

**AGRICULTURAL WATER CONSERVATION GRANT
(FY 2007)**

FINAL REPORT

to

Texas Water Development Board

Contract # 0703580719

Grant # 200606229

December 19, 2007



TEXAS STATE SOIL AND WATER CONSERVATION BOARD

P.O. Box 658

Temple, TX 76503

www.tsswcb.state.tx.us

(254) 773-2250

0703580719 - FINAL

RECEIVED
DEC 27 2007
TWDB CONTRACT ADMIN DIV.

Summary

The Texas State Soil and Water Conservation Board (TSSWCB) has fully implemented all provisions of the Agricultural Water Conservation Grant Contract awarded by the Texas Water Development Board (TWDB). The grant award of \$100,000 supplemented \$100,000 in technical assistance funding allocated to local Soil and Water Conservation Districts (SWCDs) from the TSSWCB for support of planning and implementing agricultural water conserving Best Management Practices (BMPs) on farms and ranches. Eligible BMPs were those that directly or indirectly produced water savings and those that reduced erosion, a cause of increased sedimentation of Texas' surface water reservoirs.

A total of 199 SWCDs statewide were eligible and willing to participate in this program. The assistance performed by these SWCDs has resulted in an estimated **475,474 ac-ft potential water savings for the State** or approximately **4.75 ac-ft of water conserved for each grant dollar spent**. The potential savings is equivalent to 4.60% of the 2010 estimated statewide irrigation water use of 10,345,131 ac-ft.

Introduction

SWCDs provide technical and planning assistance to agricultural producers for implementing conservation BMPs on their farms and ranches. The Texas State Soil and Water Conservation Board (TSSWCB) received an Agricultural Water Conservation Grant of \$100,000 from the Texas Water Development Board (TWDB) for FY2007. The funds from the grant were allotted to eligible SWCDs to support providing technical assistance in planning agricultural water conserving BMPs on farms and ranches. Eligible practices were those that directly or indirectly produced water savings and those that reduced erosion, since erosion results in sedimentation of Texas' surface water reservoirs.

Methods

SWCD Eligibility Criteria

In order for a SWCD to be eligible to participate in the grant program, it had to satisfy at least one of four criteria. The four criteria were:

1. Water Needs

This is a criterion from TWDB based on county data in the 2007 State water plan (Water for Texas 2007). Water needs are the difference between projected water demands and available water supplies. Water needs are classified in several categories: municipal, irrigation, manufacturing, etc. Needs were projected in ten-year increments through 2060. County based data for all water needs for the 2060 projection were used. The county data were converted to a GIS layer which was then used to select the SWCDs that contained the counties with projected water needs.

2. Irrigation Conservation Strategies

This is also a criterion from TWDB. In developing the 2007 regional water plans, the planning regions that projected water needs were requested to identify strategies for meeting their water needs. Several planning regions identified irrigation conservation as one of their strategies for meeting their water needs. Data from TWDB for those counties that identified irrigation water conservation strategies was converted to a GIS layer that was used to select the SWCDs that contained the counties with identified irrigation conservation strategies.

3. Principal Irrigation Areas

This is a criterion from the previous TSSWCB Subchapter H water conservation program. Data were originally from earlier Texas water plans in which TWDB had delineated "principal irrigation areas."

4. Sedimentation

This criterion is also from the previous TSSWCB Subchapter H water conservation program. It was based on sediment rates to major reservoirs. Sedimentation contributes significantly to surface water storage capacity loss in Texas. The 2007 state water plan states “Texas’ major reservoirs are losing approximately 90,000 acre-feet of storage per year due to sedimentation. This equates to a loss of roughly 0.27 percent of the total major reservoir capacity per year, or approximately 13 percent over the 50-year planning horizon.”

The eligibility of SWCDs under each of the criteria was established. The State Board determined that funding would be allocated equally to each criterion in each eligible district that was interested in participating in the program. Districts were surveyed to determine their willingness to participate in the program. 212 SWCDs met one or more eligibility criteria. Of those, 199 elected to participate in the program. Each participating district received an allotment of \$211.42 for each eligibility criterion that it met. For example, a district meeting three criteria received \$634.26.

Figure 1 shows the participating districts.

Appendix I contains a table showing the districts, their eligibility criteria, and their allocations.

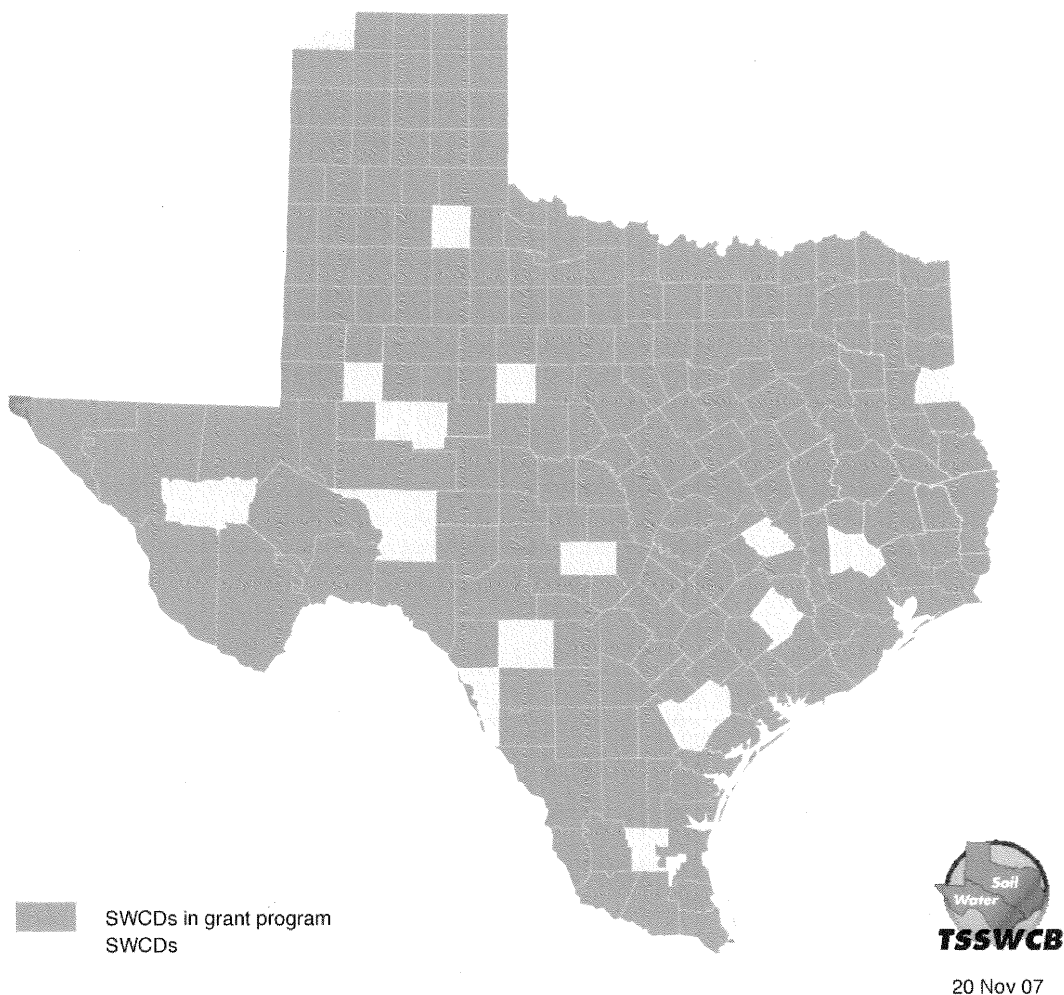


Figure 1. SWCDs Eligible and Participating in the FY 07 Ag Water Conservation Grant.

Eligible Practices

Eligible practices for the grant were agricultural water conservation BMPs developed by the water conservation task force (established by the 78th Texas Legislature) and other USDA-NRCS conservation practices that have the potential to save water. Water conserving potential was determined from *Texas Conservation Practices Physical Effects, USDA-NRCS Field Office Tech Guide, Section V*.

Erosion control practices were also deemed eligible based on their effects, also determined from *Texas Conservation Practices Physical Effects, USDA-NRCS Field Office Tech Guide, Section V*.

Water Savings Estimation

Water savings were estimated for those practices where data were available. Most estimates were from the agricultural water conservation BMPs developed by the water conservation task force. In general, the values reported are average values across the State. Where a range of values was presented, the average of the two endpoints of the range was used. Appendix II has detailed information on the source of the water savings estimates.

Estimates of water conservation were not available for many of the practices that have an indirect effect on water conservation, as the erosion BMPs. The water conservation amount for these practices was assumed to be zero for purposes of this estimate. Hence, the estimate for this grant is conservative.

Reporting

Each SWCD participating in the grant was required to report the eligible BMPs that were planned over the duration of the project. It was decided to report on the planned, rather than implemented BMPs because with conservation planning, landowners often have several years to implement the planned BMPs, depending on the requirements of the program under which the planning was done.

Results

A total of 199 out of 217 SWCDs participated in the grant program. Potential water savings resulting from this grant was estimated at 475,474 ac-ft. The potential savings is equivalent to 4.60% of the 2010 estimated statewide irrigation water use of 10,345,131 ac-ft. Approximately 4.75 ac-ft of water was conserved for each grant dollar spent. Potential water savings resulting from technical assistance from this grant are shown in Table 1. Individual SWCD water savings results can be found in Appendix III.

The practice yielding the largest potential water savings was crop residue management and conservation tillage with 475,284 acres planned for an estimated water savings of 190,114 ac ft. The second highest water saving practice was brush control/management with 416,449 acres planned for an estimated water savings of 187,402 ac-ft.

Twenty water-conserving BMPs were used by SWCDs in planning, and twenty-three erosion control BMPs. It should be noted that some of the BMPs do not directly prevent erosion, but are part of a system. For example, prescribed grazing, a grazing management system, includes cross fencing and watering facilities so that livestock may be rotated among smaller pastures, thus preventing overgrazing and subsequent erosion.

Table I. Potential Water Savings from Planned BMPs.

BMP	Units	Water savings (ac-ft/unit)	Total Planned (Units)	Total Savings (ac-ft)	SWCDs Using BMP (No)
4.1 Agricultural Irrigation Water Use Management					
4.1.1 Irrigation Scheduling	ac	0.4	57851	23140	22
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd	195	nd	8
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4	475284	190114	56
4.1.4 On-Farm Irrigation Audit	farms	nd	36	nd	6
4.2 Land Management Systems					
4.2.1 Furrow Dikes	ac	0.18	172070	30973	10
4.2.2 Land Leveling	ac	na	11435	na	14
4.2.3 Contour Farming	ac	na	799444	na	37
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54	2736	4213	5
4.2.5 Brush Control/Management	ac	0.45	416449	187402	126
4.3 On-Farm Water Delivery Systems					
4.3.1 Lining of On-Farm Irrigation Ditches	ft	0.0068	800	5	1
4.3.2 Replacement of On-Farm Irrigation Ditches with Pipelines	ft	0.0076	398230	3019	20
4.3.3 Low Pressure Center Pivot Sprinkler Irrigation Systems	ac	0.453	73034	33084	42
4.3.4 Drip/Micro-Irrigation System	ac	na	9146	na	29
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25	3308	827	5
4.3.6 Surge Flow Irrigation for Field Water Distribution Systems	ac	0.385	785	302	4
4.3.7 Linear Move Sprinkler Irrigation Systems	ac	na	4139	na	9
4.4 Water District Delivery Systems					
4.4.1 Lining of District Irrigation Canals	ft	0.0767	0	0	0
4.4.2 Replacement of Irrigation District Canals and Lateral Canals with Pipelines	ft	0.051	7748	395	2
4.5 Miscellaneous Systems					
4.5.1 Tailwater Recovery and Reuse System	ac	1	2000	2000	2
4.5.2 Nursery Production Systems	ac	na	0	na	0
Other water conservation					
Irrigation Reg Resvr. (concrete) (552)	no	na	32	na	5
Ponds (378)	no	na	404	na	61
Erosion Control Practices					
Conservation Cover (327)	ac	na	179603	na	62
Conservation Crop Rotation (328)	ac	na	704754	na	62
Contour Buffer Strips (332)	ac	na	10090	na	10
Contour Stripcropping (585)	ac	na	3500	na	1
Cover & Green Manure Crop (340)	ac	na	40871	na	11
Critical Area Planting (342)	ac	na	107478	na	41
Fence (Includes Crossfencing for Prescribed Grazing) (382)	ft	na	2334586	na	95
Field Border (386)	ac	na	27732	na	14
Filter Strip (393)	ac	na	904	na	17
Grade Stabilization Structures (410)	no	na	60	na	16
Grassed Waterway (412)	ac	na	971	na	30
Heavy Use Area Protection (561)	ac	na	2166	na	19
Pasture and Hayland Planting (512)	ac	na	58334	na	106
Pipeline-Livestock Watering (516)	ft	na	713992	na	71
Prescribed Grazing (528)	ac	na	1402196	na	89
Range Planting (550)	ac	na	143457	na	52
Riparian Forest Buffer (391)	ac	na	1647	na	17
Riparian Herbaceous Cover (390)	ac	na	775	na	4
Stripcropping—Field (586)	ac	na	12400	na	3

Terrace (600)	ft	na	1021462	na	41
Tree/Shrub Establishment (612)	ac	na	8647	na	24
Underground Outlets (620)	ft	na	10022	na	3
Watering Facility (614)	no	na	541	na	57
Total Potential Savings (ac-ft)					475,474

Note: nd—none directly, na—not available.

Conclusion

This grant resulted in the planning of agricultural water conservation and erosion control BMPs across the State of Texas. The estimate water savings from this grant is 475,474 ac-ft. The potential savings is equivalent to 4.60% of the 2010 estimated statewide irrigation water use of 10,345,131 ac-ft. Approximately 4.75 ac-ft of water was conserved for each grant dollar spent. All funds were administered by SWCDs in a highly effective and efficient manner necessary for providing local assistance to farmers and ranchers in the planning and implementation of water conservation BMPs.

