

105686

ENVIRONMENTAL HEALTH RESEARCH AND TESTING, INC.
VOLATILE ORGANIC ANALYSIS

CUSTOMER NAME:	<u>OBG LABORATORIES, INC. - MR. MIKE PETERELLI</u>		
SAMPLE SOURCE:	<u>Blosenski Landfill</u>		
WORK ORDER NO.:	<u>N/A</u>	PROJECT NO.:	<u>12319</u>
DATE EXTRACTED:	<u>N/A</u>	DATE ANALYZED:	<u>11-16-90</u>
SAMPLE TYPE:	<u>Water Sample</u>	SAMPLE VOLUME:	<u>0.50</u>
ANALYST:	<u>J. Tobler</u>	DILUTION FACTOR:	<u>1.00</u>
CUSTOMER SAMPLE NO.:	<u>AS-I-60</u>	EHRT SAMPLE NO.:	<u>29460</u>
LAB NOTEBOOK NO.:	<u>162, Pg. 9</u>	METHOD NO.:	<u>EPA 601 & 602</u>

	<u>COMPOUNDS</u>		<u>RESULT</u> ug/L
1.	Bromodichloromethane	<	5.00
2.	Bromoform	<	5.00
3.	Bromomethane	<	5.00
4.	Carbon Tetrachloride	<	5.00
5.	Chlorobenzene		22.10
6.	Chloroethane	<	5.00
7.	2-Chloroethylvinyl Ether	<	5.00
8.	Chloroform		96.60
9.	Chloromethane	<	5.00
10.	Dibromochloromethane	<	5.00
11.	1,2-Dichlorobenzene	<	5.00
12.	1,3-Dichlorobenzene	<	5.00
13.	1,4-Dichlorobenzene	<	5.00
14.	Dichlorodifluoromethane	<	5.00
15.	1,1-Dichloroethane		34.10
16.	1,2-Dichloroethane	<	5.00
17.	1,1-Dichloroethene	<	5.00
18.	trans-1,2-Dichloroethene		103.70
19.	1,2-Dichloropropane	<	5.00
20.	cis-1,3-Dichloropropene	<	5.00
21.	trans-1,3-Dichloropropene	<	5.00
22.	Methylene Chloride	<	10.00

CUSTOMER SAMPLE NO.: AS-I-60

EHRT SAMPLE NO.: 29460

23.	1,1,2,2-Tetrachloroethane	<	5.00
24.	Tetrachloroethene	<	5.00
25.	1,1,1-Trichloroethane		135.90
26.	1,1,2-Trichloroethane	<	5.00
27.	Trichloroethene		68.60
28.	Trichlorofluoromethane	<	5.00
29.	Vinyl Chloride	<	5.00
30.	Benzene		1286.70
31.	Ethylbenzene	<	5.00
32.	Toluene	<	5.00

SURROGATE STANDARDS - % RECOVERIES

1,2-Dichloroethane-d4	-	<u>110.00%</u>
Toluene-d8	-	<u>81.00%</u>
Bromofluorobenzene	-	<u>98.00%</u>

COMPUTER SEARCH

Acetone - Approx. 111.60 ug/L

ENVIRONMENTAL HEALTH RESEARCH AND TESTING, INC.
VOLATILE ORGANIC ANALYSIS

CUSTOMER NAME:	<u>OBG LABORATORIES, INC. - MR. MIKE PETTERELLI</u>		
SAMPLE SOURCE:	<u>Blosenski Landfill</u>		
WORK ORDER NO.:	<u>N/A</u>	PROJECT NO.:	<u>12319</u>
DATE EXTRACTED:	<u>N/A</u>	DATE ANALYZED:	<u>11-14-90</u>
SAMPLE TYPE:	<u>Water Sample</u>	SAMPLE VOLUME:	<u>5.00</u>
ANALYST:	<u>J. Tobler</u>	DILUTION FACTOR:	<u>1.00</u>
CUSTOMER SAMPLE NO.:	<u>AS-E-60</u>	EHRT SAMPLE NO.:	<u>29461</u>
LAB NOTEBOOK NO.:	<u>162, Pg. 9</u>	METHOD NO.:	<u>EPA 601 & 602</u>

	<u>COMPOUNDS</u>		<u>RESULT</u> ug/L
1.	Bromodichloromethane	<	0.50
2.	Bromoform	<	0.50
3.	Bromomethane	<	0.50
4.	Carbon Tetrachloride	<	0.50
5.	Chlorobenzene		2.94
6.	Chloroethane	<	0.50
7.	2-Chloroethylvinyl Ether	<	0.50
8.	Chloroform		17.05
9.	Chloromethane	<	0.50
10.	Dibromochloromethane	<	0.50
11.	1,2-Dichlorobenzene	<	0.50
12.	1,3-Dichlorobenzene	<	0.50
13.	1,4-Dichlorobenzene	<	0.50
14.	Dichlorodifluoromethane	<	0.50
15.	1,1-Dichloroethane		5.04
16.	1,2-Dichloroethane	<	0.50
17.	1,1-Dichloroethene	<	0.50
18.	trans-1,2-Dichloroethene		18.00
19.	1,2-Dichloropropane	<	0.50
20.	cis-1,3-Dichloropropene	<	0.50
21.	trans-1,3-Dichloropropene	<	0.50
22.	Methylene Chloride	<	1.00

CUSTOMER SAMPLE NO.: AS-E-60

EHRT SAMPLE NO.: 29461

23.	1,1,2,2-Tetrachloroethane	<	0.50
24.	Tetrachloroethene	<	0.50
25.	1,1,1-Trichloroethane		7.15
26.	1,1,2-Trichloroethane	<	0.50
27.	Trichloroethene		4.40
28.	Trichlorofluoromethane	<	0.50
29.	Vinyl Chloride	<	0.50
30.	Benzene		122.61
31.	Ethylbenzene	<	0.50
32.	Toluene	<	0.50

SURROGATE STANDARDS - % RECOVERIES

1,2-Dichloroethane-d4	-	<u>98.00%</u>
Toluene-d8	-	<u>93.00%</u>
Bromofluorobenzene	-	<u>100.00%</u>

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Customer Name: ENVIRONMENTAL HEALTH RESEARCH AND TESTING, INC.

Customer Name: OBG LABORATORIES, INC. - MR. PETTERELLI

Method No.: EPA 601 & 602

Project No.: 12319

Customer Sample No.: AS-E-60

EHRT No.: 29461

COMPOUND	AMOUNT ADDED (ng)	SAMPLE CONC. (ug/L)	MS CONC. (ug/L)	MS% REC #	QC LIMITS REC.
Dichloroethene	250	0	56.22	112	59-172
Trichloroethene	250	4.4	62.2	116	62-137
Benzene	250	123	190.8	136	66-142
Toluene	250	0	56.1	112	59-139
Chlorobenzene	250	2.9	57.6	109	60-133

COMPOUND	MSD CONC. (ug/L)	MSD % REC #	MS % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Dichloroethene	57.5	115	112	3	22	59-172
Trichloroethene	64.8	121	116	4	24	62-137
Benzene	178.6	111	136	20	21	66-142
Toluene	58	116	112	4	21	59-139
Chlorobenzene	58	110	109	0.01	21	60-133

Column to be used to flag recovery and RPD values with an asterick

Values outside of QC limits

RPD: 0 out of 5 outside limits
 Spike Recovery: 0 out of 10 outside limits

REMARKS:

ENVIRONMENTAL HEALTH RESEARCH AND TESTING, INC.
VOLATILE ORGANIC ANALYSIS

CUSTOMER NAME: OBG LABORATORIES, INC. - MR. MIKE PETERELLI

SAMPLE SOURCE: Blosenski Landfill

WORK ORDER NO.: N/A PROJECT NO.: 12319

DATE EXTRACTED: N/A DATE ANALYZED: 11-15-90

SAMPLE TYPE: Water Sample SAMPLE VOLUME: 0.50

ANALYST: J. Tobler DILUTION FACTOR: 1.00

CUSTOMER SAMPLE NO.: AS-I-50 EHRT SAMPLE NO.: 29462

LAB NOTEBOOK NO.: 162, Pg. 9 METHOD NO.: EPA 601 & 602

	<u>COMPOUNDS</u>		<u>RESULT</u> <u>ug/L</u>
1.	Bromodichloromethane	<	5.00
2.	Bromoform	<	5.00
3.	Bromomethane	<	5.00
4.	Carbon Tetrachloride	<	5.00
5.	Chlorobenzene		17.30
6.	Chloroethane	<	5.00
7.	2-Chloroethylvinyl Ether	<	5.00
8.	Chloroform		85.40
9.	Chloromethane	<	5.00
10.	Dibromochloromethane	<	5.00
11.	1,2-Dichlorobenzene	<	5.00
12.	1,3-Dichlorobenzene	<	5.00
13.	1,4-Dichlorobenzene	<	5.00
14.	Dichlorodifluoromethane	<	5.00
15.	1,1-Dichloroethane		30.00
16.	1,2-Dichloroethane	<	5.00
17.	1,1-Dichloroethene	<	5.00
18.	trans-1,2-Dichloroethene		91.50
19.	1,2-Dichloropropane	<	5.00
20.	cis-1,3-Dichloropropene	<	5.00
21.	trans-1,3-Dichloropropene	<	5.00
22.	Methylene Chloride	<	10.00

CUSTOMER SAMPLE NO.: AS-I-50

EHRT SAMPLE NO.: 29462

23.	1,1,2,2-Tetrachloroethane	<	5.00
24.	Tetrachloroethene	<	5.00
25.	1,1,1-Trichloroethane		117.70
26.	1,1,2-Trichloroethane	<	5.00
27.	Trichloroethene		37.10
28.	Trichlorofluoromethane	<	5.00
29.	Vinyl Chloride	<	5.00
30.	Benzene		1210.70
31.	Ethylbenzene	<	5.00
32.	Toluene	<	5.00

SURROGATE STANDARDS - % RECOVERIES

1,2-Dichloroethane-d4	-	<u>106.00%</u>
Toluene-d8	-	<u>78.00%</u>
Bromofluorobenzene	-	<u>112.00%</u>

ENVIRONMENTAL HEALTH RESEARCH AND TESTING, INC.
VOLATILE ORGANIC ANALYSIS

CUSTOMER NAME:	<u>OBG LABORATORIES, INC. - MR. MIKE PETERELLI</u>		
SAMPLE SOURCE:	<u>Blosenski Landfill</u>		
WORK ORDER NO.:	<u>N/A</u>	PROJECT NO.:	<u>12319</u>
DATE EXTRACTED:	<u>N/A</u>	DATE ANALYZED:	<u>11-14-90</u>
SAMPLE TYPE:	<u>Water Sample</u>	SAMPLE VOLUME:	<u>5.00</u>
ANALYST:	<u>J. Tobler</u>	DILUTION FACTOR:	<u>1.00</u>
CUSTOMER SAMPLE NO.:	<u>AS-E-50</u>	EHRT SAMPLE NO.:	<u>29463</u>
LAB NOTEBOOK NO.:	<u>162, Pg. 9</u>	METHOD NO.:	<u>EPA 601 & 602</u>

	<u>COMPOUNDS</u>		<u>RESULT</u> ug/L
1.	Bromodichloromethane	<	0.50
2.	Bromoform	<	0.50
3.	Bromomethane	<	0.50
4.	Carbon Tetrachloride	<	0.50
5.	Chlorobenzene		1.98
6.	Chloroethane	<	0.50
7.	2-Chloroethylvinyl Ether	<	0.50
8.	Chloroform		10.92
9.	Chloromethane	<	0.50
10.	Dibromochloromethane	<	0.50
11.	1,2-Dichlorobenzene	<	0.50
12.	1,3-Dichlorobenzene	<	0.50
13.	1,4-Dichlorobenzene	<	0.50
14.	Dichlorodifluoromethane	<	0.50
15.	1,1-Dichloroethane		3.23
16.	1,2-Dichloroethane	<	0.50
17.	1,1-Dichloroethene	<	0.50
18.	trans-1,2-Dichloroethene		11.61
19.	1,2-Dichloropropane	<	0.50
20.	cis-1,3-Dichloropropene	<	0.50
21.	trans-1,3-Dichloropropene	<	0.50
22.	Methylene Chloride	<	1.00

