

Table 1
Number of Sources in SDWIS by Water System Size
(In Terms of Service Connection Group)

Source Type	SWS (<200 Svc. Conn.)	LWS (≥200 Svc. Conn.)
Groundwater	5,231	6,488
Surface Water	488	743
Subtotal	5,719	7,231

Acronyms

LWS- Large Water System

SDWIS- Safe Drinking Water Information System

SWS- Small Water system

**TABLE 2
ESTIMATED MONITORING COSTS**

SAMPLE ANALYSIS COST	\$132/sample
EQUATIONS USED	
<u>Initial Monitoring</u>	
All system types	4 quarterly samples * \$132 * per source
Standby Sources	1 sample (triennial) * \$132 * per source
<u>Routine Monitoring</u>	
<=3,300 population	1 sample (triennial) * \$132 / 3 years (to annualize) * per source
>3,300 population	2 samples (triennial) * \$132 / 3 years (to annualize) * per source
<u>Increased Monitoring</u>	
<=3,300 population	4 quarterly samples/year * \$132 * per source
>3,300 population	(6 monthly samples + 2 quarterly samples)/year * \$132 * per source
	Year 2+ = 4 quarterly samples/year * 132 * per source
<u>Treated Monitoring</u>	
All system types	(12 monthly treated samples + 4 quarterly raw samples)/year * \$132 * per source

ALL MCL OPTIONS				
<u>Initial Monitoring - sources without detections</u>				
	Source Count		Total Cost (\$)	
<u>Water type\# Svc Conn</u>	<200	>=200	<200	>=200
Groundwater	5048	5827	\$2,665,344	\$3,076,656
Surface Water	483	726	\$255,024	\$383,328
<u>Initial Monitoring - standby sources</u>				
	Source Count		Total Cost (\$)	
<u>Water type\# Svc Conn</u>	<200	>=200	<200	>=200
Groundwater	137	241	\$18,084	\$31,812
Surface Water	4	13	\$528	\$1,716
<u>Routine Monitoring - sources without detections</u>				
	Source Count		Total Cost (\$)	
<u>Water type\# Svc Conn</u>	<200	>=200	<200	>=200
Groundwater <=3,300 pop	5016	1162	\$220,704	\$51,128
Groundwater >3,300 pop	32	4665	\$2,816	\$410,520
Surface Water <=3,300 pop	478	185	\$21,032	\$8,140
Surface Water >3,300 pop	5	541	\$440	\$47,608

Acronyms:

- MCL - Maximum Contaminant Level
- NA - Not Applicable
- pop - population
- ppt - parts per trillion
- Svc Conn- Service Connection

**TABLE 2
ESTIMATED MONITORING COSTS**

MCL = 5 ppt						
<u>Increased Monitoring - sources not requiring treatment</u>						
<u>Water Type\# Svc Conn</u>	<u>Source Count</u>		<u>Total Cost (\$) Year 1</u>		<u>Total Cost (\$) Year 2</u>	
	<200	>=200	<200	>=200	<200	>=200
Groundwater <=3,300 pop	10	6	\$5,280	\$3,168	\$5,280	\$3,168
Groundwater >3,300 pop	0	158	\$0	\$83,424	\$0	\$83,424
Surface Water <=3,300 pop	1	0	\$528	\$0	\$528	\$0
Surface Water >3,300 pop	0	4	\$0	\$2,112	\$0	\$2,112
<u>Increased Monitoring - sources requiring treatment</u>						
<u>Water type\# Svc Conn</u>	<u>Source Count</u>		<u>Total Cost (\$) Year 1</u>		<u>Total Cost (\$) Year 2</u>	
	<200	>=200	<200	>=200	<200	>=200
Groundwater <=3,300 pop	36	9	\$19,008	\$4,752	NA	NA
Groundwater >3,300 pop	0	220	\$0	\$232,320	NA	NA
Surface Water <=3,300 pop	0	0	\$0	\$0	NA	NA
Surface Water >3,300 pop	0	0	\$0	\$0	NA	NA
<u>Treated Monitoring - sources requiring treatment</u>						
<u>Water type\# Svc Conn</u>	<u>Source Count</u>		<u>Total Cost (\$) Year 1</u>		<u>Total Cost (\$) Year 2</u>	
	<200	>=200	<200	>=200	<200	>=200
Groundwater <=3,300 pop	36	9	NA	NA	\$76,032	\$19,008
Groundwater >3,300 pop	0	220	NA	NA	\$0	\$464,640
Surface Water <=3,300 pop	0	0	NA	NA	\$0	\$0
Surface Water >3,300 pop	0	0	NA	NA	\$0	\$0
<u>Increased Monitoring - currently treated sources</u>						
<u>Water type\# Svc Conn</u>	<u>Source Count</u>		<u>Total Cost (\$) Year 1</u>		<u>Total Cost (\$) Year 2</u>	
	<200	>=200	<200	>=200	<200	>=200
Groundwater <=3,300 pop	0	0	NA	NA	NA	NA
Groundwater >3,300 pop	0	3	NA	\$1,584	NA	\$1,584
Surface Water <=3,300 pop	0	0	NA	NA	NA	NA
Surface Water >3,300 pop	0	0	NA	NA	NA	NA
<u>Treated Monitoring - treated sources</u>						
<u>Water type\# Svc Conn</u>	<u>Source Count</u>		<u>Total Cost (\$) Year 1</u>		<u>Total Cost (\$) Year 2</u>	
	<200	>=200	<200	>=200	<200	>=200
Groundwater <=3,300 pop	0	0	\$0	\$0	\$0	\$0
Groundwater >3,300 pop	0	24	\$0	\$50,688	\$0	\$50,688
Surface Water <=3,300 pop	0	0	\$0	\$0	\$0	\$0
Surface Water >3,300 pop	0	0	\$0	\$0	\$0	\$0