Appendix I

Eligibility Criteria and Participating Soil and Water Conservation Districts

FY 07 Ag Water Conservation Grant Allocation

SWCD#	SWCD Name	State Zone	Water Needs	Irrigation Conservation Strategies	Principal Irrigation Area	Sediment	Allocation Criteria	Participation	Final Criteria	Allocation \$
104	Floyd County	1	X	X	X	X	4	Yes	4	845.67
107	Rio Blanco	1	X	X	X	X	4	Yes	4	845.67
108	Lubbock County	1	X	X	X	X	4	Yes	4	845.67
109	Hall-Childress	1		X	X	X	3	Yes	3	634.25
110	Tule Creek	1	X	X	X	X	4	Yes	4	845.67
111	Blackwater Valley	1	X	X	X		3	Yes	3	634.25
115	Upper Colorado	1	X	X	X		3	Yes	3	634.25
119	Lynn County	1	X	X	X		3	Yes	3	634.25
124	Dawson County	1	X	X	X		3	Yes	3	634.25
125	Gray County	1		X	X		2	Yes	2	422.83
126	Cap Rock	1	X	X	X	X	4	Yes	4	845.67
127	Donley County	1		X		X	2	Yes	2	422.83
129	Hockley County	1	X	X	X		3	Yes	3	634.25
130	Lamb County	1	X	X	X	X	4	Yes	4	845.67
131	Dallam	1	X	X	X		3	No	0	0.00
132	Hale County	1	X	X	X	X	4	Yes	4	845.67
133	Salt Fork	1		X	X	X	3	Yes	3	634.25
134	Lipscomb	1		X	X		2	Yes	2	422.83
136	Running Water	1	X	X	X		3	Yes	3	634.25
137	Moore County	1	X	X	X	X	4	Yes	4	845.67
138	Hemphill	1		X			1	Yes	1	211.42
140	Parmer	1	X	X	X		3	Yes	3	634.25
141	Wheeler County	1		X			1	Yes	1	211.42
142	Ochiltree	1		X	X		2	Yes	2	422.83
143	Tierra Blanca	1	X	X	X		3	Yes	3	634.25
145	Roberts	1		X	X		2	Yes	2	422.83
146	Hutchinson	1	X	X	X	X	4	Yes	4	845.67
147	Palo Duro	1	X	X	X	X	4	Yes	4	845.67
148	Hansford	1		X	X		2	Yes	2	422.83
149	Cochran	1	X	X	X		3	Yes	3	634.25
150	Yoakum	1	X	X	X		3	Yes	3	634.25
151	Terry	1	X	X	X		3	Yes	3	634.25
152	Hartley	1	X	X	X	X	4	Yes	4	845.67
153	Oldham County	1		X	X	X	3	Yes	3	634.25
155	Staked Plains	1		X	X	X	3	Yes	3	634.25
156	McClellan Creek	1		X	X	X	3	Yes	3	634.25
158	Garza	1	X	X		X	3	Yes	3	634.25
159	Sherman County	1	X	X	X		3	Yes	3	634.25
160	Canadian River	1	X	X	X	X	4	Yes	4	845.67
161	Foard County	1			X	X	2	Yes	2	422.83
162	Lower Pease River	1				X	1	Yes	1	211.42
163	Cottle	1			X	X	2	Yes	2	422.83
164	Upper Pease	1	X			X	2	No	0	0.00
165	Upper Clear Fork	1	X		X		2	Yes	2	422.83
166	Gaines County	1	X		X		2	Yes	2	422.83
167	Stonewall	1				X	1	Yes	1	211.42
168	King	1			X	X	2	Yes	2	422.83
169	Duck Creek	1	X	X		X	3	Yes	3	634.25
170	Andrew Kent	1	X			X	2	Yes	2	422.83

FY 07 Ag Water Conservation Grant Allocation (cont.)

SWCD#	SWCD Name	State Zone	Water Needs	Irrigation Conservation Strategies	Principal Irrigation Area	Sediment	Allocation Criteria	Participation	Final Criteria	Allocation \$
201	Concho	2	X	X	X	X	4	Yes	4	845.67
205	El Paso-Hudspeth	2	X	X	X	X	4	Yes	4	845.67
206	Middle Clear Fork	2	X		X		2	No	0	0.00
207	Mitchell	2	X	X	X	X	4	Yes	4	845.67
209	Toyah-Limpia	2	X		X	X	3	No	0	0.00
210	Highland	2	X	X	X	X	4	Yes	4	845.67
213	Upper Pecos	2	X	X	X		3	Yes	3	634.25
215	Menard County	2	X	X		X	3	Yes	3	634.25
216	Kendall	2	X			X	2	Yes	2	422.83
217	Kerr County	2	X	X			2	Yes	2	422.83
218	Pedernales	2	X			X	2	Yes	2	422.83
219	Coke County	2	X				1	Yes	1	211.42
220	Gillespie County	2					0		0	0.00
221	Nueces-Frio-Sabinal	2	X		X	X	3	No	0	0.00
222	Edwards Plateau	2		X		X	2	Yes	2	422.83
223	Mason County	2		X			1	Yes	1	211.42
224	Devil's River	2				X	1	Yes	1	211.42
225	Upper Llanos	2	X	X		X	3	Yes	3	634.25
226	Medina Valley	2	X	X	X	X	4	Yes	4	845.67
227	Big Bend	2				X	1	Yes	1	211.42
228	Maverick	2				X	1	Yes	1	211.42
229	Bandera	2	X	X		X	3	Yes	3	634.25
230	High Point	2	X	X	X	X	4	Yes	4	845.67
231	Trans Pecos	2		X	X	X	3	Yes	3	634.25
232	Runnels	2	X				1	Yes	1	211.42
233	Llano County	2	X			X	2	Yes	2	422.83
234	Middle Concho	2	X	X	X		3	Yes	3	634.25
235	Crockett	2					0		0	0.00
236	West Nueces-Las Moras	2				X	1	Yes	1	211.42
237	Rio Grande-Pecos River	2			X	X	2	Yes	2	422.83
238	Upper Nueces-Frio	2	X			X	2	Yes	2	422.83
240	Chaparal	2	X	X		X	3	No	0	0.00
241	Sandhills	2	X	X			2	Yes	2	422.83
242	Mustang	2	X	X	X	X	4	No	0	0.00
243	Howard	2	X	X		X	3	Yes	3	634.25
244	Midland	2	X	X	X		3	Yes	3	634.25
245	Nolan County	2	X	X	X		3	Yes	3	634.25
246	Andrews	2	X	X	X		3	Yes	3	634.25
247	Eldorado-Divide	2		X			1	Yes	1	211.42
248	Tom Green	2	X	X	X		3	Yes	3	634.25
249	McCulloch	2	X	X	X	X	4	Yes	4	845.67
250	San Saba	2	X		X	X	3	Yes	3	634.25
251	Glasscock County	2	X	X	X	X	4	No	0	0.00
252	North Concho River	2		X	X	X	3	No	0	0.00

FY 07 Ag Water Conservation Grant Allocation (cont.)

SWCD#	SWCD Name	State Zone	Water Needs	Irrigation Conservation Strategies	Principal Irrigation Area	Sediment	Allocation Criteria	Participation	Final Criteria	Allocation \$
301	Wilson County	3	X		X	X	3	Yes	3	634.25
304	Caldwell-Travis	3	X			X	2	Yes	2	422.83
306	Comal-Guadalupe	3	X			X	2	Yes	2	422.83
307	Atascosa County	3	X	X	X	X	4	Yes	4	845.67
316	Matagorda County	3	X	X	X	X	4	Yes	4	845.67
317	Coastal Plains	3	X	X	X	X	4	Yes	4	845.67
318	Waters Davis	3	X	X	X	X	4	Yes	4	845.67
319	Southmost	3	X	X	X	X	4	Yes	4	845.67
320	Dimmit County	3			X	X	2	Yes	2	422.83
321	Agua Poquita	3	X				1	Yes	1	211.42
323	Live Oak	3	X	X	X	X	4	Yes	4	845.67
324	San Patricio	3	X		X	X	3	Yes	3	634.25
325	Frio	3			X	X	2	Yes	2	422.83
326	Winter Garden	3	X	X	X	X	4	Yes	4	845.67
328	Loma Blanca	3					0		0	0.00
329	Copano Bay	3				X	1	Yes	1	211.42
330	Alamo	3	X	X	X	X	4	Yes	4	845.67
331	Monte Mucho	3	X		X	X	3	Yes	3	634.25
332	Starr County	3	X		X		2	Yes	2	422.83
333	Colorado	3	X	X	X	X	4	No	0	0.00
334	Lavaca	3			X	X	2	Yes	2	422.83
335	Zapata	3	X		X	X	3	Yes	3	634.25
336	Jackson	3	X		X		2	Yes	2	422.83
337	Webb	3	X		X	X	3	Yes	3	634.25
338	Gonzales County	3	X			X	2	Yes	2	422.83
339	DeWitt County	3				X	1	Yes	1	211.42
340	Bastrop County	3	X			X	2	Yes	2	422.83
341	Fayette	3	X			X	2	Yes	2	422.83
342	Wharton County	3	X	X	X	X	4	Yes	4	845.67
343	Karnes County	3	X			X	2	Yes	2	422.83
344	Bee	3					0		0	0.00
345	Calhoun	3	X		X		2	Yes	2	422.83
346	Victoria	3	X		X		2	Yes	2	422.83
347	Austin County	3	X		X	X	3	Yes	3	634.25
348	Washington	3	X			X	2	Yes	2	422.83
349	Willacy	3	X	X	X		3	Yes	3	634.25
350	Hidalgo	3	X	X	X	X	4	Yes	4	845.67
351	Hays County	3	X			X	2	Yes	2	422.83
352	Goliad County	3	X			X	2	No	0	0.00
353	McMullen County	3			X	X	2	Yes	2	422.83
354	La Salle County	3			X	X	2	Yes	2	422.83
355	Jim Wells County	3	X		X		2	Yes	2	422.83
356	Kleberg-Kenedy	3	X				1	Yes	1	211.42
357	Nueces	3	X		X	X	3	Yes	3	634.25
358	Burleson County	3	X	X		X	3	No	0	0.00
359	Lee County	3	X			X	2	Yes	2	422.83

FY 07 Ag Water Conservation Grant Allocation (cont.)

SWCD#	SWCD Name	State Zone	Water Needs	Irrigation Conservation Strategies	Principal Irrigation Area	Sediment	Allocation Criteria	Participation	Final Criteria	Allocation \$
401	Nacogdoches	4	X				1	Yes	1	211.42
404	Davy Crockett-Trinity	4	X			X	2	Yes	2	422.83
408	Bowie County	4	X			X	2	Yes	2	422.83
412	Harrison County	4	X				1	Yes	1	211.42
415	Lamar	4	X			X	2	Yes	2	422.83
417	Upshur-Gregg	4	X				1	Yes	1	211.42
419	Sulphur-Cypress	4	X			X	2	Yes	2	422.83
421	Anderson-Houston	4	X			X	2	Yes	2	422.83
422	Trinity-Neches	4	X			X	2	Yes	2	422.83
423	Red River County	4				X	1	Yes	1	211.42
424	Freestone County	4	X			X	2	Yes	2	422.83
426	Smith County	4	X			X	2	Yes	2	422.83
427	Cherokee County	4	X			X	2	Yes	2	422.83
428	Bedias Creek	4	X			X	2	Yes	2	422.83
429	Piney Woods	4	X				1	Yes	1	211.42
432	Coastal	4	X		X		2	Yes	2	422.83
433	Marion-Cass	4	X			X	2	Yes	2	422.83
434	Trinity Bay	4	X	X	X		3	Yes	3	634.25
435	Lower Trinity	4	X	X	X		3	Yes	3	634.25
436	Polk-San Jacinto	4	X				1	Yes	1	211.42
437	Lower Neches	4	X		X		2	Yes	2	422.83
438	Upper Neches	4	X				1	Yes	1	211.42
439	Long Leaf	4	X				1	Yes	1	211.42
440	Navasota	4	X	X	X	X	4	Yes	4	845.67
441	Jasper-Newton	4	X		X		2	Yes	2	422.83
442	Harris County	4	X		X		2	Yes	2	422.83
443	Delta	4				X	1	Yes	1	211.42
444	Wood	4	X				1	Yes	1	211.42
445	Hopkins-Rains	4	X				1	Yes	1	211.42
446	Lower Sabine-Neches	4	X		X		2	Yes	2	422.83
447	Rusk	4	X			X	2	Yes	2	422.83
448	Panola	4					0		0	0.00
449	Shelby	4	X				1	Yes	1	211.42
450	Brazos County	4	X			X	2	Yes	2	422.83
451	Robertson County	4	X			X	2	Yes	2	422.83
452	Montgomery County	4	X				1	No	0	0.00
453	Walker County	4	X				1	Yes	1	211.42

FY 07 Ag Water Conservation Grant Allocation (cont.)

SWCD#	SWCD Name	State Zone	Water Needs	Irrigation Conservation Strategies	Principal Irrigation Area	Sediment	Allocation Criteria	Participation	Final Criteria	Allocation \$
501	Limestone-Falls	5	X			X	2	Yes	2	422.83
504	Ellis-Prairie	5	X			X	2	Yes	2	422.83
505	Kaufman-Van Zandt	5	X			X	2	Yes	2	422.83
506	Hamilton-Coryell	5	X			X	2	Yes	2	422.83
508	Little River-San Gabriel	5	X			X	2	Yes	2	422.83
509	Central Texas	5	X			X	2	Yes	2	422.83
512	McLennan County	5	X			X	2	Yes	2	422.83
513	Taylor	5	X			X	2	Yes	2	422.83
514	Navarro	5	X			X	2	Yes	2	422.83
518	Palo Pinto	5	X				1	Yes	1	211.42
519	Dalworth	5	X			X	2	Yes	2	422.83
520	Fannin County	5	X			X	2	Yes	2	422.83
524	Upper Elm-Red	5	X			X	2	Yes	2	422.83
525	Upper Leon	5	X	X		X	3	Yes	3	634.25
530	Upper Sabine	5	X			X	2	Yes	2	422.83
534	Hill Country	5	X			X	2	Yes	2	422.83
535	Collin County	5	X			X	2	Yes	2	422.83
537	Wilbarger	5	X		X	X	3	Yes	3	634.25
538	Wichita	5	X			X	2	Yes	2	422.83
539	Young	5				X	1	Yes	1	211.42
540	Hill County-Blackland	5	X			X	2	Yes	2	422.83
541	Johnson County	5	X			X	2	Yes	2	422.83
542	Miller-Brazos	5			X	X	2	Yes	2	422.83
543	Throckmorton	5	X			X	2	Yes	2	422.83
544	Wichita-Brazos	5	X	X	X	X	4	Yes	4	845.67
545	California Creek	5	X		X		2	Yes	2	422.83
546	Haskell	5	X	X	X	X	4	Yes	4	845.67
547	Denton County	5	X			X	2	Yes	2	422.83
548	Wise	5	X			X	2	Yes	2	422.83
549	Jack	5	X			X	2	Yes	2	422.83
550	Central Colorado	5	X			X	2	Yes	2	422.83
551	Lower Clear Fork of the Brazos	5	X	X		X	3	Yes	3	634.25
552	Callahan Divide	5	X			X	2	Yes	2	422.83
553	Pecan Bayou	5	X	X		X	3	Yes	3	634.25
554	Mills County	5	X			X	2	Yes	2	422.83
555	Bosque	5	X				1	Yes	1	211.42
556	Cross Timbers	5	X				1	Yes	1	211.42
557	Brazos Valley	5	X				1	Yes	1	211.42
558	Parker County	5	X			X	2	Yes	2	422.83
559	Archer County	5	X			X	2	Yes	2	422.83
560	Little Wichita	5	X			X	2	Yes	2	422.83

FY 07 Ag Water Conservation Grant Allocation (cont.)

