

AGRICULTURAL WATER CONSERVATION GRANT (FY 2005)

FINAL REPORT

to

Texas Water Development Board

Contract # 2005-358-024

December 12, 2006



TEXAS STATE SOIL AND WATER CONSERVATION BOARD

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Summary

The Texas State Soil and Water Conservation Board (TSSWCB) has fully implemented all provisions of the Research and Planning Grant Contract awarded by the Texas Water Development Board (TWDB). The grant award of \$100,000 supplemented approximately \$950,000 in technical assistance funding allocated to local Soil and Water Conservation Districts (SWCDs) 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 195 SWCDs statewide were eligible and willing to participate in this program. The assistance performed by these SWCDs has resulted in an estimated **537,288 ac-ft potential water savings for the State** or approximately **5.37 ac-ft of water conserved for each grant dollar spent**. The potential savings is equivalent to 5.84% of the estimated statewide irrigation water use of 9,205,297 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 FY2005. 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 2002 State water plan. 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 2050. County based data for all water needs for the 2050 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 2002 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. The data were originally from earlier Texas water plans.

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 is a significant contributor surface water storage capacity loss in Texas. The 2002 state water plan states “Reservoir sedimentation is the primary reason for the decline in surface water availability.”

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. 214 SWCDs met one or more eligibility criteria. Of those, 198 elected to participate in the program. Each participating district received an allotment of \$219.30 for each eligibility criterion that it met. For example, a district meeting three criteria received \$657.90.

Three of the originally participating districts subsequently decided not to participate in the program, and their allocation was reallocated to other participating districts. Figure 1 shows the participating districts.

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

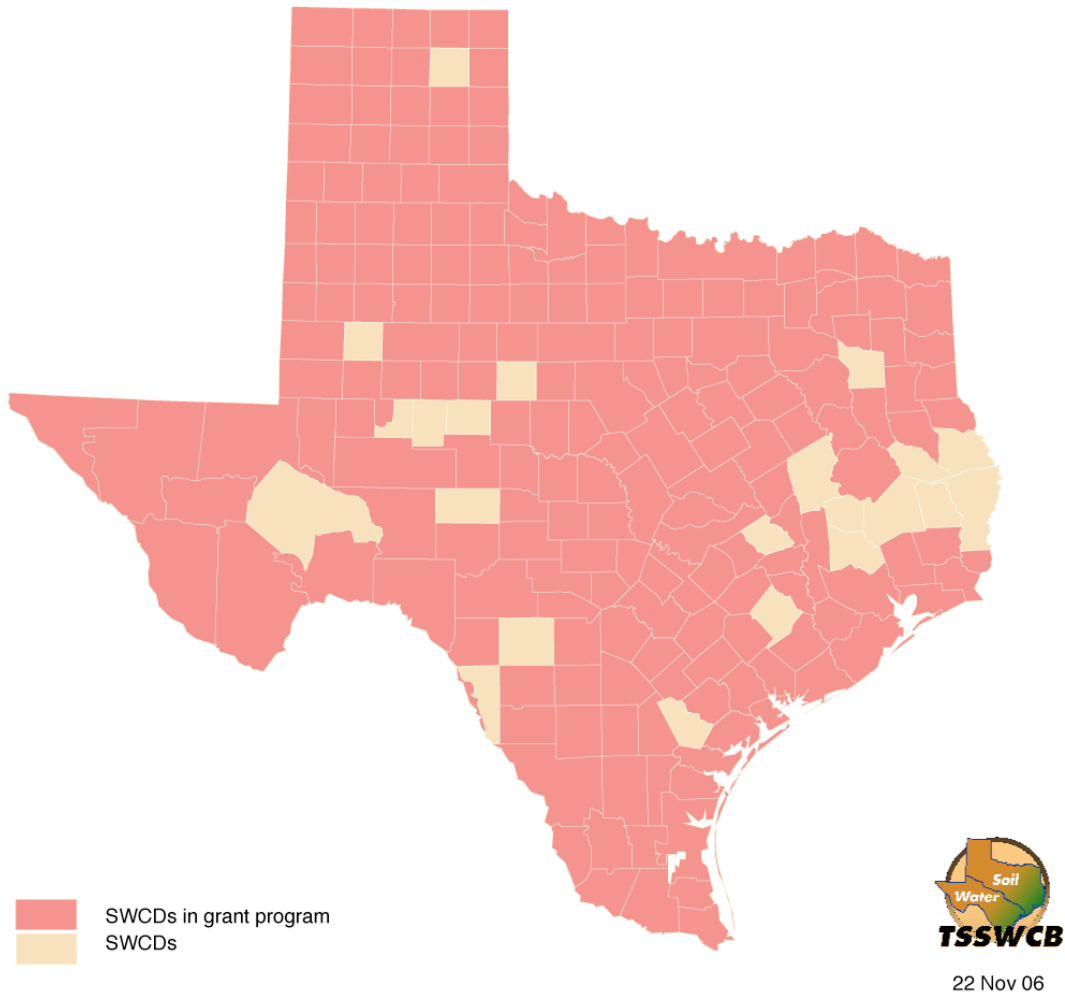


Figure 1. SWCDs Eligible and Participating in the FY 05 Ag Water Conservation Grant.

Eligible Practices

Eligible practices for the grant were agricultural water conservation BMPs developed by the water conservation task force 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 195 out of 217 SWCDs participated in the grant program. Potential water savings resulting from this grant was estimated at 537,288 ac-ft. The potential savings is equivalent to 5.84% of the estimated statewide irrigation water use of 9,205,297 ac-ft. Approximately 5.37 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 brush control/management with 777,660 acres planned for an estimated water savings of 349,947 ac ft. The second highest water saving practice was crop residue management and conservation tillage with 247,590 acres planned for an estimated water savings of 99,036 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	74761	29904	27
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd	130	nd	8
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4	247590	99036	60
4.1.4 On-Farm Irrigation Audit	farms	nd	14	nd	4
4.2 Land Management Systems					
4.2.1 Furrow Dikes	ac	0.18	34731	6252	8
4.2.2 Land Leveling	ac	na	13147	na	16
4.2.3 Contour Farming	ac	na	201399	na	37
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54	8318	12810	10
4.2.5 Brush Control/Management	ac	0.45	777660	349947	124
4.3 On-Farm Water Delivery Systems					
4.3.1 Lining of On-Farm Irrigation Ditches	ft	0.0068	7400	50	1
4.3.2 Replacement of On-Farm Irrigation Ditches with Pipelines	ft	0.0076	207933	1576	15
4.3.3 Low Pressure Center Pivot Sprinkler Irrigation Systems	ac	0.453	75027	33987	37
4.3.4 Drip/Micro-Irrigation System	ac	na	6199	na	29
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25	2835	709	5
4.3.6 Surge Flow Irrigation for Field Water Distribution Systems	ac	0.385	800	308	4
4.3.7 Linear Move Sprinkler Irrigation Systems	ac	na	1500	na	2
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	7625	389	2
4.5 Miscellaneous Systems					
4.5.1 Tailwater Recovery and Reuse System	ac	1	2320	2320	3
4.5.2 Nursery Production Systems	ac	na	0	na	0
Other water conservation					
Irrigation Reg Resvr. (concrete) (552)	no	na	43	na	8
Ponds (378)	no	na	235	na	35
Erosion Control Practices					
Conservation Cover (327)	ac	na	125595	na	37
Conservation Crop Rotation (328)	ac	na	496282	na	65
Contour Buffer Strips (332)	ac	na	766	na	5
Contour Stripcropping (585)	ac	na	0	na	0
Cover & Green Manure Crop (340)	ac	na	16549	na	13
Critical Area Planting (342)	ac	na	1842	na	30
Diversion (362)	ft	na	10420	na	2
Fence (Includes Crossfencing for Prescribed Grazing) (382)	ft	na	1206394	na	58
Field Border (386)	ac	na	3649	na	11
Filter Strip (393)	ac	na	872	na	16
Grade Stabilization Structures (410)	no	na	94	na	15
Grassed Waterway (412)	ac	na	564	na	20
Heavy Use Area Protection (561)	ac	na	1578	na	13
Pasture and Hayland Planting (512)	ac	na	68150	na	91
Pipeline-Livestock Watering (516)	ft	na	509642	na	40
Prescribed Grazing (528)	ac	na	1157808	na	49
Range Planting (550)	ac	na	19608	na	38
Riparian Forest Buffer (391)	ac	na	868	na	8
Riparian Herbaceous Cover (390)	ac	na	400	na	1

Stripcropping—Field (586)	ac	na	2300	na	2
Terrace (600)	ft	na	802614	na	39
Tree/Shrub Establishment (612)	ac	na	5812	na	16
Underground Outlets (620)	ft	na	7	na	2
Watering Facility (614)	no	na	449	na	30
Total Potential Savings (ac-ft)					537,288