**TABLE 2
ESTIMATED MONITORING COSTS**

MCL = 7 ppt						
<u>Increased Monitoring - sources not requiring treatment</u>						
<u>Water type\# Svc Conn</u>	<u>Source Count</u>		<u>Total Cost (\$) Year 1</u>		<u>Total Cost (\$) Year 2</u>	
	<200	>=200	<200	>=200	<200	>=200
Groundwater <=3,300 pop	13	9	\$6,864	\$4,752	\$6,864	\$4,752
Groundwater >3,300 pop	0	195	\$0	\$102,960	\$0	\$102,960
Surface Water <=3,300 pop	1	0	\$528	\$0	\$528	\$0
Surface Water >3,300 pop	0	4	\$0	\$2,112	\$0	\$2,112
<u>Increased Monitoring - sources requiring treatment</u>						
<u>Water type\# Svc Conn</u>	<u>Source Count</u>		<u>Total Cost (\$) Year 1</u>		<u>Total Cost (\$) Year 2</u>	
	<200	>=200	<200	>=200	<200	>=200
Groundwater <=3,300 pop	33	6	\$17,424	\$3,168	NA	NA
Groundwater >3,300 pop	0	183	\$0	\$193,248	NA	NA
Surface Water <=3,300 pop	0	0	\$0	\$0	NA	NA
Surface Water >3,300 pop	0	0	\$0	\$0	NA	NA
<u>Treated Monitoring - sources requiring treatment</u>						
<u>Water type\# Svc Conn</u>	<u>Source Count</u>		<u>Total Cost (\$) Year 1</u>		<u>Total Cost (\$) Year 2</u>	
	<200	>=200	<200	>=200	<200	>=200
Groundwater <=3,300 pop	33	6	NA	NA	\$69,696	\$12,672
Groundwater >3,300 pop	0	183	NA	NA	\$0	\$386,496
Surface Water <=3,300 pop	0	0	NA	NA	\$0	\$0
Surface Water >3,300 pop	0	0	NA	NA	\$0	\$0
<u>Increased Monitoring - currently treated sources</u>						
<u>Water type\# Svc Conn</u>	<u>Source Count</u>		<u>Total Cost (\$) Year 1</u>		<u>Total Cost (\$) Year 2</u>	
	<200	>=200	<200	>=200	<200	>=200
Groundwater <=3,300 pop	0	0	NA	NA	NA	NA
Groundwater >3,300 pop	0	4	NA	\$2,112	NA	\$2,112
Surface Water <=3,300 pop	0	0	NA	NA	NA	NA
Surface Water >3,300 pop	0	0	NA	NA	NA	NA
<u>Treated Monitoring - treated sources</u>						
<u>Water type\# Svc Conn</u>	<u>Source Count</u>		<u>Total Cost (\$) Year 1</u>		<u>Total Cost (\$) Year 2</u>	
	<200	>=200	<200	>=200	<200	>=200
Groundwater <=3,300 pop	0	0	\$0	\$0	\$0	\$0
Groundwater >3,300 pop	0	23	\$0	\$48,576	\$0	\$48,576
Surface Water <=3,300 pop	0	0	\$0	\$0	\$0	\$0
Surface Water >3,300 pop	0	0	\$0	\$0	\$0	\$0