SWCD#	SWCD Name	State Zone	Water Needs	Irrigation Conservation Strategies	Principal Irrigation Area	Sediment	Allocation Criteria	Participation	Final Criteria	Allocation \$
Totals			173	88	104	145	510	199	473	100000.00

SWCDs with no criteria 5
 SWCDs not participating 18
 SWCDs participating 199

Total \$ 100,000
 \$/criteria 211.42

Water Needs: From TWDB data. Counties with water needs for 2060
 Irrigation Strategies: From TWDB data. Counties with irrigation water conservation strategies for meeting needs
 Principal Irrigation Areas: From previous subchapter H program
 Sediment: From previous subchapter H program

Appendix II

Estimated Water Savings for BMPs

Source of Estimated Water Savings for BMPs

BMP	Units (ac, ft, etc)	Water Savings (ac ft/unit)	Water Savings-Range	WS Units	Source
4.1 Agricultural Irrigation Water Use Management					
4.1.1 Irrigation Scheduling	ac	0.4	0.3 – 0.5	ac ft/ac	AgBMP Guide
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd			AgBMP Guide
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4	0.25 – 0.5	ac ft/ac	AgBMP Guide
4.1.4 On-Farm Irrigation Audit	farms	nd			AgBMP Guide
4.2 Land Management Systems					
4.2.1 Furrow Dikes	ac	0.18		ac ft/ac	AgBMP Guide ¹
4.2.2 Land Leveling	ac	na			
4.2.3 Contour Farming	ac	na			
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54		ac ft/ac	Irrig Survey Avg
4.2.5 Brush Control/Management	ac	0.45	0.34 – 0.55	ac ft/ac	AgBMP Guide
4.3 On-Farm Water Delivery Systems					
4.3.1 Lining of On-Farm Irrigation Ditches	ft	0.0068	.00606 – .00758	ac ft/ft	AgBMP Guide
4.3.2 Replacement of On-Farm Irrigation Ditches with Pipelines	ft	0.00758		ac ft/ft	AgBMP Guide
4.3.3 Low Pressure Center Pivot Sprinkler Irrigation Systems	ac	0.453			AgBMP Guide ²
4.3.4 Drip/Micro-Irrigation System	ac	na			
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25		ac ft/ac	AgBMP Guide
4.3.6 Surge Flow Irrigation for Field Water Distribution Systems	ac	0.385	0.154 - 0.616	ac ft/ac	AgBMP Guide ³
4.3.7 Linear Move Sprinkler Irrigation Systems	ac	na			
4.4 Water District Delivery Systems					
4.4.1 Lining of District Irrigation Canals	ft	0.0767		ac ft/ft	AgBMP Guide
4.4.2 Replacement of Irrigation District Canals and Lateral Canals with Pipelines	ft	0.051		ac ft/ft	AgBMP Guide
4.5 Miscellaneous Systems					
4.5.1 Tailwater Recovery and Reuse System	ac	1	0.5 – 1.5	ac ft/ac	AgBMP Guide
4.5.2 Nursery Production Systems	ac	na			
Other water conservation: Specify					
Additional Erosion Control Practices					
Conservation Cover	ac	na			
Conservation Crop Rotation	ac	na			
Contour Buffer Strips	ac	na			
Cover & Green Manure Crop	ac	na			
Critical Area Planting	ac	na			
Field Border	ac	na			
Filter Strip	ac	na			
Heavy Use Area Protection	ac	na			
Pasture and Hayland Planting	ac	na			
Stripcropping—Contour	ac	na			
Stripcropping—Field	ac	na			
Terrace	ac	na			
Other erosion control: Specify					

nd-none directly

na-not available

ie-individual estimate

1. 12% savings of 1.54 ac ft/ac

2. BMP formula. A1=1.54. From Low angle impact (60%) to LPIC (85%), fair condition.

3. 10 – 40% of 1.54 ac

Appendix IIIs

SWCD Data

Potential Water Savings from Planned BMPs			Units Planned								
19 Dec 07			Agua Poquita	Alamo	Anderson-Houston	Andrew Kent	Andrews	Archer County	Atascosa County	Austin County	
BMP	Units (ac, ft, etc)	Water savings per unit									
4.1 Agricultural Irrigation Water Use Management											
4.1.1 Irrigation Scheduling	ac	0.4							400		
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd									
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4							800	300	
4.1.4 On-Farm Irrigation Audit	farms	nd									
4.2 Land Management Systems											
4.2.1 Furrow Dikes	ac	0.18									
4.2.2 Land Leveling	ac	na								377	
4.2.3 Contour Farming	ac	na									
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54									
4.2.5 Brush Control/Management	ac	0.45	1500	194		3500	7000		535	350	
4.3 On-Farm Water Delivery Systems											
4.3.1 Lining of On-Farm Irrigation Ditches	ft	0.0068									
4.3.2 Replacement of On-Farm Irrigation Ditches with Pipelines	ft	0.0076		1600						7902	
4.3.3 Replacement of On-Farm Irrigation Ditches with Systems	ac	0.453		15					200		
4.3.4 Drip/Micro-Irrigation System	ac	na							10		
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25									
4.3.6 Surge Flow Irrigation for Field Water Distribution Systems	ac	0.385									
4.3.7 Linear Move Sprinkler Irrigation Systems	ac	na									
4.4 Water District Delivery Systems											
4.4.1 Lining of District Irrigation Canals	ft	0.0767									
4.4.2 Replacement of Irrigation District Canals and Lateral Canals with Pipelines	ft	0.051									
4.5 Miscellaneous Systems											
4.5.1 Tailwater Recovery and Reuse System	ac	1									
4.5.2 Nursery Production Systems	ac	na									
Other water conservation											
Irrigation Reg Resvr. (concrete) (552)	no	na									
Ponds (378)	no	na		3			10				
Erosion Control Practices											
Conservation Cover (327)	ac	na					5261		400		
Conservation Crop Rotation (328)	ac	na					1200		400	300	
Contour Buffer Strips (332)	ac	na									
Contour Stripcropping (585)	ac	na									
Cover & Green Manure Crop (340)	ac	na			20					10	
Critical Area Planting (342)	ac	na			2		200				
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na	15000	5736	1560	3400			17294		
Field Border (386)	ac	na									
Filter Strip (393)	ac	na									
Grade Stabilization Structures (410)	no	na			2						
Grassed Waterway (412)	ac	na					20				
Heavy Use Area Protection (561)	ac	na								30	
Pasture and Hayland Planting (512)	ac	na		571	100		100		291	250	
Pipeline-Livestock Watering (516)	ft	na	2000	5204		300				3500	
Prescribed Grazing (528)	ac	na			200	15000			10000	8000	
Range Planting (550)	ac	na	600				2000		674	200	
Riparian Forest Buffer (391)	ac	na							218	50	
Riparian Herbaceous Cover (390)	ac	na									
Stripcropping—Field (586)	ac	na									
Terrace (600)	ft	na					800				
Tree/Shrub Establishment (612)	ac	na			90						
Underground Outlets (620)	ft	na								10000	
Watering Facility (614)	no	na					4		2		
nd-none directly											

Potential Water Savings from Planned BMPs											
19 Dec 07											
BMP	Units (ac. ft, etc)	Water savings per unit	Bandera	Bastrop County	Bedias Creek	Big Bend	Blackwater Valley	Bosque	Bowie County	Brazos County	
4.1 Agricultural Irrigation Water Use Management											
4.1.1 Irrigation Scheduling	ac	0.4					3000			195	
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd									
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4		100			1800			1391	
4.1.4 On-Farm Irrigation Audit	farms	nd									
4.2 Land Management Systems											
4.2.1 Furrow Dikes	ac	0.18									
4.2.2 Land Leveling	ac	na									
4.2.3 Contour Farming	ac	na		200			300				
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54									
4.2.5 Brush Control/Management	ac	0.45	500	310			1500			217	
4.3 On-Farm Water Delivery Systems											
4.3.1 Lining of On-Farm Irrigation Ditches	ft	0.0068								800	
4.3.2 Replacement of On-Farm Irrigation Ditches with Pipelines	ft	0.0076									
4.3.3 Systems	ac	0.453					1000				
4.3.4 Drip/Micro-Irrigation System	ac	na					40				
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25									
4.3.6 Surge Flow Irrigation for Field Water Distribution Systems	ac	0.385									
4.3.7 Linear Move Sprinkler Irrigation Systems	ac	na								1	
4.4 Water District Delivery Systems											
4.4.1 Lining of District Irrigation Canals	ft	0.0767									
4.4.2 Replacement of Irrigation District Canals and Lateral Canals with Pipelines	ft	0.051									
4.5 Miscellaneous Systems											
4.5.1 Tailwater Recovery and Reuse System	ac	1									
4.5.2 Nursery Production Systems	ac	na									
Other water conservation											
Irrigation Reg Resvr. (concrete) (552)	no	na									
Ponds (378)	no	na		4	5					7	
Erosion Control Practices											
Conservation Cover (327)	ac	na		200			1800				
Conservation Crop Rotation (328)	ac	na		200			4000			1395	
Contour Buffer Strips (332)	ac	na									
Contour Stripcropping (585)	ac	na									
Cover & Green Manure Crop (340)	ac	na									
Critical Area Planting (342)	ac	na	2				25		222	7	
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na		12475					2110	41990	
Field Border (386)	ac	na									
Filter Strip (393)	ac	na					25				
Grade Stabilization Structures (410)	no	na					5			1	
Grassed Waterway (412)	ac	na					500				
Heavy Use Area Protection (561)	ac	na									
Pasture and Hayland Planting (512)	ac	na	25	350					320	527	
Pipeline-Livestock Watering (516)	ft	na		5930					212	5400	
Prescribed Grazing (528)	ac	na		4000	75					4381	
Range Planting (550)	ac	na								20	
Riparian Forest Buffer (391)	ac	na		21						5	
Riparian Herbaceous Cover (390)	ac	na									
Stripcropping—Field (586)	ac	na									
Terrace (600)	ft	na					475				
Tree/Shrub Establishment (612)	ac	na			50				564		
Underground Outlets (620)	ft	na									
Watering Facility (614)	no	na		10					2		
nd-none directly											

Potential Water Savings from Planned BMPs											
19 Dec 07											
BMP	Units (ac, ft, etc)	Water savings per unit	Brazos Valley	Caldwell- Travis	Calhoun	California Creek	Callahan Divide	Canadian River	Cap Rock	Central Colorado	
4.1 Agricultural Irrigation Water Use Management											
4.1.1 Irrigation Scheduling	ac	0.4							483		
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd							8		
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4				50000					
4.1.4 On-Farm Irrigation Audit	farms	nd									
4.2 Land Management Systems											
4.2.1 Furrow Dikes	ac	0.18									
4.2.2 Land Leveling	ac	na									
4.2.3 Contour Farming	ac	na				100000					
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54									
4.2.5 Brush Control/Management	ac	0.45		1670	862	1400	6000		2300	5250	
4.3 On-Farm Water Delivery Systems											
4.3.1 Lining of On-Farm Irrigation Ditches	ft	0.0068									
4.3.2 Replacement of On-Farm Irrigation Ditches with Pipelines	ft	0.0076									
4.3.3 Replacement of On-Farm Irrigation Ditches with Systems	ac	0.453							183		
4.3.4 Drip/Micro-Irrigation System	ac	na				150			300		
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25									
4.3.6 Surge Flow Irrigation for Field Water Distribution Systems	ac	0.385									
4.3.7 Linear Move Sprinkler Irrigation Systems	ac	na									
4.4 Water District Delivery Systems											
4.4.1 Lining of District Irrigation Canals	ft	0.0767									
4.4.2 Replacement of Irrigation District Canals and Lateral Canals with Pipelines	ft	0.051									
4.5 Miscellaneous Systems											
4.5.1 Tailwater Recovery and Reuse System	ac	1									
4.5.2 Nursery Production Systems	ac	na									
Other water conservation											
Irrigation Reg Resvr. (concrete) (552)	no	na									
Ponds (378)	no	na		6		4	3				
Erosion Control Practices											
Conservation Cover (327)	ac	na				800	110		361		
Conservation Crop Rotation (328)	ac	na				75000	492				
Contour Buffer Strips (332)	ac	na									
Contour Stripcropping (585)	ac	na									
Cover & Green Manure Crop (340)	ac	na									
Critical Area Planting (342)	ac	na									
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na		1600	7260	11000	49000		7521		
Field Border (386)	ac	na									
Filter Strip (393)	ac	na									
Grade Stabilization Structures (410)	no	na									
Grassed Waterway (412)	ac	na		5		11					
Heavy Use Area Protection (561)	ac	na									
Pasture and Hayland Planting (512)	ac	na		1670	209	500			361		
Pipeline-Livestock Watering (516)	ft	na			10098	13000	4200		21000		
Prescribed Grazing (528)	ac	na		3150	310		2700				
Range Planting (550)	ac	na		70		700					
Riparian Forest Buffer (391)	ac	na		200							
Riparian Herbaceous Cover (390)	ac	na									
Stripcropping—Field (586)	ac	na									
Terrace (600)	ft	na		12000		2500			9811		
Tree/Shrub Establishment (612)	ac	na									
Underground Outlets (620)	ft	na									
Watering Facility (614)	no	na				3	2		9		
nd-none directly											