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 537,288 ac-ft. The potential savings is equivalent to 5.84% of the estimated statewide irrigation water use of 9,205,297 ac-ft. Approximately 5.37 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 05 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	877.19
107	Rio Blanco	1	X	X	X	X	4	Yes	4	877.19
108	Lubbock County	1	X		X	X	3	Yes	3	657.89
109	Hall-Childress	1	X		X	X	3	Yes	3	657.89
110	Tule Creek	1	X	X	X	X	4	Yes	4	877.19
111	Blackwater Valley	1	X	X	X		3	Yes	3	657.89
115	Upper Colorado	1	X	X	X		3	Yes	3	657.89
119	Lynn County	1	X		X		2	Yes	2	438.60
124	Dawson County	1			X		1	No	0	0.00
125	Gray County	1	X		X		2	Yes	2	438.60
126	Cap Rock	1			X	X	2	Yes	2	438.60
127	Donley County	1				X	1	Yes	1	219.30
129	Hockley County	1	X	X	X		3	Yes	3	657.89
130	Lamb County	1	X		X	X	3	Yes	3	657.89
131	Dallam	1	X	X	X		3	Yes	3	657.89
132	Hale County	1	X	X	X	X	4	Yes	4	877.19
133	Salt Fork	1			X	X	2	Yes	2	438.60
134	Lipscomb	1	X		X		2	Yes	2	438.60
136	Running Water	1	X	X	X		3	Yes	3	657.89
137	Moore County	1	X	X	X	X	4	Yes	4	877.19
138	Hemphill	1	X				1	Yes	1	219.30
140	Parmer	1	X	X	X		3	Yes	3	657.89
141	Wheeler County	1	X				1	Yes	1	219.30
142	Ochiltree	1	X		X		2	Yes	2	438.60
143	Tierra Blanca	1	X		X		2	Yes	2	438.60
145*	Roberts	1			X		1	Yes	1	219.30
146	Hutchinson	1			X	X	2	Yes	2	438.60
147	Palo Duro	1	X	X	X	X	4	Yes	4	877.19
148	Hansford	1	X		X		2	Yes	2	438.60
149	Cochran	1	X	X	X		3	Yes	3	657.89
150	Yoakum	1	X		X		2	Yes	2	438.60
151	Terry	1	X	X	X		3	Yes	3	657.89
152	Hartley	1			X	X	2	Yes	2	438.60
153	Oldham County	1	X	X	X	X	4	Yes	4	877.19
155	Staked Plains	1	X		X	X	3	Yes	3	657.89
156	McClellan Creek	1	X		X	X	3	Yes	3	657.89
158	Garza	1	X	X		X	3	Yes	3	657.89
159	Sherman County	1			X		1	Yes	1	219.30
160	Canadian River	1	X	X	X	X	4	Yes	4	877.19
161	Foard County	1			X	X	2	Yes	2	438.60
162	Lower Pease River	1				X	1	Yes	1	219.30
163	Cottle	1			X	X	2	Yes	2	438.60
164	Upper Pease	1				X	1	Yes	1	219.30
165	Upper Clear Fork	1	X		X		2	Yes	2	438.60
166	Gaines County	1	X		X		2	Yes	2	438.60
167	Stonewall	1				X	1	Yes	1	219.30
168	King	1			X	X	2	Yes	2	438.60
169	Duck Creek	1				X	1	Yes	1	219.30
170	Andrew Kent	1				X	1	Yes	1	219.30

FY 05 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	3	Yes	3	657.89
205	El Paso-Hudspeth	2	X	X	X	X	4	Yes	4	877.19
206*	Middle Clear Fork	2	X	X	X		3	Yes	3	657.89
207	Mitchell	2	X		X	X	3	Yes	3	657.89
209	Toyah-Limpia	2	X	X	X	X	4	Yes	4	877.19
210	Highland	2	X		X	X	3	Yes	3	657.89
213	Upper Pecos	2	X	X	X		3	Yes	3	657.89
215	Menard County	2	X			X	2	Yes	2	438.60
216	Kendall	2	X			X	2	Yes	2	438.60
217	Kerr County	2	X	X			2	Yes	2	438.60
218	Pedernales	2	X			X	2	Yes	2	438.60
219	Coke County	2					0	No	0	0.00
220	Gillespie County	2	X				1	Yes	1	219.30
221	Nueces-Frio-Sabinal	2	X	X	X	X	4	No	0	0.00
222	Edwards Plateau	2	X	X		X	3	Yes	3	657.89
223	Mason County	2	X				1	Yes	1	219.30
224	Devil's River	2	X			X	2	Yes	2	438.60
225	Upper Llanos	2	X			X	2	Yes	2	438.60
226	Medina Valley	2	X	X	X	X	4	Yes	4	877.19
227	Big Bend	2	X			X	2	Yes	2	438.60
228	Maverick	2	X	X		X	3	Yes	3	657.89
229	Bandera	2	X			X	2	Yes	2	438.60
230	High Point	2	X	X	X	X	4	Yes	4	877.19
231	Trans Pecos	2	X		X	X	3	No	0	0.00
232	Runnels	2	X				1	Yes	1	219.30
233	Llano County	2	X			X	2	Yes	2	438.60
234	Middle Concho	2	X	X	X		3	Yes	3	657.89
235	Crockett	2	X				1	Yes	1	219.30
236	West Nueces-Las Moras	2	X			X	2	Yes	2	438.60
237	Rio Grande-Pecos River	2	X		X	X	3	Yes	3	657.89
238	Upper Nueces-Frio	2	X	X		X	3	Yes	3	657.89
240	Chaparal	2	X	X		X	3	No	0	0.00
241	Sandhills	2	X				1	Yes	1	219.30
242	Mustang	2	X	X	X	X	4	Yes	4	877.19
243	Howard	2	X			X	1	Yes	1	219.30
244	Midland	2	X	X	X		3	Yes	3	657.89
245	Nolan County	2	X		X		2	Yes	2	438.60
246	Andrews	2	X	X	X		3	Yes	3	657.89
247	Eldorado-Divide	2					0	No	0	0.00
248	Tom Green	2	X	X	X		3	Yes	3	657.89
249	McCulloch	2	X		X	X	3	Yes	3	657.89
250	San Saba	2			X	X	2	Yes	2	438.60
251	Glasscock County	2	X	X	X	X	4	No	0	0.00
252	North Concho River	2			X	X	2	No	0	0.00

FY 05 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	657.89
304	Caldwell-Travis	3	X			X	2	Yes	2	438.60
306	Comal-Guadalupe	3	X	X		X	3	Yes	3	657.89
307	Atascosa County	3	X	X	X	X	4	Yes	4	877.19
316	Matagorda County	3	X	X	X	X	4	Yes	4	877.19
317	Coastal Plains	3	X	X	X	X	4	Yes	4	877.19
318	Waters Davis	3	X	X	X	X	4	Yes	4	877.19
319	Southmost	3	X	X	X	X	4	Yes	4	877.19
320	Dimmit County	3	X		X	X	3	Yes	3	657.89
321	Agua Poquita	3	X	X			2	Yes	2	438.60
323	Live Oak	3	X	X	X	X	4	Yes	4	877.19
324	San Patricio	3	X		X	X	3	Yes	3	657.89
325	Frio	3	X	X	X	X	4	Yes	4	877.19
326	Winter Garden	3	X	X	X	X	4	Yes	4	877.19
328	Loma Blanca	3	X				1	Yes	1	219.30
329	Copano Bay	3	X			X	2	Yes	2	438.60
330	Alamo	3	X	X	X	X	4	Yes	4	877.19
331	Monte Mucho	3			X	X	2	Yes	2	438.60
332	Starr County	3	X	X	X		3	Yes	3	657.89
333	Colorado	3	X	X	X	X	4	No	0	0.00
334	Lavaca	3	X		X	X	3	Yes	3	657.89
335	Zapata	3	X	X	X	X	4	Yes	4	877.19
336	Jackson	3	X		X		2	Yes	2	438.60
337	Webb	3	X		X	X	3	Yes	3	657.89
338	Gonzales County	3	X			X	2	Yes	2	438.60
339	DeWitt County	3				X	1	Yes	1	219.30
340	Bastrop County	3	X			X	2	Yes	2	438.60
341	Fayette	3				X	1	Yes	1	219.30
342	Wharton County	3	X	X	X	X	4	Yes	4	877.19
343	Karnes County	3		X		X	2	Yes	2	438.60
344	Bee	3					0	No	0	0.00
345	Calhoun	3	X		X		2	Yes	2	438.60
346	Victoria	3		X	X		2	Yes	2	438.60
347	Austin County	3			X	X	2	Yes	2	438.60
348	Washington	3				X	1	Yes	1	219.30
349	Willacy	3	X	X	X		3	Yes	3	657.89
350	Hidalgo	3	X	X	X	X	4	Yes	4	877.19
351	Hays County	3	X			X	2	Yes	2	438.60
352	Goliad County	3				X	1	Yes	1	219.30
353	McMullen County	3			X	X	2	Yes	2	438.60
354	La Salle County	3			X	X	2	Yes	2	438.60
355	Jim Wells County	3	X		X		2	Yes	2	438.60
356	Kleberg-Kenedy	3	X				1	Yes	1	219.30
357	Nueces	3	X		X	X	3	Yes	3	657.89
358	Burleson County	3				X	1	No	0	0.00
359	Lee County	3	X			X	2	Yes	2	438.60