**TABLE 2
ESTIMATED MONITORING COSTS**

MCL = 15 ppt						
<u>Increased Monitoring - sources not requiring treatment</u>						
<u>Water type\# Svc Conn</u>	<u>Source Count</u>		<u>Total Cost (\$) Year 1</u>		<u>Total Cost (\$) Year 2</u>	
	<200	>=200	<200	>=200	<200	>=200
Groundwater <=3,300 pop	25	14	\$13,200	\$7,392	\$13,200	\$7,392
Groundwater >3,300 pop	0	249	\$0	\$131,472	\$0	\$131,472
Surface Water <=3,300 pop	1	0	\$528	\$0	\$528	\$0
Surface Water >3,300 pop	0	4	\$0	\$2,112	\$0	\$2,112
<u>Increased Monitoring - sources requiring treatment</u>						
<u>Water type\# Svc Conn</u>	<u>Source Count</u>		<u>Total Cost (\$) Year 1</u>		<u>Total Cost (\$) Year 2</u>	
	<200	>=200	<200	>=200	<200	>=200
Groundwater <=3,300 pop	21	1	\$11,088	\$528	NA	NA
Groundwater >3,300 pop	0	129	\$0	\$136,224	NA	NA
Surface Water <=3,300 pop	0	0	\$0	\$0	NA	NA
Surface Water >3,300 pop	0	0	\$0	\$0	NA	NA
<u>Treated Monitoring - sources requiring treatment</u>						
<u>Water type\# Svc Conn</u>	<u>Source Count</u>		<u>Total Cost (\$) Year 1</u>		<u>Total Cost (\$) Year 2</u>	
	<200	>=200	<200	>=200	<200	>=200
Groundwater <=3,300 pop	21	1	NA	NA	\$44,352	\$2,112
Groundwater >3,300 pop	0	129	NA	NA	\$0	\$272,448
Surface Water <=3,300 pop	0	0	NA	NA	\$0	\$0
Surface Water >3,300 pop	0	0	NA	NA	\$0	\$0
<u>Increased Monitoring - currently treated sources</u>						
<u>Water type\# Svc Conn</u>	<u>Source Count</u>		<u>Total Cost (\$) Year 1</u>		<u>Total Cost (\$) Year 2</u>	
	<200	>=200	<200	>=200	<200	>=200
Groundwater <=3,300 pop	0	0	NA	NA	NA	NA
Groundwater >3,300 pop	0	4	NA	\$2,112	NA	\$2,112
Surface Water <=3,300 pop	0	0	NA	NA	NA	NA
Surface Water >3,300 pop	0	0	NA	NA	NA	NA
<u>Treated Monitoring - treated sources</u>						
<u>Water type\# Svc Conn</u>	<u>Source Count</u>		<u>Total Cost (\$) Year 1</u>		<u>Total Cost (\$) Year 2</u>	
	<200	>=200	<200	>=200	<200	>=200
Groundwater <=3,300 pop	0	0	\$0	\$0	\$0	\$0
Groundwater >3,300 pop	0	23	\$0	\$48,576	\$0	\$48,576
Surface Water <=3,300 pop	0	0	\$0	\$0	\$0	\$0
Surface Water >3,300 pop	0	0	\$0	\$0	\$0	\$0

**TABLE 2
ESTIMATED MONITORING COSTS**

MCL = 35 ppt						
<u>Increased Monitoring - sources not requiring treatment</u>						
<u>Water type\# Svc Conn</u>	<u>Source Count</u>		<u>Total Cost (\$) Year 1</u>		<u>Total Cost (\$) Year 2</u>	
	<200	>=200	<200	>=200	<200	>=200
Groundwater <=3,300 pop	30	15	\$15,840	\$7,920	\$15,840	\$7,920
Groundwater >3,300 pop	0	307	\$0	\$162,096	\$0	\$162,096
Surface Water <=3,300 pop	1	0	\$528	\$0	\$528	\$0
Surface Water >3,300 pop	0	4	\$0	\$2,112	\$0	\$2,112
<u>Increased Monitoring - sources requiring treatment</u>						
<u>Water type\# Svc Conn</u>	<u>Source Count</u>		<u>Total Cost (\$) Year 1</u>		<u>Total Cost (\$) Year 2</u>	
	<200	>=200	<200	>=200	<200	>=200
Groundwater <=3,300 pop	16	0	\$8,448	\$0	NA	NA
Groundwater >3,300 pop	0	71	\$0	\$74,976	NA	NA
Surface Water <=3,300 pop	0	0	\$0	\$0	NA	NA
Surface Water >3,300 pop	0	0	\$0	\$0	NA	NA
<u>Treated Monitoring - sources requiring treatment</u>						
<u>Water type\# Svc Conn</u>	<u>Source Count</u>		<u>Total Cost (\$) Year 1</u>		<u>Total Cost (\$) Year 2</u>	
	<200	>=200	<200	>=200	<200	>=200
Groundwater <=3,300 pop	16	0	NA	NA	\$33,792	\$0
Groundwater >3,300 pop	0	71	NA	NA	\$0	\$149,952
Surface Water <=3,300 pop	0	0	NA	NA	\$0	\$0
Surface Water >3,300 pop	0	0	NA	NA	\$0	\$0
<u>Increased Monitoring - currently treated sources</u>						
<u>Water type\# Svc Conn</u>	<u>Source Count</u>		<u>Total Cost (\$) Year 1</u>		<u>Total Cost (\$) Year 2</u>	
	<200	>=200	<200	>=200	<200	>=200
Groundwater <=3,300 pop	0	0	NA	NA	NA	NA
Groundwater >3,300 pop	0	10	NA	\$5,280	NA	\$5,280
Surface Water <=3,300 pop	0	0	NA	NA	NA	NA
Surface Water >3,300 pop	0	0	NA	NA	NA	NA
<u>Treated Monitoring - treated sources</u>						
<u>Water type\# Svc Conn</u>	<u>Source Count</u>		<u>Total Cost (\$) Year 1</u>		<u>Total Cost (\$) Year 2</u>	
	<200	>=200	<200	>=200	<200	>=200
Groundwater <=3,300 pop	0	0	\$0	\$0	\$0	\$0
Groundwater >3,300 pop	0	17	\$0	\$35,904	\$0	\$35,904
Surface Water <=3,300 pop	0	0	\$0	\$0	\$0	\$0
Surface Water >3,300 pop	0	0	\$0	\$0	\$0	\$0

