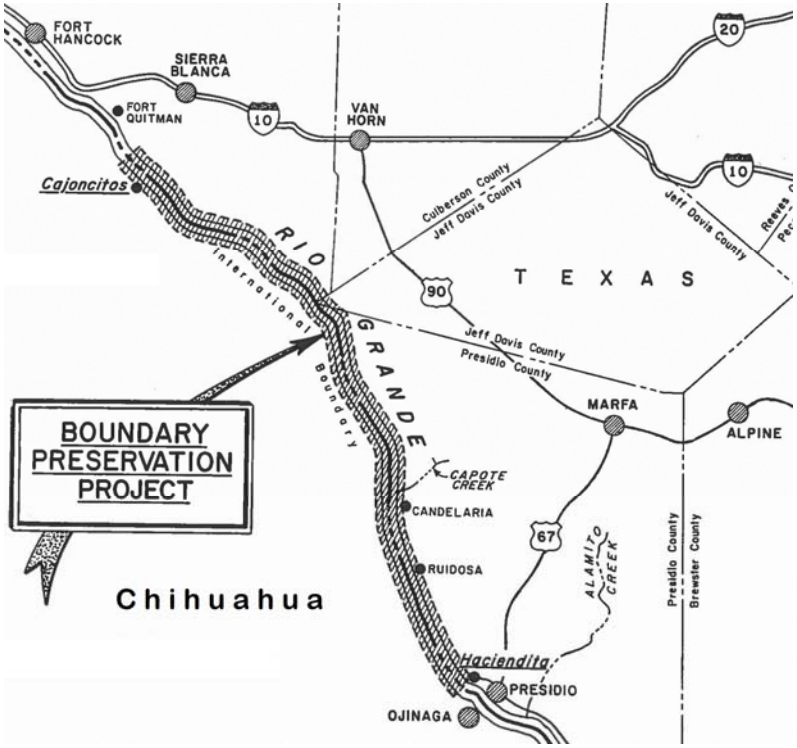
The Boundary Preservation Project

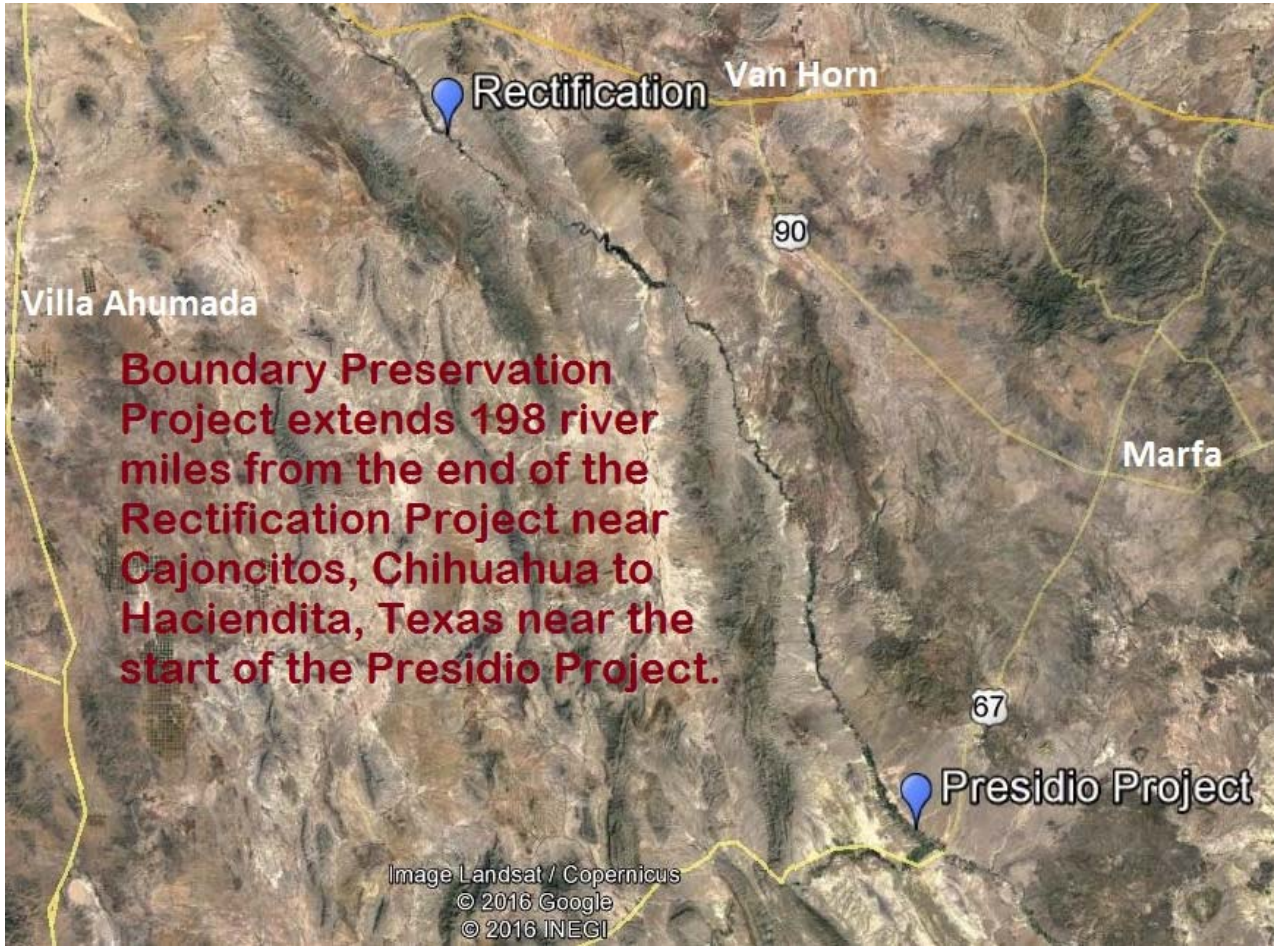


JULY 13, 2017

USIBWC CITIZENS FORUM MEETING

KELLY BLOUGH, INTERNATIONAL BOUNDARY AND WATER COMMISSION, U.S. SECTION

What Is The Boundary Preservation Project?



8 Canyon reaches totaling 30 miles

46 named arroyos
- 22 Mexico
- 24 US

56 prominent sediment cones with a cluster located below Indian Hot Springs

What Is The Boundary Preservation Project?

Field Conditions

Reduction of historical flows led to sedimentation, increased vegetation, and an undefined channel and boundary

Flooding during high flows resulted in significant river and boundary migration

1970 Treaty and Minute 262 (1979)

Minute documents the joint decision that restoration and preservation of the channel was needed to preserve the character of the boundary and prevent separation of large tracts from one side to another.

What Was Planned

1978 Environmental Impact Statement Alternatives Evaluated

- No action
- Install monuments in lieu of a river boundary
- Restoration and preservation of channel with mitigations (Preferred Alternative)

Arizona State University was contracted to complete vegetation mapping, ecological impact modeling, and cultural and endangered species surveys

What Was Planned

Work to be shared equally in alternating reaches by both USIBWC and CILA to restore channel capacity of 500 – 600 cfs.