FY 05 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	219.30
404	Davy Crockett-Trinity	4	X			X	2	Yes	2	438.60
408	Bowie County	4	X			X	2	Yes	2	438.60
412	Harrison County	4	X				1	Yes	1	219.30
415	Lamar	4	X			X	2	Yes	2	438.60
417	Upshur-Gregg	4	X				1	Yes	1	219.30
419	Sulphur-Cypress	4	X			X	2	Yes	2	438.60
421	Anderson-Houston	4	X			X	2	Yes	2	438.60
422	Trinity-Neches	4	X			X	2	Yes	2	438.60
423	Red River County	4	X			X	2	Yes	2	438.60
424	Freestone County	4	X			X	2	Yes	2	438.60
426*	Smith County	4	X			X	2	Yes	2	438.60
427	Cherokee County	4	X			X	2	Yes	2	438.60
428	Bedias Creek	4				X	1	No	0	0.00
429	Piney Woods	4	X				1	No	0	0.00
432	Coastal	4	X		X		2	Yes	2	438.60
433	Marion-Cass	4	X			X	2	Yes	2	438.60
434	Trinity Bay	4	X		X		2	Yes	2	438.60
435	Lower Trinity	4	X		X		2	Yes	2	438.60
436	Polk-San Jacinto	4	X				1	No	0	0.00
437	Lower Neches	4	X		X		2	Yes	2	438.60
438	Upper Neches	4	X				1	No	0	0.00
439	Long Leaf	4	X				1	No	0	0.00
440	Navasota	4	X	X	X	X	4	Yes	4	877.19
441	Jasper-Newton	4	X		X		2	No	0	0.00
442	Harris	4	X		X		2	Yes	2	438.60
443	Delta	4	X			X	2	Yes	2	438.60
444	Wood	4	X				1	Yes	1	219.30
445	Hopkins-Rains	4	X				1	Yes	1	219.30
446	Lower Sabine-Neches	4	X		X		2	Yes	2	438.60
447	Rusk	4	X			X	2	Yes	2	438.60
448	Panola	4	X				1	Yes	1	219.30
449	Shelby	4	X				1	Yes	1	219.30
450	Brazos County	4	X			X	2	Yes	2	438.60
451	Robertson County	4	X			X	2	Yes	2	438.60
452	Montgomery County	4	X				1	No	0	0.00
453	Walker County	4	X				1	No	0	0.00

FY 05 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	438.60
504	Ellis-Prairie	5	X			X	2	Yes	2	438.60
505	Kaufman-Van Zandt	5	X			X	2	Yes	2	438.60
506	Hamilton-Coryell	5	X			X	2	Yes	2	438.60
508	Little River-San Gabriel	5	X			X	2	Yes	2	438.60
509	Central Texas	5	X			X	2	Yes	2	438.60
512	McLennan County	5	X			X	2	Yes	2	438.60
513	Taylor	5	X			X	2	Yes	2	438.60
514	Navarro	5	X			X	2	Yes	2	438.60
518	Palo Pinto	5	X				1	Yes	1	219.30
519	Dalworth	5	X			X	2	Yes	2	438.60
520	Fannin County	5	X			X	2	Yes	2	438.60
524	Upper Elm-Red	5	X			X	2	Yes	2	438.60
525	Upper Leon	5	X	X		X	3	Yes	3	657.89
530	Upper Sabine	5	X			X	2	Yes	2	438.60
534	Hill Country	5	X			X	2	Yes	2	438.60
535	Collin County	5	X			X	2	Yes	2	438.60
537	Wilbarger	5	X		X	X	3	Yes	3	657.89
538	Wichita	5	X			X	2	Yes	2	438.60
539	Young	5	X			X	2	Yes	2	438.60
540	Hill County-Blackland	5	X			X	2	Yes	2	438.60
541	Johnson County	5	X			X	2	Yes	2	438.60
542	Miller-Brazos	5			X	X	2	Yes	2	438.60
543	Throckmorton	5	X			X	2	Yes	2	438.60
544	Wichita-Brazos	5	X	X	X	X	4	Yes	4	877.19
545	California Creek	5	X		X		2	Yes	2	438.60
546	Haskell	5	X		X	X	3	Yes	3	657.89
547	Denton County	5	X			X	2	Yes	2	438.60
548	Wise	5	X			X	2	Yes	2	438.60
549	Jack	5				X	1	Yes	1	219.30
550	Central Colorado	5	X			X	2	Yes	2	438.60
551	Lower Clear Fork of the Brazos	5	X	X		X	3	Yes	3	657.89
552	Callahan Divide	5	X	X		X	3	Yes	3	657.89
553	Pecan Bayou	5	X			X	2	Yes	2	438.60
554	Mills County	5	X			X	2	Yes	2	438.60
555	Bosque	5	X				1	Yes	1	219.30
556	Cross Timbers	5	X				1	Yes	1	219.30
557	Brazos Valley	5	X				1	Yes	1	219.30
558	Parker County	5	X			X	2	Yes	2	438.60
559	Archer County	5				X	1	Yes	1	219.30
560	Little Wichita	5				X	1	Yes	1	219.30

FY 05 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			179	59	104	145	487		456	100000

SWCDs with no criteria 3
 SWCDs not participating 19
 SWCDs participating 198

Total \$ 100,000
 \$/criteria 219.30

Water Needs: From TWDB data. Counties with water needs for 2050
 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
 * Districts with initial allocation subsequently declining to participate in 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 III

SWCD Data

Potential Water Savings from Planned BMPs			Units Planned							
12 Dec 06										
BMP	Units (ac, ft, etc)	Water savings per unit	Agua Poquita	Alamo	Anderson-Houston	Andrew Kent	Andrews	Archer County	Atascosa County	Austin 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						100		
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						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	140	670		5100	73174	1000	100	
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		2150						
4.3.3 Systems	ac	0.453		105			40		172	
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		6					4	
Ponds (378)	no	na						3		
Erosion Control Practices										
Conservation Cover (327)	ac	na								
Conservation Crop Rotation (328)	ac	na						100		
Contour Buffer Strips (332)	ac	na								
Contour Stripcropping (585)	ac	na								
Cover & Green Manure Crop (340)	ac	na			60					
Critical Area Planting (342)	ac	na						50		
Diversion (362)	ft	na								
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na	44822	7330	1500		13200	1000	34765	
Field Border (386)	ac	na								
Filter Strip (393)	ac	na								
Grade Stabilization Structures (410)	no	na								
Grassed Waterway (412)	ac	na						5		
Heavy Use Area Protection (561)	ac	na								
Pasture and Hayland Planting (512)	ac	na		1042	220				145	55
Pipeline-Livestock Watering (516)	ft	na	2000	952			15660			2500
Prescribed Grazing (528)	ac	na		1426	220				10809	175
Range Planting (550)	ac	na	256	384			8	500	87	30
Riparian Forest Buffer (391)	ac	na								
Riparian Herbaceous Cover (390)	ac	na								
Stripcropping—Field (586)	ac	na								
Terrace (600)	ft	na						1500		
Tree/Shrub Establishment (612)	ac	na			60					
Underground Outlets (620)	ft	na								
Watering Facility (614)	no	na	2	3			13			
nd-none directly										

Potential Water Savings from Planned BMPs											
12 Dec 06											
BMP	Units (ac, ft, etc)	Water savings per unit	Bandera	Bastrop County	Big Bend	Blackwater r Valley	Bosque	Bowie County	Brazos County	Brazos Valley	
4.1 Agricultural Irrigation Water Use Management											
4.1.1 Irrigation Scheduling	ac	0.4				1100					
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd									
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4		75		1800					
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		100							
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	525	3000	1200	1500		502	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									
4.3.3 Systems	ac	0.453				960					
4.3.4 Drip/Micro-Irrigation System	ac	na				250					
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	1	2							
Erosion Control Practices											
Conservation Cover (327)	ac	na				1800			2000		
Conservation Crop Rotation (328)	ac	na		100		3600					
Contour Buffer Strips (332)	ac	na									
Contour Stripcropping (585)	ac	na									
Cover & Green Manure Crop (340)	ac	na									
Critical Area Planting (342)	ac	na									
Diversion (362)	ft	na									
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na	5000	8200				4931			
Field Border (386)	ac	na									
Filter Strip (393)	ac	na									
Grade Stabilization Structures (410)	no	na									
Grassed Waterway (412)	ac	na		6							
Heavy Use Area Protection (561)	ac	na									
Pasture and Hayland Planting (512)	ac	na				120	500	20		3000	
Pipeline-Livestock Watering (516)	ft	na									
Prescribed Grazing (528)	ac	na	3000	2000	230000			20			
Range Planting (550)	ac	na									
Riparian Forest Buffer (391)	ac	na		40							
Riparian Herbaceous Cover (390)	ac	na									
Stripcropping—Field (586)	ac	na									
Terrace (600)	ft	na				170					
Tree/Shrub Establishment (612)	ac	na						48			
Underground Outlets (620)	ft	na									
Watering Facility (614)	no	na		4							
nd-none directly											