**TABLE 2
ESTIMATED MONITORING COSTS**

MCL = 70 ppt						
<u>Increased Monitoring - sources not requiring treatment</u>						
<u>Water type\# Svc Conn</u>	<u>Source Count</u>		<u>Total Cost (\$) Year 1</u>		<u>Total Cost (\$) Year 2</u>	
	<200	>=200	<200	>=200	<200	>=200
Groundwater <=3,300 pop	34	15	\$ 17,952	\$ 7,920	\$ 17,952	\$ 7,920
Groundwater >3,300 pop	0	339	\$ 0	\$ 178,992	\$ 0	\$ 178,992
Surface Water <=3,300 pop	1	0	\$ 528	\$ 0	\$ 528	\$ 0
Surface Water >3,300 pop	0	4	\$ 0	\$ 2,112	\$ 0	\$ 2,112
<u>Increased Monitoring - sources requiring treatment</u>						
<u>Water type\# Svc Conn</u>	<u>Source Count</u>		<u>Total Cost (\$) Year 1</u>		<u>Total Cost (\$) Year 2</u>	
	<200	>=200	<200	>=200	<200	>=200
Groundwater <=3,300 pop	12	0	\$ 6,336	\$ 0	NA	NA
Groundwater >3,300 pop	0	39	\$ 0	\$ 41,184	NA	NA
Surface Water <=3,300 pop	0	0	\$ 0	\$ 0	NA	NA
Surface Water >3,300 pop	0	0	\$ 0	\$ 0	NA	NA
<u>Treated Monitoring - sources requiring treatment</u>						
<u>Water type\# Svc Conn</u>	<u>Source Count</u>		<u>Total Cost (\$) Year 1</u>		<u>Total Cost (\$) Year 2</u>	
	<200	>=200	<200	>=200	<200	>=200
Groundwater <=3,300 pop	12	0	NA	NA	\$ 25,344	\$ 0
Groundwater >3,300 pop	0	39	NA	NA	\$ 0	\$ 82,368
Surface Water <=3,300 pop	0	0	NA	NA	\$ 0	\$ 0
Surface Water >3,300 pop	0	0	NA	NA	\$ 0	\$ 0
<u>Increased Monitoring - currently treated sources</u>						
<u>Water type\# Svc Conn</u>	<u>Source Count</u>		<u>Total Cost (\$) Year 1</u>		<u>Total Cost (\$) Year 2</u>	
	<200	>=200	<200	>=200	<200	>=200
Groundwater <=3,300 pop	0	0	NA	NA	NA	NA
Groundwater >3,300 pop	0	18	NA	\$ 9,504	NA	\$ 9,504
Surface Water <=3,300 pop	0	0	NA	NA	NA	NA
Surface Water >3,300 pop	0	0	NA	NA	NA	NA
<u>Treated Monitoring - treated sources</u>						
<u>Water type\# Svc Conn</u>	<u>Source Count</u>		<u>Total Cost (\$) Year 1</u>		<u>Total Cost (\$) Year 2</u>	
	<200	>=200	<200	>=200	<200	>=200
Groundwater <=3,300 pop	0	0	\$ 0	\$ 0	\$ 0	\$ 0
Groundwater >3,300 pop	0	9	\$ 0	\$ 19,008	\$ 0	\$ 19,008
Surface Water <=3,300 pop	0	0	\$ 0	\$ 0	\$ 0	\$ 0
Surface Water >3,300 pop	0	0	\$ 0	\$ 0	\$ 0	\$ 0

