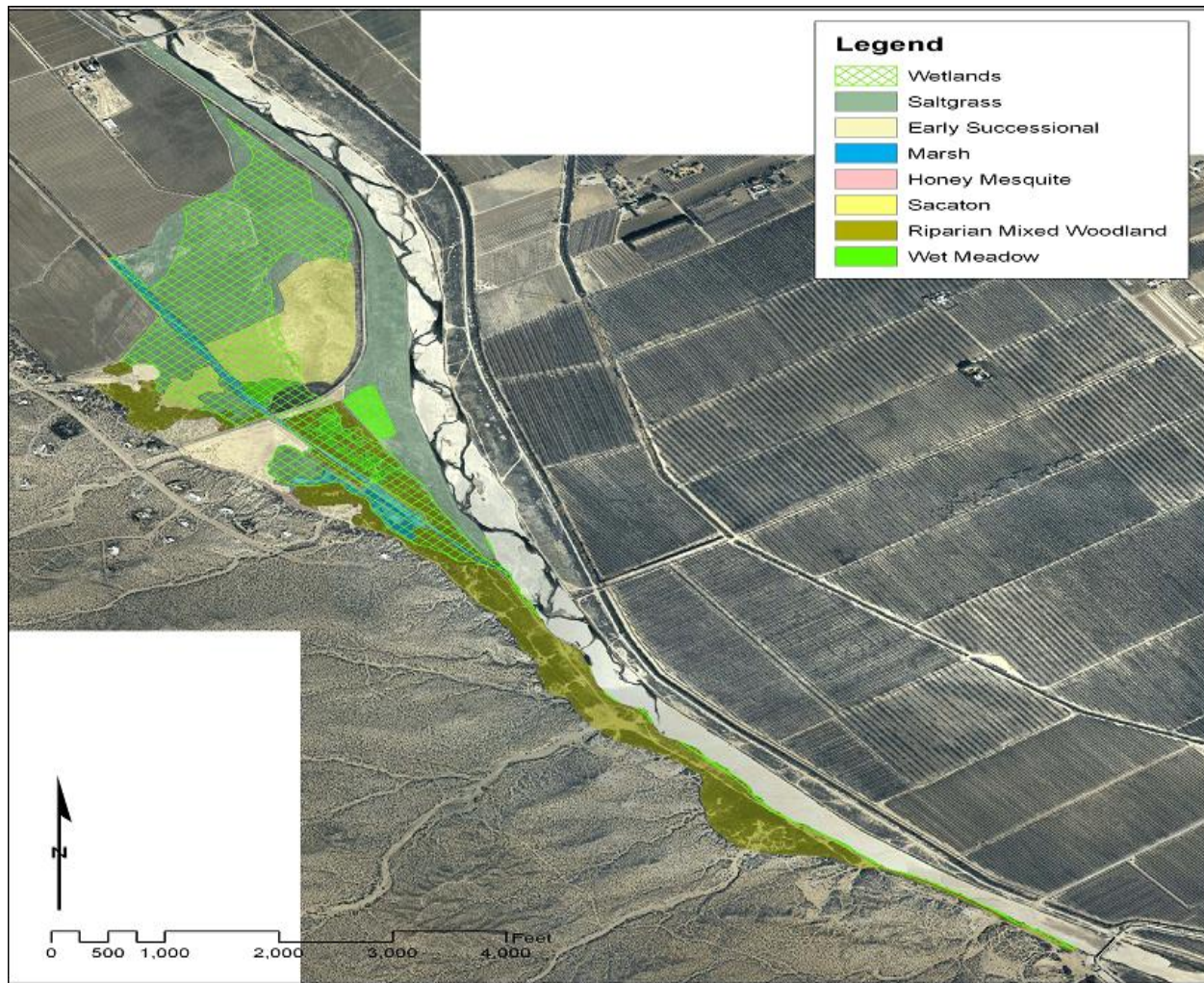
- Use of EBID water-righted land or transfer of EBID water rights to land
- State Park – special case
- IBWC Record of Decision
- Periodic Restoration Release/Flow
- Special Water Users Associations