CUSTOMER SAMPLE NO.: AS-E-50

EHRT SAMPLE NO.: 29463

23.	1,1,2,2-Tetrachloroethane	<	0.50
24.	Tetrachloroethene	<	0.50
25.	1,1,1-Trichloroethane		4.44
26.	1,1,2-Trichloroethane	<	0.50
27.	Trichloroethene	<	0.50
28.	Trichlorofluoromethane	<	0.50
29.	Vinyl Chloride	<	0.50
30.	Benzene		81.19
31.	Ethylbenzene	<	0.50
32.	Toluene	<	0.50

SURROGATE STANDARDS - % RECOVERIES

1,2-Dichloroethane-d4	-	<u>97.00%</u>
Toluene-d8	-	<u>98.00%</u>
Bromofluorobenzene	-	<u>103.00%</u>

ENVIRONMENTAL HEALTH RESEARCH AND TESTING, INC.
VOLATILE ORGANIC ANALYSIS

CUSTOMER NAME:	<u>OBG LABORATORIES, INC. - MR. MIKE PETERELLI</u>		
SAMPLE SOURCE:	<u>Blosenski Landfill</u>		
WORK ORDER NO.:	<u>N/A</u>	PROJECT NO.:	<u>12319</u>
DATE EXTRACTED:	<u>N/A</u>	DATE ANALYZED:	<u>11-09-90</u>
SAMPLE TYPE:	<u>Water Blank A</u>	SAMPLE VOLUME:	<u>5.00</u>
ANALYST:	<u>J. Tobler</u>	DILUTION FACTOR:	<u>1.00</u>
CUSTOMER SAMPLE NO.:	<u>N/A</u>	EHRT SAMPLE NO.:	<u>N/A</u>
LAB NOTEBOOK NO.:	<u>162, Pg. 9</u>	METHOD NO.:	<u>EPA 601 & 602</u>

	<u>COMPOUNDS</u>		<u>RESULT</u> ug/L
1.	Bromodichloromethane	<	0.50
2.	Bromoform	<	0.50
3.	Bromomethane	<	0.50
4.	Carbon Tetrachloride	<	0.50
5.	Chlorobenzene	<	0.50
6.	Chloroethane	<	0.50
7.	2-Chloroethylvinyl Ether	<	0.50
8.	Chloroform	<	0.50
9.	Chloromethane	<	0.50
10.	Dibromochloromethane	<	0.50
11.	1,2-Dichlorobenzene	<	0.50
12.	1,3-Dichlorobenzene	<	0.50
13.	1,4-Dichlorobenzene	<	0.50
14.	Dichlorodifluoromethane	<	0.50
15.	1,1-Dichloroethane	<	0.50
16.	1,2-Dichloroethane	<	0.50
17.	1,1-Dichloroethene	<	0.50
18.	trans-1,2-Dichloroethene	<	0.50
19.	1,2-Dichloropropane	<	0.50
20.	cis-1,3-Dichloropropene	<	0.50
21.	trans-1,3-Dichloropropene	<	0.50
22.	Methylene Chloride	<	1.00

CUSTOMER SAMPLE NO.: N/A

EHRT SAMPLE NO.: N/A

23.	1,1,2,2-Tetrachloroethane	<	0.50
24.	Tetrachloroethene	<	0.50
25.	1,1,1-Trichloroethane	<	0.50
26.	1,1,2-Trichloroethane	<	0.50
27.	Trichloroethene	<	0.50
28.	Trichlorofluoromethane	<	0.50
29.	Vinyl Chloride	<	0.50
30.	Benzene	<	0.50
31.	Ethylbenzene	<	0.50
32.	Toluene		0.76

SURROGATE STANDARDS - % RECOVERIES

1,2-Dichloroethane-d4	-	<u>96.00%</u>
Toluene-d8	-	<u>100.00%</u>
Bromofluorobenzene	-	<u>98.00%</u>

ENVIRONMENTAL HEALTH RESEARCH AND TESTING, INC.
VOLATILE ORGANIC ANALYSIS

CUSTOMER NAME: OBG LABORATORIES, INC. - MR. MIKE PETTERELLI

SAMPLE SOURCE: Blosenski Landfill

WORK ORDER NO.: N/A PROJECT NO.: 12319

DATE EXTRACTED: N/A DATE ANALYZED: 11-14-90

SAMPLE TYPE: Water Blank B SAMPLE VOLUME: 5.00

ANALYST: J. Tobler DILUTION FACTOR: 1.00

CUSTOMER SAMPLE NO.: N/A EHRT SAMPLE NO.: N/A

LAB NOTEBOOK NO.: 162, Pg. 9 METHOD NO.: EPA 601 & 602

	<u>COMPOUNDS</u>		<u>RESULT</u> <u>ug/L</u>
1.	Bromodichloromethane	<	0.50
2.	Bromoform	<	0.50
3.	Bromomethane	<	0.50
4.	Carbon Tetrachloride	<	0.50
5.	Chlorobenzene	<	0.50
6.	Chloroethane	<	0.50
7.	2-Chloroethyiviny Ether	<	0.50
8.	Chloroform	<	0.50
9.	Chloromethane	<	0.50
10.	Dibromochloromethane	<	0.50
11.	1,2-Dichlorobenzene	<	0.50
12.	1,3-Dichlorobenzene	<	0.50
13.	1,4-Dichlorobenzene	<	0.50
14.	Dichlorodifluoromethane	<	0.50
15.	1,1-Dichloroethane	<	0.50
16.	1,2-Dichloroethane	<	0.50
17.	1,1-Dichloroethene	<	0.50
18.	trans-1,2-Dichloroethene	<	0.50
19.	1,2-Dichloropropane	<	0.50
20.	cis-1,3-Dichloropropene	<	0.50
21.	trans-1,3-Dichloropropene	<	0.50
22.	Methylene Chloride	<	1.00

CUSTOMER SAMPLE NO.: N/A

EHRT SAMPLE NO.: N/A

23.	1,1,2,2-Tetrachloroethane	<	0.50
24.	Tetrachloroethene	<	0.50
25.	1,1,1-Trichloroethane	<	0.50
26.	1,1,2-Trichloroethane	<	0.50
27.	Trichloroethene	<	0.50
28.	Trichlorofluoromethane	<	0.50
29.	Vinyl Chloride	<	0.50
30.	Benzene	<	0.50
31.	Ethylbenzene	<	0.50
32.	Toluene	<	0.50

SURROGATE STANDARDS - % RECOVERIES

1,2-Dichloroethane-d4	-	<u>99.00%</u>
Toluene-d8	-	<u>99.00%</u>
Bromofluorobenzene	-	<u>104.00%</u>

ENVIRONMENTAL HEALTH RESEARCH AND TESTING, INC.
VOLATILE ORGANIC ANALYSIS

CUSTOMER NAME:	<u>OBG LABORATORIES, INC. - MR. MIKE PETERELLI</u>		
SAMPLE SOURCE:	<u>Biosenski Landfill</u>		
WORK ORDER NO.:	<u>N/A</u>	PROJECT NO.:	<u>12319</u>
DATE EXTRACTED:	<u>N/A</u>	DATE ANALYZED:	<u>11-14-90</u>
SAMPLE TYPE:	<u>Water Sample</u>	SAMPLE VOLUME:	<u>5.00</u>
ANALYST:	<u>J. Tobler</u>	DILUTION FACTOR:	<u>1.00</u>
CUSTOMER SAMPLE NO.:	<u>Trip Blk.</u>	EHRT SAMPLE NO.:	<u>29474</u>
LAB NOTEBOOK NO.:	<u>162, Pg. 9</u>	METHOD NO.:	<u>EPA 601 & 602</u>

	<u>COMPOUNDS</u>		<u>RESULT</u> ug/L
1.	Bromodichloromethane	<	0.50
2.	Bromoform	<	0.50
3.	Bromomethane	<	0.50
4.	Carbon Tetrachloride	<	0.50
5.	Chlorobenzene	<	0.50
6.	Chloroethane	<	0.50
7.	2-Chloroethylvinyl Ether	<	0.50
8.	Chloroform		1.70
9.	Chloromethane	<	0.50
10.	Dibromochloromethane	<	0.50
11.	1,2-Dichlorobenzene	<	0.50
12.	1,3-Dichlorobenzene	<	0.50
13.	1,4-Dichlorobenzene	<	0.50
14.	Dichlorodifluoromethane	<	0.50
15.	1,1-Dichloroethane	<	0.50
16.	1,2-Dichloroethane	<	0.50
17.	1,1-Dichloroethene	<	0.50
18.	trans-1,2-Dichloroethene	<	0.50
19.	1,2-Dichloropropane	<	0.50
20.	cis-1,3-Dichloropropene	<	0.50
21.	trans-1,3-Dichloropropene	<	0.50
22.	Methylene Chloride	<	1.00

CUSTOMER SAMPLE NO.: Trip Bk.

EHRT SAMPLE NO.: 29474

23.	1,1,2,2-Tetrachloroethane	<	0.50
24.	Tetrachloroethene	<	0.50
25.	1,1,1-Trichloroethane	<	0.50
26.	1,1,2-Trichloroethane	<	0.50
27.	Trichloroethene	<	0.50
28.	Trichlorofluoromethane	<	0.50
29.	Vinyl Chloride	<	0.50
30.	Benzene	<	0.50
31.	Ethylbenzene	<	0.50
32.	Toluene	<	0.50

SURROGATE STANDARDS - % RECOVERIES

1,2-Dichloroethane-d4	-	<u>91.00%</u>
Toluene-d8	-	<u>105.00%</u>
Bromofluorobenzene	-	<u>84.00%</u>

ENVIRONMENTAL HEALTH RESEARCH AND TESTING, INC.
VOLATILE ORGANIC ANALYSIS

CUSTOMER NAME:	<u>OBG LABORATORIES, INC. - MR. MIKE PETERELLI</u>		
SAMPLE SOURCE:	<u>Blosenski Landfill</u>		
WORK ORDER NO.:	<u>N/A</u>	PROJECT NO.:	<u>12319</u>
DATE EXTRACTED:	<u>N/A</u>	DATE ANALYZED:	<u>11-15-90</u>
SAMPLE TYPE:	<u>Charcoal Tube</u>	SAMPLE VOLUME:	<u>1.00</u>
ANALYST:	<u>J. Tobler</u>	DILUTION FACTOR:	<u>1.00</u>
CUSTOMER SAMPLE NO.:	<u>AS-AIR-100F</u>	EHRT SAMPLE NO.:	<u>29464</u>
LAB NOTEBOOK NO.:	<u>162, Pg. 17</u>	METHOD NO.:	<u>Modified NIOSH 1003 & 1501</u>

	<u>COMPOUNDS</u>		<u>RESULT</u> <u>ug/Filter</u>
1.	Benzyl Chloride	<	0.05
2.	Bromoform	<	0.05
3.	Carbon Tetrachloride	<	0.05
4.	Chlorobenzene		41.50
5.	Chlorobromomethane	<	0.05
6.	Chloroform		307.80
7.	o-Dichlorobenzene	<	0.05
8.	p-Dichlorobenzene	<	0.05
9.	1,1-Dichloroethane		196.20
10.	1,2-Dichloroethylene		479.40
11.	Ethylene Dichloride	<	0.05
12.	Hexachloroethane	<	0.05
13.	Methylchloroform	<	0.05
14.	Propylene Dichloride	<	0.05
15.	Benzene		4852.40
16.	p-tert-butyltoluene	<	0.25
17.	Cumene	<	0.05
18.	Ethylbenzene	<	0.05
19.	a-methylstyrene	<	0.05
20.	Naphthalene	<	0.75
21.	Styrene	<	0.05
22.	Toluene	<	0.05
23.	Vinyltoluene	<	0.25
24.	Xylene	<	0.05