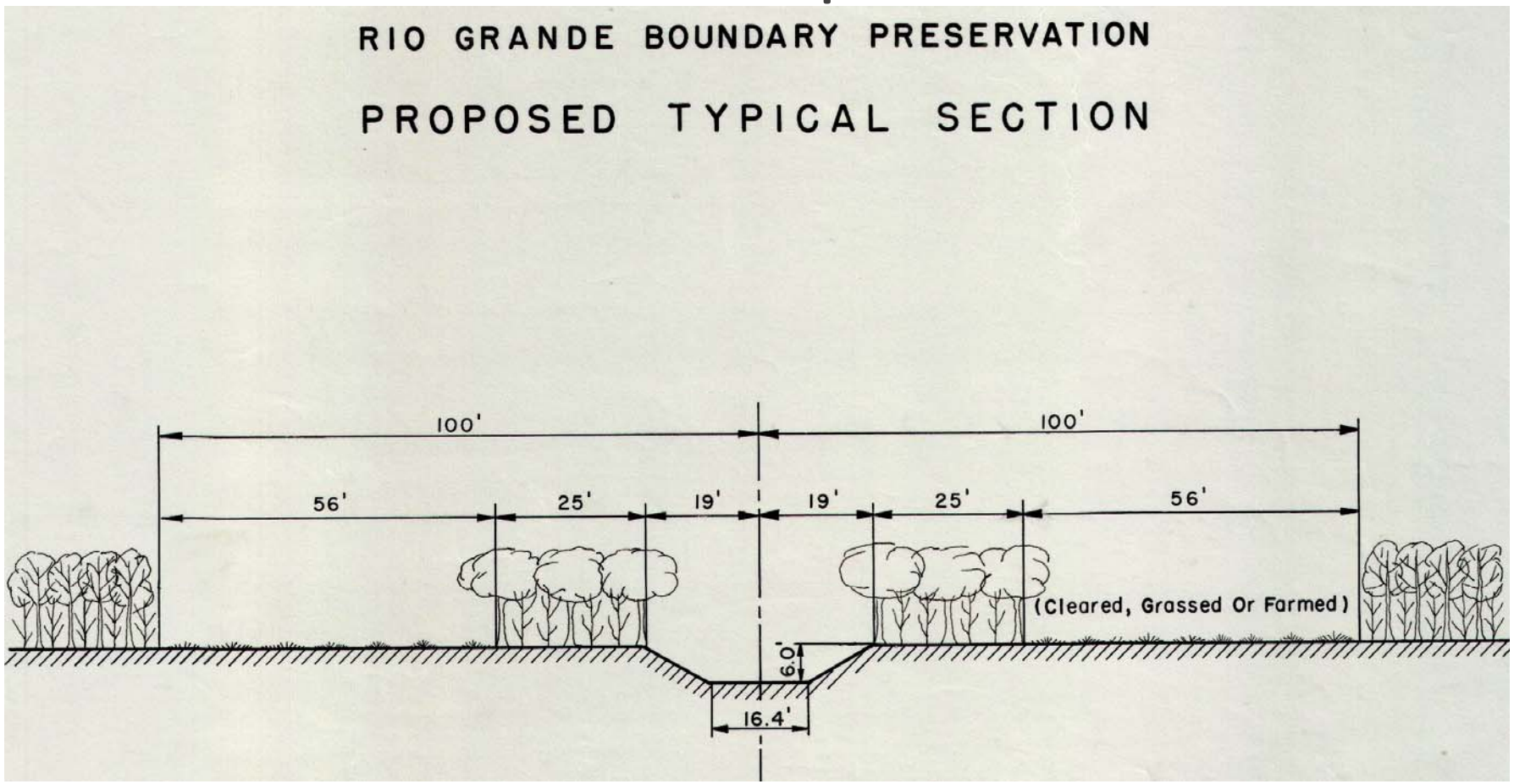
Mitigations included

1. creation of 10 ponds (25 acres total) to provide wetland habitat

2. pipe connections from river to 295 acres of adjacent wetlands

3. clearing and reseeding floodway with grasses, forbs and spoil mounds with shrubs

1978 Environmental Impact Statement



What Was Implemented

Due to field conditions, work was delayed and alternative methods such as draglines were used resulting in significant deviation from the EIS including failure to maintain vegetated fringe and reseed, production of more spoil than anticipated and work during bird breeding season.

1983 at 25% completion public concern mounted and Audubon Society and other EIS stakeholders filed suit against the IBWC

1984 Additional NEPA EA was completed with decision to only use in house resources, minimize use of dragline, improve scheduling and increase oversight.

1988 A Consent Judgement was signed which included a 5 year work plan and requirement for oversight by a “qualified biologist” agreed to by all parties.

1991 work 60 miles below Rectification at Bramlet Ranch

What Was Implemented

Mitigations completed include 12 ponds (33 acres) and 183 acres acquired for wetlands and additional features such as cattle fencing and wildlife huts.