Potential Water Savings from Planned BMPs											
19 Dec 07											
BMP	Units (ac, ft, etc)	Water savings per unit	Central Texas	Cherokee County	Coastal	Coastal Plains	Cochran	Coke County	Collin County	Comal- Guadalupe	
4.1 Agricultural Irrigation Water Use Management											
4.1.1 Irrigation Scheduling	ac	0.4									
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd									
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4	10000		5800	714					
4.1.4 On-Farm Irrigation Audit	farms	nd									
4.2 Land Management Systems											
4.2.1 Furrow Dikes	ac	0.18									
4.2.2 Land Leveling	ac	na			2920	465					
4.2.3 Contour Farming	ac	na	5400								
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54									
4.2.5 Brush Control/Management	ac	0.45	1500			1048	2057	4038		1291	
4.3 On-Farm Water Delivery Systems											
4.3.1 Lining of On-Farm Irrigation Ditches	ft	0.0068									
4.3.2 Replacement of On-Farm Irrigation Ditches with Pipelines	ft	0.0076					3753				
4.3.3 Replacement of On-Farm Irrigation Ditches with Systems	ac	0.453					1940				
4.3.4 Drip/Micro-Irrigation System	ac	na					18				
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25									
4.3.6 Surge Flow Irrigation for Field Water Distribution Systems	ac	0.385									
4.3.7 Linear Move Sprinkler Irrigation Systems	ac	na					1696				
4.4 Water District Delivery Systems											
4.4.1 Lining of District Irrigation Canals	ft	0.0767									
4.4.2 Replacement of Irrigation District Canals and Lateral Canals with Pipelines	ft	0.051									
4.5 Miscellaneous Systems											
4.5.1 Tailwater Recovery and Reuse System	ac	1									
4.5.2 Nursery Production Systems	ac	na									
Other water conservation											
Irrigation Reg Resvr. (concrete) (552)	no	na									
Ponds (378)	no	na	15							1	
Erosion Control Practices											
Conservation Cover (327)	ac	na					3976	1647	860		
Conservation Crop Rotation (328)	ac	na	6000		14750	714			1020		
Contour Buffer Strips (332)	ac	na	100								
Contour Stripcropping (585)	ac	na									
Cover & Green Manure Crop (340)	ac	na									
Critical Area Planting (342)	ac	na	50						20	17	
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na	20000			14815				7270	
Field Border (386)	ac	na									
Filter Strip (393)	ac	na									
Grade Stabilization Structures (410)	no	na	2			4					
Grassed Waterway (412)	ac	na	30							42	
Heavy Use Area Protection (561)	ac	na			109	16			6		
Pasture and Hayland Planting (512)	ac	na	800		718	419			160	1222	
Pipeline-Livestock Watering (516)	ft	na	3000			7541				3950	
Prescribed Grazing (528)	ac	na	5000		15281	4168		2962			
Range Planting (550)	ac	na	250					100		550	
Riparian Forest Buffer (391)	ac	na									
Riparian Herbaceous Cover (390)	ac	na									
Stripcropping—Field (586)	ac	na									
Terrace (600)	ft	na	75000							85300	
Tree/Shrub Establishment (612)	ac	na			101						
Underground Outlets (620)	ft	na									
Watering Facility (614)	no	na	4			9					
nd-none directly											

Potential Water Savings from Planned BMPs											
19 Dec 07											
BMP	Units (ac, ft, etc)	Water savings per unit	Concho	Copano Bay	Cottle	Cross Timbers	Dalworth	Davy Crockett- Trinity	Delta	Denton County	
4.1 Agricultural Irrigation Water Use Management											
4.1.1 Irrigation Scheduling	ac	0.4									
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd									
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4	47000		5000				905		
4.1.4 On-Farm Irrigation Audit	farms	nd									
4.2 Land Management Systems											
4.2.1 Furrow Dikes	ac	0.18									
4.2.2 Land Leveling	ac	na									
4.2.3 Contour Farming	ac	na	100000		5000				175		
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54									
4.2.5 Brush Control/Management	ac	0.45	7300	3221	5000						
4.3 On-Farm Water Delivery Systems											
4.3.1 Lining of On-Farm Irrigation Ditches	ft	0.0068									
4.3.2 Replacement of On-Farm Irrigation Ditches with Pipelines	ft	0.0076									
4.3.3 Replacement of On-Farm Irrigation Ditches with Systems	ac	0.453	370								
4.3.4 Drip/Micro-Irrigation System	ac	na	40								
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25									
4.3.6 Surge Flow Irrigation for Field Water Distribution Systems	ac	0.385									
4.3.7 Linear Move Sprinkler Irrigation Systems	ac	na									
4.4 Water District Delivery Systems											
4.4.1 Lining of District Irrigation Canals	ft	0.0767									
4.4.2 Replacement of Irrigation District Canals and Lateral Canals with Pipelines	ft	0.051									
4.5 Miscellaneous Systems											
4.5.1 Tailwater Recovery and Reuse System	ac	1									
4.5.2 Nursery Production Systems	ac	na									
Other water conservation											
Irrigation Reg Resvr. (concrete) (552)	no	na									
Ponds (378)	no	na					1		19		
Erosion Control Practices											
Conservation Cover (327)	ac	na	4000		600		13	115			
Conservation Crop Rotation (328)	ac	na	135000		5000		100	70	795		
Contour Buffer Strips (332)	ac	na			100				48		
Contour Stripcropping (585)	ac	na									
Cover & Green Manure Crop (340)	ac	na									
Critical Area Planting (342)	ac	na			100				65		
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na	7113	19366	50000		1400	10200	3240		
Field Border (386)	ac	na			30		40				
Filter Strip (393)	ac	na			50		40		27		
Grade Stabilization Structures (410)	no	na							1		
Grassed Waterway (412)	ac	na	8				3		7		
Heavy Use Area Protection (561)	ac	na			400						
Pasture and Hayland Planting (512)	ac	na	250	200	600		20	2287	175	500	
Pipeline-Livestock Watering (516)	ft	na	5698		5000		500				
Prescribed Grazing (528)	ac	na	40000		20000		260	3317		1000	
Range Planting (550)	ac	na	900		500					1000	
Riparian Forest Buffer (391)	ac	na	110								
Riparian Herbaceous Cover (390)	ac	na	425								
Stripcropping—Field (586)	ac	na			100						
Terrace (600)	ft	na	75000		660				12300		
Tree/Shrub Establishment (612)	ac	na			30		5	185	50		
Underground Outlets (620)	ft	na									
Watering Facility (614)	no	na	6		10						
nd-none directly											

Potential Water Savings from Planned BMPs											
19 Dec 07											
BMP	Units (ac, ft, etc)	Water savings per unit	Devil's River	DeWitt County	Dimmit County	Donley County	Duck Creek	Edwards Plateau	El Paso- Hudspeth	Eldorado Divide	
4.1 Agricultural Irrigation Water Use Management											
4.1.1 Irrigation Scheduling	ac	0.4					320				
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd					3				
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4	20				4260				
4.1.4 On-Farm Irrigation Audit	farms	nd					3				
4.2 Land Management Systems											
4.2.1 Furrow Dikes	ac	0.18					15000				
4.2.2 Land Leveling	ac	na	10								
4.2.3 Contour Farming	ac	na					44000				
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54									
4.2.5 Brush Control/Management	ac	0.45	800	2815	500		9760	5000		3000	
4.3 On-Farm Water Delivery Systems											
4.3.1 Lining of On-Farm Irrigation Ditches	ft	0.0068									
4.3.2 Replacement of On-Farm Irrigation Ditches with Pipelines	ft	0.0076									
4.3.3 Replacement of On-Farm Irrigation Ditches with Systems	ac	0.453									
4.3.4 Drip/Micro-Irrigation System	ac	na									
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25									
4.3.6 Surge Flow Irrigation for Field Water Distribution Systems	ac	0.385									
4.3.7 Linear Move Sprinkler Irrigation Systems	ac	na									
4.4 Water District Delivery Systems											
4.4.1 Lining of District Irrigation Canals	ft	0.0767									
4.4.2 Replacement of Irrigation District Canals and Lateral Canals with Pipelines	ft	0.051									
4.5 Miscellaneous Systems											
4.5.1 Tailwater Recovery and Reuse System	ac	1									
4.5.2 Nursery Production Systems	ac	na									
Other water conservation											
Irrigation Reg Resvr. (concrete) (552)	no	na									
Ponds (378)	no	na		17							
Erosion Control Practices											
Conservation Cover (327)	ac	na	50				23000	500			
Conservation Crop Rotation (328)	ac	na						500			
Contour Buffer Strips (332)	ac	na									
Contour Stripcropping (585)	ac	na									
Cover & Green Manure Crop (340)	ac	na									
Critical Area Planting (342)	ac	na						105000			
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na		98800			9680				
Field Border (386)	ac	na									
Filter Strip (393)	ac	na									
Grade Stabilization Structures (410)	no	na									
Grassed Waterway (412)	ac	na									
Heavy Use Area Protection (561)	ac	na									
Pasture and Hayland Planting (512)	ac	na	30				1760	280			
Pipeline-Livestock Watering (516)	ft	na					23500	10560		5000	
Prescribed Grazing (528)	ac	na					108500	133000			
Range Planting (550)	ac	na					760	775			
Riparian Forest Buffer (391)	ac	na						300			
Riparian Herbaceous Cover (390)	ac	na									
Stripcropping—Field (586)	ac	na									
Terrace (600)	ft	na		7800			16000				
Tree/Shrub Establishment (612)	ac	na					1				
Underground Outlets (620)	ft	na									
Watering Facility (614)	no	na		10			28	135		1	
nd-none directly											

Potential Water Savings from Planned BMPs											
19 Dec 07											
BMP	Units (ac, ft, etc)	Water savings per unit	Ellis- Prairie	Fannin County	Fayette	Floyd County	Foard County	Freestone County	Frio	Gaines County	
4.1 Agricultural Irrigation Water Use Management											
4.1.1 Irrigation Scheduling	ac	0.4				8888	160			2900	
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd					3				
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4				568					
4.1.4 On-Farm Irrigation Audit	farms	nd									
4.2 Land Management Systems											
4.2.1 Furrow Dikes	ac	0.18									
4.2.2 Land Leveling	ac	na									
4.2.3 Contour Farming	ac	na	360								
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54									
4.2.5 Brush Control/Management	ac	0.45	925		30	746	3387	553	2000		
4.3 On-Farm Water Delivery Systems											
4.3.1 Lining of On-Farm Irrigation Ditches	ft	0.0068									
4.3.2 Replacement of On-Farm Irrigation Ditches with Pipelines	ft	0.0076				81565					
4.3.3 Replacement of On-Farm Irrigation Ditches with Systems	ac	0.453				5816	160		300	1800	
4.3.4 Drip/Micro-Irrigation System	ac	na				429			50	60	
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25									
4.3.6 Surge Flow Irrigation for Field Water Distribution Systems	ac	0.385									
4.3.7 Linear Move Sprinkler Irrigation Systems	ac	na									
4.4 Water District Delivery Systems											
4.4.1 Lining of District Irrigation Canals	ft	0.0767									
4.4.2 Replacement of Irrigation District Canals and Lateral Canals with Pipelines	ft	0.051									
4.5 Miscellaneous Systems											
4.5.1 Tailwater Recovery and Reuse System	ac	1									
4.5.2 Nursery Production Systems	ac	na									
Other water conservation											
Irrigation Reg Resrv. (concrete) (552)	no	na									
Ponds (378)	no	na	5		13		3	3			
Erosion Control Practices											
Conservation Cover (327)	ac	na				8591			4000		
Conservation Crop Rotation (328)	ac	na	5000			445			10000		
Contour Buffer Strips (332)	ac	na									
Contour Stripcropping (585)	ac	na									
Cover & Green Manure Crop (340)	ac	na									
Critical Area Planting (342)	ac	na	10		4			3			
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na			3000		6900	10560			
Field Border (386)	ac	na									
Filter Strip (393)	ac	na									
Grade Stabilization Structures (410)	no	na	3								
Grassed Waterway (412)	ac	na	15				18				
Heavy Use Area Protection (561)	ac	na									
Pasture and Hayland Planting (512)	ac	na	400	700	20	316	566		1000	360	
Pipeline-Livestock Watering (516)	ft	na			1500	2640	26550				
Prescribed Grazing (528)	ac	na	3500		600	3539					
Range Planting (550)	ac	na	150								
Riparian Forest Buffer (391)	ac	na									
Riparian Herbaceous Cover (390)	ac	na									
Stripcropping- Field (586)	ac	na									
Terrace (600)	ft	na	8000		300		173200				
Tree/Shrub Establishment (612)	ac	na									
Underground Outlets (620)	ft	na	2								
Watering Facility (614)	no	na			2		12				
nd-none directly											

Potential Water Savings from Planned BMPs										
19 Dec 07										
BMP	Units (ac, ft, etc)	Water savings per unit	Garza	Gonzales County	Gray County	Hale County	Hall- Childress	Hamilton- Coryell	Hansford	Harris County
4.1 Agricultural Irrigation Water Use Management										
4.1.1 Irrigation Scheduling	ac	0.4					780			
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd								
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4				1107	40000		1500	
4.1.4 On-Farm Irrigation Audit	farms	nd					3			
4.2 Land Management Systems										
4.2.1 Furrow Dikes	ac	0.18					3000			
4.2.2 Land Leveling	ac	na								
4.2.3 Contour Farming	ac	na					450000			
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54				256				
4.2.5 Brush Control/Management	ac	0.45	3,628	75			4000			917
4.3 On-Farm Water Delivery Systems										
4.3.1 Lining of On-Farm Irrigation Ditches	ft	0.0068								
4.3.2 Replacement of On-Farm Irrigation Ditches with Pipelines	ft	0.0076				134153				
4.3.3 Replacement of On-Farm Irrigation Ditches with Systems	ac	0.453			123	7493	4		1450	
4.3.4 Drip/Micro-Irrigation System	ac	na	80			685	2			
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25								
4.3.6 Surge Flow Irrigation for Field Water Distribution Systems	ac	0.385								
4.3.7 Linear Move Sprinkler Irrigation Systems	ac	na								
4.4 Water District Delivery Systems										
4.4.1 Lining of District Irrigation Canals	ft	0.0767								
4.4.2 Replacement of Irrigation District Canals and Lateral Canals with Pipelines	ft	0.051					2000			
4.5 Miscellaneous Systems										
4.5.1 Tailwater Recovery and Reuse System	ac	1								
4.5.2 Nursery Production Systems	ac	na								
Other water conservation										
Irrigation Reg Resvr. (concrete) (552)	no	na								
Ponds (378)	no	na	2				2			2
Erosion Control Practices										
Conservation Cover (327)	ac	na	4068	150		238	4000			
Conservation Crop Rotation (328)	ac	na		150						
Contour Buffer Strips (332)	ac	na								
Contour Stripcropping (585)	ac	na								
Cover & Green Manure Crop (340)	ac	na					25000			
Critical Area Planting (342)	ac	na								
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na	26400	1500	5452		15000		10000	9620
Field Border (386)	ac	na								
Filter Strip (393)	ac	na								
Grade Stabilization Structures (410)	no	na								
Grassed Waterway (412)	ac	na					3			
Heavy Use Area Protection (561)	ac	na								
Pasture and Hayland Planting (512)	ac	na	158				2500			
Pipeline-Livestock Watering (516)	ft	na	32100	1200	5526	256	15000			770
Prescribed Grazing (528)	ac	na	10117		97953		40000			
Range Planting (550)	ac	na	40				1000			
Riparian Forest Buffer (391)	ac	na								
Riparian Herbaceous Cover (390)	ac	na								
Stripcropping—Field (586)	ac	na					12000			
Terrace (600)	ft	na					45000			
Tree/Shrub Establishment (612)	ac	na								
Underground Outlets (620)	ft	na					20			
Watering Facility (614)	no	na	12		7		12			
nd-none directly										