COMPUTER SEARCH

1,1-Dichloroethene	-	Approx. 41.5 ug/Filter
Trichloroethene	-	Approx. 159 ug/Filter

ENVIRONMENTAL HEALTH RESEARCH AND TESTING, INC.
VOLATILE ORGANIC ANALYSIS

CUSTOMER NAME:	<u>OBG LABORATORIES, INC. - MR. MIKE PETERELLI</u>		
SAMPLE SOURCE:	<u>Blosenski Landfill</u>		
WORK ORDER NO.:	<u>N/A</u>	PROJECT NO.:	<u>12319</u>
DATE EXTRACTED:	<u>N/A</u>	DATE ANALYZED:	<u>11-16-90</u>
SAMPLE TYPE:	<u>Charcoal Tube</u>	SAMPLE VOLUME:	<u>1.00</u>
ANALYST:	<u>J. Tobler</u>	DILUTION FACTOR:	<u>1.00</u>
CUSTOMER SAMPLE NO.:	<u>AS-AIR-100B</u>	EHRT SAMPLE NO.:	<u>29465</u>
LAB NOTEBOOK NO.:	<u>162, Pg. 17</u>	METHOD NO.:	<u>Modified NIOSH 1003 & 1501</u>

	<u>COMPOUNDS</u>		<u>RESULT</u> <u>ug/Filter</u>
1.	Benzyl Chloride	<	0.05
2.	Bromoform	<	0.05
3.	Carbon Tetrachloride	<	0.05
4.	Chlorobenzene	<	0.05
5.	Chlorobromomethane	<	0.05
6.	Chloroform	<	0.05
7.	o-Dichlorobenzene	<	0.05
8.	p-Dichlorobenzene	<	0.05
9.	1,1-Dichloroethane	<	0.05
10.	1,2-Dichloroethylene	<	0.05
11.	Ethylene Dichloride	<	0.05
12.	Hexachloroethane	<	0.05
13.	Methylchloroform	<	0.05
14.	Propylene Dichloride	<	0.05
15.	Benzene	<	0.05
16.	p-tert-butyltoluene	<	0.25
17.	Cumene	<	0.05
18.	Ethylbenzene	<	0.05
19.	a-methylstyrene	<	0.05
20.	Naphthalene	<	0.75
21.	Styrene	<	0.05
22.	Toluene	<	0.05
23.	Vinyltoluene	<	0.25
24.	Xylene	<	0.05

ENVIRONMENTAL HEALTH RESEARCH AND TESTING, INC.
VOLATILE ORGANIC ANALYSIS

CUSTOMER NAME:	<u>OBG LABORATORIES, INC. - MR. MIKE PETERELLI</u>		
SAMPLE SOURCE:	<u>Blosenski Landfill</u>		
WORK ORDER NO.:	<u>N/A</u>	PROJECT NO.:	<u>12319</u>
DATE EXTRACTED:	<u>N/A</u>	DATE ANALYZED:	<u>11-15-90</u>
SAMPLE TYPE:	<u>Charcoal Tube</u>	SAMPLE VOLUME:	<u>1.00</u>
ANALYST:	<u>J. Tobler</u>	DILUTION FACTOR:	<u>1.00</u>
CUSTOMER SAMPLE NO.:	<u>AS-AIR-90F</u>	EHRT SAMPLE NO.:	<u>29466</u>
LAB NOTEBOOK NO.:	<u>162, Pg. 17</u>	METHOD NO.:	<u>Modified NIOSH 1003 & 1501</u>

	<u>COMPOUNDS</u>		<u>RESULT</u> ug/Filter
1.	Benzyl Chloride	<	0.05
2.	Bromoform	<	0.05
3.	Carbon Tetrachloride	<	0.05
4.	Chlorobenzene		89.65
5.	Chlorobromomethane	<	0.05
6.	Chloroform		495.85
7.	o-Dichlorobenzene	<	0.05
8.	p-Dichlorobenzene	<	0.05
9.	1,1-Dichloroethane		298.75
10.	1,2-Dichloroethyiene		796.00
11.	Ethylene Dichloride	<	0.05
12.	Hexachloroethane	<	0.05
13.	Methylchloroform	<	0.05
14.	Propylene Dichloride	<	0.05
15.	Benzene	<	0.05
16.	p-tert-butyltoluene	<	0.25
17.	Cumeme	<	0.05
18.	Ethylbenzene	<	0.05
19.	a-methylstyrene	<	0.05
20.	Naphthalene	<	0.75
21.	Styrene	<	0.05
22.	Toluene		9.35
23.	Vinytoluene	<	0.25
24.	Xylene	<	0.05

CUSTOMER SAMPLE NO.: AS-AIR-90F

EHRT SAMPLE NO.: 29466

COMPUTER SEARCH

1,1-Dichloroethane	-	Approx. 299 ug/Filter
1,1,1-Trichloroethane	-	Approx. 340 ug/Filter
Trichloroethene	-	Approx. 307 ug/Filter
Benzene	-	Approx. 305 ug/Filter
1,1-Dichloroethene	-	Approx. 66 ug/Filter

ENVIRONMENTAL HEALTH RESEARCH AND TESTING, INC.
VOLATILE ORGANIC ANALYSIS

CUSTOMER NAME:	<u>OBG LABORATORIES, INC. - MR. MIKE PETERELLI</u>		
SAMPLE SOURCE:	<u>Blosenski Landfill</u>		
WORK ORDER NO.:	<u>N/A</u>	PROJECT NO.:	<u>12319</u>
DATE EXTRACTED:	<u>N/A</u>	DATE ANALYZED:	<u>11-16-90</u>
SAMPLE TYPE:	<u>Charcoal Tube</u>	SAMPLE VOLUME:	<u>1.00</u>
ANALYST:	<u>J. Tobler</u>	DILUTION FACTOR:	<u>1.00</u>
CUSTOMER SAMPLE NO.:	<u>AS-AIR-90B</u>	EHRT SAMPLE NO.:	<u>29467</u>
LAB NOTEBOOK NO.:	<u>162, Pg. 17</u>	METHOD NO.:	<u>Modified NIOSH 1003 & 1501</u>

	<u>COMPOUNDS</u>		<u>RESULT ug/Filter</u>
1.	Benzyl Chloride	<	0.05
2.	Bromoform	<	0.05
3.	Carbon Tetrachloride	<	0.05
4.	Chlorobenzene	<	0.05
5.	Chlorobromomethane	<	0.05
6.	Chloroform		23.95
7.	o-Dichlorobenzene	<	0.05
8.	p-Dichlorobenzene	<	0.05
9.	1,1-Dichloroethane		41.80
10.	1,2-Dichloroethylene	<	0.05
11.	Ethylene Dichloride	<	0.05
12.	Hexachloroethane	<	0.05
13.	Methylchloroform	<	0.05
14.	Propylene Dichloride	<	0.05
15.	Benzene	<	0.05
16.	p-tert-butyltoluene	<	0.25
17.	Cumene	<	0.05
18.	Ethylbenzene	<	0.05
19.	a-methylstyrene	<	0.05
20.	Naphthalene	<	0.75
21.	Styrene	<	0.05
22.	Toluene	<	0.05
23.	Vinyltoluene	<	0.25
24.	Xylene	<	0.05

CUSTOMER SAMPLE NO.: AS-AIR-90B

EHRT SAMPLE NO.: 29467

COMPUTER SEARCH

1,1,1-Trichloroethane - Approx. 11 ug/Filter

Dibromomethane - Approx. 7.4 ug/Filter

ENVIRONMENTAL HEALTH RESEARCH AND TESTING, INC.
VOLATILE ORGANIC ANALYSIS

CUSTOMER NAME:	<u>OBG LABORATORIES, INC. - MR. MIKE PETTERELLI</u>		
SAMPLE SOURCE:	<u>Blosenski Landfill</u>		
WORK ORDER NO.:	<u>N/A</u>	PROJECT NO.:	<u>12319</u>
DATE EXTRACTED:	<u>N/A</u>	DATE ANALYZED:	<u>11-14-90</u>
SAMPLE TYPE:	<u>Charcoal Tube</u>	SAMPLE VOLUME:	<u>1.00</u>
ANALYST:	<u>J. Tobler</u>	DILUTION FACTOR:	<u>1.00</u>
CUSTOMER SAMPLE NO.:	<u>AS-AIR-80F</u>	EHRT SAMPLE NO.:	<u>29468</u>
LAB NOTEBOOK NO.:	<u>162, Pg. 17</u>	METHOD NO.:	<u>Modified NIOSH 1003 & 1501</u>

	<u>COMPOUNDS</u>		<u>RESULT</u> <u>ug/Filter</u>
1.	Benzyl Chloride	<	0.05
2.	Bromoform	<	0.05
3.	Carbon Tetrachloride	<	0.05
4.	Chlorobenzene		64.00
5.	Chlorobromomethane	<	0.05
6.	Chloroform		385.30
7.	o-Dichlorobenzene	<	0.05
8.	p-Dichlorobenzene	<	0.05
9.	1,1-Dichloroethane		178.60
10.	1,2-Dichloroethylene		495.60
11.	Ethylene Dichloride	<	0.05
12.	Hexachloroethane	<	0.05
13.	Methylchloroform	<	0.05
14.	Propylene Dichloride	<	0.05
15.	Benzene		4777.95
16.	p-tert-butyltoluene	<	0.25
17.	Cumene	<	0.05
18.	Ethylbenzene	<	0.05
19.	a-methylstyrene	<	0.05
20.	Naphthalene	<	0.75
21.	Styrene	<	0.05
22.	Toluene	<	0.05
23.	Vinytoluene	<	0.25
24.	Xylene	<	0.05

CUSTOMER SAMPLE NO.: AS-AIR-80F

EHRT SAMPLE NO.: 29468

COMPUTER SEARCH

1,1-Dichloroethene	-	Approx. 41.9 ug/Filter
1,1,1-Trichloroethane	-	Approx. 397 ug/Filter
Trichloroethene	-	Approx. 260 ug/Filter

ENVIRONMENTAL HEALTH RESEARCH AND TESTING, INC.
VOLATILE ORGANIC ANALYSIS

CUSTOMER NAME: OBG LABORATORIES, INC. - MR. MIKE PETERELLI

SAMPLE SOURCE: Blosenski Landfill

WORK ORDER NO.: N/A PROJECT NO.: 12319

DATE EXTRACTED: N/A DATE ANALYZED: 11-16-90

SAMPLE TYPE: Charcoal Tube SAMPLE VOLUME: 1.00

ANALYST: J. Tobler DILUTION FACTOR: 1.00

CUSTOMER SAMPLE NO.: AS-AIR-80B EHRT SAMPLE NO.: 29469

LAB NOTEBOOK NO.: 162, Pg. 17 METHOD NO.: Modified NIOSH
1003 & 1501

	<u>COMPOUNDS</u>		<u>RESULT</u> <u>ug/Filter</u>
1.	Benzyl Chloride	<	0.05
2.	Bromoform	<	0.05
3.	Carbon Tetrachloride	<	0.05
4.	Chlorobenzene	<	0.05
5.	Chlorobromomethane	<	0.05
6.	Chloroform	<	0.05
7.	o-Dichlorobenzene	<	0.05
8.	p-Dichlorobenzene	<	0.05
9.	1,1-Dichloroethane	<	0.05
10.	1,2-Dichloroethylene	<	0.05
11.	Ethylene Dichloride	<	0.05
12.	Hexachloroethane	<	0.05
13.	Methylchloroform	<	0.05
14.	Propylene Dichloride	<	0.05
15.	Benzene	<	0.05
16.	p-tert-butyltoluene	<	0.25
17.	Cumene	<	0.05
18.	Ethylbenzene	<	0.05
19.	a-methylstyrene	<	0.05
20.	Naphthalene	<	0.75
21.	Styrene	<	0.05
22.	Toluene	<	0.05
23.	Vinyltoluene	<	0.25
24.	Xylene	<	0.05