**TABLE 2
ESTIMATED MONITORING COSTS**

MCL = 150 ppt						
<u>Increased Monitoring - sources not requiring treatment</u>						
<u>Water type\# Svc Conn</u>	<u>Source Count</u>		<u>Total Cost (\$) Year 1</u>		<u>Total Cost (\$) Year 2</u>	
	<200	>=200	<200	>=200	<200	>=200
Groundwater <=3,300 pop	43	15	\$ 22,704	\$ 7,920	\$22,704	\$ 7,920
Groundwater >3,300 pop	0	365	\$ 0	\$ 192,720	\$ 0	\$ 192,720
Surface Water <=3,300 pop	1	0	\$528	\$ 0	\$528	\$ 0
Surface Water >3,300 pop	0	4	\$ 0	\$2,112	\$ 0	\$2,112
<u>Increased Monitoring - sources requiring treatment</u>						
<u>Water type\# Svc Conn</u>	<u>Source Count</u>		<u>Total Cost (\$) Year 1</u>		<u>Total Cost (\$) Year 2</u>	
	<200	>=200	<200	>=200	<200	>=200
Groundwater <=3,300 pop	3	0	\$1,584	\$ 0	NA	NA
Groundwater >3,300 pop	0	13	\$ 0	\$13,728	NA	NA
Surface Water <=3,300 pop	0	0	\$ 0	\$ 0	NA	NA
Surface Water >3,300 pop	0	0	\$ 0	\$ 0	NA	NA
<u>Treated Monitoring - sources requiring treatment</u>						
<u>Water type\# Svc Conn</u>	<u>Source Count</u>		<u>Total Cost (\$) Year 1</u>		<u>Total Cost (\$) Year 2</u>	
	<200	>=200	<200	>=200	<200	>=200
Groundwater <=3,300 pop	3	0	NA	NA	\$6,336	\$ 0
Groundwater >3,300 pop	0	13	NA	NA	\$ 0	\$27,456
Surface Water <=3,300 pop	0	0	NA	NA	\$ 0	\$ 0
Surface Water >3,300 pop	0	0	NA	NA	\$ 0	\$ 0
<u>Increased Monitoring - currently treated sources</u>						
<u>Water type\# Svc Conn</u>	<u>Source Count</u>		<u>Total Cost (\$) Year 1</u>		<u>Total Cost (\$) Year 2</u>	
	<200	>=200	<200	>=200	<200	>=200
Groundwater <=3,300 pop	0	0	NA	NA	NA	NA
Groundwater >3,300 pop	0	23	NA	\$12,144	NA	\$12,144
Surface Water <=3,300 pop	0	0	NA	NA	NA	NA
Surface Water >3,300 pop	0	0	NA	NA	NA	NA
<u>Treated Monitoring - treated sources</u>						
<u>Water type\# Svc Conn</u>	<u>Source Count</u>		<u>Total Cost (\$) Year 1</u>		<u>Total Cost (\$) Year 2</u>	
	<200	>=200	<200	>=200	<200	>=200
Groundwater <=3,300 pop	0	0	\$ 0	\$ 0	\$ 0	\$ 0
Groundwater >3,300 pop	0	4	\$ 0	\$8,448	\$ 0	\$8,448
Surface Water <=3,300 pop	0	0	\$ 0	\$ 0	\$ 0	\$ 0
Surface Water >3,300 pop	0	0	\$ 0	\$ 0	\$ 0	\$ 0

**TABLE 3
ESTIMATED TREATMENT COSTS**

MCL = 5 ppt					
Excluding 1,2,3-TCP Treated Sources					
<u># Service Connections</u>	<u># of Sources</u>	<u>Total Capital Costs</u>	<u>Total Annualized Costs</u>	<u>Total O&M Costs</u>	<u>Total Annual Costs</u>
<200	36	\$3,468,772	\$327,452	\$344,545	\$671,997
>=200	229	\$93,644,293	\$8,840,021	\$19,084,619	\$27,924,640
1,2,3-TCP Treated Sources					
<u># Service Connections</u>	<u># of Sources</u>	<u>Total O&M Costs</u>			
<200	0	\$0			
>=200	24	\$4,702,830			

MCL = 7 ppt					
Excluding 1,2,3-TCP Treated Sources					
<u># Service Connections</u>	<u># of Sources</u>	<u>Total Capital Costs</u>	<u>Total Annualized Costs</u>	<u>Total O&M Costs</u>	<u>Total Annual Costs</u>
<200	33	\$3,121,926	\$294,710	\$305,297	\$600,007
>=200	189	\$67,842,119	\$6,404,296	\$14,997,803	\$21,402,099
1,2,3-TCP Treated Sources					
<u># Service Connections</u>	<u># of Sources</u>	<u>Total O&M Costs</u>			
<200	0	\$0			
>=200	23	\$4,442,138			

MCL = 15 ppt					
Excluding 1,2,3-TCP Treated Sources					
<u># Service Connections</u>	<u># of Sources</u>	<u>Total Capital Costs</u>	<u>Total Annualized Costs</u>	<u>Total O&M Costs</u>	<u>Total Annual Costs</u>
<200	21	\$1,893,936	\$178,788	\$197,764	\$376,552
>=200	130	\$50,014,423	\$4,721,361	\$10,860,601	\$15,581,962
1,2,3-TCP Treated Sources					
<u># Service Connections</u>	<u># of Sources</u>	<u>Total O&M Costs</u>			
<200	0	\$0			
>=200	23	\$4,442,138			

Acronyms:

1,2,3-TCP - 1,2,3-Trichloropropane ppt - parts per trillion
O&M - Operations and Maintenance

