

SUPPLEMENTAL WATERSHED PLAN AGREEMENT NO. I

Between the

El Paso Hudspeth Soil and Water Conservation District
Local Organization

Hudspeth County Conservation and Reclamation District No. 1
Local Organization

Hudspeth County Commissioners Court
Local Organization

(hereinafter referred to as the Sponsoring Local Organization)

State of Texas

and the

Soil Conservation Service
United States Department of Agriculture
(hereinafter referred to as the Service)

Whereas, the Watershed Work Plan Agreement for the Alamo Arroyo Watershed, State of Texas, executed by the Sponsoring Local Organization named therein and the Service, became effective on the 23rd day of April 1957; and

Whereas, in order to carry out the Watershed Work Plan for said watershed, it has become necessary to modify said Watershed Work Plan Agreement; and

Whereas, it has been found necessary to modify the Watershed Work Plan Agreement to provide for abandonment of Floodwater Retarding Structure No. 2 and alteration of Floodwater Retarding Structure No. 3; and

Whereas, it has become necessary to modify the Watershed Work Plan to reflect current policy and terminology relative to engineering and project administration costs;

Now, therefore, the Sponsoring Local Organization and the Service hereby agree upon the following modifications of the terms, conditions, and stipulations of said Watershed Work Plan Agreement:

1. Floodwater Retarding Structure No. 2 is hereby deleted from the plan.
2. Floodwater Retarding Structure No. 3 will be modified in accordance with current design criteria to reflect a completed practical breach of Floodwater Retarding Structure No. 2.

Site 2 will be permanently breached to the natural ground line at the failure location by removing a 100 foot wide section of the dam. Breaching will provide safe passage of flood flow exceeding the available storage below the breach line. The storage below the breach line will provide sediment accumulation benefits.

3. Paragraph numbered 3 is modified to read as follows:

The percentages of construction costs modifying Floodwater Retarding Structure No. 3 and completing the breach of Floodwater Retarding Structure No. 2 will be paid by the Sponsoring Local Organization and the Service as follows:

<u>Percent Sponsoring Local Organization Will Pay</u>	<u>Percent Service Will Pay</u>	<u>Estimated Construction Cost</u>
0	100	\$574,530

4. Paragraph numbered 5 is amended to read as follows:

In response to the Sponsors request, the Service will provide engineering and related services and contract for modification of Floodwater Retarding Structure No. 3 and completion of the breach of Floodwater Retarding Structure No. 2. The Sponsoring Local Organization and the Service will each bear the costs of project administration which it incurs, estimated to be \$0 and \$88,151, respectively.

5. A paragraph numbered 15 is added to read as follows:

The program conducted will be in compliance with all requirements respecting nondiscrimination as contained in the Civil Rights Act of 1964 and the regulations of the Secretary of Agriculture (7 C.F.R. 15.1-15.12), which provide that no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any activity receiving federal financial assistance.

6. The appended Tables 2 and 3 to this supplemental agreement are addenda to Tables 2 and 3, respectively, in the Watershed Work Plan; and Figure 3 referred to in the Watershed Work Plan is modified to conform with the appended Structural Measures Map.
7. The Sponsoring Local Organization and the Service further agree to all other terms, conditions, and stipulations of said Watershed Work Plan Agreement not modified herein.

El Paso Hudspeth Soil and Water
Conservation District
Local Organization

By R. G. Adams

Title Chairman

6326 Gateway East El Paso 79905
Address Zip Code

Date Oct 14 1980

The signing of this agreement was authorized by a resolution of the governing
body of the El Paso Hudspeth Soil and Water Conservation District

Local Organization

adopted at a meeting held on Oct 14, 1980

Gene Stricker
Secretary, Local Organization

Box 283 Fabens, TX 79838
Address Zip Code

Oct 14, 1980
Date

Hudspeth County Conservation and
Reclamation District No. 1
Local Organization

By J. G. McPherson

Title Chairman

Fort Hancock, TX 79839
Address Zip Code

Date 11-19-80

The signing of this agreement was authorized by a resolution of the governing
body of the Hudspeth County Conservation and Reclamation District No. 1