ENVIRONMENTAL HEALTH RESEARCH AND TESTING, INC.
VOLATILE ORGANIC ANALYSIS

CUSTOMER NAME:	<u>OBG LABORATORIES, INC. - MR. MIKE PETERELLI</u>		
SAMPLE SOURCE:	<u>Blosenski Landfill</u>		
WORK ORDER NO.:	<u>N/A</u>	PROJECT NO.:	<u>12319</u>
DATE EXTRACTED:	<u>N/A</u>	DATE ANALYZED:	<u>11-14-90</u>
SAMPLE TYPE:	<u>Charcoal Tube</u>	SAMPLE VOLUME:	<u>1.00</u>
ANALYST:	<u>J. Tobler</u>	DILUTION FACTOR:	<u>1.00</u>
CUSTOMER SAMPLE NO.:	<u>AS-AIR-60F</u>	EHRT SAMPLE NO.:	<u>29470</u>
LAB NOTEBOOK NO.:	<u>162, Pg. 17</u>	METHOD NO.:	<u>Modified NIOSH 1003 & 1501</u>

	<u>COMPOUNDS</u>		<u>RESULT</u> <u>ug/Filter</u>
1.	Benzyl Chloride	<	0.05
2.	Bromoform	<	0.05
3.	Carbon Tetrachloride	<	0.05
4.	Chlorobenzene		123.85
5.	Chlorobromomethane	<	0.05
6.	Chloroform		618.60
7.	o-Dichlorobenzene	<	0.05
8.	p-Dichlorobenzene	<	0.05
9.	1,1-Dichloroethane		260.40
10.	1,2-Dichloroethylene		851.95
11.	Ethylene Dichloride	<	0.05
12.	Hexachloroethane	<	0.05
13.	Methylchloroform	<	0.05
14.	Propylene Dichloride	<	0.05
15.	Benzene		8607.35
16.	p-tert-butyltoluene	<	0.25
17.	Cumene	<	0.05
18.	Ethylbenzene	<	0.05
19.	a-methylstyrene	<	0.05
20.	Naphthalene	<	0.75
21.	Styrene	<	0.05
22.	Toluene	<	0.05
23.	Vinytoluene	<	0.25
24.	Xylene	<	0.05

CUSTOMER SAMPLE NO.: AS-AIR-60F

EHRT SAMPLE NO.: 29470

COMPUTER SEARCH

1,1-Dichloroethene	-	Approx. 57.5 ug/Filter
1,1,1-Trichloroethane	-	Approx. 693 ug/Filter
1,2-Dichloroethane	-	Approx. 260 ug/Filter

ENVIRONMENTAL HEALTH RESEARCH AND TESTING, INC.
VOLATILE ORGANIC ANALYSIS

CUSTOMER NAME:	<u>OBG LABORATORIES, INC. - MR. MIKE PETERELLI</u>		
SAMPLE SOURCE:	<u>Blosenski Landfill</u>		
WORK ORDER NO.:	<u>N/A</u>	PROJECT NO.:	<u>12319</u>
DATE EXTRACTED:	<u>N/A</u>	DATE ANALYZED:	<u>11-15-90</u>
SAMPLE TYPE:	<u>Charcoal Tube</u>	SAMPLE VOLUME:	<u>1.00</u>
ANALYST:	<u>J. Tobler</u>	DILUTION FACTOR:	<u>1.00</u>
CUSTOMER SAMPLE NO.:	<u>AS-AIR-60B</u>	EHRT SAMPLE NO.:	<u>29471A</u>
LAB NOTEBOOK NO.:	<u>162, Pg. 17</u>	METHOD NO.:	<u>Modified NIOSH 1003 & 1501</u>

	<u>COMPOUNDS</u>		<u>RESULT</u> <u>ug/Filter</u>
1.	Benzyl Chloride	<	0.05
2.	Bromoform	<	0.05
3.	Carbon Tetrachloride	<	0.05
4.	Chlorobenzene	<	0.05
5.	Chlorobromomethane	<	0.05
6.	Chloroform		68.55
7.	o-Dichlorobenzene	<	0.05
8.	p-Dichlorobenzene	<	0.05
9.	1,1-Dichloroethane		90.25
10.	1,2-Dichloroethylene		42.00
11.	Ethylene Dichloride	<	0.05
12.	Hexachloroethane	<	0.05
13.	Methylchloroform	<	0.05
14.	Propylene Dichloride	<	0.05
15.	Benzene		25.30
16.	p-tert-butyltoluene	<	0.25
17.	Cumene	<	0.05
18.	Ethylbenzene	<	0.05
19.	a-methylstyrene	<	0.05
20.	Naphthalene	<	0.75
21.	Styrene	<	0.05
22.	Toluene	<	0.05
23.	Vinytoluene	<	0.25
24.	Xylene	<	0.05

CUSTOMER SAMPLE NO.: AS-AIR-60B

EHRT SAMPLE NO.: 29471A

COMPUTER SEARCH

1,1-Dichloroethene	-	Approx. 26 ug/Filter
1,1,1-Trichloroethane	-	Approx. 65 ug/Filter
1,2-Dichloroethane	-	Approx. 91 ug/Filter

ENVIRONMENTAL HEALTH RESEARCH AND TESTING, INC.
VOLATILE ORGANIC ANALYSIS

CUSTOMER NAME: OBG LABORATORIES, INC. - MR. MIKE PETERELLI

SAMPLE SOURCE: Blosenski Landfill

WORK ORDER NO.: N/A PROJECT NO.: 12319

DATE EXTRACTED: N/A DATE ANALYZED: 11-16-90

SAMPLE TYPE: Charcoal Duplicate SAMPLE VOLUME: 1.00

ANALYST: J. Tobler DILUTION FACTOR: 1.00

CUSTOMER SAMPLE NO.: AS-AIR-60B EHRT SAMPLE NO.: 29471B

LAB NOTEBOOK NO.: 162, Pg. 17 METHOD NO.: Modified NIOSH
1003 & 1501

	<u>COMPOUNDS</u>		<u>RESULT ug/Filter</u>
1.	Benzyl Chloride	<	0.05
2.	Bromoform	<	0.05
3.	Carbon Tetrachloride	<	0.05
4.	Chlorobenzene	<	0.05
5.	Chlorobromomethane	<	0.05
6.	Chloroform		74.45
7.	o-Dichlorobenzene	<	0.05
8.	p-Dichlorobenzene	<	0.05
9.	1,1-Dichloroethane		91.10
10.	1,2-Dichloroethylene		45.50
11.	Ethylene Dichloride	<	0.05
12.	Hexachloroethane	<	0.05
13.	Methylchloroform	<	0.05
14.	Propylene Dichloride	<	0.05
15.	Benzene		29.25
16.	p-tert-butyltoluene	<	0.25
17.	Cumene	<	0.05
18.	Ethylbenzene	<	0.05
19.	a-methylstyrene	<	0.05
20.	Naphthalene	<	0.75
21.	Styrene	<	0.05
22.	Toluene	<	0.05
23.	Vinyltoluene	<	0.25
24.	Xylene	<	0.05

CUSTOMER SAMPLE NO.: AS-AIR-60B

EHRT SAMPLE NO.: 29471B

COMPUTER SEARCH

1,1-Dichloroethene	-	Approx. 30 ug/Filter
1,1,1-Trichloroethane	-	Approx. 33 ug/Filter
1,1-Dichloroethane	-	Approx. 91 ug/Filter

ENVIRONMENTAL HEALTH RESEARCH AND TESTING, INC.
VOLATILE ORGANIC ANALYSIS

CUSTOMER NAME:	<u>OBG LABORATORIES, INC. - MR. MIKE PETERELLI</u>		
SAMPLE SOURCE:	<u>Blosenski Landfill</u>		
WORK ORDER NO.:	<u>N/A</u>	PROJECT NO.:	<u>12319</u>
DATE EXTRACTED:	<u>N/A</u>	DATE ANALYZED:	<u>11-14-90</u>
SAMPLE TYPE:	<u>Charcoal Sample</u>	SAMPLE VOLUME:	<u>1.00</u>
ANALYST:	<u>J. Tobler</u>	DILUTION FACTOR:	<u>1.00</u>
CUSTOMER SAMPLE NO.:	<u>AS-AIR-BLANK</u>	EHRT SAMPLE NO.:	<u>29472</u>
LAB NOTEBOOK NO.:	<u>148, Pg. 70</u>	METHOD NO.:	<u>Modified NIOSH 1003 & 1501</u>

	<u>COMPOUNDS</u>		<u>RESULT ug/Filter</u>
1.	Benzyl Chloride	<	0.05
2.	Bromoform	<	0.05
3.	Carbon Tetrachloride	<	0.05
4.	Chlorobenzene	<	0.05
5.	Chlorobromomethane	<	0.05
6.	Chloroform	<	0.05
7.	o-Dichlorobenzene	<	0.05
8.	p-Dichlorobenzene	<	0.05
9.	1,1-Dichloroethane	<	0.05
10.	1,2-Dichloroethylene	<	0.05
11.	Ethylene Dichloride	<	0.05
12.	Hexachloroethane	<	0.05
13.	Methylchloroform	<	0.05
14.	Propylene Dichloride	<	0.05
15.	Benzene	<	0.05
16.	p-tert-butyltoluene	<	0.25
17.	Cumene	<	0.05
18.	Ethylbenzene	<	0.05
19.	a-methylstyrene	<	0.05
20.	Naphthalene	<	0.75
21.	Styrene	<	0.05
22.	Toluene	<	0.05
23.	Vinyltoluene	<	0.25
24.	Xylene	<	0.05

PREDESIGN REPORT
BLOSENSKI LANDFILL
CHESTER COUNTY, PENNSYLVANIA

APPENDIX 5-4

AR002145

PENNSYLVANIA WATER QUALITY STANDARDS

(Pennsylvania Code, Title 25 — Environmental Resources, Chapter 16 — Water Quality Toxics Management Strategy — Statement of Policy, Adopted March 10, 1989, Amended effective April 7, 1989; and Chapter 93 — Water Quality Standards; Adopted September 3, 1971; Amended effective October 8, 1979; May 31, 1980; February 16, 1985; September 5, 1987; September 10, 1988; November 26, 1988; February 25, 1989; March 11, 1989; May 20, 1989; June 24, 1989; December 16, 1989; June 23, 1990)

CHAPTER 16. WATER QUALITY TOXICS MANAGEMENT STRATEGY — STATEMENT OF POLICY

Subchapter A. GUIDELINES FOR DEVELOPMENT OF CRITERIA FOR TOXIC SUBSTANCES AND WATER QUALITY CRITERIA FOR TOXIC SUBSTANCES

INTRODUCTION

§16.1. General.

Water quality criteria are the numeric limits for parameters or stream conditions that need to be maintained or attained to prevent or eliminate pollution. They are designed to protect the water uses listed in Chapter 93 (relating to water quality standards). The most sensitive of these protected uses are generally water supply and aquatic life related. Therefore, criteria designed to protect these uses will normally protect the other uses listed in Chapter 93. This chapter specifies guidelines and procedures for development of criteria for toxic substances and also lists those limits which have been developed to date.

DISCUSSION

§16.11. Toxic substances.

(a) These guidelines cover the Federal Clean Water Act section 307(a) priority pollutants and any other toxic substances which the Department determines to be of concern due to their verified presence in wastewater discharges. Priority pollutants are the primary focus of concern because the EPA has determined them to be the

most commonly used, persistent and toxic substances in wastewater discharges. They include many heavy metals and solvents.