Potential Water Savings from Planned BMPs			Harrison County	Hartley	Haskell	Hays County	Hemphill	Hidalgo	High Point	Highland
BMP	Units (ac, ft, etc)	Water savings per unit								
19 Dec 07										
4.1 Agricultural Irrigation Water Use Management										
4.1.1 Irrigation Scheduling	ac	0.4								
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd								
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4			3500	150				
4.1.4 On-Farm Irrigation Audit	farms	nd								
4.2 Land Management Systems										
4.2.1 Furrow Dikes	ac	0.18								
4.2.2 Land Leveling	ac	na						225	85	
4.2.3 Contour Farming	ac	na			12500	150				
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54								
4.2.5 Brush Control/Management	ac	0.45			6100	1600			800	2819
4.3 On-Farm Water Delivery Systems										
4.3.1 Lining of On-Farm Irrigation Ditches	ft	0.0068								
4.3.2 Replacement of On-Farm Irrigation Ditches with Pipelines	ft	0.0076						840		
4.3.3 Replacement of On-Farm Irrigation Ditches with Systems	ac	0.453			3700	32			90	
4.3.4 Drip/Micro-Irrigation System	ac	na			35					
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25								
4.3.6 Surge Flow Irrigation for Field Water Distribution Systems	ac	0.385								
4.3.7 Linear Move Sprinkler Irrigation Systems	ac	na			100					
4.4 Water District Delivery Systems										
4.4.1 Lining of District Irrigation Canals	ft	0.0767								
4.4.2 Replacement of Irrigation District Canals and Lateral Canals with Pipelines	ft	0.051								
4.5 Miscellaneous Systems										
4.5.1 Tailwater Recovery and Reuse System	ac	1								
4.5.2 Nursery Production Systems	ac	na								
Other water conservation										
Irrigation Reg Resvr. (concrete) (552)	no	na								
Ponds (378)	no	na			2	3				
Erosion Control Practices										
Conservation Cover (327)	ac	na			550					
Conservation Crop Rotation (328)	ac	na			12500	150				
Contour Buffer Strips (332)	ac	na								
Contour Stripcropping (585)	ac	na								
Cover & Green Manure Crop (340)	ac	na			500					
Critical Area Planting (342)	ac	na								
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na							17500	
Field Border (386)	ac	na								
Filter Strip (393)	ac	na								
Grade Stabilization Structures (410)	no	na								
Grassed Waterway (412)	ac	na					2			
Heavy Use Area Protection (561)	ac	na								
Pasture and Hayland Planting (512)	ac	na	150		200			35		
Pipeline-Livestock Watering (516)	ft	na							50363	4400
Prescribed Grazing (528)	ac	na								115497
Range Planting (550)	ac	na								
Riparian Forest Buffer (391)	ac	na								
Riparian Herbaceous Cover (390)	ac	na								
Stripcropping - Field (586)	ac	na								
Terrace (600)	ft	na			150					
Tree/Shrub Establishment (612)	ac	na	450	10						
Underground Outlets (620)	ft	na								
Watering Facility (614)	no	na		1					7	2
nd-none directly										

Potential Water Savings from Planned BMPs										
19 Dec 07										
BMP	Units (ac, ft, etc)	Water savings per unit	Hill Country	Hill County- Blackland	Hockley County	Hopkins- Rains	Howard	Hutchinson	Jack	Jackson
4.1 Agricultural Irrigation Water Use Management										
4.1.1 Irrigation Scheduling	ac	0.4								900
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd			20					
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4			1200					
4.1.4 On-Farm Irrigation Audit	farms	nd								
4.2 Land Management Systems										
4.2.1 Furrow Dikes	ac	0.18			1400					
4.2.2 Land Leveling	ac	na								200
4.2.3 Contour Farming	ac	na			2000		640			
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54			100					
4.2.5 Brush Control/Management	ac	0.45			6000		2000	564	200	1450
4.3 On-Farm Water Delivery Systems										
4.3.1 Lining of On-Farm Irrigation Ditches	ft	0.0068								
4.3.2 Replacement of On-Farm Irrigation Ditches with Pipelines	ft	0.0076			10000					5000
4.3.3 Replacement of On-Farm Irrigation Ditches with Systems	ac	0.453			1100			257		
4.3.4 Drip/Micro-Irrigation System	ac	na			1200			216		
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25								
4.3.6 Surge Flow Irrigation for Field Water Distribution Systems	ac	0.385								
4.3.7 Linear Move Sprinkler Irrigation Systems	ac	na								
4.4 Water District Delivery Systems										
4.4.1 Lining of District Irrigation Canals	ft	0.0767								
4.4.2 Replacement of Irrigation District Canals and Lateral Canals with Pipelines	ft	0.051								
4.5 Miscellaneous Systems										
4.5.1 Tailwater Recovery and Reuse System	ac	1								
4.5.2 Nursery Production Systems	ac	na								
Other water conservation										
Irrigation Reg Resvr. (concrete) (552)	no	na								
Ponds (378)	no	na			6		2			2
Erosion Control Practices										
Conservation Cover (327)	ac	na		2000	1000		500	606		
Conservation Crop Rotation (328)	ac	na		6000	1000					2600
Contour Buffer Strips (332)	ac	na								
Contour Stripcropping (585)	ac	na								
Cover & Green Manure Crop (340)	ac	na			500					
Critical Area Planting (342)	ac	na								
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na		6000				99319		19280
Field Border (386)	ac	na								12700
Filter Strip (393)	ac	na								
Grade Stabilization Structures (410)	no	na			4					11
Grassed Waterway (412)	ac	na			25			6		
Heavy Use Area Protection (561)	ac	na								
Pasture and Hayland Planting (512)	ac	na				100				400
Pipeline-Livestock Watering (516)	ft	na						42850		9400
Prescribed Grazing (528)	ac	na						8567	300	6462
Range Planting (550)	ac	na								70
Riparian Forest Buffer (391)	ac	na								98
Riparian Herbaceous Cover (390)	ac	na								
Stripcropping—Field (586)	ac	na				300				
Terrace (600)	ft	na		10000	200			7300		
Tree/Shrub Establishment (612)	ac	na								
Underground Outlets (620)	ft	na								
Watering Facility (614)	no	na						21		6
nd-none directly										

Potential Water Savings from Planned BMPs											
19 Dec 07											
BMP	Units (ac, ft, etc)	Water savings per unit	Jasper- Newton	Jim Wells County	Johnson County	Karnes County	Kaufman- Van Zandt	Kendall	Kerr County	King	
4.1 Agricultural Irrigation Water Use Management											
4.1.1 Irrigation Scheduling	ac	0.4									
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd									
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4					800			5000	
4.1.4 On-Farm Irrigation Audit	farms	nd									
4.2 Land Management Systems											
4.2.1 Furrow Dikes	ac	0.18									
4.2.2 Land Leveling	ac	na									
4.2.3 Contour Farming	ac	na				600	1200			5000	
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54									
4.2.5 Brush Control/Management	ac	0.45	650	425		1746	3000	3399	1280	30000	
4.3 On-Farm Water Delivery Systems											
4.3.1 Lining of On-Farm Irrigation Ditches	ft	0.0068									
4.3.2 Replacement of On-Farm Irrigation Ditches with Pipelines	ft	0.0076									
Systems	ac	0.453									
4.3.4 Drip/Micro-Irrigation System	ac	na									
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25									
4.3.6 Surge Flow Irrigation for Field Water Distribution Systems	ac	0.385									
4.3.7 Linear Move Sprinkler Irrigation Systems	ac	na									
4.4 Water District Delivery Systems											
4.4.1 Lining of District Irrigation Canals	ft	0.0767									
4.4.2 Replacement of Irrigation District Canals and Lateral Canals with Pipelines	ft	0.051									
4.5 Miscellaneous Systems											
4.5.1 Tailwater Recovery and Reuse System	ac	1									
4.5.2 Nursery Production Systems	ac	na									
Other water conservation											
Irrigation Reg Resrv. (concrete) (552)	no	na	15								
Ponds (378)	no	na				7	40				
Erosion Control Practices											
Conservation Cover (327)	ac	na		1547			120		290	600	
Conservation Crop Rotation (328)	ac	na		11281		800	1200			5000	
Contour Buffer Strips (332)	ac	na								100	
Contour Stripcropping (585)	ac	na									
Cover & Green Manure Crop (340)	ac	na					1000				
Critical Area Planting (342)	ac	na	225			10	800		156	100	
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na		18321		20121	1600				
Field Border (386)	ac	na					5			30	
Filter Strip (393)	ac	na					5			30	
Grade Stabilization Structures (410)	no	na									
Grassed Waterway (412)	ac	na					12	25			
Heavy Use Area Protection (561)	ac	na					3			400	
Pasture and Hayland Planting (512)	ac	na	350	15		902	1800			600	
Pipeline-Livestock Watering (516)	ft	na		5123		10840					
Prescribed Grazing (528)	ac	na	1200	501		15000	2000				
Range Planting (550)	ac	na		27		726	500				
Riparian Forest Buffer (391)	ac	na	30								
Riparian Herbaceous Cover (390)	ac	na									
Stripcropping – Field (586)	ac	na									
Terrace (600)	ft	na				10000				660	
Tree/Shrub Establishment (612)	ac	na	1100								
Underground Outlets (620)	ft	na									
Watering Facility (614)	no	na		13		13					
nd-none directly											

Potential Water Savings from Planned BMPs										
19 Dec 07										
BMP	Units (ac, ft, etc)	Water savings per unit	Kleberg- Kenedy	La Salle County	Lamar	Lamb County	Lavaca	Lee County	Limestone Falls	Lipscomb
4.1 Agricultural Irrigation Water Use Management										
4.1.1 Irrigation Scheduling	ac	0.4				2200				
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd								
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4	5000			65000			6000	3200
4.1.4 On-Farm Irrigation Audit	farms	nd								
4.2 Land Management Systems										
4.2.1 Furrow Dikes	ac	0.18				130000				
4.2.2 Land Leveling	ac	na								
4.2.3 Contour Farming	ac	na				21400			5500	434
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54								
4.2.5 Brush Control/Management	ac	0.45	1000	2505			800	350	9800	1600
4.3 On-Farm Water Delivery Systems										
4.3.1 Lining of On-Farm Irrigation Ditches	ft	0.0068								
4.3.2 Replacement of On-Farm Irrigation Ditches with Pipelines	ft	0.0076				5000				
4.3.3 Replacement of On-Farm Irrigation Ditches with Systems	ac	0.453				4000				
4.3.4 Drip/Micro-Irrigation System	ac	na				2000				
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25				200				
4.3.6 Surge Flow Irrigation for Field Water Distribution Systems	ac	0.385				200				
4.3.7 Linear Move Sprinkler Irrigation Systems	ac	na				200				
4.4 Water District Delivery Systems										
4.4.1 Lining of District Irrigation Canals	ft	0.0767								
4.4.2 Replacement of Irrigation District Canals and Lateral Canals with Pipelines	ft	0.051								
4.5 Miscellaneous Systems										
4.5.1 Tailwater Recovery and Reuse System	ac	1								
4.5.2 Nursery Production Systems	ac	na								
Other water conservation										
Irrigation Reg Resvr. (concrete) (552)	no	na								
Ponds (378)	no	na			10		20		14	
Erosion Control Practices										
Conservation Cover (327)	ac	na	10000		1000	2000		50	100	
Conservation Crop Rotation (328)	ac	na				130000			6000	
Contour Buffer Strips (332)	ac	na							56	
Contour Stripcropping (585)	ac	na								
Cover & Green Manure Crop (340)	ac	na				2500				
Critical Area Planting (342)	ac	na			10		100		47	
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na	9264	17160					13400	
Field Border (386)	ac	na							15	
Filter Strip (393)	ac	na						50	9	
Grade Stabilization Structures (410)	no	na			2					
Grassed Waterway (412)	ac	na			10				12	
Heavy Use Area Protection (561)	ac	na					40			
Pasture and Hayland Planting (512)	ac	na	350		500	3000	1000	350	1800	
Pipeline-Livestock Watering (516)	ft	na		9005						
Prescribed Grazing (528)	ac	na		1000	1000				3700	
Range Planting (550)	ac	na							600	
Riparian Forest Buffer (391)	ac	na			30					
Riparian Herbaceous Cover (390)	ac	na								
Stripcropping--Field (586)	ac	na								
Terrace (600)	ft	na			15000	200		50		
Tree/Shrub Establishment (612)	ac	na			30					
Underground Outlets (620)	ft	na								
Watering Facility (614)	no	na		1						
nd-none directly										

