

EXPECTATIONS: ELEMENT D

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Bandera, TX
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Element D

- Estimate of the amounts of technical and financial assistance needed, associated costs, and the sources and authorities that will be relied upon to implement all elements of the WPP.
- Handbook Section 12.7 covers Estimating Financial and Technical Assistance Needed

Financial / Technical Assistance

- Take into account the following needs:
 - Administration and management services, salaries, fees, supplies, in-kind service
 - Information and education costs
 - Installation and operation and management
 - Monitoring, data analysis, data management

Identify All Funding Sources

Federal

- USDA EQIP, CREP
- USGS monitoring; USACE riparian funds
- EPA CWA 319h, 604b, 106, CWSRF
- www.epa.gov/owow/funding/databases.html

State

- TWDB CWSRF
- TCEQ/TSSWCB for EPA funds

Local Sources

Private Sources

Identify All Relevant Technical Assistance Authorities

- An effective WPP is contingent upon all relevant authorities being identified and for them agreeing to carry out their respective portions of the WPP
- Example technical authorities include
 - State : TFS, SWCDs, TSSWCB, TCEQ, TPWS, Texas Agrilife, TCEQ's SBEA
 - Federal: NRCS, USFWS,

Leverage Existing Sources

- Often existing financial and technical resources are already working in the area
 - Work with those entities to find a common goal of their mission and your mission in the WPP

1. BMPs and efficiencies for different pollutants on CROPLAND.							
Watershed	Cropland						
	N	P	BOD	Sediment	BMPs	% Area BMP Applied	
W1	0.0825	0.0675	ND	0.1125	Grass Swales		15
W2	0.1	0.35	34	0.425	Terrace		50
2. BMPs and efficiencies for different pollutants on PASTURELAND.							
Watershed	Pastureland						
	N	P	BOD	Sediment	BMPs	% Area BMP Applied	
W1	0	0	0	0			100
W2	0	0	0	0	Combined BMPs-		100
3. BMPs and efficiencies for different pollutants on FOREST.							
Watershed	Forest						
	N	P	BOD	Sediment	BMPs	% Area BMP Applied	
W1	ND	ND	ND	0.1775	Grass seeding roads		25
W2	ND	ND	ND	0.258	Steanside buffer		30

LOADS: NO BMPs								
Water shed	N LOAD (no BMP)	P Load (no BMP)	BOD Load (no BMP)	Sed. Load (no BMP)	WITH BMPs			
					N Reduct	P Reduct	BOD Reduced	Sed. Reduct.
	lb/year	lb/year	lb/year	t/year	lb/year	lb/year	lb/year	t/year
W1	108603	20351.2	247397	2351.0	3326.0	2251.4	963.0	150.5
W2	98424.3	20873.0	224130	3702.1	15679	6096.7	2051748	1154.8
Total	207027.4	41224.2	471527	6053.2	19005	8348.0	2052711.9	1305.3

Sample Cost / Technical Assistance Matrix						
Watershed Goal 1: Restore WQ to meet designated uses for fishing						
OBJECTIVE 1: Reduce Sedimentation by 20%						
Tasks	Responsible Party	Total Costs	Funding Mechanism	Indicators	Milestones (yrs) Short (1) Med.(5) Long(10)	
Purchase Greenway	County Parks	\$10K	County funds	# miles	2	4 10
Ordinance for floodway easement	City	10K	City funds	Ordinance adopted		5
Install riparian buffer	St PWD	\$12,500	EQIP & CREP	TSS load-ton/yr	20	15 12
Monitor sediment load pre-post implement	DEQ	\$9,500				