(b) In November, 1980, the EPA published criteria for protection of human health and aquatic life for 104 of the 129 priority pollutants. (There are currently 126 priority pollutants since three have subsequently been deleted.) Only 24 of the priority pollutants had both human health and aquatic life criteria. These criteria were developed in accordance with national guidelines summarized at 45 Fed. Reg. 79318 (1980). In several instances, the EPA has updated the criteria or issued new criteria based upon new data. The Department's procedures for establishing limits for aquatic life and human health protection for priority pollutants, and other toxics of concern, for which the EPA has not issued criteria, are discussed in this subchapter.

GUIDELINES FOR DEVELOPMENT OF AQUATIC LIFE CRITERIA

§16.21. Long-term and short-term concepts.

To provide for protection of aquatic life, it is necessary to consider both long-term (reproduction, growth, survival) and short-term (survival) concepts. Aquatic life can generally survive excursions of elevated concentrations of a pollutant so long as the excursion is of relatively short duration and does not frequently recur. However, to provide complete protection over a lifetime, a lower concentration must be maintained. Thus, each aquatic life criterion

consists of two components. The EPA defines these as a criterion maximum concentration (CMC) for short-term protection and a criterion continuous concentration (CCC) for long-term protection. Each component is further defined in terms of magnitude (a scientifically derived number), duration (the period of time over which the number must be achieved) and frequency (the amount of time that this number may be exceeded). Consistent with this approach, the Department whenever possible develops acute (short-term) and chronic (long-term) criteria and specifies the applicable magnitude and duration. The frequency of occurrence is specified through the design stream flow condition appropriate to the criteria.

§16.22. Criteria development.

The Department will establish criteria for toxic substances to provide for protection of aquatic life in accordance with the following guidelines:

(1) For those toxics for which the EPA has developed criteria in accordance with the national guidelines as set forth in 45 Fed. Reg. 79341 (1980), the Department will review and evaluate the criteria. Where the Department determines that the criteria are adequate to protect indigenous aquatic communities in the State's waters, these criteria will serve as the basis for establishing effluent limitations. Where the Department determines that the EPA national criteria are inappropriate (too lenient or too stringent), the Department will adjust these criteria in accordance with national guidelines to

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reflect the levels required for protection of aquatic life in Pennsylvania waters.

(2) For those toxics for which the EPA has not developed criteria due to an inadequate database to fit the national guidelines, and until such time that the EPA finalizes the less data intensive procedures set forth in the draft "Guidelines for Deriving Ambient Aquatic Life Advisory Concentrations," the Department will develop aquatic life criteria using best scientific information available.

(i) Best scientific information available is defined as consisting of all of the following components:

(A) Bioassay tests conducted in accordance with standardized methods and procedures.

(B) Bioassay tests conducted with species representative of Commonwealth waters.

(C) Bioassay tests with minimum duration of 48 hours for invertebrates and 96 hours for fishes.

(ii) In-stream levels for aquatic life protection will be developed by averaging relevant toxicity data and multiplying by an appropriate application factor. Pollutant specific application factors will be employed if acute and chronic data are available to calculate such a factor. In the absence of the data, the general application factor specified in the NAS "Water Quality Criteria 1972" will be used — 0.1 (max) and 0.05 (avg) for nonpersistent pollutants; and 0.05 (max) and 0.01 (avg) for persistent pollutants. A persistent pollutant is defined to be consistent with the previously cited reference as a substance having a half-life of greater than 4 days. Pollutants will be assumed to be persistent unless specific data are available which indicate otherwise.

(3) For those toxics for which there are insufficient data to fit the EPA National Guidelines or Departmental guidelines specified in paragraph (2) the Department will impose monitor-only requirements or technology-based limits or both until sufficient data become available to develop an in-stream criterion for aquatic life protection.

(4) If a wastewater discharger believes that an in-stream criterion established by the Department is overly stringent, he shall have the option to develop and submit data in support of an alternative site-specific criterion. When this option is

electd, bioassay tests shall be conducted in accordance with procedures set forth in §93.8(d) and (e) (relating to development of specific water quality criteria for the protection of aquatic life). The Department will make the final determination as to the validity and applicability of these data. If the criterion which is developed using the site-specific alternative is more stringent than that originally established by the Department, the more stringent criterion shall form the basis for establishing effluent limitations. If a less stringent criterion is developed and approved by the Department, it shall be evaluated to ensure that it does not violate a criterion necessary to protect any other designated uses.

(5) Where the Department determines that whole effluent toxicity testing (WETT) is required for protection of aquatic life, the requirements will be imposed upon the wastewater discharger. This determination will be made in accordance with the Department's "Protocol for Selecting and Ranking Wastewater Dischargers for Whole Effluent Toxicity Testing Requirements." Toxicity tests will be conducted in accordance with the Department's "Protocol for Conducting Whole Effluent Toxicity Tests."

§16.23. Sources of information.

The Department will use the following sources of information in establishing limits for aquatic life protection:

(1) United States EPA 1986 Quality Criteria for Water (Goldbook).

(2) United States EPA Quality Criteria for Water — 1976 (Redbook).

(3) Water Quality Criteria 1972 (Bluebook).

(4) United States EPA Ambient Water Quality Criteria Development Documents.

(5) Aquatic life toxicity data available in the published scientific literature.

(6) Aquatic life toxicity data available on EPA computerized databases (AQUIRE).

GUIDELINES FOR DEVELOPMENT OF HUMAN HEALTH-BASED CRITERIA

§16.31 Application.

In the development of water quality criteria for human health protection, the principles of risk assessment and risk management are applied in two distinct ways depending upon the toxic effect to be pro-

ected against. Traditional toxicology developed upon a theory that the "d determines the position" (any substance toxic if the dose becomes large enough) is generally recognized, however, that for most substances there is a safe dose at which no adverse effects will be seen. The "threshold level" approach is in contrast to the "no threshold level" approach generally ascribed to carcinogens.

§16.32. Threshold level toxic effects.

(a) A threshold effect is defined as adverse impact that occurs in the exposed individual only after a physiological reserve is depleted. For these effects there exists a dose below which no adverse response will occur. Threshold toxic effects include most systemic effects and developmental toxicity, including teratogenic. Developmental toxicity includes all adverse effects in developing offspring resulting from prenatal exposure to a causative agent.

(b). Control of threshold toxics is based upon animal testing or epidemiological studies that report no — or low — served adverse effect levels of the substance (NOAEL or LOAEL). In evaluating a particular toxic, toxicologists weigh the merits of all the tests, and choose, in their best professional judgment, the safe level. By applying standard margins of safety to the NOAEL extrapolated from the laboratory animals to humans (a factor of 10), for sensitive subpopulations (1 and from short-term to chronic studies (10) can be taken into account. An additional factor of 10 is used if only LOAEL is available. Together with other modifying factors (1-10) used, when necessary, to account for deficiencies in toxicity studies, an acceptable exposure level is determined. The current term for this acceptable level is reference dose (RfD); it was previously called the acceptable daily intake (ADI). The reference dose is adjusted for protection of an average (70 Kg) person. It is then divided by the expected exposure condition to result in an applicable criterion. Standard exposure conditions via water include two liters per day of drinking water and, where appropriate, consumption of 6.5 grams of fish per day. Criteria for threshold toxic effects are designed to provide life health protection.

(c) The Department will establish criteria for threshold toxics in accordance with

the following guidelines:

(1) If the EPA or other experts have developed criteria, the Department will evaluate and accept the criteria when it is determined that they are adequate to protect the designated water uses.

(2) If the EPA criteria have been evaluated, and have been determined to be adequate to protect designated uses, or when no criteria have been developed, the Department will collect applicable risk assessment data and develop criteria following standard toxicological procedures.

(3) If no data are available to characterize the hazard of a chemical, no criterion will be developed. The more stringent of technology limits or a criterion to protect the next most sensitive use will be substituted. A threshold criterion will be developed at a future date if and when information becomes available.

(4) A taste and odor value may be used to establish a criterion when this value is more critical than the threshold criterion, in the absence of sufficient toxicity data.

(d) The sources the Department uses to obtain relevant risk assessment values for protection for threshold level toxic effects to human health are as follows:

(1) Verified reference doses, listed in the EPA agency-wide supported data system known as IRIS (Integrated Risk Information System), provide the most current risk assessment values for more than 300 chemicals. These values are a primary source for criteria development.

(2) Finalized drinking water health values; that is, Maximum Contaminant Level Goals (MCLGs), are the result of peer-reviewed evaluations of the toxicity of chemicals and are good sources of risk data for ambient water criteria development.

(3) CWA 304(a) health criteria were established in 1980 by the EPA based upon the most current scientific data and are a good source of such information. The EPA updates and additions to the 1980 criteria and development documents are also good current sources of data.

(4) Teratology data from a peer-reviewed source provide information on criteria for teratogens.

(5) Other sources of toxicity information, such as drinking water health advisories and ambient water quality advisories, are investigated and may be used to set criteria.

§16.33. Nonthreshold effects (cancer).

(a) A nonthreshold effect is defined as an adverse impact, including carcinogenesis, for which no exposure greater than zero assures protection to the exposed individual. Thus, in contrast to the threshold concept discussed in §16.32 (relating to threshold level toxic effects), the nonthreshold approach to toxics control is based upon the premise that there is no safe concentration of the toxic.

(b) The nonthreshold approach is applicable to complete carcinogens, to cancer initiators and mutagenic substances. Because there is currently no complete guidance or concurrence by the scientific community on the concept of regulating certain carcinogenic substances which do not satisfy the above conditions, all carcinogens are currently addressed as nonthreshold. If, in the future, a threshold approach is supported by the experts as appropriate for nongenotoxic carcinogens, substances so defined can then be addressed in that manner. A carcinogen is defined as a substance that causes an increased incidence in benign or malignant neoplasms, or a substantial decrease in the latency period between exposure and the onset of neoplasms in man or other species as evidenced by toxicological or epidemiological studies or both. Although the mechanisms of cancer are not yet known, the most accepted theory within the scientific community is that two distinct steps (with multiple stages) are involved: initiation and promotion. Cancer is initiated by an agent that reacts with the DNA (or genetic material) within a cell. This action causes a change (or mutation) in the DNA which may then be promoted by the same or another agent into the proliferation of the disease. The nonthreshold theory holds that even one molecular level change in the DNA has a nominal probability of expression into cancer. Promotion, on the other hand, may or may not involve the threshold effects which are subject to the body's repair mechanisms and may only be expressed when the natural defenses are overcome. The promotional activities are those that act on the transformed cells, not on the DNA itself, hence they are nongenotoxic (that is, do not effect the genetic material).

(c) Only about 25 to 30 substances and processes have been positively identified as

causes of cancer in humans. Hundreds more substances have been linked to cancer in laboratory animals or suggested to "possibly" cause cancer. On many occasions, Federal and international experts have attempted to define what substances are likely to cause cancer in humans. The most respected international group seeking to define carcinogens is the World Health Organization's International Agency for Research on Cancer (WHO-IARC), which publishes comprehensive monographs on carcinogens. On March 14, 1985, (50 Fed. Reg. 10372 (1985)), the President's Office of Science and Technology Policy (OSTP) released a final framework document of cancer principles and guidelines. The EPA has issued risk assessment guidelines for cancer and carcinogens (and other effects) which follow basically the same evaluative processes in defining and expressing the potency of carcinogens. The EPA guidelines became effective September 24, 1986, and are contained in 51 Fed. Reg. 33992 (1986). The EPA is currently updating these guidances.

(d) Both IARC and the EPA rank chemicals as to the weight of evidence that indicates their likelihood for causing cancer. The National Toxicology Program, United States Public Health Service, DHHS also annually lists chemicals known or reasonably anticipated to cause cancer. The Department accepts the expertise of all these groups and regulates water pollutants named in any pertinent subgroup of their lists as carcinogens. (The reason the lists are not identical to one another is because each group evaluates the weight of evidence for their priority chemicals, and there are differences in their priorities.)