Potential Water Savings from Planned BMPs										
19 Dec 07										
BMP	Units (ac, ft, etc)	Water savings per unit	Little River-San Gabriel	Little Wichita	Live Oak	Llano County	Clear Fork of the Brazos	Lower Neches	Lower Pease River	Lower Sabine- Neches
4.1 Agricultural Irrigation Water Use Management										
4.1.1 Irrigation Scheduling	ac	0.4								
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd								
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4		500			3044			
4.1.4 On-Farm Irrigation Audit	farms	nd								
4.2 Land Management Systems										
4.2.1 Furrow Dikes	ac	0.18								
4.2.2 Land Leveling	ac	na								
4.2.3 Contour Farming	ac	na		200			1550			
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54								
4.2.5 Brush Control/Management	ac	0.45		400	1400	2110	39727	1615	3401	400
4.3 On-Farm Water Delivery Systems										
4.3.1 Lining of On-Farm Irrigation Ditches	ft	0.0068								
4.3.2 Replacement of On-Farm Irrigation Ditches with Pipelines	ft	0.0076							3250	
Systems	ac	0.453							1628	
4.3.4 Drip/Micro-Irrigation System	ac	na								
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25								
4.3.6 Surge Flow Irrigation for Field Water Distribution Systems	ac	0.385								
4.3.7 Linear Move Sprinkler Irrigation Systems	ac	na								
4.4 Water District Delivery Systems										
4.4.1 Lining of District Irrigation Canals	ft	0.0767								
4.4.2 Replacement of Irrigation District Canals and Lateral Canals with Pipelines	ft	0.051								
4.5 Miscellaneous Systems										
4.5.1 Tailwater Recovery and Reuse System	ac	1								
4.5.2 Nursery Production Systems	ac	na								
Other water conservation										
Irrigation Reg Resrv. (concrete) (552)	no	na								
Ponds (378)	no	na		4			3	2		4
Erosion Control Practices										
Conservation Cover (327)	ac	na	300	100			261			782
Conservation Crop Rotation (328)	ac	na					3044			
Contour Buffer Strips (332)	ac	na	30	400				412		
Contour Stripcropping (585)	ac	na								
Cover & Green Manure Crop (340)	ac	na								
Critical Area Planting (342)	ac	na	10	2	9					
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na		2500			4800		86710	3000
Field Border (386)	ac	na	4							
Filter Strip (393)	ac	na	20							
Grade Stabilization Structures (410)	no	na								
Grassed Waterway (412)	ac	na					10		12	
Heavy Use Area Protection (561)	ac	na								12
Pasture and Hayland Planting (512)	ac	na	60	100	420			131	4987	150
Pipeline-Livestock Watering (516)	ft	na			11300		26242		25660	
Prescribed Grazing (528)	ac	na		1500	2000		75882	1280		1675
Range Planting (550)	ac	na		100	744		483		1128	
Riparian Forest Buffer (391)	ac	na		100						
Riparian Herbaceous Cover (390)	ac	na		100						
Stripcropping—Field (586)	ac	na								
Terrace (600)	ft	na	150	750					8400	
Tree/Shrub Establishment (612)	ac	na						2100		
Underground Outlets (620)	ft	na								
Watering Facility (614)	no	na					4			3
nd-none directly										

Potential Water Savings from Planned BMPs											
19 Dec 07											
BMP	Units (ac, ft, etc)	Water savings per unit	Lower Trinity	Lubbock County	Lynn County	Marion- Cass	Mason County	Matagord a County	Maverick	McClellan Creek	
4.1 Agricultural Irrigation Water Use Management											
4.1.1 Irrigation Scheduling	ac	0.4		57			100				
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd		30							
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4	615	20000			350			5971	
4.1.4 On-Farm Irrigation Audit	farms	nd		8							
4.2 Land Management Systems											
4.2.1 Furrow Dikes	ac	0.18		6000	401						
4.2.2 Land Leveling	ac	na	160						250		
4.2.3 Contour Farming	ac	na		20000	640		200				
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54									
4.2.5 Brush Control/Management	ac	0.45	2207			211	5000		2000		
4.3 On-Farm Water Delivery Systems											
4.3.1 Lining of On-Farm Irrigation Ditches	ft	0.0068									
4.3.2 Replacement of On-Farm Irrigation Ditches with Pipelines	ft	0.0076		50000					32000	29399	
Systems	ac	0.453		1500	807		120		140	2446	
4.3.4 Drip/Micro-Irrigation System	ac	na		1500	245						
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25									
4.3.6 Surge Flow Irrigation for Field Water Distribution Systems	ac	0.385									
4.3.7 Linear Move Sprinkler Irrigation Systems	ac	na					100				
4.4 Water District Delivery Systems											
4.4.1 Lining of District Irrigation Canals	ft	0.0767									
4.4.2 Replacement of Irrigation District Canals and Lateral Canals with Pipelines	ft	0.051									
4.5 Miscellaneous Systems											
4.5.1 Tailwater Recovery and Reuse System	ac	1									
4.5.2 Nursery Production Systems	ac	na									
Other water conservation											
Irrigation Reg Resvr. (concrete) (552)	no	na									
Ponds (378)	no	na	4			3	4		6		
Erosion Control Practices											
Conservation Cover (327)	ac	na		11000			500				
Conservation Crop Rotation (328)	ac	na	794	14000	1320		400				
Contour Buffer Strips (332)	ac	na								8833	
Contour Stripcropping (585)	ac	na		3500							
Cover & Green Manure Crop (340)	ac	na									
Critical Area Planting (342)	ac	na				10					
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na				3127	5000	1950	35000	1120	
Field Border (386)	ac	na									
Filter Strip (393)	ac	na									
Grade Stabilization Structures (410)	no	na									
Grassed Waterway (412)	ac	na									
Heavy Use Area Protection (561)	ac	na					40				
Pasture and Hayland Planting (512)	ac	na	415	240	120	20	400	175	350		
Pipeline-Livestock Watering (516)	ft	na					3000		5500	6050	
Prescribed Grazing (528)	ac	na	1560	1000			20000	230		4145	
Range Planting (550)	ac	na		108			750		200	601	
Riparian Forest Buffer (391)	ac	na									
Riparian Herbaceous Cover (390)	ac	na									
Stripcropping - Field (586)	ac	na									
Terrace (600)	ft	na			9700						
Tree/Shrub Establishment (612)	ac	na	410			52					
Underground Outlets (620)	ft	na									
Watering Facility (614)	no	na		10			5			6	
nd-none directly											

Potential Water Savings from Planned BMPs											
19 Dec 07											
BMP	Units (ac, ft, etc)	Water savings per unit	McCulloch	McLennan County	McMullen County	Medina Valley	Menard County	Middle Concho	Midland	Miller-Brazos	
4.1 Agricultural Irrigation Water Use Management											
4.1.1 Irrigation Scheduling	ac	0.4									
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd									
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4	400			839					
4.1.4 On-Farm Irrigation Audit	farms	nd									
4.2 Land Management Systems											
4.2.1 Furrow Dikes	ac	0.18									
4.2.2 Land Leveling	ac	na									
4.2.3 Contour Farming	ac	na	640	807							
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54									
4.2.5 Brush Control/Management	ac	0.45	1500		3000	174	2812	19824	2400		
4.3 On-Farm Water Delivery Systems											
4.3.1 Lining of On-Farm Irrigation Ditches	ft	0.0068									
4.3.2 Replacement of On-Farm Irrigation Ditches with Pipelines	ft	0.0076									
Systems	ac	0.453				74			70	5	
4.3.4 Drip/Micro-Irrigation System	ac	na						365	100		
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25									
4.3.6 Surge Flow Irrigation for Field Water Distribution Systems	ac	0.385									
4.3.7 Linear Move Sprinkler Irrigation Systems	ac	na									
4.4 Water District Delivery Systems											
4.4.1 Lining of District Irrigation Canals	ft	0.0767									
4.4.2 Replacement of Irrigation District Canals and Lateral Canals with Pipelines	ft	0.051									
4.5 Miscellaneous Systems											
4.5.1 Tailwater Recovery and Reuse System	ac	1									
4.5.2 Nursery Production Systems	ac	na									
Other water conservation											
Irrigation Reg Resvr. (concrete) (552)	no	na									
Ponds (378)	no	na		2						14	
Erosion Control Practices											
Conservation Cover (327)	ac	na									
Conservation Crop Rotation (328)	ac	na		919		839					
Contour Buffer Strips (332)	ac	na									
Contour Stripcropping (585)	ac	na									
Cover & Green Manure Crop (340)	ac	na									
Critical Area Planting (342)	ac	na									
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na		4900		1144				5000	
Field Border (386)	ac	na									
Filter Strip (393)	ac	na									
Grade Stabilization Structures (410)	no	na									
Grassed Waterway (412)	ac	na		15						30	
Heavy Use Area Protection (561)	ac	na									
Pasture and Hayland Planting (512)	ac	na	600	536		29				1400	
Pipeline-Livestock Watering (516)	ft	na							1000	22000	
Prescribed Grazing (528)	ac	na		1865		8035					
Range Planting (550)	ac	na									
Riparian Forest Buffer (391)	ac	na									
Riparian Herbaceous Cover (390)	ac	na									
Stripcropping—Field (586)	ac	na									
Terrace (600)	ft	na		177000						25500	
Tree/Shrub Establishment (612)	ac	na									
Underground Outlets (620)	ft	na									
Watering Facility (614)	no	na							3		
nd-none directly											

Potential Water Savings from Planned BMPs											
19 Dec 07											
BMP	Units (ac, ft, etc)	Water savings per unit	Mills County	Mitchell	Monte Mucho	Moore County	Nacogdoche s	Navarro	Navasota	Nolan County	
4.1 Agricultural Irrigation Water Use Management											
4.1.1 Irrigation Scheduling	ac	0.4									
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd									
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4						600			
4.1.4 On-Farm Irrigation Audit	farms	nd									
4.2 Land Management Systems											
4.2.1 Furrow Dikes	ac	0.18									
4.2.2 Land Leveling	ac	na									
4.2.3 Contour Farming	ac	na						550			
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54									
4.2.5 Brush Control/Management	ac	0.45	2750		440			200		9170	
4.3 On-Farm Water Delivery Systems											
4.3.1 Lining of On-Farm Irrigation Ditches	ft	0.0068									
4.3.2 Replacement of On-Farm Irrigation Ditches with Pipelines	ft	0.0076									
Systems	ac	0.453									
4.3.4 Drip/Micro-Irrigation System	ac	na									
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25									
4.3.6 Surge Flow Irrigation for Field Water Distribution Systems	ac	0.385									
4.3.7 Linear Move Sprinkler Irrigation Systems	ac	na									
4.4 Water District Delivery Systems											
4.4.1 Lining of District Irrigation Canals	ft	0.0767									
4.4.2 Replacement of Irrigation District Canals and Lateral Canals with Pipelines	ft	0.051									
4.5 Miscellaneous Systems											
4.5.1 Tailwater Recovery and Reuse System	ac	1									
4.5.2 Nursery Production Systems	ac	na									
Other water conservation											
Irrigation Reg Resvr. (concrete) (552)	no	na									
Ponds (378)	no	na			1		14				
Erosion Control Practices											
Conservation Cover (327)	ac	na								4445	
Conservation Crop Rotation (328)	ac	na	410					600			
Contour Buffer Strips (332)	ac	na									
Contour Stripcropping (585)	ac	na									
Cover & Green Manure Crop (340)	ac	na									
Critical Area Planting (342)	ac	na					8	20			
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na	24700		1000					8800	
Field Border (386)	ac	na						108			
Filter Strip (393)	ac	na						213			
Grade Stabilization Structures (410)	no	na						10			
Grassed Waterway (412)	ac	na						33		29	
Heavy Use Area Protection (561)	ac	na									
Pasture and Hayland Planting (512)	ac	na	320				318				
Pipeline-Livestock Watering (516)	ft	na	2600							27695	
Prescribed Grazing (528)	ac	na								2164	
Range Planting (550)	ac	na	120		440					2909	
Riparian Forest Buffer (391)	ac	na								59	
Riparian Herbaceous Cover (390)	ac	na									
Stripcropping— Field (586)	ac	na									
Terrace (600)	ft	na						550		143000	
Tree/Shrub Establishment (612)	ac	na									
Underground Outlets (620)	ft	na									
Watering Facility (614)	no	na			2					40	
nd-none directly											

Potential Water Savings from Planned BMPs										
19 Dec 07										
BMP	Units (ac, ft, etc)	Water savings per unit	Nueces	Ochiltree	Oldham County	Palo Duro	Palo Pinto	Parker County	Farmer	Pecan Bayou
4.1 Agricultural Irrigation Water Use Management										
4.1.1 Irrigation Scheduling	ac	0.4				1000				
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd								
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4		324		1200				
4.1.4 On-Farm Irrigation Audit	farms	nd								
4.2 Land Management Systems										
4.2.1 Furrow Dikes	ac	0.18								
4.2.2 Land Leveling	ac	na	300							
4.2.3 Contour Farming	ac	na								
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54								
4.2.5 Brush Control/Management	ac	0.45	450		4231	100	1130	720		1600
4.3 On-Farm Water Delivery Systems										
4.3.1 Lining of On-Farm Irrigation Ditches	ft	0.0068								
4.3.2 Replacement of On-Farm Irrigation Ditches with Pipelines	ft	0.0076								
Systems	ac	0.453								
4.3.4 Drip/Micro-Irrigation System	ac	na			130					
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25				60				
4.3.6 Surge Flow Irrigation for Field Water Distribution Systems	ac	0.385								
4.3.7 Linear Move Sprinkler Irrigation Systems	ac	na								
4.4 Water District Delivery Systems										
4.4.1 Lining of District Irrigation Canals	ft	0.0767								
4.4.2 Replacement of Irrigation District Canals and Lateral Canals with Pipelines	ft	0.051								
4.5 Miscellaneous Systems										
4.5.1 Tailwater Recovery and Reuse System	ac	1								
4.5.2 Nursery Production Systems	ac	na								
Other water conservation										
Irrigation Reg Resvr. (concrete) (552)	no	na								
Ponds (378)	no	na						2		
Erosion Control Practices										
Conservation Cover (327)	ac	na	3000			2000				
Conservation Crop Rotation (328)	ac	na	3000				60	260		
Contour Buffer Strips (332)	ac	na								
Contour Stripcropping (585)	ac	na								
Cover & Green Manure Crop (340)	ac	na								
Critical Area Planting (342)	ac	na	5							
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na			13000	5280	17550	12400		
Field Border (386)	ac	na								
Filter Strip (393)	ac	na								
Grade Stabilization Structures (410)	no	na								
Grassed Waterway (412)	ac	na								
Heavy Use Area Protection (561)	ac	na								
Pasture and Hayland Planting (512)	ac	na	150		300	140	310	367		200
Pipeline-Livestock Watering (516)	ft	na	1500	3737	11200	2640		4770		
Prescribed Grazing (528)	ac	na	200	441			49600	8070		
Range Planting (550)	ac	na					2060	220		
Riparian Forest Buffer (391)	ac	na								
Riparian Herbaceous Cover (390)	ac	na								
Stripcropping—Field (586)	ac	na								
Terrace (600)	ft	na								
Tree/Shrub Establishment (612)	ac	na								
Underground Outlets (620)	ft	na								
Watering Facility (614)	no	na		2		3				
nd-none directly										