Local Organization

adopted at a meeting held on Nov. 19, 1980

George Esola
Secretary, Local Organization

Fort Hancock, Tex 79839
Address Zip Code

Nov. 19, 1980
Date

Hudspeth County
Commissioners Court
Local Organization

By Shirley F. Fisher

Title County Judge

Pierson Blanca Tx
Address Zip Code
79851

Date 12-8-80

The signing of this agreement was authorized by a resolution of the
governing body of the Hudspeth County Commissioners Court

Local Organization

at a meeting held on December 8, 1980

Sean L. Ellison
Secretary, Local Organization

Pierson Blanca Tx
Address Zip Code
79851

December 8, 1980
Date

Soil Conservation Service
United States Department of Agriculture

Approved by:

C. Beall Youland
State Conservationist

ACTING

DEC 16 1980
Date

1/ ADDENDUM TO TABLE 2 - ESTIMATED STRUCTURAL COST DISTRIBUTION

Alamo Arroyo Watershed, Texas
(Dollars) 2/

Item	Installation Costs		Installation Costs		Total
	Construction	Engineering	Other Funds	Land	
	P. L. 566		P. L. 566		Installation Costs
					Other
Floodwater Retarding Structure					
2	30,470	13,100	43,570	-	43,570
3	544,060	43,520	587,580	-	587,580
SUBTOTAL-Structural	574,530	56,620	631,150	-	631,150
PROJECT ADMINISTRATION			88,150		88,150
GRAND TOTAL	574,530	56,620	719,300	-	719,300