(e) Cancer is probably considered by most people to have the most dreaded impact on human health. Its notoriety draws attention that, if considered objectively, is outweighed by other impacts of much higher risk. Nevertheless, public perception is an important aspect of governmental action and much of the focus of health-based control deals with cancer. Therefore, in essence, the public demands stringent control of carcinogens.

(f) The Department has determined that the regulation of carcinogens from a water quality perspective in accordance with the procedure specified in the following subsections will adequately and reasonably protect human health.

(g) The Department accepts the evaluation and extrapolation modeling used by the EPA's Carcinogen Assessment Group (CAG) to quantiate the carcinogenic risk of particular chemicals. Cancer risk level criteria are, therefore, adaptations of the EPA's cancer potency (slope) factors. Criteria based on cancer risk levels are average lifetime exposure values.

(h) The model most often used by EPA-CAG to estimate the upper bound incremental cancer risk from exposure to a chemical is a linearized multi-stage dose-response extrapolation model fitted to the tumor incidence data and using standard assumptions in the absence of pertinent data (45 Fed. Reg. 79350). Since at the present time there is no way to demonstrate the scientific validity of any model, the use of risk extrapolation models is a subject of debate in the scientific community. However, risk extrapolation is generally recognized as the only tool available at this time for estimating the magnitude of human hazards associated with non-threshold toxicants. It should also be noted that other risk assessment models which use different assumptions may produce estimates ranging over several orders of magnitude. The EPA, however, believes the linearized multi-stage model provides the most plausible upper limit to risk in most cases.

(i) The Department's water quality toxics management program controls carcinogens to an overall risk management level of one excess case of cancer in a population of 1 million (1×10^{-6}). Expressing this another way, the probability of an individual getting cancer from an ambient water exposure to a carcinogen is increased by a factor of one in 1 million. This level appears to be protective of human health to a significant degree when compared to other risks encountered in life.

(j) The selection of an "acceptable" or insignificant cancer risk level (CRL) is not a scientific decision; it is a value judgment. In the Department's judgment, the 1×10^{-6} cancer risk level is acceptable in water quality control which is predicated on exposure that includes drinking 2 liters of water and ingesting 6.5 grams of fish per day over a 70-year lifetime. The average person in this society stands at risk of cancer from diet related causes (including

tobacco and alcohol consumption) of approximately 30%, or one chance in three. By contrast, some toxicologists and human health experts believe that only 3% (1 in 33) may be attributable to occupational and environmental exposure to industrial chemicals (Doll and Peto JNCI, 1981).

(k) The Department limits exposure to environmental carcinogens to a CRL of 1×10^{-6} which offers prudent control in reducing that current environmental risk. The virtual safety of a 1×10^{-6} CRL is supported by the following two points. First, the cancer modeling which predicts the in-stream values of 1×10^{-6} protection offers a likely upper bound to the risk, because it contains several conservative (that is, protective) assumptions. Secondly, the risk is a probability, not a reality. There is not necessarily one more real cancer in a population of 1 million people.

(l) Because individuals are less concerned about the impact of voluntary risks (that is, risks to which one knowingly subjects oneself), people daily expose themselves to far greater risks. On the other hand, people are often much more concerned about involuntary risks, such as exposure to toxic chemicals in a drinking water, because they have no control over the situation. The Department believes a risk management level of 1×10^{-6} will satisfy these concerns.

(m) The Department will use the following guidelines in establishing criteria for nonthreshold toxics:

(1) The determination as to whether a substance is a carcinogen will be its listing by the EPA, IARC or NTP as such.

(2) For those toxics for which (cancer potency) slope factor values have been developed as evidenced by listing on IRIS or by an expert group (such as EPA-CAG), the Department will either use the EPA developed criteria or will develop criteria based upon these potency values.

(3) For those carcinogens for which cancer potency (slope factor) values have not been developed, the Department will set effluent limits as not detectable by the most sensitive analytical procedure.

(n) For all not detectable effluent limits, the most sensitive analytical method will be specified in the permit when it is known. Otherwise, the most appropriate analytical method will be specified in the

permit. The permittee will be required to identify an analytical method and report to the Department for approval. Detectable levels achieved and all analyses will be reported to the Department.

CRITERIA MODIFICATION

§16.41. Changes and additions.

The criteria set forth in Appendix Table 1 for toxic substances are based on the best scientific information currently available. These may, however, be modified if the Department determines an evaluation of new scientific findings warrants a modification. Submittal of data and information by NPDES applicants will be considered by the Department in this regard. Changes and additions to the table will be published annually in the *Pennsylvania Bulletin*.

WATER QUALITY CRITERIA FOR TOXIC SUBSTANCES

§16.51. Table.

Appendix A, Table 1 lists the human health and aquatic life criteria for toxic substances which the Department will be developing for use in NPDES permits. The human health criteria are further defined as to the specific effect (that is, carcinogenicity, taste, odor, general health). For those aquatic life criteria which are hard to define and specified as a formula, such as for the heavy metals, criteria for hardness values of 50, 100 and 200 are provided as examples. The Department will use specific hardness of the receiving stream in calculating criteria on a case-by-case basis for these substances. The parameters are grouped according to chemical/analytical properties and denoted alphabetically: M = Metals; A = Acid Soluble; V = Volatile; B = Base Neutral; and P = Pesticide. Some of these criteria may be superseded for Drainage Lists W (Ohio River Basin) and X (Lake Erie Basin) under interstate and international compact agreements with Ohio River Valley Sanitation Commission and International Joint Commission, respectively. See §16.41 (relating to designated water uses and water quality criteria) for specific parameters and criteria.

**Subchapter B. ANALYTICAL
METHODS AND
DETECTION LIMITS
FOR TOXIC SUBSTANCES**

GENERAL PROVISIONS

§16.101. Introduction.

(a) This subchapter contains information on the final EPA guidelines establishing test procedures for the analysis of priority pollutants under the Federal Water Pollution Control Act, known as the Clean Water Act (33 U.S.C.A. §125-1376). All of the procedures of analysis for the organic compounds are contained in 40 CFR 136 (relating to guidelines establishing test procedures), which was printed in its entirety at 49 Fed. Reg. 43234 (October 26, 1984). Corrections: 50 Fed. Reg. 690 (January 4, 1985) and amendments: 51 Fed. Reg. 23692 (June 30, 1986). Procedures for inorganic substances are cited in this source, but details are found elsewhere.

(b) This information provides the levels of analytical detectability for toxic priority pollutants. It is intended as a basis for review of NPDES application forms, and for establishing appropriate detection limits and methods of analysis to accompany final effluent limitations in permits.

§16.102. Approved EPA analytical methods and detection limits.

(a) Table 2 contains the following data elements and is to be used as follows:

(1) Parameter + (CAS) is the chemical name preceded by an alphanumeric code or the priority pollutants. Other inorganics (metals) listed on the application form have also been included. The Chemical Abstracts Service (CAS) number, a unique chemical identifier, is also listed for completeness of identification. The CAS number should always be verified to insure proper identification, particularly with chemicals with ambiguous and/or unfamiliar names.

(2) Screening detection limit is the val-

ue to be used as the general reference point in evaluating screening analyses submitted with an application. The analytical method used is irrelevant as long as it is EPA approved and meets the screening detection limit. With proper documentation, specific matrix and other interferences may allow for higher screening detection limits than those listed.

(3) Method number + (description) includes the approved EPA procedures by their identifying number and an abbreviated description of each. All of the methods are detailed in one or more of the following sources:

(i) *Methods for Chemical Analysis of Water and Wastes*, EPA 600/4-79-020, Revised March 1984.

(ii) 40 CFR 136 (relating to guidelines establishing test procedures) as published in 51 Fed. Reg. 23692 (June 30, 1986) and 49 Fed. Reg. 43234 (October 26, 1984 — with corrections in 50 Fed. Reg. 690 (January 4, 1985)). The EPA provides a list of other sources for these methods in the Federal Registers. Methods that were not developed by the EPA, that is, have no EPA identifying method number, but are approved by the EPA for use in NPDES related analyses are marked with an asterisk (*) in Appendix A, Table 2.

(iii) *Standard Methods for the Examination of Water and Wastewater*, 16th Edition, APHA-AWWA-JWPCF, 1985.

(iv) *Hach Handbook of Wastewater Analysis*, Hach, 1979.

(4) MDL is the method (minimum) detection limit for each chemical for each method. The method detection limit (MDL) is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the value is above zero (that is, something is really there). The MDL concentrations listed were obtained using reagent water. Similar results were achieved using representative wastewaters. The MDL actually achieved in a given analysis will

vary depending on instrument sensitivity and matrix effects.

(i) The permittee is expected generally to achieve the MDL of the most sensitive method for any pollutant with an effluent limitation of Not Detectable. MDLs are also used to decide whether the water quality-based effluent limitation is listed as a numerical value or Not Detectable in the permit.

(ii) If two analytical methods for the same parameter have MDLs that differ by less than 1 µg/l or a factor of 2 (whichever is greater), the permit may be written designating either method as acceptable. The permittee also has the option of using an alternate method he selects as long as he achieves the level of detection of the cited method or the numerical water quality-based limit.

(iii) The primary source for MDLs is the EPA. However, when the EPA has not reported the MDL, other sources (particularly, Standard Methods) are consulted. When there is no literature on the MDL, the Department of Environmental Resources Bureau of Laboratories may be asked to determine the MDL.

(5) For alternate MDL's permittees will be required to meet the MDLs listed in paragraph (4), where appropriate, unless they choose to develop their own MDLs. In that case, they may be granted case-specific MDLs if they submit complete documentation demonstrating a matrix effect in their particular effluent. They must follow the procedure for determining MDLs published as Appendix B 40 CFR 136 (relating to guidelines establishing test procedures). The Bureau of Laboratories will evaluate the data and advise the Regional Office of their decision.

(b) Table 3 gives a more detailed description of the EPA 600-series of analytical procedures for organic pollutants. Further detail is contained in 40 CFR 136.

APPENDIX A
TABLE 1
WATER QUALITY CRITERIA FOR TOXIC SUBSTANCES

PP NO	CHEMICAL NAME	CAS NUMBER	FISH and AQUATIC LIFE CRITERIA		HUMAN HEALTH CRITERIA (µg/l)
			CRITERIA CONTINUOUS CONCENTRATIONS (µg/l)	CRITERIA MAXIMUM CONCENTRATIONS (µg/l)	
1M	ANTIMONY	07440360	219	1095	145
2M	ARSENIC	07440382	190(As3+)	360(As3+)	50
3M	BERYLLIUM	07440417	0.01 × 96hr LC50	0.05 × 96hr LC50	0.007
4M	CADMIUM	07440439	Exp(0.7852[lnH] - 3.490) @H = 50 100 200 Crit = 0.66 1.1 2.0	Exp(1.128[lnH] - 3.828) @H = 50 100 200 Crit = 1.8 3.9 9.6	10
5M	CHROMIUM, TOTAL	07440473	11 + Exp(0.8190[lnH] + 1.561) @H = 50 100 200 Crit = 131 221 381	16 + Exp(0.8190[lnH] + 3.688) @H = 50 100 200 Crit = 996 1716 3116	170,050
5M	CHROMIUM, VI	07440473	11	16	50
6M	COPPER	07440508	Exp(0.8545[lnH] - 1.465) @H = 50 100 200 Crit = 6.5 12 21	Exp(0.9422[lnH] - 1.464) @H = 50 100 200 Crit = 9.2 18 34	1000
7M	LEAD	07439921	Exp(1.266[lnH] - 4.661) @H = 50 100 200 Crit = 1.3 3.2 7.7	Exp(1.266[lnH] - 1.416) @H = 50 100 200 Crit = 34 82 200	50
8M	MERCURY	07439976	0.012	2.4	0.144
9M	NICKEL	07440020	Exp(0.8460[lnH] + 1.1645) @H = 50 100 200 Crit = 88 160 280	Exp(0.8460[lnH] + 3.3612) @H = 50 100 200 Crit = 790 1400 2500	632
10M	SELENIUM	07782492	5	20	10
11M	SILVER	07440224	0.2	Exp(1.72[lnH] - 6.52) @H = 50 100 200 Crit = 1.2 4.1 13	50
12M	THALLIUM	07440280	18	90	13
13M	ZINC	07440666	Exp(0.8473[lnH] + 0.7614) @H = 50 100 200 Crit = 59 110 190	Exp(0.8473[lnH] + 0.8604) @H = 50 100 200 Crit = 65 120 210	500
14M	CYANIDE, FREE	00057125	5	22	200
15M	PHENOLICS (TOTAL PHENOLS)	—	20	100	5 (at water supply intake)
1A	2-CHLOROPHENOL	00095578	20	100	0.1
2A	2,4-DICHLOROPHENOL	00120832	337	1685	0.3
3A	2,4-DIMETHYLPHENOL	00105679	132	660	400
4A	4,6-DINITRO-o-CRESOL	00534521	16	80	13.4
5A	2,4-DINITROPHENOL	00051285	131	655	70
6A	2-NITROPHENOL	00088755	20	100	N/A
7A	4-NITROPHENOL	00100027	467	2335	N/A
8A	p-CHLORO-m-CRESOL	00059507	31	155	3000
9A	PENTACHLOROPHENOL	00087865	Exp(1.005[pH] - 5.290) @pH = 6.5 7.8 9.0 Crit = 3.5 13 43	Exp(1.005[pH] - 4.830) @pH = 6.5 7.8 9.0 Crit = 5.5 20 68	30