Potential Water Savings from Planned BMPs												
19 Dec 07												
BMP	Units (ac, ft, etc)	Water savings per unit		Pedernale s	Piney Woods	Polk-San Jacinto	Red River County	Rio Blanco	Rio Grande- Pecos River	Roberts	Robertson County	
4.1 Agricultural Irrigation Water Use Management												
4.1.1 Irrigation Scheduling	ac	0.4						3000				3201
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd										
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4					196					345
4.1.4 On-Farm Irrigation Audit	farms	nd						10				
4.2 Land Management Systems												
4.2.1 Furrow Dikes	ac	0.18										
4.2.2 Land Leveling	ac	na										
4.2.3 Contour Farming	ac	na										
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54										
4.2.5 Brush Control/Management	ac	0.45		3730				3000	1946	900		555
4.3 On-Farm Water Delivery Systems												
4.3.1 Lining of On-Farm Irrigation Ditches	ft	0.0068										
4.3.2 Replacement of On-Farm Irrigation Ditches with Pipelines	ft	0.0076										
4.3.3 Replacement of On-Farm Irrigation Ditches with Systems	ac	0.453								333		1923
4.3.4 Drip/Micro-Irrigation System	ac	na						400				
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25										
4.3.6 Surge Flow Irrigation for Field Water Distribution Systems	ac	0.385										
4.3.7 Linear Move Sprinkler Irrigation Systems	ac	na										242
4.4 Water District Delivery Systems												
4.4.1 Lining of District Irrigation Canals	ft	0.0767										
4.4.2 Replacement of Irrigation District Canals and Lateral Canals with Pipelines	ft	0.051										
4.5 Miscellaneous Systems												
4.5.1 Tailwater Recovery and Reuse System	ac	1										
4.5.2 Nursery Production Systems	ac	na										
Other water conservation												
Irrigation Reg Resvr. (concrete) (552)	no	na										
Ponds (378)	no	na				2	17					22
Erosion Control Practices												
Conservation Cover (327)	ac	na					681	2000		102		
Conservation Crop Rotation (328)	ac	na					196					
Contour Buffer Strips (332)	ac	na										
Contour Stripcropping (585)	ac	na										
Cover & Green Manure Crop (340)	ac	na										
Critical Area Planting (342)	ac	na										
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na				2800	68585			19287		51850
Field Border (386)	ac	na										
Filter Strip (393)	ac	na			4		21					225
Grade Stabilization Structures (410)	no	na										
Grassed Waterway (412)	ac	na										
Heavy Use Area Protection (561)	ac	na			13		2					
Pasture and Hayland Planting (512)	ac	na				200	2285					
Pipeline-Livestock Watering (516)	ft	na								20013		
Prescribed Grazing (528)	ac	na			23	1000	5594	3000				
Range Planting (550)	ac	na									102	
Riparian Forest Buffer (391)	ac	na				50						
Riparian Herbaceous Cover (390)	ac	na										
Stripcropping—Field (586)	ac	na										
Terrace (600)	ft	na										
Tree/Shrub Establishment (612)	ac	na				500	1214					
Underground Outlets (620)	ft	na										
Watering Facility (614)	no	na									3	
nd-none directly												

Potential Water Savings from Planned BMPs										
19 Dec 07										
BMP	Units (ac, ft, etc)	Water savings per unit	Runnels	Running Water	Rusk	Salt Fork	San Patricio	San Saba	Sandhills	Shelby
4.1 Agricultural Irrigation Water Use Management										
4.1.1 Irrigation Scheduling	ac	0.4		12500						
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd					4			
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4		36800		246	2000			120
4.1.4 On-Farm Irrigation Audit	farms	nd								
4.2 Land Management Systems										
4.2.1 Furrow Dikes	ac	0.18		1800						
4.2.2 Land Leveling	ac	na					200			
4.2.3 Contour Farming	ac	na								
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54		841						
4.2.5 Brush Control/Management	ac	0.45	20			400	2500	89	1330	325
4.3 On-Farm Water Delivery Systems										
4.3.1 Lining of On-Farm Irrigation Ditches	ft	0.0068								
4.3.2 Replacement of On-Farm Irrigation Ditches with Pipelines	ft	0.0076		1500						
Systems	ac	0.453		10000		672				
4.3.4 Drip/Micro-Irrigation System	ac	na								
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25								
4.3.6 Surge Flow Irrigation for Field Water Distribution Systems	ac	0.385								
4.3.7 Linear Move Sprinkler Irrigation Systems	ac	na								
4.4 Water District Delivery Systems										
4.4.1 Lining of District Irrigation Canals	ft	0.0767								
4.4.2 Replacement of Irrigation District Canals and Lateral Canals with Pipelines	ft	0.051								
4.5 Miscellaneous Systems										
4.5.1 Tailwater Recovery and Reuse System	ac	1								
4.5.2 Nursery Production Systems	ac	na								
Other water conservation										
Irrigation Reg Resvr. (concrete) (552)	no	na								
Ponds (378)	no	na	5		5		3			3
Erosion Control Practices										
Conservation Cover (327)	ac	na				380	10000			
Conservation Crop Rotation (328)	ac	na		44000						
Contour Buffer Strips (332)	ac	na								
Contour Stripcropping (585)	ac	na								
Cover & Green Manure Crop (340)	ac	na		10000		246				
Critical Area Planting (342)	ac	na			15					10
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na		14600	3000	10400	20000	7049	54200	15000
Field Border (386)	ac	na	333							12
Filter Strip (393)	ac	na								25
Grade Stabilization Structures (410)	no	na								
Grassed Waterway (412)	ac	na	59				4			
Heavy Use Area Protection (561)	ac	na								20
Pasture and Hayland Planting (512)	ac	na			200	160	250			40
Pipeline-Livestock Watering (516)	ft	na		14000			4000		59070	
Prescribed Grazing (528)	ac	na		2000	1500	3640	10000		75000	2300
Range Planting (550)	ac	na							200	
Riparian Forest Buffer (391)	ac	na								3
Riparian Herbaceous Cover (390)	ac	na								
Stripcropping -- Field (586)	ac	na								
Terrace (600)	ft	na	45000				7000			
Tree/Shrub Establishment (612)	ac	na			500					
Underground Outlets (620)	ft	na								
Watering Facility (614)	no	na				5	2		24	
nd-none directly										

Potential Water Savings from Planned BMPs											
19 Dec 07											
BMP	Units (ac, ft, etc)	Water savings per unit	Sherman County	Smith County	Southmos t	Staked Plains	Starr County	Stonewall	Sulphur- Cypress	Taylor	
4.1 Agricultural Irrigation Water Use Management											
4.1.1 Irrigation Scheduling	ac	0.4	1000								
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd									
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4	15,000		53378	1000					
4.1.4 On-Farm Irrigation Audit	farms	nd									
4.2 Land Management Systems											
4.2.1 Furrow Dikes	ac	0.18	250		19						
4.2.2 Land Leveling	ac	na			3566						
4.2.3 Contour Farming	ac	na	1000			900				5000	
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54	1500								
4.2.5 Brush Control/Management	ac	0.45	250		264	2670	41	500		400	
4.3 On-Farm Water Delivery Systems											
4.3.1 Lining of On-Farm Irrigation Ditches	ft	0.0068									
4.3.2 Replacement of On-Farm Irrigation Ditches with Pipelines	ft	0.0076			3873						
4.3.4 Drip/Micro-Irrigation System	ac	na	11,000		50	165					
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25	1,500		798						
4.3.6 Surge Flow Irrigation for Field Water Distribution Systems	ac	0.385	300								
4.3.7 Linear Move Sprinkler Irrigation Systems	ac	na	500		1100						
4.4 Water District Delivery Systems											
4.4.1 Lining of District Irrigation Canals	ft	0.0767									
4.4.2 Replacement of Irrigation District Canals and Lateral Canals with Pipelines	ft	0.051			5748						
4.5 Miscellaneous Systems											
4.5.1 Tailwater Recovery and Reuse System	ac	1	1200								
4.5.2 Nursery Production Systems	ac	na									
Other water conservation											
Irrigation Reg Resrv. (concrete) (552)	no	na									
Ponds (378)	no	na		2			1				
Erosion Control Practices											
Conservation Cover (327)	ac	na	2,500		30800						
Conservation Crop Rotation (328)	ac	na	30000		46558	1000				8000	
Contour Buffer Strips (332)	ac	na	11								
Contour Stripcropping (585)	ac	na									
Cover & Green Manure Crop (340)	ac	na	1000								
Critical Area Planting (342)	ac	na	14							10	
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na		1600		11965	9064	1700		10000	
Field Border (386)	ac	na	71		26						
Filter Strip (393)	ac	na	25		22						
Grade Stabilization Structures (410)	no	na			2						
Grassed Waterway (412)	ac	na								2	
Heavy Use Area Protection (561)	ac	na			156						
Pasture and Hayland Planting (512)	ac	na	125	18	757					600	
Pipeline-Livestock Watering (516)	ft	na				14850	1521				
Prescribed Grazing (528)	ac	na		116	7850	4600	25915			3800	
Range Planting (550)	ac	na			85	251	70				
Riparian Forest Buffer (391)	ac	na									
Riparian Herbaceous Cover (390)	ac	na									
Stripcropping—Field (586)	ac	na									
Terrace (600)	ft	na				9026					
Tree/Shrub Establishment (612)	ac	na									
Underground Outlets (620)	ft	na									
Watering Facility (614)	no	na				18	2				
nd-none directly											

Conservation Rpt 07.xls
Final Rpt 07

Potential Water Savings from Planned BMPs											
19 Dec 07											
BMP	Units (ac, ft, etc)	Water savings per unit	Terry	Throckm rton	Tierra Blanca	Tom Green	Trinity Bay	Trinity- Neches	Tule Creek	Upper Clear Fork	
4.1 Agricultural Irrigation Water Use Management											
4.1.1 Irrigation Scheduling	ac	0.4	2846		13250						100
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd			126						
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4	294		38750	1000	2473		12375	5000	
4.1.4 On-Farm Irrigation Audit	farms	nd							7		
4.2 Land Management Systems											
4.2.1 Furrow Dikes	ac	0.18			14200						
4.2.2 Land Leveling	ac	na									
4.2.3 Contour Farming	ac	na	98	5000	4000	1000					2000
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54	39								
4.2.5 Brush Control/Management	ac	0.45	445	30000	3700						20000
4.3 On-Farm Water Delivery Systems											
4.3.1 Lining of On-Farm Irrigation Ditches	ft	0.0068									
4.3.2 Replacement of On-Farm Irrigation Ditches with Pipelines	ft	0.0076			1200	10000					
Systems	ac	0.453	1029		4400	120			2002		
4.3.4 Drip/Micro-Irrigation System	ac	na	240			20					400
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25			750						
4.3.6 Surge Flow Irrigation for Field Water Distribution Systems	ac	0.385			125	160					
4.3.7 Linear Move Sprinkler Irrigation Systems	ac	na			200						
4.4 Water District Delivery Systems											
4.4.1 Lining of District Irrigation Canals	ft	0.0767									
4.4.2 Replacement of Irrigation District Canals and Lateral Canals with Pipelines	ft	0.051									
4.5 Miscellaneous Systems											
4.5.1 Tailwater Recovery and Reuse System	ac	1			800						
4.5.2 Nursery Production Systems	ac	na									
Other water conservation											
Irrigation Reg Resvr. (concrete) (552)	no	na			3					3	3
Ponds (378)	no	na		10				5			
Erosion Control Practices											
Conservation Cover (327)	ac	na	3576	1000	8400		2473				9000
Conservation Crop Rotation (328)	ac	na	543	40000	38570				12375	450	
Contour Buffer Strips (332)	ac	na									
Contour Stripcropping (585)	ac	na									
Cover & Green Manure Crop (340)	ac	na	95								
Critical Area Planting (342)	ac	na						10			14
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na	1599	20000	32000			2000			
Field Border (386)	ac	na									100
Filter Strip (393)	ac	na									
Grade Stabilization Structures (410)	no	na									
Grassed Waterway (412)	ac	na									15
Heavy Use Area Protection (561)	ac	na	2		750						
Pasture and Hayland Planting (512)	ac	na		400	1250		60	200			200
Pipeline-Livestock Watering (516)	ft	na	3600	1000							10000
Prescribed Grazing (528)	ac	na	2263	40000	15500		1531	2000	20015		
Range Planting (550)	ac	na	8	200	120						
Riparian Forest Buffer (391)	ac	na		200							
Riparian Herbaceous Cover (390)	ac	na		200							
Stripcropping—Field (586)	ac	na									
Terrace (600)	ft	na	1743	2000							
Tree/Shrub Establishment (612)	ac	na			8						
Underground Outlets (620)	ft	na									
Watering Facility (614)	no	na	4	3	10						8
nd-none directly											