**TABLE 3
ESTIMATED TREATMENT COSTS**

MCL = 35 ppt					
Excluding 1,2,3-TCP Treated Sources					
<u># Service Connections</u>	<u># of Sources</u>	<u>Total Capital Costs</u>	<u>Total Annualized Costs</u>	<u>Total O&M Costs</u>	<u>Total Annual Costs</u>
<200	16	\$1,455,912	\$137,438	\$146,194	\$283,632
>=200	71	\$23,123,731	\$2,182,880	\$5,543,678	\$7,726,558
1,2,3-TCP Treated Sources					
<u># Service Connections</u>	<u># of Sources</u>	<u>Total O&M Costs</u>			
<200	0	\$0			
>=200	17	\$3,155,695			

MCL = 70 ppt					
Excluding 1,2,3-TCP Treated Sources					
<u># Service Connections</u>	<u># of Sources</u>	<u>Total Capital Costs</u>	<u>Total Annualized Costs</u>	<u>Total O&M Costs</u>	<u>Total Annual Costs</u>
<200	12	\$1,151,373	\$108,690	\$113,218	\$221,907
>=200	39	\$15,497,472	\$1,462,961	\$3,389,537	\$4,852,498
1,2,3-TCP Treated Sources					
<u># Service Connections</u>	<u># of Sources</u>	<u>Total O&M Costs</u>			
<200	0	\$0			
>=200	9	\$1,433,324			

MCL = 150 ppt					
Excluding 1,2,3-TCP Treated Sources					
<u># Service Connections</u>	<u># of Sources</u>	<u>Total Capital Costs</u>	<u>Total Annualized Costs</u>	<u>Total O&M Costs</u>	<u>Total Annual Costs</u>
<200	3	\$216,106	\$20,400	\$28,193	\$48,594
>=200	13	\$8,684,993	\$819,863	\$1,567,475	\$2,387,338
1,2,3-TCP Treated Sources					
<u># Service Connections</u>	<u># of Sources</u>	<u>Total O&M Costs</u>			
<200	0	\$0			
>=200	4	\$734,763			

**TABLE 4
COST SUMMARIES AND ESTIMATED REDUCTION IN CANCER CASES**

MCL = 5 ppt	<u>Total Monitoring Costs (Year 2+)</u>		<u>Annualized Capital Costs</u>		<u>Annual O&M Costs</u>		<u>Total Annual Costs</u>	
	<u>Groundwater</u>	<u>Surface Water</u>	<u>Groundwater</u>	<u>Surface Water</u>	<u>Groundwater</u>	<u>Surface Water</u>	<u>Groundwater</u>	<u>Surface Water</u>
<200 Svc Conn	\$76,032	\$0	\$327,452	\$0	\$344,545	\$0	\$748,029	\$0
>=200 Svc Conn	\$534,336	\$0	\$8,840,021	\$0	\$23,787,449	\$0	\$33,161,806	\$0
<u>Cost/Source</u>	<u># Sources</u>	<u>Annual Cost/Source</u>	Costs are for systems requiring treatment. Monitoring costs for non-contaminated sources and contaminated sources without treatment are not included.					
<200 Svc Conn	36	\$20,779						
>=200 Svc Conn	253	\$131,074						
<u>Cost/Svc Conn</u>	<u># Svc Conn</u>	<u>Annual Cost/Svc Conn</u>	Includes estimated reduction in theoretical cancer case per year for existing 1,2,3-TCP treated systems					
<200 Svc Conn	1,229	\$609						
>=200 Svc Conn	1,302,502	\$25						
<u>Cost/System</u>	<u># Systems</u>	<u>Annual Cost/System</u>						
<200 Svc Conn	33	\$22,668						
>=200 Svc Conn	70	\$473,740						
<u>Cost-Benefit</u>	<u>Est. Cancer Reduction</u>	<u>Est. Cost/Reduction</u>						
<200 Svc Conn	0.01	\$97,054,860						
>=200 Svc Conn	2.35	\$14,116,733						

Acronyms:

1,2,3-TCP - 1,2,3-Trichloropropane ppt- parts per trillion
 Est. - Estimated
 MCL - Maximum Contaminant Level
 O&M - Operations and Maintenance
 Svc Conn- Service Connection