TABLE I
WATER QUALITY CRITERIA FOR TOXIC SUBSTANCES

	CHEMICAL NAME	CAS NUMBER	FISH and AQUATIC LIFE CRITERIA		HUMAN HEALTH CRITERIA	
			CRITERIA CONTINUOUS CONCENTRATIONS (µg/l)	CRITERIA MAXIMUM CONCENTRATIONS (µg/l)		
A	PHENOL	00108952	20	100	300	T&O
A	2,4,6-TRICHLOROPHENOL	00088062	91	455	1	CRL
V	ACROLEIN	00107028	1	5	320	H
V	ACRYLONITRILE	00107131	129	645	0.06	CRL
V	BENZENE	00071432	128	640	1	CRL
V	[DELETED]					—
V	BROMOFORM	00075252	365	1825	0.2 (b)	CRL
V	CARBON TETRACHLORIDE	00056235	556	2780	0.3	CRL
V	CHLOROBENZENE	00108907	236	1180	20	T&O
V	CHLORODIBROMOMETHANE	00124481	N/A	N/A	0.2 (b)	CRL
V	CHLOROETHANE	00075003	N/A	N/A	N/A	—
V	2-CHLOROETHYL VINYL ETHER	00110758	3500	17,500	N/A	—
V	CHLOROFORM	00067663	389	1945	0.2	CRL
V	DICHLOROBROMOMETHANE	00075274	N/A	N/A	0.2 (b)	CRL
V	[DELETED]					—
V	1,1-DICHLOROETHANE	00075343	N/A	N/A	N/A	—
V	1,2-DICHLOROETHANE	00107062	3088	15,440	0.4	CRL
V	1,1-DICHLOROETHYLENE	00075354	1492	7460	0.06	CRL
V	1,2-DICHLOROPROPANE	00078875	2165	10,825	N/A	—
V	1,3-DICHLOROPROPYLENE	00542756	61	305	87	H
V	ETHYLBENZENE	00100414	580	2900	1400	H
V	METHYL BROMIDE	00074839	110	550	0.2 (b)	CRL
V	METHYL CHLORIDE	00074873	5500	27,500	0.2 (b)	CRL
V	METHYLENE CHLORIDE	00075092	2368	11,840	5	CRL
V	1,1,2-TETRACHLOROETHANE	00079345	208	1040	0.2	CRL
V	TETRACHLOROETHYLENE	00127184	139	695	0.7	CRL
V	TOLUENE	00108883	330	1650	14,300	H
V	1,2-trans-DICHLOROETHYLENE	00156605	1350	6750	350	H
V	1,1,1-TRICHLOROETHANE	00071556	605	3025	1000	H
V	1,1,2-TRICHLOROETHANE	00079005	678	3390	0.6	CRL
V	TRICHLOROETHYLENE	00079016	450	2250	3	CRL

TABLE I
WATER QUALITY CRITERIA FOR TOXIC SUBSTANCES

PP NO	CHEMICAL NAME	CAS NUMBER	FISH and AQUATIC LIFE CRITERIA		HY- HE- CRITERIA ($\mu\text{g/l}$)
			CRITERIA CONTINUOUS CONCENTRATIONS ($\mu\text{g/l}$)	CRITERIA MAXIMUM CONCENTRATIONS ($\mu\text{g/l}$)	
30V	[DELETED]				
31V	VINYL CHLORIDE	00075014	N/A	N/A	0.02
1B	ACENAPHTHENE	00083329	17	85	20
2B	ACENAPHTHYLENE	00208968	N/A	N/A	0.003
3B	ANTHRACENE	00120127	N/A	N/A	0.003
4B	BENZIDINE	00092875	59	295	0.0001
5B	BENZO(a)ANTHRA- CENE	00056553	0.1	0.5	0.003
6B	BENZO(a)PYRENE	00050328	N/A	N/A	0.003
7B	3,4- BENZOFUORANTHENE	00205992	N/A	N/A	0.003
8B	BENZO(ghi)PERYL- ENE	00191242	N/A	N/A	0.003
9B	BENZO(k)FLUOR- ANTHENE	00207089	N/A	N/A	0.003
10B	BIS(2- CHLOROETHOXY) METHANE	00111911	N/A	N/A	N/A
11B	BIS(2- CHLOROETHYL) ETHER	00111444	6000	30,000	0.03
12B	BIS(2-CHLORO- ISOPROPYL)ETHER	00108601	N/A	N/A	34.7
13B	BIS(2- ETHYLHEXYL) PHTHALATE	00117817	909	4545	15,000
14B	4-BROMOPHENYL PHENYL ETHER	00101553	54	270	
15B	BUTYLBENZYL PHTHALATE	00085687	35	140	N/A
16B	2-CHLORONAPH- THALENE	00091587	N/A	N/A	N/A
17B	4-CHLOROPHENYL PHENYL ETHER	07005723	N/A	N/A	N/A
18B	CHRYSENE	00218019	N/A	N/A	0.003
19B	DIBENZO(a,h) ANTHRACENE	00053703	N/A	N/A	0.003
20B	1,2- DICHLOROBENZENE	00095501	164	820	400 (c)
21B	1,3- DICHLOROBENZENE	00541731	69	345	400 (c)
22B	1,4- DICHLOROBENZENE	00106467	146	730	400 (c)
23B	3,3'-DICHLORO- BENZIDINE	00091941	N/A	N/A	0.01
24B	DIETHYL PHTHALATE	00084662	800	4000	350,000
25B	DIMETHYL PHTHALATE	00131113	495	2475	313,000

TABLE I
WATER QUALITY CRITERIA FOR TOXIC SUBSTANCES

C	CHEMICAL NAME	CAS NUMBER	FISH and AQUATIC LIFE CRITERIA		HUMAN HEALTH CRITERIA ($\mu\text{g}/\text{l}$)	
			CRITERIA CONTINUOUS CONCENTRATIONS ($\mu\text{g}/\text{l}$)	CRITERIA MAXIMUM CONCENTRATIONS ($\mu\text{g}/\text{l}$)		
B	DI-N-BUTYL PHTHALATE	00084742	21	105	34,000	H
B	2,4-DINITROTOLUENE	00121142	318	1590	0.1	CRL
B	2,6-DINITROTOLUENE	00606202	198	990	N/A	—
B	DI-N-OCTYL PHTHALATE	00117840	N/A	N/A	N/A	—
B	1,2-DIPHENYLHYDRAZINE	00122667	3	15	0.04	CRL
B	FLUORANTHENE	00206440	40	200	42	H
B	FLUORENE	00086737	N/A	N/A	0.003	CRL
B	HEXACHLOROBENZENE	00118741	N/A	N/A	0.0007	CRL
B	HEXACHLOROBUTADIENE	00087683	2	10	0.5	CRL
B	HEXACHLOROCYCLOPENTADIENE	00077474	1	5	1	T&O
B	HEXACHLOROETHANE	00067721	12	60	2	CRL
B	INDENO(1,2,3-cd)PYRENE	00193395	N/A	N/A	0.003	CRL
B	ISOPHORONE	00078591	2080	10,400	5200	H
B	NAPHTHALENE	00091203	43	135	10	T&O
B	NITROBENZENE	00098953	808	4040	30	T&O
B	N-NITROSODIMETHYLAMINE	00062759	3420	17,100	0.001	CRL
B	N-NITROSODI-N-PROPYLAMINE	00621647	N/A	N/A	0.0008	CRL
B	N-NITROSODIPHENYLAMINE	00086306	59	295	5	CRL
B	PHENANTHRENE	00085018	1	5	0.003	CRL
B	PYRENE	00129000	N/A	N/A	0.003	CRL
B	1,2,4-TRICHLOROBENZENE	00120821	26	130	700	H
P	ALDRIN	00309002	0.1	0.5	0.00007	CRL
P	alpha-BHC	00319846	N/A	N/A	0.009	CRL
P	beta-BHC	00310857	N/A	N/A	0.02	CRL
P	gamma-BHC (LINDANE)	00058899	0.08	2	0.02	CRL
P	delta-BHC	00319868	N/A	N/A	N/A	—
P	CHLORDANE	00057749	0.0043	2.4	0.0005	CRL
P	4,4'-DDT	00050293	0.001	1.1	0.00002	CRL
P	4,4'-DDE	00072559	0.001	1.1	N/A	—
P	4,4'-DDD	00072548	0.001	1.1	N/A	—
P	DIELDRIN	00060571	0.0019	2.5	0.00007	CRL
P	alpha-ENDOSULFAN	00095988	0.056	0.22	74	H
P	beta-ENDOSULFAN	33212659	0.056	0.22	74	H
P	ENDOSULFAN SULFATE	01031078	N/A	N/A	74	—
P	ENDRIN	00072208	0.0023	0.18	1	H
P	ENDRIN ALDEHYDE	07421934	N/A	N/A	N/A	—

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TABLE 1
WATER QUALITY CRITERIA FOR TOXIC SUBSTANCES

PP NO	CHEMICAL NAME	CAS NUMBER	FISH and AQUATIC LIFE CRITERIA		HUMAN HEALTH CRITERIA ($\mu\text{g/l}$)
			CRITERIA CONTINUOUS CONCENTRATIONS ($\mu\text{g/l}$)	CRITERIA MAXIMUM CONCENTRATIONS ($\mu\text{g/l}$)	
16P	HEPTACHLOR	00076448	0.0038	0.52	0.0003
17P	HEPTACHLOR EPOXIDE	01024573	0.1	0.5	N/A
18P	PCB-1242	53469219	0.014	2	0.00008(d)
19P	PCB-1254	11097691	0.014	2	0.00008(d)
20P	PCB-1221	11104282	0.014	2	0.00008(d)
21P	PCB-1232	11141165	0.014	2	0.00008(d)
22P	PCB-1248	12672296	0.014	2	0.00008(d)
23P	PCB-1260	11096825	0.014	2	0.00008(d)
24P	PCB-1016	12674112	0.014	2	0.00008(d)
25P	TOXAPHENE	08001352	0.0002	0.73	0.0007
PP	2,3,7,8-TCDD	01746016	N/A	N/A	1×10^{-8}

Acronyms and Footnotes to Table 1

H—Threshold effect human health criterion.

CR—Cancer risk level criterion at 1×10^{-6} .