Potential Water Savings from Planned BMPs											
19 Dec 07											
BMP	Units (ac, ft, etc)	Water savings per unit	Upper Colorado	Upper Elm-Red	Upper Leon	Upper Llanos	Upper Neches	Upper Nueces- Frio	Upper Pecos	Upper Sabine	
4.1 Agricultural Irrigation Water Use Management											
4.1.1 Irrigation Scheduling	ac	0.4							571		
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd							1		
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4							2149		
4.1.4 On-Farm Irrigation Audit	farms	nd							5		
4.2 Land Management Systems											
4.2.1 Furrow Dikes	ac	0.18									
4.2.2 Land Leveling	ac	na							71		
4.2.3 Contour Farming	ac	na									
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54									
4.2.5 Brush Control/Management	ac	0.45	3685	1000		3458		13074	209		
4.3 On-Farm Water Delivery Systems											
4.3.1 Lining of On-Farm Irrigation Ditches	ft	0.0068									
4.3.2 Replacement of On-Farm Irrigation Ditches with Pipelines	ft	0.0076									
4.3.3 Replacement of On-Farm Irrigation Ditches with Systems	ac	0.453									
4.3.4 Drip/Micro-Irrigation System	ac	na									
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25									
4.3.6 Surge Flow Irrigation for Field Water Distribution Systems	ac	0.385									
4.3.7 Linear Move Sprinkler Irrigation Systems	ac	na									
4.4 Water District Delivery Systems											
4.4.1 Lining of District Irrigation Canals	ft	0.0767									
4.4.2 Replacement of Irrigation District Canals and Lateral Canals with Pipelines	ft	0.051									
4.5 Miscellaneous Systems											
4.5.1 Tailwater Recovery and Reuse System	ac	1									
4.5.2 Nursery Production Systems	ac	na									
Other water conservation											
Irrigation Reg Resvr. (concrete) (552)	no	na									
Ponds (378)	no	na									
Erosion Control Practices											
Conservation Cover (327)	ac	na	260								
Conservation Crop Rotation (328)	ac	na	200					176	2149		
Contour Buffer Strips (332)	ac	na									
Contour Stripcropping (585)	ac	na									
Cover & Green Manure Crop (340)	ac	na									
Critical Area Planting (342)	ac	na									
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na	1332			8159		188460	197356		
Field Border (386)	ac	na									
Filter Strip (393)	ac	na									
Grade Stabilization Structures (410)	no	na									
Grassed Waterway (412)	ac	na									
Heavy Use Area Protection (561)	ac	na									
Pasture and Hayland Planting (512)	ac	na	364			128					
Pipeline-Livestock Watering (516)	ft	na	2640			1500			38393		
Prescribed Grazing (528)	ac	na	16800			19911		72685	95592		
Range Planting (550)	ac	na	1475			126		118075			
Riparian Forest Buffer (391)	ac	na						156			
Riparian Herbaceous Cover (390)	ac	na									
Stripcropping—Field (586)	ac	na									
Terrace (600)	ft	na	6800				1000				
Tree/Shrub Establishment (612)	ac	na									
Underground Outlets (620)	ft	na									
Watering Facility (614)	no	na						9	3		
nd-none directly											

Potential Water Savings from Planned BMPs											
19 Dec 07											
BMP	Units (ac, ft, etc)	Water savings per unit	Upshur- Gregg	Victoria	Walker County	Washington	Waters Davis	Webb	West Nueces- Las Moras	Wharton County	
4.1 Agricultural Irrigation Water Use Management											
4.1.1 Irrigation Scheduling	ac	0.4									
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd									
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4		3900							
4.1.4 On-Farm Irrigation Audit	farms	nd									
4.2 Land Management Systems											
4.2.1 Furrow Dikes	ac	0.18									
4.2.2 Land Leveling	ac	na					2606				
4.2.3 Contour Farming	ac	na									
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54									
4.2.5 Brush Control/Management	ac	0.45		22000		268	1576	2500	8000		
4.3 On-Farm Water Delivery Systems											
4.3.1 Lining of On-Farm Irrigation Ditches	ft	0.0068									
4.3.2 Replacement of On-Farm Irrigation Ditches with Pipelines	ft	0.0076		6000							
4.3.3 Replacement of On-Farm Irrigation Ditches with Systems	ac	0.453		131							
4.3.4 Drip/Micro-Irrigation System	ac	na									
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25									
4.3.6 Surge Flow Irrigation for Field Water Distribution Systems	ac	0.385									
4.3.7 Linear Move Sprinkler Irrigation Systems	ac	na									
4.4 Water District Delivery Systems											
4.4.1 Lining of District Irrigation Canals	ft	0.0767									
4.4.2 Replacement of Irrigation District Canals and Lateral Canals with Pipelines	ft	0.051									
4.5 Miscellaneous Systems											
4.5.1 Tailwater Recovery and Reuse System	ac	1									
4.5.2 Nursery Production Systems	ac	na									
Other water conservation											
Irrigation Reg Resvr. (concrete) (552)	no	na									
Ponds (378)	no	na	9		4		2				
Erosion Control Practices											
Conservation Cover (327)	ac	na			117						
Conservation Crop Rotation (328)	ac	na		9800							
Contour Buffer Strips (332)	ac	na									
Contour Stripcropping (585)	ac	na									
Cover & Green Manure Crop (340)	ac	na									
Critical Area Planting (342)	ac	na	1								
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na	13864	80000	13100	57196				6651	
Field Border (386)	ac	na									
Filter Strip (393)	ac	na									
Grade Stabilization Structures (410)	no	na			1					6	
Grassed Waterway (412)	ac	na									
Heavy Use Area Protection (561)	ac	na	22								
Pasture and Hayland Planting (512)	ac	na	108	500	223	36	2658			565	
Pipeline-Livestock Watering (516)	ft	na	600	7100		11732					
Prescribed Grazing (528)	ac	na	1088	20000	1675					453	
Range Planting (550)	ac	na		300		77					
Riparian Forest Buffer (391)	ac	na									
Riparian Herbaceous Cover (390)	ac	na		50							
Stripcropping—Field (586)	ac	na									
Terrace (600)	ft	na									
Tree/Shrub Establishment (612)	ac	na	726		175						
Underground Outlets (620)	ft	na									
Watering Facility (614)	no	na	3	10							
nd-none directly											

Potential Water Savings from Planned BMPs											
19 Dec 07											
BMP	Units (ac, ft, etc)	Water savings per unit	Wheeler County	Wichita	Wichita- Brazos	Wilbarger	Willacy	Wilson County	Winter Garden	Wise	
4.1 Agricultural Irrigation Water Use Management											
4.1.1 Irrigation Scheduling	ac	0.4									
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd									
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4									
4.1.4 On-Farm Irrigation Audit	farms	nd									
4.2 Land Management Systems											
4.2.1 Furrow Dikes	ac	0.18									
4.2.2 Land Leveling	ac	na									
4.2.3 Contour Farming	ac	na				1000					
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54									
4.2.5 Brush Control/Management	ac	0.45				1000		873	1200		
4.3 On-Farm Water Delivery Systems											
4.3.1 Lining of On-Farm Irrigation Ditches	ft	0.0068									
4.3.2 Replacement of On-Farm Irrigation Ditches with Pipelines	ft	0.0076						7195	4000		
4.3.3 Replacement of On-Farm Irrigation Ditches with Systems	ac	0.453				1400		101			
4.3.4 Drip/Micro-Irrigation System	ac	na							120		
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25									
4.3.6 Surge Flow Irrigation for Field Water Distribution Systems	ac	0.385									
4.3.7 Linear Move Sprinkler Irrigation Systems	ac	na									
4.4 Water District Delivery Systems											
4.4.1 Lining of District Irrigation Canals	ft	0.0767									
4.4.2 Replacement of Irrigation District Canals and Lateral Canals with Pipelines	ft	0.051									
4.5 Miscellaneous Systems											
4.5.1 Tailwater Recovery and Reuse System	ac	1									
4.5.2 Nursery Production Systems	ac	na									
Other water conservation											
Irrigation Reg Resrv. (concrete) (552)	no	na				8					
Ponds (378)	no	na		2				4	4		
Erosion Control Practices											
Conservation Cover (327)	ac	na				783					
Conservation Crop Rotation (328)	ac	na				5000					
Contour Buffer Strips (332)	ac	na									
Contour Stripcropping (585)	ac	na									
Cover & Green Manure Crop (340)	ac	na									
Critical Area Planting (342)	ac	na						2			
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na						14257	4000		
Field Border (386)	ac	na									
Filter Strip (393)	ac	na									
Grade Stabilization Structures (410)	no	na				1					
Grassed Waterway (412)	ac	na				8					
Heavy Use Area Protection (561)	ac	na				15					
Pasture and Hayland Planting (512)	ac	na					1336	756	80		
Pipeline-Livestock Watering (516)	ft	na				113		7400	4000		
Prescribed Grazing (528)	ac	na				60000		6100			
Range Planting (550)	ac	na						20	115		
Riparian Forest Buffer (391)	ac	na									
Riparian Herbaceous Cover (390)	ac	na									
Stripcropping--Field (586)	ac	na									
Terrace (600)	ft	na		16137							
Tree/Shrub Establishment (612)	ac	na									
Underground Outlets (620)	ft	na									
Watering Facility (614)	no	na				3		2	3		
nd-none directly											

Potential Water Savings from Planned BMPs						
19 Dec 07						
BMP	Units (ac, ft, etc)	Water savings per unit	Wood	Yoakum	Young	Zapata
4.1 Agricultural Irrigation Water Use Management						
4.1.1 Irrigation Scheduling	ac	0.4				
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd				
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4		5300		
4.1.4 On-Farm Irrigation Audit	farms	nd				
4.2 Land Management Systems						
4.2.1 Furrow Dikes	ac	0.18				
4.2.2 Land Leveling	ac	na				
4.2.3 Contour Farming	ac	na				
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54				
4.2.5 Brush Control/Management	ac	0.45		80	542	180
4.3 On-Farm Water Delivery Systems						
4.3.1 Lining of On-Farm Irrigation Ditches	ft	0.0068				
4.3.2 Replacement of On-Farm Irrigation Ditches with Pipelines	ft	0.0076				
4.3.3 Replacement of On-Farm Irrigation Ditches with Systems	ac	0.453		3100		
4.3.4 Drip/Micro-Irrigation System	ac	na		96		
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25				
4.3.6 Surge Flow Irrigation for Field Water Distribution Systems	ac	0.385				
4.3.7 Linear Move Sprinkler Irrigation Systems	ac	na				
4.4 Water District Delivery Systems						
4.4.1 Lining of District Irrigation Canals	ft	0.0767				
4.4.2 Replacement of Irrigation District Canals and Lateral Canals with Pipelines	ft	0.051				
4.5 Miscellaneous Systems						
4.5.1 Tailwater Recovery and Reuse System	ac	1				
4.5.2 Nursery Production Systems	ac	na				
Other water conservation						
Irrigation Reg Resvr. (concrete) (552)	no	na				
Ponds (378)	no	na	10			
Erosion Control Practices						
Conservation Cover (327)	ac	na	40			
Conservation Crop Rotation (328)	ac	na			1029	
Contour Buffer Strips (332)	ac	na				
Contour Stripcropping (585)	ac	na				
Cover & Green Manure Crop (340)	ac	na				
Critical Area Planting (342)	ac	na	12			
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na	425454		2850	
Field Border (386)	ac	na	14258			
Filter Strip (393)	ac	na	113			
Grade Stabilization Structures (410)	no	na	5			
Grassed Waterway (412)	ac	na				
Heavy Use Area Protection (561)	ac	na	130			
Pasture and Hayland Planting (512)	ac	na	252		78	
Pipeline-Livestock Watering (516)	ft	na	950	3500		
Prescribed Grazing (528)	ac	na	2116	950	5292	
Range Planting (550)	ac	na			158	
Riparian Forest Buffer (391)	ac	na	17			
Riparian Herbaceous Cover (390)	ac	na				
Stripcropping—Field (586)	ac	na				
Terrace (600)	ft	na				
Tree/Shrub Establishment (612)	ac	na	293	3		
Underground Outlets (620)	ft	na				
Watering Facility (614)	no	na	5	2		
nd-none directly						

Potential Water Savings from Planned BMPs			Total Planned	Total Savings	
19 Dec 07					
BMP	Units (ac, ft, etc)	Water savings per unit	Units	ac ft	No. SWCDs Planning Practice
4.1 Agricultural Irrigation Water Use Management					
4.1.1 Irrigation Scheduling	ac	0.4	57851	23140	22
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd	195	nd	8
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4	475284	190114	56
4.1.4 On-Farm Irrigation Audit	farms	nd	36	nd	6
4.2 Land Management Systems					
4.2.1 Furrow Dikes	ac	0.18	172070	30973	10
4.2.2 Land Leveling	ac	na	11435	na	14
4.2.3 Contour Farming	ac	na	799444	na	37
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54	2736	4213	5
4.2.5 Brush Control/Management	ac	0.45	416449	187402	126
4.3 On-Farm Water Delivery Systems					
4.3.1 Lining of On-Farm Irrigation Ditches	ft	0.0068	800	5	1
4.3.2 Replacement of On-Farm Irrigation Ditches with Pipelines	ft	0.0076	398230	3019	20
Systems	ac	0.453	73034	33084	42
4.3.4 Drip/Micro-Irrigation System	ac	na	9146	na	29
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25	3308	827	5
4.3.6 Surge Flow Irrigation for Field Water Distribution Systems	ac	0.385	785	302	4
4.3.7 Linear Move Sprinkler Irrigation Systems	ac	na	4139	na	9
4.4 Water District Delivery Systems					
4.4.1 Lining of District Irrigation Canals	ft	0.0767	0	0	0
4.4.2 Replacement of Irrigation District Canals and Lateral Canals with Pipelines	ft	0.051	7748	395	2
4.5 Miscellaneous Systems					
4.5.1 Tailwater Recovery and Reuse System	ac	1	2000	2000	2
4.5.2 Nursery Production Systems	ac	na	0	na	0
Other water conservation					
Irrigation Reg Resvr. (concrete) (552)	no	na	32	na	5
Ponds (378)	no	na	404	na	61
Erosion Control Practices					
Conservation Cover (327)	ac	na	179603	na	62
Conservation Crop Rotation (328)	ac	na	704754	na	62
Contour Buffer Strips (332)	ac	na	10090	na	10
Contour Stripcropping (585)	ac	na	3500	na	1
Cover & Green Manure Crop (340)	ac	na	40871	na	11
Critical Area Planting (342)	ac	na	107478	na	41
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na	2334586	na	95
Field Border (386)	ac	na	27732	na	14
Filter Strip (393)	ac	na	904	na	17
Grade Stabilization Structures (410)	no	na	60	na	16
Grassed Waterway (412)	ac	na	971	na	30
Heavy Use Area Protection (561)	ac	na	2166	na	19
Pasture and Hayland Planting (512)	ac	na	58334	na	106
Pipeline-Livestock Watering (516)	ft	na	713992	na	71
Prescribed Grazing (528)	ac	na	1402196	na	89
Range Planting (550)	ac	na	143457	na	52
Riparian Forest Buffer (391)	ac	na	1647	na	17
Riparian Herbaceous Cover (390)	ac	na	775	na	4
Stripcropping--Field (586)	ac	na	12400	na	3
Terrace (600)	ft	na	1021462	na	41
Tree/Shrub Establishment (612)	ac	na	8647	na	24
Underground Outlets (620)	ft	na	10022	na	3
Watering Facility (614)	no	na	541	na	57
nd-none directly			-----	-----	-----
			Total Potential Savings	475,474 ac ft	