Case 1: Become an E-Farmer

- Acquire land with EBID water rights
- Acquire land within EBID and transfer separate EBID water rights to it
 - Can be acquired by purchase or reclassification
 - Must be irrigable, or allowed by variance from EBID board
- Fits within existing EBID policies, and allows for water and water rights transferability through District procedures
- Could be used for delivery of water to IBWC river floodplain (between the levees)



Case 2: Mesilla Valley Bosque State Park



- Concept developed by EBID, City of Las Cruces, Southwest Environment Center, and NM Game and Fish
- State land adjacent to EBID's Picacho Drain
- Drain flows passively provide water to constructed habitat
- Increases in open water evaporation offset by removal of dense canopy salt cedar
- Drain function remains paramount
- Additional water rights to be acquired as necessary to keep EBID whole
- Safe harbor agreements to protect EBID from ESA intervention



Case 3: US IBWC Collaborative

- Settled disputes over channel maintenance Record of Decision (ROD)
- Participants included IBWC, EBID, environmental interests, Army Corps of Engineers, and a broad stakeholders group
- Examined opportunities for enhancing riparian habitat within IBWC's right-of-way while maintaining flood protection and Project water rights

Management Category	No Action Alternative	Flood Control Improvement Alternative	PREFERRED ALTERNATIVE: Integrated USIBWC Land Management	Targeted River Restoration Alternative
Levee System Management	Routine levee and road maintenance	No change	No change	No change
	n/a	Levee system improvements	Levee system improvements	Levee system improvements
Floodway Management	Unmodified grazing leases	Modified leases for erosion control (3,552 ac)	Modified leases for erosion control (3,552 ac)	Modified leases for erosion control (3,493 ac)
	Continue seasonal mowing (4,657 ac)	No change	Continued mowing (2,674 ac)	Continued mowing (2,223 ac)
			Modified grassland management (1,641 ac)	Modified grassland management (1,641 ac)
			Native vegetation planting (223 ac)	Native vegetation planting (189 ac)
			Stream bank reconfiguration (127 ac)	Seasonal peak flows / bank preparation (516 ac)
n/a	n/a	n/a	Voluntary conservation easements (1,618 ac)	
Channel and Irrigation Facilities Management	Debris removal and channel protection	No change	No change	No change
	American Dam and irrigation structures maintenance	No change	No change	No change
	n/a	n/a	n/a	Reopening of former meanders (147 ac)
Sediment Management	NRCS sediment dam maintenance	No change	No change	No change
	Sediment removal from arroyos / mitigation actions	No change	No change	Modified arroyo dredging for aquatic habitat (12 arroyos)
	Disposal from dredging channel within ROW*	Disposal mainly outside ROW*	Disposal mainly outside ROW*	Disposal mainly outside ROW*
	n/a	n/a	Disposal from environmental measure excavation inside ROW*	Disposal from environmental measure excavation inside ROW*

ROD Preferred Alternative

- Targeted restoration sites may be irrigated from EBID facilities or overbanked with normal operational flows
- Sites selected based on location, topography, facilities, and floodability
- Broad range of vegetation types, morphology, and flow conditions to be created
- Part of IBWC management plan
- In-channel sediment removal to be further studied

Case 4: Periodic Restoration Release/Flow (under discussion)

A release of Project water not intended for diversion, to create overbank flooding, enhance channel dynamics, and rework sediment

Goal: To enhance irrigation releases once every 3 to 5 years to promote river-floodplain hydrologic connectivity at select restoration sites during historic spring runoff