Potential Water Savings from Planned BMPs											
12 Dec 06											
BMP	Units (ac, ft, etc)	Water savings per unit	Caldwell- Travis	Calhoun	California Creek	Callahan Divide	Canadian River	Cap Rock	Central Colorado	Central Texas	
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			30						
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		2967							
4.2.3 Contour Farming	ac	na			3292						
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54									
4.2.5 Brush Control/Management	ac	0.45	1438	818	2673	3353			5000	500	
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 Systems	ac	0.453									
4.3.4 Drip/Micro-Irrigation System	ac	na			30						
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	1	2							
Erosion Control Practices											
Conservation Cover (327)	ac	na			232						
Conservation Crop Rotation (328)	ac	na		31000	6786	72				5000	
Contour Buffer Strips (332)	ac	na									
Contour Stripcropping (585)	ac	na									
Cover & Green Manure Crop (340)	ac	na			272						
Critical Area Planting (342)	ac	na		6							
Diversion (362)	ft	na									
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na		22384						15000	
Field Border (386)	ac	na		7	299						
Filter Strip (393)	ac	na								2	
Grade Stabilization Structures (410)	no	na		14							
Grassed Waterway (412)	ac	na	25		48					43	
Heavy Use Area Protection (561)	ac	na									
Pasture and Hayland Planting (512)	ac	na		783	72	193				578	
Pipeline-Livestock Watering (516)	ft	na		6100							
Prescribed Grazing (528)	ac	na		581						5000	
Range Planting (550)	ac	na		164		110					
Riparian Forest Buffer (391)	ac	na									
Riparian Herbaceous Cover (390)	ac	na									
Stripcropping—Field (586)	ac	na									
Terrace (600)	ft	na	23000		620						
Tree/Shrub Establishment (612)	ac	na								2000	
Underground Outlets (620)	ft	na									
Watering Facility (614)	no	na		5							
nd-none directly											

Potential Water Savings from Planned BMPs											
12 Dec 06											
BMP	Units (ac, ft, etc)	Water savings per unit	Cherokee County	Coastal	Coastal Plains	Cochran	Collin County	Comal- Guadalupe	Concho	Copano Bay	
4.1 Agricultural Irrigation Water Use Management											
4.1.1 Irrigation Scheduling	ac	0.4		660							
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd									
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4			1288				47000	2300	
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		490	29						
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		1018					4920		
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 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							4000		
Conservation Crop Rotation (328)	ac	na		860	12758				135000		
Contour Buffer Strips (332)	ac	na									
Contour Stripcropping (585)	ac	na									
Cover & Green Manure Crop (340)	ac	na									
Critical Area Planting (342)	ac	na									
Diversion (362)	ft	na									
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na						1000			
Field Border (386)	ac	na									
Filter Strip (393)	ac	na									
Grade Stabilization Structures (410)	no	na									
Grassed Waterway (412)	ac	na						15			
Heavy Use Area Protection (561)	ac	na				5					
Pasture and Hayland Planting (512)	ac	na		155	308			200	727		
Pipeline-Livestock Watering (516)	ft	na									
Prescribed Grazing (528)	ac	na									
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						30000	700		
Tree/Shrub Establishment (612)	ac	na									
Underground Outlets (620)	ft	na									
Watering Facility (614)	no	na									
nd-none directly											

Potential Water Savings from Planned BMPs										
12 Dec 06										
BMP	Units (ac, ft, etc)	Water savings per unit	Cottle	Crockett	Cross Timbers	Dallam	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							836	
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							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		8799						
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 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					2		18	
Erosion Control Practices										
Conservation Cover (327)	ac	na					75	84		
Conservation Crop Rotation (328)	ac	na					25	55	835	
Contour Buffer Strips (332)	ac	na							35	
Contour Stripcropping (585)	ac	na								
Cover & Green Manure Crop (340)	ac	na								
Critical Area Planting (342)	ac	na						5	70	
Diversion (362)	ft	na								
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na					500		2234	
Field Border (386)	ac	na								
Filter Strip (393)	ac	na							15	
Grade Stabilization Structures (410)	no	na							1	
Grassed Waterway (412)	ac	na							9	
Heavy Use Area Protection (561)	ac	na								
Pasture and Hayland Planting (512)	ac	na					25	3165	110	4000
Pipeline-Livestock Watering (516)	ft	na								
Prescribed Grazing (528)	ac	na					250			
Range Planting (550)	ac	na					25			
Riparian Forest Buffer (391)	ac	na								
Riparian Herbaceous Cover (390)	ac	na								
Stripcropping—Field (586)	ac	na								
Terrace (600)	ft	na							15800	
Tree/Shrub Establishment (612)	ac	na					5		25	
Underground Outlets (620)	ft	na								
Watering Facility (614)	no	na								
nd-none directly										

Potential Water Savings from Planned BMPs											
12 Dec 06											
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	Ellis- Prairie	
4.1 Agricultural Irrigation Water Use Management											
4.1.1 Irrigation Scheduling	ac	0.4				2200	320				
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd				3	6				
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4				1750	3760				
4.1.4 On-Farm Irrigation Audit	farms	nd				3	6				
4.2 Land Management Systems											
4.2.1 Furrow Dikes	ac	0.18					16000				
4.2.2 Land Leveling	ac	na									
4.2.3 Contour Farming	ac	na					43000			825	
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	2800	15000	12200		650	
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 Systems	ac	0.453				2600	40				
4.3.4 Drip/Micro-Irrigation System	ac	na				20	39				
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25				300					
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				320					
4.5.2 Nursery Production Systems	ac	na									
Other water conservation											
Irrigation Reg Resvr. (concrete) (552)	no	na									
Ponds (378)	no	na				1					10
Erosion Control Practices											
Conservation Cover (327)	ac	na				640					
Conservation Crop Rotation (328)	ac	na				640	22000			1800	
Contour Buffer Strips (332)	ac	na					500				
Contour Stripcropping (585)	ac	na									
Cover & Green Manure Crop (340)	ac	na					730				
Critical Area Planting (342)	ac	na				220				28	
Diversion (362)	ft	na									
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na	95000				15840				
Field Border (386)	ac	na									
Filter Strip (393)	ac	na									
Grade Stabilization Structures (410)	no	na								6	
Grassed Waterway (412)	ac	na								40	
Heavy Use Area Protection (561)	ac	na									
Pasture and Hayland Planting (512)	ac	na		650		160	160			600	
Pipeline-Livestock Watering (516)	ft	na	22000	2500			47560				
Prescribed Grazing (528)	ac	na	35000			580	126000			3000	
Range Planting (550)	ac	na		1500		160				250	
Riparian Forest Buffer (391)	ac	na									
Riparian Herbaceous Cover (390)	ac	na									
Stripcropping—Field (586)	ac	na									
Terrace (600)	ft	na					7656			2300	
Tree/Shrub Establishment (612)	ac	na				320	2				
Underground Outlets (620)	ft	na									5
Watering Facility (614)	no	na	4			3	23				
nd-none directly											