1993 The Consent Judgement 5 year work plan is completed and IBWC informs stakeholders that it is forced by high flows and competing priorities to apply resources elsewhere

2002 404 permit issued for regrading confluence of Brooks Arroyo and river above Indian Hot Springs at Talley Ranch

Channel with Pond in 1996 and 2016

Further Study

2001 Dr. Mike Landis thesis proposes a dam for storage of winter flows for June release that would aid in restoration and preservation of this reach of the river by more closely mimicking the predevelopment hydrograph of the river.

Further Study

2007 TCEQ sponsored USACE study produced updated maps and reports of environmental and hydrologic conditions for stakeholder use

Preferred - Management via a systematic watershed approach

Alternative – Select single confluences for demonstration projects to be replicated at other reaches of Rio Grande

Or consider – Channel improvements at sites of greatest sediment accumulation

Where We Are Today

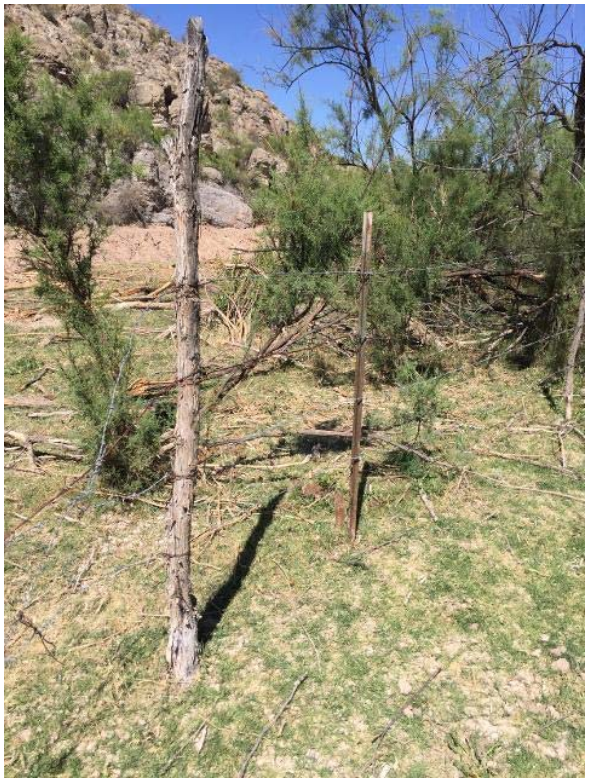
Condition of much of the channel with respect to sediment plugs and debris dams is not known

On the ground status of mitigation sites not known

Tamarisk beetle impact is apparent but not quantified

Upstream flooding (lower Rectification) due to sediment build up in upper Boundary Preservation is a continuing problem

Current Channel Work Below Rectification



Questions