Periodic Restoration Flow

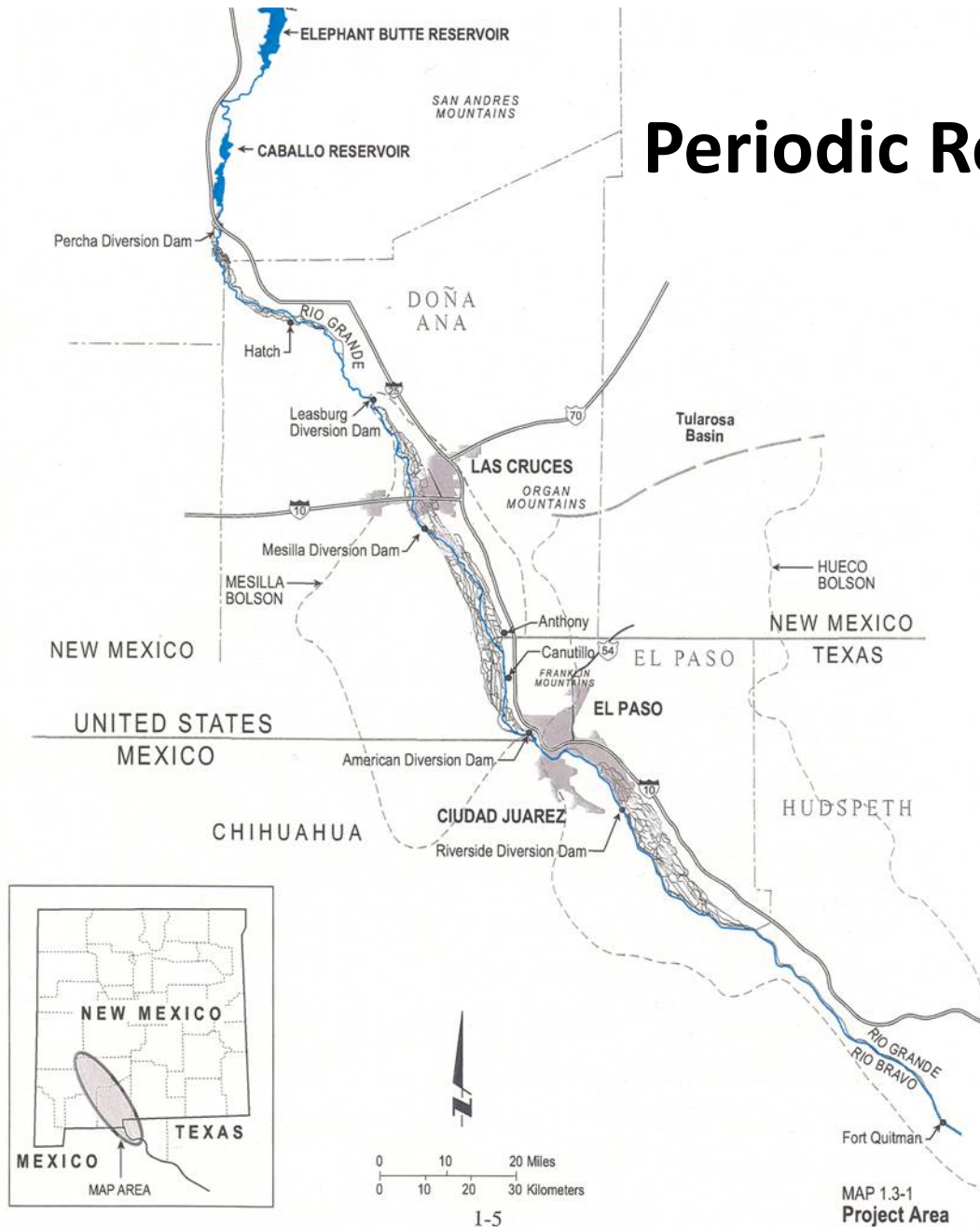
Under the Sale of Water for Miscellaneous Purposes Act of 1920, the Sec. Interior can supply project water for purposes other than irrigation provided:

- *Use is not detrimental to irrigation*
- *There is no other practicable source of water supply*
- *Prior approval by the appropriate water district(s)*
- *Money from such contracts is put in Reclamation Fund crediting the Project supplying the water*