Potential Water Savings from Planned BMPs											
12 Dec 06											
BMP	Units (ac, ft, etc)	Water savings per unit	Fannin County	Fayette	Floyd County	Foard County	Freestone County	Frio	Gaines County	Garza	
4.1 Agricultural Irrigation Water Use Management											
4.1.1 Irrigation Scheduling	ac	0.4			9030	115		600	2400		
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd				3				2	
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4			240			2400		353	
4.1.4 On-Farm Irrigation Audit	farms	nd									
4.2 Land Management Systems											
4.2.1 Furrow Dikes	ac	0.18			880						
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						2000			
4.2.5 Brush Control/Management	ac	0.45			637	3794	6	8000	900	5,388	
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 Systems	ac	0.453			1471	115		600	1800		
4.3.4 Drip/Micro-Irrigation System	ac	na			636			200		259	
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				5	2	20			
Ponds (378)	no	na		5						1	
Erosion Control Practices											
Conservation Cover (327)	ac	na		2000	438						
Conservation Crop Rotation (328)	ac	na		2000	246			2400		353	
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			2				
Diversion (362)	ft	na									
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na				34100	2640	20000		20100	
Field Border (386)	ac	na									
Filter Strip (393)	ac	na		10							
Grade Stabilization Structures (410)	no	na									
Grassed Waterway (412)	ac	na				3		20			
Heavy Use Area Protection (561)	ac	na									
Pasture and Hayland Planting (512)	ac	na	2000	50	438	887		800			
Pipeline-Livestock Watering (516)	ft	na				7400		2000		7800	
Prescribed Grazing (528)	ac	na				1000		20000		14283	
Range Planting (550)	ac	na						1200			
Riparian Forest Buffer (391)	ac	na									
Riparian Herbaceous Cover (390)	ac	na									
Stripcropping—Field (586)	ac	na									
Terrace (600)	ft	na			13200	22000					
Tree/Shrub Establishment (612)	ac	na									
Underground Outlets (620)	ft	na									
Watering Facility (614)	no	na				6		20		8	
nd-none directly											

Potential Water Savings from Planned BMPs											
12 Dec 06											
BMP	Units (ac, ft, etc)	Water savings per unit	Gillespie County	Goliad County	Gonzales County	Gray County	Hale County	Hall- Childress	Hamilton- Coryell	Hansford	
4.1 Agricultural Irrigation Water Use Management											
4.1.1 Irrigation Scheduling	ac	0.4					8969				
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd									
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4					648				
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		2000							
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54									
4.2.5 Brush Control/Management	ac	0.45	3749	200000	70						
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					136201				
4.3.3 Systems	ac	0.453					6550			500	
4.3.4 Drip/Micro-Irrigation System	ac	na					1054				
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		10000			46172				
Conservation Crop Rotation (328)	ac	na			26		700				
Contour Buffer Strips (332)	ac	na									
Contour Stripcropping (585)	ac	na									
Cover & Green Manure Crop (340)	ac	na					420				
Critical Area Planting (342)	ac	na		200							
Diversion (362)	ft	na									
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na		200000	1200					5280	
Field Border (386)	ac	na		1000							
Filter Strip (393)	ac	na		200							
Grade Stabilization Structures (410)	no	na		5							
Grassed Waterway (412)	ac	na		100							
Heavy Use Area Protection (561)	ac	na									
Pasture and Hayland Planting (512)	ac	na		2000	40		159				
Pipeline-Livestock Watering (516)	ft	na		100000							
Prescribed Grazing (528)	ac	na		400000							
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		200000							
Tree/Shrub Establishment (612)	ac	na									
Underground Outlets (620)	ft	na									
Watering Facility (614)	no	na		200							
nd-none directly											

Potential Water Savings from Planned BMPs										
12 Dec 06										
BMP	Units (ac, ft, etc)	Water savings per unit	Harris	Harrison County	Hartley	Haskell	Hays County	Hemphill	Hidalgo	High Point
4.1 Agricultural Irrigation Water Use Management										
4.1.1 Irrigation Scheduling	ac	0.4								217
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd								
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4			2102	2898	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							350	
4.2.3 Contour Farming	ac	na				3590	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	57		2560	1397	700	2400		2060
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							2700	3000
4.3.3 Systems	ac	0.453			2500	2863	48			
4.3.4 Drip/Micro-Irrigation System	ac	na			50	86				
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	1			
Erosion Control Practices										
Conservation Cover (327)	ac	na			1200	392	300			
Conservation Crop Rotation (328)	ac	na			1500	9940				
Contour Buffer Strips (332)	ac	na								
Contour Stripcropping (585)	ac	na								
Cover & Green Manure Crop (340)	ac	na			400	323				
Critical Area Planting (342)	ac	na								
Diversion (362)	ft	na								420
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na	2477					11200		24000
Field Border (386)	ac	na								
Filter Strip (393)	ac	na								
Grade Stabilization Structures (410)	no	na								
Grassed Waterway (412)	ac	na					8			
Heavy Use Area Protection (561)	ac	na								
Pasture and Hayland Planting (512)	ac	na	13		50	203				
Pipeline-Livestock Watering (516)	ft	na						1150		24600
Prescribed Grazing (528)	ac	na								
Range Planting (550)	ac	na						36		
Riparian Forest Buffer (391)	ac	na								
Riparian Herbaceous Cover (390)	ac	na								
Stripcropping—Field (586)	ac	na								
Terrace (600)	ft	na				300				
Tree/Shrub Establishment (612)	ac	na		600	25					
Underground Outlets (620)	ft	na			2					
Watering Facility (614)	no	na						2		
nd-none directly										

Potential Water Savings from Planned BMPs										
12 Dec 06										
BMP	Units (ac, ft, etc)	Water savings per unit	Highland	Hill Country	Hill County- Blackland	Hockley County	Hopkins- Rains	Howard	Hutchinso n	Jack
4.1 Agricultural Irrigation Water Use Management										
4.1.1 Irrigation Scheduling	ac	0.4						248		
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd				25				
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4				1000		248	2500	
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								
4.2.3 Contour Farming	ac	na				2000		700		
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54				100			400	
4.2.5 Brush Control/Management	ac	0.45	1500	2587		5000		1967	645	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				10000				
4.3.3 Systems	ac	0.453				1100			1703	
4.3.4 Drip/Micro-Irrigation System	ac	na				800			142	
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					20	1		
Erosion Control Practices										
Conservation Cover (327)	ac	na				1000			256	
Conservation Crop Rotation (328)	ac	na				1000			3000	
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					15			
Diversion (362)	ft	na								
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na					5000		60000	
Field Border (386)	ac	na								
Filter Strip (393)	ac	na					100			
Grade Stabilization Structures (410)	no	na					5			
Grassed Waterway (412)	ac	na								
Heavy Use Area Protection (561)	ac	na								
Pasture and Hayland Planting (512)	ac	na		1200		100	500			
Pipeline-Livestock Watering (516)	ft	na							36100	
Prescribed Grazing (528)	ac	na					5500		50000	
Range Planting (550)	ac	na		1397				1581		
Riparian Forest Buffer (391)	ac	na					10			
Riparian Herbaceous Cover (390)	ac	na								
Stripcropping—Field (586)	ac	na				300				
Terrace (600)	ft	na				200		10732		
Tree/Shrub Establishment (612)	ac	na								
Underground Outlets (620)	ft	na								
Watering Facility (614)	no	na							30	
nd-none directly										

Potential Water Savings from Planned BMPs											
12 Dec 06											
BMP	Units (ac, ft, etc)	Water savings per unit	Jackson	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	1228			300	250			4000	
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	650								
4.2.3 Contour Farming	ac	na				150	250			4000	
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54									
4.2.5 Brush Control/Management	ac	0.45	2874	400	78	1100	5000	5214	450	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	7500								
4.3.3 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									
Ponds (378)	no	na	1		12		58				
Erosion Control Practices											
Conservation Cover (327)	ac	na		1578						600	
Conservation Crop Rotation (328)	ac	na	1600	11349		300	250			4000	
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	20			1	500			100	
Diversion (362)	ft	na									
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na	15000	19864	12230		18000				
Field Border (386)	ac	na				1800				30	
Filter Strip (393)	ac	na				2				30	
Grade Stabilization Structures (410)	no	na				3	12				
Grassed Waterway (412)	ac	na					100				
Heavy Use Area Protection (561)	ac	na	30				85			400	
Pasture and Hayland Planting (512)	ac	na	50	8	238	750	3000			600	
Pipeline-Livestock Watering (516)	ft	na		4876							
Prescribed Grazing (528)	ac	na	5000	488			5000				
Range Planting (550)	ac	na	90	30	40		1000				
Riparian Forest Buffer (391)	ac	na	24								
Riparian Herbaceous Cover (390)	ac	na									
Stripcropping—Field (586)	ac	na									
Terrace (600)	ft	na				25000	2000			600	
Tree/Shrub Establishment (612)	ac	na					2000				
Underground Outlets (620)	ft	na									
Watering Facility (614)	no	na	5	10							
nd-none directly											

Potential Water Savings from Planned BMPs											
12 Dec 06											
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									
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd									
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4			300			100			
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	500	745			130	500			
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 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			10			
Erosion Control Practices											
Conservation Cover (327)	ac	na			500						
Conservation Crop Rotation (328)	ac	na			300						
Contour Buffer Strips (332)	ac	na									
Contour Stripcropping (585)	ac	na									
Cover & Green Manure Crop (340)	ac	na			300		10				
Critical Area Planting (342)	ac	na			25						
Diversion (362)	ft	na									
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na		75565				12000		2973	
Field Border (386)	ac	na									
Filter Strip (393)	ac	na			50						
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			1000		150	800			
Pipeline-Livestock Watering (516)	ft	na		9389			300				
Prescribed Grazing (528)	ac	na		3087				5000			
Range Planting (550)	ac	na		75							
Riparian Forest Buffer (391)	ac	na									
Riparian Herbaceous Cover (390)	ac	na									
Stripcropping—Field (586)	ac	na									
Terrace (600)	ft	na			200		75				
Tree/Shrub Establishment (612)	ac	na									
Underground Outlets (620)	ft	na									
Watering Facility (614)	no	na		6							
nd-none directly											