**TABLE 4
COST SUMMARIES AND ESTIMATED REDUCTION IN CANCER CASES**

MCL = 7 ppt	<u>Total Monitoring Costs (Year 2+)</u>		<u>Annualized Capital Costs</u>		<u>Annual O&M Costs</u>		<u>Total Annual Costs</u>	
	<u>Groundwater</u>	<u>Surface Water</u>	<u>Groundwater</u>	<u>Surface Water</u>	<u>Groundwater</u>	<u>Surface Water</u>	<u>Groundwater</u>	<u>Surface Water</u>
<200 Svc Conn	\$69,696	\$0	\$294,710	\$0	\$305,297	\$0	\$669,703	\$0
>=200 Svc Conn	\$447,744	\$0	\$6,404,296	\$0	\$19,439,941	\$0	\$26,291,981	\$0
<u>Cost/Source</u>	<u># Sources</u>	<u>Annual Cost/Source</u>						
<200 Svc Conn	33	\$20,294	<div style="border: 1px solid black; padding: 5px;"> Costs are for systems requiring treatment. Monitoring costs for non-contaminated sources and contaminated sources without treatment are not included. </div>					
>=200 Svc Conn	212	\$124,019						
<u>Cost/Svc Conn</u>	<u># Svc Conn</u>	<u>Annual Cost/Svc Conn</u>						
<200 Svc Conn	1,015	\$660						
>=200 Svc Conn	1,091,435	\$24						
<u>Cost/System</u>	<u># Systems</u>	<u>Annual Cost/System</u>						
<200 Svc Conn	30	\$22,323						
>=200 Svc Conn	59	\$445,627						
<u>Cost-Benefit</u>	<u>Est. Cancer Reduction</u>	<u>Est. Cost/Reduction</u>						
<200 Svc Conn	0.01	\$89,191,626	<div style="border: 1px solid black; padding: 5px;"> Includes estimated reduction in theoretical cancer case per year for existing 1,2,3-TCP treated systems </div>					
>=200 Svc Conn	2.31	\$11,360,640						

**TABLE 4
COST SUMMARIES AND ESTIMATED REDUCTION IN CANCER CASES**

MCL = 15 ppt	<u>Total Monitoring Costs (Year 2+)</u>		<u>Annualized Capital Costs</u>		<u>Annual O&M Costs</u>		<u>Total Annual Costs</u>	
	<u>Groundwater</u>	<u>Surface Water</u>	<u>Groundwater</u>	<u>Surface Water</u>	<u>Groundwater</u>	<u>Surface Water</u>	<u>Groundwater</u>	<u>Surface Water</u>
<200 Svc Conn	\$44,352	\$0	\$178,788	\$0	\$197,764	\$0	\$420,904	\$0
>=200 Svc Conn	\$323,136	\$0	\$4,721,361	\$0	\$15,302,739	\$0	\$20,347,236	\$0
<u>Cost/Source</u>	<u># Sources</u>	<u>Annual Cost/Source</u>	<div style="border: 1px solid black; padding: 5px;"> Costs are for systems requiring treatment. Monitoring costs for non-contaminated sources and contaminated sources without treatment are not included. </div>					
<200 Svc Conn	21	\$20,043						
>=200 Svc Conn	153	\$132,988						
<u>Cost/Svc Conn</u>	<u># Svc Conn</u>	<u>Annual Cost/Svc Conn</u>	<div style="border: 1px solid black; padding: 5px;"> Includes estimated reduction in theoretical cancer case per year for existing 1,2,3-TCP treated systems </div>					
<200 Svc Conn	701	\$600						
>=200 Svc Conn	990,653	\$21						
<u>Cost/System</u>	<u># Systems</u>	<u>Annual Cost/System</u>						
<200 Svc Conn	19	\$22,153						
>=200 Svc Conn	47	\$432,920						
<u>Cost-Benefit</u>	<u>Est. Cancer Reduction</u>	<u>Est. Cost/Reduction</u>						
<200 Svc Conn	0.01	\$60,958,056						
>=200 Svc Conn	2.21	\$9,221,521						

**TABLE 4
COST SUMMARIES AND ESTIMATED REDUCTION IN CANCER CASES**

MCL = 35 ppt	<u>Total Monitoring Costs (Year 2+)</u>		<u>Annualized Capital Costs</u>		<u>Annual O&M Costs</u>		<u>Total Annual Costs</u>	
	<u>Groundwater</u>	<u>Surface Water</u>	<u>Groundwater</u>	<u>Surface Water</u>	<u>Groundwater</u>	<u>Surface Water</u>	<u>Groundwater</u>	<u>Surface Water</u>
<200 Svc Conn	\$33,792	\$0	\$137,438	\$0	\$146,194	\$0	\$317,424	\$0
>=200 Svc Conn	\$185,856	\$0	\$2,182,880	\$0	\$8,699,373	\$0	\$11,068,110	\$0
<u>Cost/Source</u>	<u># Sources</u>	<u>Annual Cost/Source</u>						
<200 Svc Conn	16	\$19,839	<div style="border: 1px solid black; padding: 5px;"> Costs are for systems requiring treatment. Monitoring costs for non-contaminated sources and contaminated sources without treatment are not included. </div>					
>=200 Svc Conn	88	\$125,774						
<u>Cost/Svc Conn</u>	<u># Svc Conn</u>	<u>Annual Cost/Svc Conn</u>						
<200 Svc Conn	502	\$632						
>=200 Svc Conn	809,396	\$14						
<u>Cost/System</u>	<u># Systems</u>	<u>Annual Cost/System</u>						
<200 Svc Conn	14	\$22,673						
>=200 Svc Conn	31	\$357,036						
<u>Cost-Benefit</u>	<u>Est. Cancer Reduction</u>	<u>Est. Cost/Reduction</u>						
<200 Svc Conn	0.01	\$54,210,530	<div style="border: 1px solid black; padding: 5px;"> Includes estimated reduction in theoretical cancer case per year for existing 1,2,3-TCP treated systems </div>					
>=200 Svc Conn	2.01	\$5,498,899						

