Appendix E
Example System Cost

Appendix E contains sample initial costs for an automated flood warning system.

EXAMPLE SYSTEM COST

Description	Qty	Unit	Extended
RAIN GAGES			
SELF-REPORTING RAIN GAGE W/ TRANSMITTER	14	3,500	49,000
RAIN GAGE TOP SECTION	14	INCL	INCL
TIPPING BUCKET	14	INCL	INCL
STANDPIPE ASSEMBLY	14	INCL	INCL
SOLAR PANEL	14	165	2,310
DIRECTIONAL ANTENNA - 7DB	14	275	3,850
LIGHTNING ARRESTER	14	110	1,540
INSTALLATION	14	750	10,500
RAIN GAGE SUBTOTAL			67,200
RAIN/STREAM GAGES			
SELF-REPORTING RAIN/STREAM GAGE W/ TRANSMITTER	3	4,665	13,995
RAIN GAGE TOP SECTION	3	INCL	INCL
TIPPING BUCKET	3	INCL	INCL
STANDPIPE ASSEMBLY	3	INCL	INCL
SOLAR PANEL	3	165	495
DIRECTIONAL ANTENNA - 7DB	3	275	825
LIGHTNING ARRESTER	3	110	330
PRESSURE TRANSDUCER W/ 100' CABLE	3	INCL	INCL
INSTALLATION	3	1,500	4,500
RAIN/STREAM GAGE TOTAL			20,145
STREAM GAGES			
SELF-REPORTING STREAM GAGE W/ TRANSMITTER	1	4,180	4,180
ANALOG INPUT CONNECTOR PACKAGE	1	INCL	INCL
RAIN GAGE TOP SECTION	1	INCL	INCL
TIPPING BUCKET	1	INCL	INCL
STANDPIPE ASSEMBLY	1	INCL	INCL
SOLAR PANEL	1	165	165
DIRECTIONAL ANTENNA - 7DB	1	275	275
LIGHTNING ARRESTER	1	110	110
PRESSURE TRANSDUCER W/ 100' CABLE	1	INCL	INCL
INSTALLATION	1	1,500	1,500
STREAM GAGE TOTAL			6,230

WEATHER STATION

SELF-REPORTING WEATHER W/ TRANSMITTER	1	6,000	6,000
ANALOG INPUT CONNECTOR PACKAGE	1	INCL	INCL
RAIN GAGE TOP SECTION	1	INCL	INCL
TIPPING BUCKET	1	INCL	INCL
WIND SPEED	1	INCL	INCL
WIND DIRECTION	1	INCL	INCL
RELATIVE HUMIDITY/TEMPERATURE	1	INCL	INCL
BAROMETRIC PRESSURE	1	INCL	INCL
STANDPIPE ASSEMBLY	1	INCL	INCL
SOLAR PANEL	1	INCL	INCL
DIRECTIONAL ANTENNA - 7DB	1	275	275
LIGHTNING ARRESTER	1	110	110
INSTALLATION	1	1,500	1,500
WEATHER STATION SUBTOTAL			7,885

REPEATER

PACKAGED REPEATER	2	7,200	14,400
LIGHTNING PROTECTION	2	110	220
INSTALLATION	2	750	1,500
PROGRAMMING ACCESSORIES SUBTOTAL			16,120

PROGRAMMING ACCESSORIES

PORTABLE FIELD TERMINAL	1	1,500	1,500
COMMUNICATIONS SOFTWARE	1	275	275
PROGRAMMING CABLE, 5096 TO TERMINAL	1	50	50
PROGRAMMING ACCESSORIES SUBTOTAL			1,825

BASE STATION

RECEIVE ANTENNA, VHF	1	620	620
7/8" FOAM COAX CABLE (FT)	500	6	3,000
7/8" FOAM COAX CABLE CONNECTOR SET	1	165	165
RECEIVER/DECODER, VHF	1	2,600	2,600
LIGHTNING PROTECTION	1	250	250
COMPUTER SYSTEM	1	7,500	7,500
SERIAL MULTIPLEXOR	1	700	700
DOT MATRIX PRINTER	1	825	825
BATTERY BACK-UP SYSTEM	1	900	900
2400 BAUD TELEPHONE MODEM	1	750	750
TELEPHONE LINE SURGE PROTECTION	1	100	100
SERIAL LINE SURGE PROTECTION	1	200	200
SYSTEM SOFTWARE	1	1,000	1,000

DATA ACQUISITION AND DISPLAY SOFTWARE	1	4,000	4,000
HYDROLOGIC FORECAST SOFTWARE	1	4,000	4,000
INSTALLATION	1	2,000	2,000
BASE STATION SUBTOTAL			28,610

SPARE PARTS

9.5 AMP-HR GEL CELL BATTERIES	8	65	520
TRANSMITTERS	3	2,500	7,500
PRESSURE TRANSDUCERS	2	895	1,790
TIPPING BUCKET	2	245	490
SOLAR PANELS	3	165	495
REMOTE STATION TESTER	1	3,520	3,520
CARRYING CASE FOR 5062	1	200	200
BATTERY DISCHARGER	1	360	360
BATTERY CHARGER	2	85	170
WATTMETER WITH DUMMY LOAD	1	495	495
WATTMETER SLUG, 10 WATT	2	90	180
SPARE POWER SUPPLY	1	85	85
RECEIVER/DECODER, VHF	1	2,600	2,600
PRESSURE TRANSDUCER CABLE	1	500	500
DIRECTIONAL ANTENNA	2	275	550
ANTENNA MAST	1	200	200
SPARE PARTS SUBTOTAL			19,655

SERVICES

INITIAL TRAINING	1	5,000	5,000
FOLLOW-UP TRAINING IN SIX MONTHS	1	2,500	2,500
PROJECT MANAGEMENT/ SYSTEM ENGINEERING	1	7,500	7,500
FREIGHT, FOB DESTINATION	1	3,000	3,000
SERVICES SUBTOTAL			18,000

TOTAL	$185,670