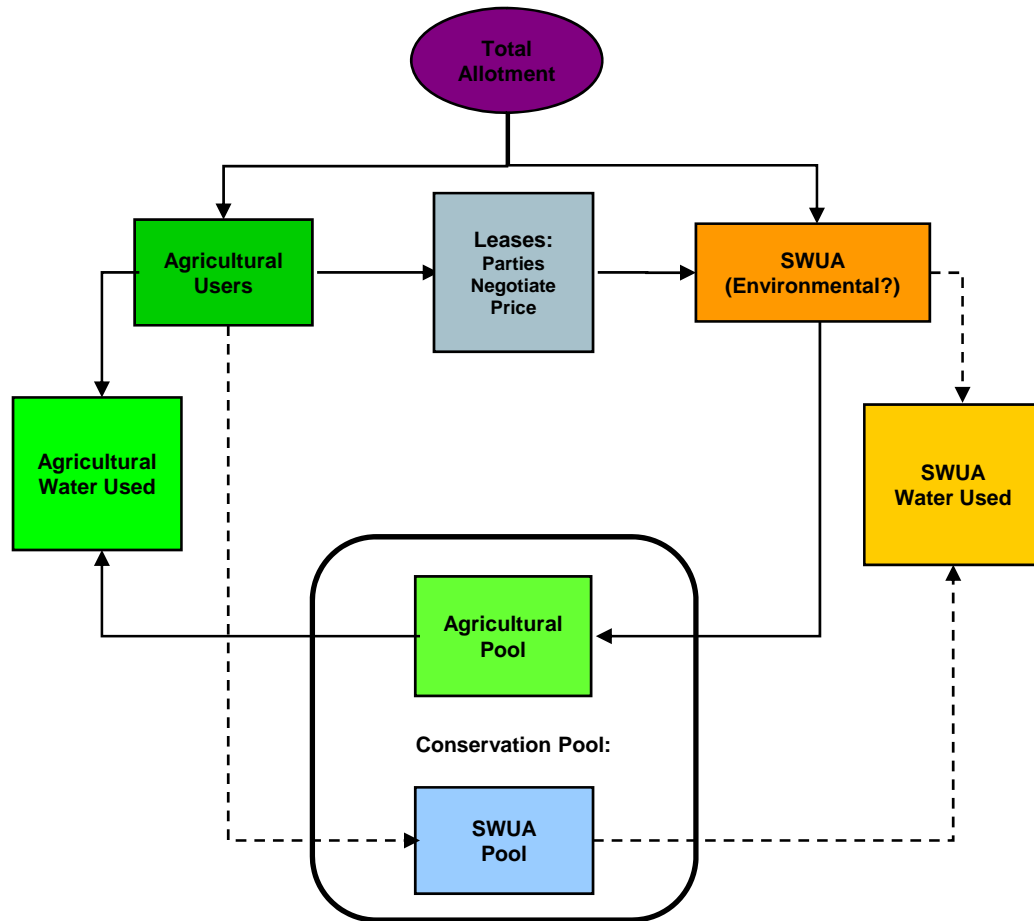
Periodic Restoration Flow

Other legal and practical questions remain:

- Who would be the downstream beneficiary of the restoration flows?
- Do either irrigation districts in the Rio Grande Project have an interest in a periodic lease of an average of 9,500 ac-ft/event?
- Are there Rio Grande Compact or Treaty constraints to a periodic restoration flow?



Case 5: Institutional Opportunity for Management of Environmental Water - SWUAs



- EBID Policy 2003-GA8, approved November 19, 2003
- 73-10-48 NMSA
- Assessed as EBID constituents
- Share pro rata in shortages
- Surface water rights maintain EBID's 1906 priority date
- SWUA must lease all of the water from a parcel; land must be fallowed
- Special Combined Unit: Small tracts (<2 acres) can be consolidated and treated as farm tract for ordering and billing
- Maintained as Ag use until demand for direct M&I use develops
- May be suitable for E-flow administration through NM ISC

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