**TABLE 4
COST SUMMARIES AND ESTIMATED REDUCTION IN CANCER CASES**

MCL = 70 ppt	<u>Total Monitoring Costs (Year 2+)</u>		<u>Annualized Capital Costs</u>		<u>Annual O&M Costs</u>		<u>Total Annual Costs</u>	
	<u>Groundwater</u>	<u>Surface Water</u>	<u>Groundwater</u>	<u>Surface Water</u>	<u>Groundwater</u>	<u>Surface Water</u>	<u>Groundwater</u>	<u>Surface Water</u>
<200 Svc Conn	\$25,344	\$0	\$108,690	\$0	\$113,218	\$0	\$247,251	\$0
>=200 Svc Conn	\$101,376	\$0	\$1,462,961	\$0	\$4,822,861	\$0	\$6,387,198	\$0
<u>Cost/Source</u>	<u># Sources</u>	<u>Annual Cost/Source</u>	Costs are for systems requiring treatment. Monitoring costs for non-contaminated sources and contaminated sources without treatment are not included.					
<200 Svc Conn	12	\$20,604						
>=200 Svc Conn	48	\$133,067						
<u>Cost/Svc Conn</u>	<u># Svc Conn</u>	<u>Annual Cost/Svc Conn</u>	Includes estimated reduction in theoretical cancer case per year for existing 1,2,3-TCP treated systems					
<200 Svc Conn	494	\$501						
>=200 Svc Conn	470,454	\$14						
<u>Cost/System</u>	<u># Systems</u>	<u>Annual Cost/System</u>						
<200 Svc Conn	12	\$20,604						
>=200 Svc Conn	18	\$354,844						
<u>Cost-Benefit</u>	<u>Est. Cancer Reduction</u>	<u>Est. Cost/Reduction</u>						
<200 Svc Conn	0.00	\$56,229,876						
>=200 Svc Conn	1.84	\$3,466,775						

**TABLE 4
COST SUMMARIES AND ESTIMATED REDUCTION IN CANCER CASES**

MCL = 150 ppt	<u>Total Monitoring Costs (Year 2+)</u>		<u>Annualized Capital Costs</u>		<u>Annual O&M Costs</u>		<u>Total Annual Costs</u>	
	<u>Groundwater</u>	<u>Surface Water</u>	<u>Groundwater</u>	<u>Surface Water</u>	<u>Groundwater</u>	<u>Surface Water</u>	<u>Groundwater</u>	<u>Surface Water</u>
<200 Svc Conn	\$6,336	\$0	\$20,400	\$0	\$28,193	\$0	\$54,930	\$0
>=200 Svc Conn	\$35,904	\$0	\$819,863	\$0	\$2,302,238	\$0	\$3,158,005	\$0
<u>Cost/Source</u>	<u># Sources</u>	<u>Annual Cost/Source</u>						
<200 Svc Conn	3	\$18,310	<div style="border: 1px solid black; padding: 5px;"> Costs are for systems requiring treatment. Monitoring costs for non-contaminated sources and contaminated sources without treatment are not included. </div>					
>=200 Svc Conn	17	\$185,765						
<u>Cost/Svc Conn</u>	<u># Svc Conn</u>	<u>Annual Cost/Svc Conn</u>						
<200 Svc Conn	63	\$872						
>=200 Svc Conn	309,934	\$10						
<u>Cost/System</u>	<u># Systems</u>	<u>Annual Cost/System</u>						
<200 Svc Conn	3	\$18,310						
>=200 Svc Conn	9	\$350,889						
<u>Cost-Benefit</u>	<u>Est. Cancer Reduction</u>	<u>Est. Cost/Reduction</u>						
<200 Svc Conn	0.00	\$21,484,980	<div style="border: 1px solid black; padding: 5px;"> Includes estimated reduction in theoretical cancer case per year for existing 1,2,3-TCP treated systems </div>					
>=200 Svc Conn	1.62	\$1,945,241						

Table 5
Estimated Total Annualized Costs at the Proposed Maximum Contaminant Level
(MCL)
by Water System Ownership

Water System Ownership^(a)	No. of Water Systems Impacted	Total Annualized Cost (\$M) (for Year 1+)^(b)
Federal	74	\$0.01
State	101	\$0.10
Local	1,410	\$28.67
Private	2,711	\$5.99
Total	4,296	\$34.77

(a) Database indicates mixed ownership for system 2400167, which was assumed to be local, based on available information. For routine monitoring costs, all mixed and unlabeled systems were assumed to be local systems; these systems did not have any record of contamination.

(b) Annualized costs do not include initial monitoring