Ft. Cobb WPP, Oklahoma Sample of a Good Element D						
Table 7. Funding Necessary to Implement TMDL Recommended Practices to Restore Beneficial Use Support to Fort Cobb Reservoir.						
TMDL target	Anticipated from this project	TMDL Recommended BMP	Project/Funding Source	Federal	State/Local	Total
17%	7%	No-till in 50% of wheat and other row crop	FY 2005 319 Fort Cobb TMDL Implementation CSP, EQIP, ???	\$672,380	\$586,754	\$1,259,134*
	10%					\$930,000
25%		Convert 20% of worst cultivated land to pasture	FY 2001 319 Fort Cobb Project EQIP, CSP, ???			\$2,050,000*
30%	1%	Riparian Areas in 60% of watershed	FY 2001 319 Fort Cobb Project	\$30,802	\$25,867	\$64,669
	15%		2005 CREP	\$4,726,750	\$945,358	\$5,672,148
	14%		EQIP, CSP, CSP, ???	\$4,236,204	\$1,068,801	\$5,294,005
31.5%	31.5%	Nutrient Management Plans for 90% of producers	FY 2001 and 2005 319 Programs, EQIP, CSP, CSP, ???			\$375,000*
???	???	Grade Stabilization Structures	FY 2001 319 Fort Cobb Project EQIP, ???	\$92,804	\$61,870	\$154,674
						\$16,799,630

Ft. Cobb WPP				
Table 6. Funding Needs for Technical Support for Implementation of BMPs.				
Project/Funding Source	Task	Federal	State Cost Share Funds	Total
FY 2001 319 Fort Cobb Project- five year period	On-Site Coordinator	\$225,000		\$225,000
	Plan Writer	\$60,000		\$60,000
	District Support	\$75,000		\$75,000
FY 2005 319 Fort Cobb TMDL Implementation Project- salaries and support for 2-3 years beyond 2001 project	On-Site Coordinator	\$121,000		\$121,000
	District Support	\$15,000		\$15,000
Conservation Reserve Enhancement Program (CREP)- funding for 2-3 years of technical support	Plan Writer		\$94,000 - \$312,000	\$94,000 - \$312,000
NRCS District Conservationists (3)		\$52,000 - \$85,000 ¹		\$52,000 - \$85,000
	Total	\$609,800 - \$642,800	\$94,000 - \$312,000	\$703,800 - \$954,800

Table 8.2 Millers Creek Recommended Monitoring Plan and Costs					
Item	Stations	Monitoring Frequency	Five Year Cost	Annual Cost	10 yr cost
Benthic Monitoring	8	3 sites/yr	\$18,000	\$3600	\$36,000
Habitat Monitoring	8	4 Sites in Yrs. 4,5,9,10	\$7,500	\$3,750	\$15,000
Rate Curve Adjust	6	3 sites every 3 yrs Beginning 2006	--NA--	\$11,334	\$34,000
Geomorphic	5	2 sites every 4 yrs Beginning 2007	--NA--	\$8,700	\$17,400
Transducer Flow	2	2 sites in yrs. 1, 4, 5, 9, 10	\$30,000	\$10,000	\$50,000
Water Quality	10	10 sites monthly	\$60,000	\$12,000	\$120,000
Website	--NA--	--NA--	\$17,500	\$3,500	\$35,000
TOTALS			--NA--	\$52,884	\$307,400

Nine Elements of Proposed Management Measures: Upper San Antonio WPP

A	C	B	D	E	F	G	H	I	
Causes/ Sources of Impair- ment (Bacteria)	Management Measures/Critical Areas	Estimate Load Reduced	Technical & Financial Assistance for each measure	Educate & Outreach for each measure	Schedule to Implement for each measure	Interim measurable milestones	Indicator to measure progress	Monitoring Component	Lead Entity
Avian Land Deposits	Bird feeding ban @ Riverwalk, Parks	2%	\$100,000	Signs, awareness	2007-2009	30% reduction in birds	Bacteria reduced	Routine basin monitoring	COSA
	Bird exclusion practices and devices		\$100,000	Train Park staff	2007-2009	30% reduction in birds	Bacteria Reduced	Routine basin Monitoring	COSA/ TP W
Pet Waste	Increase awareness and enforcement of pet ordinances; Pooper Scooper Program	3%	additional program funds \$100,000	Signs, educatio n, mitt dispense rs	2007-2009	Pet owner participation # of mits used	Bacteria Reduced	Routine Monitoring/ Targeted Monitoring	COSA