Potential Water Savings from Planned BMPs											
12 Dec 06											
BMP	Units (ac, ft, etc)	Water savings per unit	Little River-San Gabriel	Little Wichita	Live Oak	Llano County	Loma Blanca	Clear Fork of the Brazos	Lower Neches	Lower Pease River	
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		4000				1550			
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	2000	1000							
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54	150								
4.2.5 Brush Control/Management	ac	0.45		3500	13828	2350	103	26457	1555		
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 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		8							
Erosion Control Practices											
Conservation Cover (327)	ac	na		6000	400			1877			
Conservation Crop Rotation (328)	ac	na	1700	6000				3427			
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	9						
Diversion (362)	ft	na		10000							
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na									
Field Border (386)	ac	na									
Filter Strip (393)	ac	na	38					23			
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	604		73	33			
Pipeline-Livestock Watering (516)	ft	na						4000			
Prescribed Grazing (528)	ac	na		20000			5000	5949			
Range Planting (550)	ac	na	30	300	800						
Riparian Forest Buffer (391)	ac	na		400							
Riparian Herbaceous Cover (390)	ac	na		400							
Stripcropping—Field (586)	ac	na									
Terrace (600)	ft	na	70000	20000				130			
Tree/Shrub Establishment (612)	ac	na									
Underground Outlets (620)	ft	na									
Watering Facility (614)	no	na						1			
nd-none directly											

Potential Water Savings from Planned BMPs											
12 Dec 06											
BMP	Units (ac, ft, etc)	Water savings per unit	Lower Sabine- Neches	Lower Trinity	Lubbock County	Lynn County	Marion- Cass	Mason County	Matagord a County	Maverick	
4.1 Agricultural Irrigation Water Use Management											
4.1.1 Irrigation Scheduling	ac	0.4							308		
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd			15						
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4			1500	320					
4.1.4 On-Farm Irrigation Audit	farms	nd									
4.2 Land Management Systems											
4.2.1 Furrow Dikes	ac	0.18			900	284					
4.2.2 Land Leveling	ac	na		210					389	633	
4.2.3 Contour Farming	ac	na			1000	320		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	227	1425				1500	523	1509	
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			11000				2500		
4.3.3 Systems	ac	0.453			1200	254				14394	
4.3.4 Drip/Micro-Irrigation System	ac	na			650	30					
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				320					
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				
Erosion Control Practices											
Conservation Cover (327)	ac	na				320					
Conservation Crop Rotation (328)	ac	na			1300	320		200	309		
Contour Buffer Strips (332)	ac	na									
Contour Stripcropping (585)	ac	na									
Cover & Green Manure Crop (340)	ac	na									
Critical Area Planting (342)	ac	na					15				
Diversion (362)	ft	na									
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na					1102		43912		
Field Border (386)	ac	na									
Filter Strip (393)	ac	na									
Grade Stabilization Structures (410)	no	na							13		
Grassed Waterway (412)	ac	na									
Heavy Use Area Protection (561)	ac	na	5								
Pasture and Hayland Planting (512)	ac	na	118			16	342		678	571	
Pipeline-Livestock Watering (516)	ft	na									
Prescribed Grazing (528)	ac	na									
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			17000	12000					
Tree/Shrub Establishment (612)	ac	na					31				
Underground Outlets (620)	ft	na									
Watering Facility (614)	no	na									
nd-none directly											

Potential Water Savings from Planned BMPs											
12 Dec 06											
BMP	Units (ac, ft, etc)	Water savings per unit	McClellan Creek	McCulloch	McLennan County	McMullen County	Medina Valley	Menard County	Middle Concho	Midland	
4.1 Agricultural Irrigation Water Use Management											
4.1.1 Irrigation Scheduling	ac	0.4	5000								
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd									
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4	2500	400			515			451	
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	350						
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	550	1505	794	2560	4095		
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 Systems	ac	0.453	8000				456				
4.3.4 Drip/Micro-Irrigation System	ac	na	100						313	451	
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				10					
Erosion Control Practices											
Conservation Cover (327)	ac	na	243								
Conservation Crop Rotation (328)	ac	na	4500		755		515		325		
Contour Buffer Strips (332)	ac	na									
Contour Stripcropping (585)	ac	na									
Cover & Green Manure Crop (340)	ac	na									
Critical Area Planting (342)	ac	na			26						
Diversion (362)	ft	na									
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na	11900			25040			92148		
Field Border (386)	ac	na			40						
Filter Strip (393)	ac	na			15						
Grade Stabilization Structures (410)	no	na									
Grassed Waterway (412)	ac	na			55						
Heavy Use Area Protection (561)	ac	na									
Pasture and Hayland Planting (512)	ac	na	80	600	400	200	586				
Pipeline-Livestock Watering (516)	ft	na	15350			3400			17240		
Prescribed Grazing (528)	ac	na	2560			48899			32500		
Range Planting (550)	ac	na				350	121		398		
Riparian Forest Buffer (391)	ac	na									
Riparian Herbaceous Cover (390)	ac	na									
Stripcropping—Field (586)	ac	na									
Terrace (600)	ft	na	5600		300						
Tree/Shrub Establishment (612)	ac	na	4								
Underground Outlets (620)	ft	na									
Watering Facility (614)	no	na	12						26		
nd-none directly											

Potential Water Savings from Planned BMPs											
12 Dec 06											
BMP	Units (ac, ft, etc)	Water savings per unit	Miller- Brazos	Mills County	Mitchell	Monte Mucho	Moore County	Mustang	Nacogdoche s	Navarro	
4.1 Agricultural Irrigation Water Use Management											
4.1.1 Irrigation Scheduling	ac	0.4					3480	500			
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd									
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4			1222		720	500		1043	
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						2000		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	260	3000	769	229	500	2000		200	
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 Systems	ac	0.453	160				3480	200			
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					1				
Ponds (378)	no	na	5							14	
Erosion Control Practices											
Conservation Cover (327)	ac	na					357			603	
Conservation Crop Rotation (328)	ac	na					3480			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	22	
Diversion (362)	ft	na									
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na					13287				
Field Border (386)	ac	na								108	
Filter Strip (393)	ac	na								213	
Grade Stabilization Structures (410)	no	na	1							10	
Grassed Waterway (412)	ac	na	40							33	
Heavy Use Area Protection (561)	ac	na								14	
Pasture and Hayland Planting (512)	ac	na	500						318	1391	
Pipeline-Livestock Watering (516)	ft	na	1500								
Prescribed Grazing (528)	ac	na					5000				
Range Planting (550)	ac	na					327				
Riparian Forest Buffer (391)	ac	na									
Riparian Herbaceous Cover (390)	ac	na									
Stripcropping—Field (586)	ac	na									
Terrace (600)	ft	na	8550							681	
Tree/Shrub Establishment (612)	ac	na									
Underground Outlets (620)	ft	na									
Watering Facility (614)	no	na					6				
nd-none directly											

Potential Water Savings from Planned BMPs										
12 Dec 06										
BMP	Units (ac, ft, etc)	Water savings per unit	Navasota	Nolan County	Nueces	Ochiltree	Oldham County	Palo Duro	Palo Pinto	Panola
4.1 Agricultural Irrigation Water Use Management										
4.1.1 Irrigation Scheduling	ac	0.4	1500					1000		
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd								
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4	1800	223	1255			1200		
4.1.4 On-Farm Irrigation Audit	farms	nd	2							
4.2 Land Management Systems										
4.2.1 Furrow Dikes	ac	0.18								
4.2.2 Land Leveling	ac	na	100							
4.2.3 Contour Farming	ac	na		841				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	750	8935			17500	80		
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	12000							
4.3.3 Systems	ac	0.453						120		
4.3.4 Drip/Micro-Irrigation System	ac	na		38						
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25						160		
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		4260			250			
Conservation Crop Rotation (328)	ac	na	1800	422	1255			2000		
Contour Buffer Strips (332)	ac	na								
Contour Stripcropping (585)	ac	na								
Cover & Green Manure Crop (340)	ac	na	38							
Critical Area Planting (342)	ac	na	5							
Diversion (362)	ft	na								
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na		13622		2706		2640		
Field Border (386)	ac	na								
Filter Strip (393)	ac	na								123
Grade Stabilization Structures (410)	no	na		9						
Grassed Waterway (412)	ac	na						1		
Heavy Use Area Protection (561)	ac	na	1							62
Pasture and Hayland Planting (512)	ac	na	500	24			200			50
Pipeline-Livestock Watering (516)	ft	na		17000		360	7080	5200		
Prescribed Grazing (528)	ac	na		13452				1250		528
Range Planting (550)	ac	na		2333						
Riparian Forest Buffer (391)	ac	na		149						
Riparian Herbaceous Cover (390)	ac	na								
Stripcropping—Field (586)	ac	na								
Terrace (600)	ft	na		47540				1400		
Tree/Shrub Establishment (612)	ac	na								
Underground Outlets (620)	ft	na								
Watering Facility (614)	no	na		16				6		
nd-none directly										