1/ Additional costs to modify structures

2/ Price Base: 1979

ADDENDUM TO TABLE 3 - STRUCTURAL DATA - SITE 3
DAM WITH PLANNED STORAGE CAPACITY

Alamo Arroyo Watershed, Texas

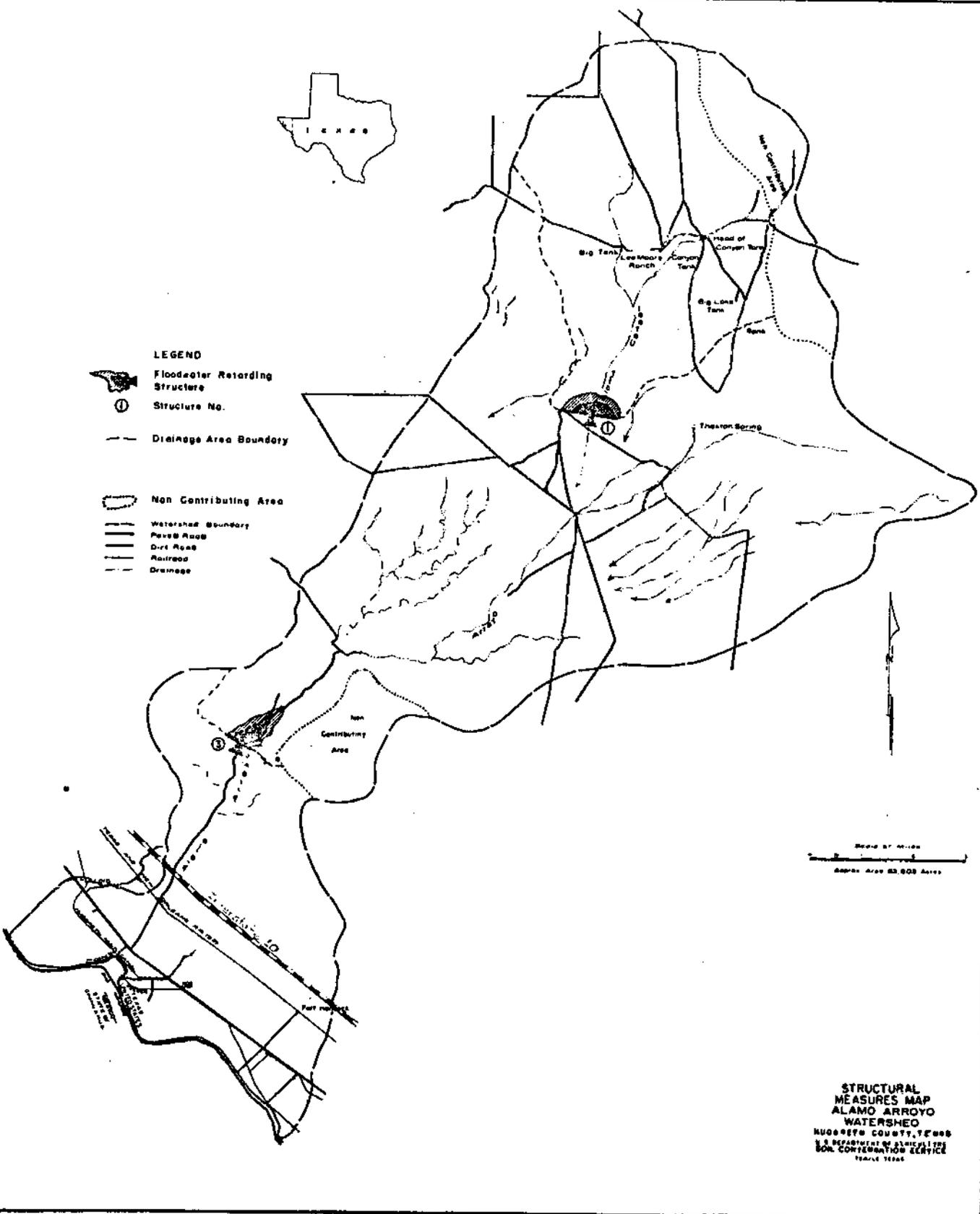
Item	: Unit :	Structure Number
		3
Class of Structure		B
Uncontrolled Drainage Area	Sq.Mi.	68.74
Controlled Drainage Area	Sq.Mi.	25.75
Total Drainage Area	Sq.Mi.	94.49
Runoff Curve No. (1-day)		60
Time of Concentration (T _c)	Hrs.	8
Elevation Top of Dam	Ft.	3,786.6
Elevation Crest Emergency Spillway	Ft.	3,781.1
Elevation Crest High Stage Inlet	Ft.	3,768.4
Elevation of Lowest Ungated Outlet	Ft.	3,752.0
Emergency Spillway Type		earth
Emergency Spillway Bottom Width	Ft.	400
Emergency Spillway Exit Slope	Ft./Ft.	0.040
Maximum Height of Dam	Ft.	55.9
Volume of Fill	Cu.Yd.	301,837
Total Capacity ^{1/}	Ac.Ft.	4,060
Sediment Submerged	Ac.Ft.	1,600
Sediment Aerated	Ac.Ft.	530
Floodwater Retarding	Ac.Ft.	1,930
Surface Area		
Lowest Ungated Outlet	Acres	38
Sediment Pool	Acres	150
Floodwater Retarding Pool ^{1/}	Acres	244
Principal Spillway Design		
Rainfall Volume (1-day)	In.	3.73
Rainfall Volume (10-day)	In.	5.80
Runoff Volume (10-day)	In.	0.41
Capacity of High Stage (Max.)	cfs	523
Dimensions of Conduit	In.	57
Frequency Operation-Emergency Spillway	% chance	1.0+
Emergency Spillway Hydrograph		
Rainfall Volume	In.	3.41
Runoff Volume	In.	0.49
Velocity of Flow (V _e)	Ft./Sec.	0
Max. Reservoir Water Surface Elevation	Ft.	3,777.7
Freeboard Hydrograph		
Rainfall Volume	In.	6.77
Runoff Volume	In.	2.44
Max. Reservoir Water Surface Elevation	Ft.	3,786.4
Discharge per Foot of Width	Ac.Ft.	17.88
Bulk Length	Ft.	636
Capacity Equivalents		
Sediment Volume	In.	0.58
Floodwater Retarding Volume	In.	0.53

^{1/} Crest of Emergency Spillway

October 1979



- LEGEND**
- Floodwater Retarding Structure
 - Structure No.
 - Drainage Area Boundary
 - Non Contributing Area
 - Watershed Boundary
 - Paved Road
 - Dirt Road
 - Railroad
 - Drainage



Scale 1" = 1 Mile
Area 83,000 Acres

STRUCTURAL MEASURES MAP
ALAMO ARROYO WATERSHED
HUGHES COUNTY, TEXAS
U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
TRAFFIC 1954