Potential Water Savings from Planned BMPs											
12 Dec 06											
BMP	Units (ac, ft, etc)	Water savings per unit	Parker County	Farmer	Pecan Bayou	Pedernale s	Red River County	Rio Blanco	Rio Grande- Pecos River	Robertson County	
4.1 Agricultural Irrigation Water Use Management											
4.1.1 Irrigation Scheduling	ac	0.4		1846							
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd									
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4		2566							
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	210		2800	3325			121	150	
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		2394						4000	
4.3.3 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	178							3000	
Conservation Crop Rotation (328)	ac	na		2566							
Contour Buffer Strips (332)	ac	na									
Contour Stripcropping (585)	ac	na									
Cover & Green Manure Crop (340)	ac	na									
Critical Area Planting (342)	ac	na							35	40	
Diversion (362)	ft	na									
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na	112		20000				9000	3000	
Field Border (386)	ac	na									
Filter Strip (393)	ac	na									
Grade Stabilization Structures (410)	no	na									5
Grassed Waterway (412)	ac	na	5								
Heavy Use Area Protection (561)	ac	na		5							
Pasture and Hayland Planting (512)	ac	na	121		300						300
Pipeline-Livestock Watering (516)	ft	na							26400	3000	
Prescribed Grazing (528)	ac	na		120	10000				42000	300	
Range Planting (550)	ac	na			800				175	50	
Riparian Forest Buffer (391)	ac	na									40
Riparian Herbaceous Cover (390)	ac	na									
Stripcropping—Field (586)	ac	na									
Terrace (600)	ft	na									1500
Tree/Shrub Establishment (612)	ac	na	40								
Underground Outlets (620)	ft	na									
Watering Facility (614)	no	na							2		
nd-none directly											

Potential Water Savings from Planned BMPs										
12 Dec 06										
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		18000						
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd								
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4	100	34000			450			
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					200			
4.2.3 Contour Farming	ac	na	750							
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54		1600						
4.2.5 Brush Control/Management	ac	0.45	1250				1250	1500	2656	
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 Systems	ac	0.453		6000			160			
4.3.4 Drip/Micro-Irrigation System	ac	na		40			250		16	
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		80						
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				1	
Erosion Control Practices										
Conservation Cover (327)	ac	na	100							
Conservation Crop Rotation (328)	ac	na	1000	34000			1700			
Contour Buffer Strips (332)	ac	na								
Contour Stripcropping (585)	ac	na								
Cover & Green Manure Crop (340)	ac	na								
Critical Area Planting (342)	ac	na				4	2			
Diversion (362)	ft	na								
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na								
Field Border (386)	ac	na	200							
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	1000		60		80		40	
Pipeline-Livestock Watering (516)	ft	na			800					
Prescribed Grazing (528)	ac	na								
Range Planting (550)	ac	na	750							
Riparian Forest Buffer (391)	ac	na								
Riparian Herbaceous Cover (390)	ac	na								
Stripcropping—Field (586)	ac	na								
Terrace (600)	ft	na	200000				5000			
Tree/Shrub Establishment (612)	ac	na			150					
Underground Outlets (620)	ft	na								
Watering Facility (614)	no	na								
nd-none directly										

Potential Water Savings from Planned BMPs											
12 Dec 06											
BMP	Units (ac, ft, etc)	Water savings per unit	Sherman County	Southmos t	Staked Plains	Starr County	Stonewall	Sulphur- Cypress	Taylor	Terry	
4.1 Agricultural Irrigation Water Use Management											
4.1.1 Irrigation Scheduling	ac	0.4	1000							640	
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	48525	9000				2800	640	
4.1.4 On-Farm Irrigation Audit	farms	nd									
4.2 Land Management Systems											
4.2.1 Furrow Dikes	ac	0.18	250	17							
4.2.2 Land Leveling	ac	na		3242							
4.2.3 Contour Farming	ac	na	1000		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	240	12000	600	100000		500		
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		3488							
4.3.3 Systems	ac	0.453	11,000							620	
4.3.4 Drip/Micro-Irrigation System	ac	na	50	150						20	
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25	1,500	725							
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	1000							
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		5225							
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 Resvr. (concrete) (552)	no	na									
Ponds (378)	no	na				5					
Erosion Control Practices											
Conservation Cover (327)	ac	na	2,500	28000						640	
Conservation Crop Rotation (328)	ac	na	30000	42325	9000				3000		
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								
Diversion (362)	ft	na									
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na				23500					
Field Border (386)	ac	na	71	24							
Filter Strip (393)	ac	na	25	20							
Grade Stabilization Structures (410)	no	na									
Grassed Waterway (412)	ac	na							4		
Heavy Use Area Protection (561)	ac	na		142							
Pasture and Hayland Planting (512)	ac	na	125	688					300		
Pipeline-Livestock Watering (516)	ft	na				20000					
Prescribed Grazing (528)	ac	na				17500			2000		
Range Planting (550)	ac	na				3600					
Riparian Forest Buffer (391)	ac	na									
Riparian Herbaceous Cover (390)	ac	na									
Stripcropping—Field (586)	ac	na									
Terrace (600)	ft	na			12000						
Tree/Shrub Establishment (612)	ac	na									
Underground Outlets (620)	ft	na									
Watering Facility (614)	no	na				12					
nd-none directly											

Potential Water Savings from Planned BMPs											
12 Dec 06											
BMP	Units (ac, ft, etc)	Water savings per unit	Throckmo rton	Tierra Blanca	Tom Green	Toyah- Limpia	Trinity Bay	Trinity- Neches	Tule Creek	Upper Clear Fork	
4.1 Agricultural Irrigation Water Use Management											
4.1.1 Irrigation Scheduling	ac	0.4		12500			982		1738		
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd		75							
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4		7500			982		1908	5000	
4.1.4 On-Farm Irrigation Audit	farms	nd									
4.2 Land Management Systems											
4.2.1 Furrow Dikes	ac	0.18		15000							
4.2.2 Land Leveling	ac	na		300		431					
4.2.3 Contour Farming	ac	na	10000	3500	1000					5000	
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54		500					333		
4.2.5 Brush Control/Management	ac	0.45	15000	2500		358				30000	
4.3 On-Farm Water Delivery Systems											
4.3.1 Lining of On-Farm Irrigation Ditches	ft	0.0068				7400					
4.3.2 Replacement of On-Farm Irrigation Ditches with Pipelines	ft	0.0076		3000							
4.3.3 Systems	ac	0.453		2400	2				589	100	
4.3.4 Drip/Micro-Irrigation System	ac	na		60	100					260	
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25		150							
4.3.6 Surge Flow Irrigation for Field Water Distribution Systems	ac	0.385		100							
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			2400						
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		2	3						
Ponds (378)	no	na									
Erosion Control Practices											
Conservation Cover (327)	ac	na	1000	1500						1100	
Conservation Crop Rotation (328)	ac	na	40000	22500			982		1908	1400	
Contour Buffer Strips (332)	ac	na								120	
Contour Stripcropping (585)	ac	na									
Cover & Green Manure Crop (340)	ac	na									
Critical Area Planting (342)	ac	na									
Diversion (362)	ft	na									
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na		25000		6000					
Field Border (386)	ac	na								70	
Filter Strip (393)	ac	na			6						
Grade Stabilization Structures (410)	no	na									
Grassed Waterway (412)	ac	na		4							
Heavy Use Area Protection (561)	ac	na		750							
Pasture and Hayland Planting (512)	ac	na	400	1500			595			5000	
Pipeline-Livestock Watering (516)	ft	na		17500		51725			750		
Prescribed Grazing (528)	ac	na		15000					462		
Range Planting (550)	ac	na									
Riparian Forest Buffer (391)	ac	na	200								
Riparian Herbaceous Cover (390)	ac	na									
Stripcropping—Field (586)	ac	na								2000	
Terrace (600)	ft	na	40000	4000	500					360	
Tree/Shrub Establishment (612)	ac	na		10							
Underground Outlets (620)	ft	na									
Watering Facility (614)	no	na		8		7			6		
nd-none directly											

Potential Water Savings from Planned BMPs											
12 Dec 06											
BMP	Units (ac, ft, etc)	Water savings per unit	Upper Colorado	Upper Elm-Red	Upper Leon	Upper Llanos	Upper Nueces- Frio	Upper Pease	Upper Pecos	Upper Sabine	
4.1 Agricultural Irrigation Water Use Management											
4.1.1 Irrigation Scheduling	ac	0.4	30						104		
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd							1		
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4									
4.1.4 On-Farm Irrigation Audit	farms	nd							3		
4.2 Land Management Systems											
4.2.1 Furrow Dikes	ac	0.18									
4.2.2 Land Leveling	ac	na							30		
4.2.3 Contour Farming	ac	na	120								
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54	1260								
4.2.5 Brush Control/Management	ac	0.45				2908	10500		800		
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							5500		
4.3.3 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									
Ponds (378)	no	na	2								
Erosion Control Practices											
Conservation Cover (327)	ac	na									
Conservation Crop Rotation (328)	ac	na									
Contour Buffer Strips (332)	ac	na									
Contour Stripcropping (585)	ac	na									
Cover & Green Manure Crop (340)	ac	na									
Critical Area Planting (342)	ac	na									
Diversion (362)	ft	na									
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na				9300					
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		9900							
Pipeline-Livestock Watering (516)	ft	na				2300					
Prescribed Grazing (528)	ac	na									
Range Planting (550)	ac	na				407					
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				1					
nd-none directly											

Potential Water Savings from Planned BMPs											
12 Dec 06											
BMP	Units (ac, ft, etc)	Water savings per unit	Upshur- Gregg	Victoria	Washington	Waters Davis	Webb	West Nueces- Las Moras	Wharton County	Wheeler 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		4500					15000		
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				1576			1550		
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		20000	143	976	3000	8000	750		
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 Systems	ac	0.453		100							
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	6			3	1				
Erosion Control Practices											
Conservation Cover (327)	ac	na									
Conservation Crop Rotation (328)	ac	na		9500							
Contour Buffer Strips (332)	ac	na									
Contour Stripcropping (585)	ac	na									
Cover & Green Manure Crop (340)	ac	na									
Critical Area Planting (342)	ac	na				4					
Diversion (362)	ft	na									
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na	22175		45071	1600			12937		
Field Border (386)	ac	na									
Filter Strip (393)	ac	na									
Grade Stabilization Structures (410)	no	na				2			6		
Grassed Waterway (412)	ac	na									
Heavy Use Area Protection (561)	ac	na									
Pasture and Hayland Planting (512)	ac	na	91	600		1501			1651		
Pipeline-Livestock Watering (516)	ft	na									
Prescribed Grazing (528)	ac	na	97		114		250				
Range Planting (550)	ac	na			68						
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	492								
Underground Outlets (620)	ft	na									
Watering Facility (614)	no	na									
nd-none directly											

Potential Water Savings from Planned BMPs											
12 Dec 06											
BMP	Units (ac, ft, etc)	Water savings per unit	Wichita	Wichita- Brazos	Wilbarger	Willacy	Wilson County	Winter Garden	Wise	Wood	
4.1 Agricultural Irrigation Water Use Management											
4.1.1 Irrigation Scheduling	ac	0.4	274								
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd									
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4	99				15				
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	442				50		3979		
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54									
4.2.5 Brush Control/Management	ac	0.45	232				60	500	4480	11	
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					2500				
4.3.3 Systems	ac	0.453						1150			
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					4	1		6	
Erosion Control Practices											
Conservation Cover (327)	ac	na									
Conservation Crop Rotation (328)	ac	na					155		7743		
Contour Buffer Strips (332)	ac	na									
Contour Stripcropping (585)	ac	na									
Cover & Green Manure Crop (340)	ac	na					155		12341		
Critical Area Planting (342)	ac	na							390	11	
Diversion (362)	ft	na									
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na					1250			6757	
Field Border (386)	ac	na									
Filter Strip (393)	ac	na									
Grade Stabilization Structures (410)	no	na								2	
Grassed Waterway (412)	ac	na									
Heavy Use Area Protection (561)	ac	na							75	4	
Pasture and Hayland Planting (512)	ac	na				2379			1749	12	
Pipeline-Livestock Watering (516)	ft	na					2150	1000		1800	
Prescribed Grazing (528)	ac	na								398	
Range Planting (550)	ac	na									
Riparian Forest Buffer (391)	ac	na								5	
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	
nd-none directly											

Potential Water Savings from Planned BMPs					
12 Dec 06					
BMP	Units (ac, ft, etc)	Water savings per unit	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	2500		
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	475		
4.2.5 Brush Control/Management	ac	0.45	1537	1860	201
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 Systems	ac	0.453	1475		
4.3.4 Drip/Micro-Irrigation System	ac	na	95		
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			
Conservation Crop Rotation (328)	ac	na			
Contour Buffer Strips (332)	ac	na			
Contour Stripcropping (585)	ac	na			
Cover & Green Manure Crop (340)	ac	na			
Critical Area Planting (342)	ac	na			
Diversion (362)	ft	na			
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na			
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			
Pipeline-Livestock Watering (516)	ft	na			
Prescribed Grazing (528)	ac	na			7010
Range Planting (550)	ac	na			26
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			
nd-none directly					Total Pot

Potential Water Savings from Planned BMPs			Total Planned	Total Savings	
12 Dec 06					
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	74761	29904	27
4.1.2 Volumetric Measurement of Irrigation Water Use	meters	nd	130	nd	8
4.1.3 Crop Residue Management and Conservation Tillage	ac	0.4	247590	99036	60
4.1.4 On-Farm Irrigation Audit	farms	nd	14	nd	4
4.2 Land Management Systems					
4.2.1 Furrow Dikes	ac	0.18	34731	6252	8
4.2.2 Land Leveling	ac	na	13147	na	16
4.2.3 Contour Farming	ac	na	201399	na	37
4.2.4 Conversion of Supplemental Irrigated Farmland to Dry-Land Farmland	ac	1.54	8318	12810	10
4.2.5 Brush Control/Management	ac	0.45	777660	349947	124
4.3 On-Farm Water Delivery Systems					
4.3.1 Lining of On-Farm Irrigation Ditches	ft	0.0068	7400	50	1
4.3.2 Replacement of On-Farm Irrigation Ditches with Pipelines	ft	0.0076	207933	1576	15
4.3.3 Replacement of On-Farm Irrigation Ditches with Systems	ac	0.453	75027	33987	37
4.3.4 Drip/Micro-Irrigation System	ac	na	6199	na	29
4.3.5 Gated and Flexible Pipe for Field Water Distribution Systems	ac	0.25	2835	709	5
4.3.6 Surge Flow Irrigation for Field Water Distribution Systems	ac	0.385	800	308	4
4.3.7 Linear Move Sprinkler Irrigation Systems	ac	na	1500	na	2
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	7625	389	2
4.5 Miscellaneous Systems					
4.5.1 Tailwater Recovery and Reuse System	ac	1	2320	2320	3
4.5.2 Nursery Production Systems	ac	na	0	na	0
Other water conservation					
Irrigation Reg Resvr. (concrete) (552)	no	na	43	na	8
Ponds (378)	no	na	235	na	35
Erosion Control Practices					
Conservation Cover (327)	ac	na	125595	na	37
Conservation Crop Rotation (328)	ac	na	496282	na	65
Contour Buffer Strips (332)	ac	na	766	na	5
Contour Stripcropping (585)	ac	na	0	na	0
Cover & Green Manure Crop (340)	ac	na	16549	na	13
Critical Area Planting (342)	ac	na	1842	na	30
Diversion (362)	ft	na	10420	na	2
Fence (Includes Crossfencing for Prescribed Grazing)	ft	na	1206394	na	58
Field Border (386)	ac	na	3649	na	11
Filter Strip (393)	ac	na	872	na	16
Grade Stabilization Structures (410)	no	na	94	na	15
Grassed Waterway (412)	ac	na	564	na	20
Heavy Use Area Protection (561)	ac	na	1578	na	13
Pasture and Hayland Planting (512)	ac	na	68150	na	91
Pipeline-Livestock Watering (516)	ft	na	509642	na	40
Prescribed Grazing (528)	ac	na	1157808	na	49
Range Planting (550)	ac	na	19608	na	38
Riparian Forest Buffer (391)	ac	na	868	na	8
Riparian Herbaceous Cover (390)	ac	na	400	na	1
Stripcropping—Field (586)	ac	na	2300	na	2
Terrace (600)	ft	na	802614	na	39
Tree/Shrub Establishment (612)	ac	na	5812	na	16
Underground Outlets (620)	ft	na	7	na	2
Watering Facility (614)	no	na	449	na	30
nd-none directly			-----	-----	-----
			ential Savings	537,288 ac ft	