T&O—Taste and odor criterion.

lnH—Natural logarithm of the hardness of stream as mg/l CaCO₃.

N/A—Insufficient data to develop criterion.

b—Criterion is for total of halomethanes (5V + 8V + 12V + 20V + 21V) present.

c—Criterion is for total dichlorobenzenes (20B + 21B + 22B) present.

D—Criterion is for total PCBs (18P + 19P + 20P + 21P + 22P + 23P + 24P).

TABLE 2
APPROVED EPA ANALYTICAL METHODS
AND DETECTION LIMITS: INORGANICS

(1) Metal Samples are to be unfiltered and predigested for measurement of total fraction

Parameter (CAS)	Screening Detection Limit ($\mu\text{g/l}$)	Method Number (Description)	MDL ($\mu\text{g/l}$)
Aluminum (7429905)	100	202.1 (AA, flame)	100
		202.2 (AA, furnace)	3
		200.7 (ICP)	45
		306B*1 (Colorimetric)	6
1M Antimony (7440360)	200	204.1 (AA, flame)	200
		204.2 (AA, furnace)	3
		200.7 (ICP)	45
2M Arsenic (7440382)	50	206.2 (AA, furnace)	1
		206.3 (AA, hydride)	2
		206.4 (SDCC)	10
		200.7 (ICP)	53
Barium (14798084)	100	208.1 (AA, flame)	100
		208.2 (AA, furnace)	2
		200.7 (ICP)	2

TABLE 2
 APPROVED EPA ANALYTICAL METHODS
 AND DETECTION LIMITS: INORGANICS

(1) Metal Samples are to be unfiltered and predigested for measurement of total fraction

Parameter (CAS)	Screening Detection Limit ($\mu\text{g/l}$)	Method Number (Description)	MDL ($\mu\text{g/l}$)
3M Beryllium (7440417)	5	210.1 (AA, flame)	5
		210.2 (AA, furnace)	0.2
		200.7 (ICP)	0.3
		309B* ¹ (Colorimetric)	5
Boron (7440428)	5	212.3 (Colorimetric)	0.2
		200.7 (ICP)	5
4M Cadmium (7440439)	5	213.1 (AA, flame)	5
		213.2 (AA, furnace)	0.1
		200.7 (ICP)	4
		310B* ¹ (Colorimetric)	0.5
5M Chromium, total (7440473)	50	218.1 (AA, flame)	50
		218.2 (AA, furnace)	1
		218.3 (AA, extraction)	1
		200.7 (ICP)	7
5M Chromium, VI (7440473)	10	218.4 (AA, Extraction)	10
		307B* ^{1a} (Colorimetric)	N.A.
Cobalt (7440484)	50	219.1 (AA, flame)	50
		219.2 (AA, furnace)	1
		200.7 (ICP)	7
6M Copper (7440508)	20	220.1 (AA, flame)	20
		220.2 (AA, furnace)	1
		200.7 (ICP)	6
		313B* ¹ (Colorimetric)	3
		8506* ² (Colorimetric)	10
Iron (7439896)	30	236.1 (AA, direct)	30
		236.2 (AA, furnace)	1
		200.7 (ICP)	7
		315B* ¹ (Colorimetric)	20
7M Lead (7439921)	100	239.1 (AA, flame)	100
		239.2 (AA, furnace)	1
		200.7 (ICP)	42
		316B* ¹ (Colorimetric)	1
Magnesium (7439954)	30	242.1 (AA, flame)	1
		200.7 (ICP)	30
		318B* ¹ (Gravimetric)	N.A.

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TABLE 2
APPROVED EPA ANALYTICAL METHODS
AND DETECTION LIMITS: INORGANICS

(1) Metal Samples are to be unfiltered and predigested for measurement of total fraction

Parameter (CAS)	Screening Detection Limit ($\mu\text{g/l}$)	Method Number (Description)	MDL ($\mu\text{g/l}$)
Manganese (7439965)	10	243.1 (AA, flame)	10
		243.2 (AA, furnace)	0.2
		200.7 (ICP)	2
		319B* ¹ (Colorimetric)	N.A.
		8034* ² (Colorimetric)	N.A.
8M Mercury (7439976)	0.2	245.1 (Cold Vapor, Man.)	0.2
		245.2 (Cold Vapor, Auto)	0.2
Molybdenum (7439987)	100	246.1 (AA, flame)	100
		246.2 (AA, furnace)	1
		200.7 (ICP)	8
9M Nickel (7440020)	40	249.1 (AA, flame)	40
		249.2 (AA, furnace)	1
		200.7 (ICP)	15
		321B* ¹ (Colorimetric)	N.A.
10M Selenium (7782492)	75	270.2 (AA, furnace)	2
		270.3 (AA, hydride)	2
		200.7 (ICP)	75
11M Silver (7440224)	10	272.1 (AA, flame)	10
		272.2 (AA, furnace)	0.2
		200.7 (ICP)	7
		319B* ^{1,2} (Colorimetric)	N.A.
12M Thallium (7440280)	100	279.1 (AA, flame)	100
		279.2 (AA, furnace)	1
		200.7 (ICP)	40
Tin (7440315)	800	282.1 (AAS, flame)	800
		282.2 (AA, furnace)	5
Titanium (7440326)	400	283.1 (AA, flame)	400
		283.2 (AA, furnace)	10
13M Zinc (7440666)	5	289.1 (AA, flame)	5
		289.2 (AA, furnace)	0.05
		200.7 (ICP)	2
		328C* ¹ (Colorimetric)	1
		8009* ² (Colorimetric)	N.A.
14M Cyanide, Total (57125)	20	335.2 (Titrimetric)	1000
		335.2 (Spectrophometric)	20
		335.3 (Color., Auto)	5
Cyanide, Amenable to Chlorination (57125)	N.A.	335.1 (Titrimetric)	1000
		335.1 (Spectrophometric)	N.A.

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TABLE 2
APPROVED EPA ANALYTICAL METHODS
AND DETECTION LIMITS: INORGANICS

(1) Metal Samples are to be unfiltered and predigested for measurement of total fraction

Parameter (CAS)	Screening Detection Limit (µg/l)	Method Number (Description)	MDL (µg/l)
**		412H* ¹ (not EPA approved)	N.A.
14M Cyanide, Free (Weak and Dissociable) (57125)	5	— DER method, automated (not EPA approved)	1
15M Phenols, Total	5	420.1 (4AAP, Manual) 420.2 (4AAP, Auto)	5 2

*Not an EPA developed method, but approved by EPA
Source is: (1) *Standard Methods for the Examination of Water and Wastewater, 16th Edition. APHA—AWWA—WPCF, 1985.*
(1a) *14th Edition, 1976.*
or
(2) *Hach Handbook of Wastewater Analysis, 1979.*

**Because EPA currently measures "total cyanide" to satisfy cyanide limits, they have not yet approved analytical methods for "free cyanide". Free cyanide is a DER required analysis, and either of the two listed methods are acceptable for its determination.

TABLE 2
APPROVED EPA ANALYTICAL METHODS
AND DETECTION LIMITS: ORGANICS

Parameter (CAS)	Screening Detection Limit (µg/l)	Method Number (Description)	MDL (µg/l)
1A 2-Chlorophenol (95578)	10	604 — GC/FID	0.31
		604 — GC/ECD	0.58
		625 — GC/MS	3.3
		1625 — GC/MS (isotope)	10
2A 2,4-Dichlorophenol (120832)	10	604 — GC/FID	0.39
		604 — GC/ECD	0.68
		625 — GC/MS	2.7
		1625 — GC/MS (isotope)	10
3A 2,4-Dimethylphenol (105679)	10	604 — GC/FID	0.32
		604 — GC/ECD	0.63
		625 — GC/MS	2.7
		1625 — GC/MS (isotope)	10
4A 4,6-Dinitro-o-cresol (534521)	10	604 — GC/FID	16.0
		604 — GC/ECD	1.8
		625 — GC/MS	24
		1625 — GC/MS (isotope)	20

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TABLE 2
APPROVED EPA ANALYTICAL METHODS
AND DETECTION LIMITS: ORGANICS

Parameter (CAS)	Screening Detection Limit ($\mu\text{g/l}$)	Method Number (Description)	MDL ($\mu\text{g/l}$)
5A 2,4-Dinitrophenol (51285)	50	604 — GC/FID	13.0
		625 — GC/MS	42
		1625 — GC/MS (isotope)	50
6A 2-Nitrophenol (88755)	10	604 — GC/FID	0.45
		604 — GC/ECD	0.77
		625 — GC/MS	3.6
		1625 — GC/MS (isotope)	20
7A 4-Nitrophenol (100077)	50	604 — GC/FID	2.8
		604 — GC/ECD	0.70
		625 — GC/MS	2.4
		1625 — GC/MS (isotope)	50
8A p-Chloro-m-cresol (59507)	10	604 — GC/FID	0.36
		604 — GC/ECD	1.8
		625 — GC/MS	3.0
		1625 — GC/MS (isotope)	10
9A Pentachlorophenol (87865)	50	604 — GC/FID	7.4
		604 — GC/ECD	0.59
		625 — GC/MS	3.6
		1625 — GC/MS (isotope)	50
10A Phenol (108952)	10	604 — GC/FID	0.14
		604 — GC/ECD	2.2
		625 — GC/MS	1.5
		1625 — GC/MS (isotope)	10
11A 2,4,6-Trichlorophenol (88062)	10	604 — GC/FID	0.64
		604 — GC/ECD	0.58
		625 — GC/MS	2.7
		1625 — GC/MS (isotope)	10
1V Acrolein ⁽¹⁾ (107028)	10	603 — GC/FID	0.6
		624 — GC/MS	N.A.
		1624 — GC/MS (isotope)	50
2V Acrylonitrile ⁽¹⁾ (107131)	10	603 — GC/FID	0.5
		624 — GC/MS	N.A.
		1624 — GC/MS (isotope)	50
3V Benzene (71432)	10	602 — GC/PID	0.209
		624 — GC/MS	4.4
		1624 — GC/MS (isotope)	10
4V		Deleted	
5V Bromoform (75252)	10	601 — GC/Hal.	0.20
		624 — GC/MS	4.7
		1624 — GC/MS (isotope)	10
6V Carbontetrachloride (56235)	10	601 — GC/Hal.	0.12
		624 — GC/MS	2.8
		1624 — GC/MS (isotope)	10
7V Chlorobenzene (108907)	10	601 — GC/Hal.	0.25
		602 — GC/PID	0.20
		624 — GC/MS	6.0
		1625 — GC/MS (isotope)	10

TABLE 2
APPROVED EPA ANALYTICAL METHODS
AND DETECTION LIMITS: ORGANICS

Parameter (CAS)	Screening Detection Limit ($\mu\text{g/l}$)	Method Number (Description)	MDL ($\mu\text{g/l}$)
8V Chlorodibromomethane (124481)	10	601 — GC/Hal.	0.09
		624 — GC/MS	3.1
		1624 — GC/MS (isotope)	10
9V Chloroethane (75003)	10	601 — GC/Hal.	0.52
		624 — GC/MS	N.A.
		1624 — GC/MS (isotope)	50
10V 2-Chloroethyl vinyl ether (110758)	10	601 — GC/Hal.	0.13
		624 — GC/MS	N.A.
		1624 — GC/MS (isotope)	10
11V Chloroform (67663)	10	601 — GC/Hal.	0.05
		624 — GC/MS	1.6
		1624 — GC/MS (isotope)	10
12V Dichlorobromo- methane (75274)	10	601 — GC/Hal.	0.10
		624 — GC/MS	2.2
		1624 — GC/MS (isotope)	10
13V		Deleted	
14V 1,1-Dichloroethane (75343)	10	601 — GC/Hal.	0.07
		624 — GC/MS	4.7
		1624 — GC/MS (isotope)	10
15V 1,2-Dichloroethane (107062)	10	601 — GC/Hal.	0.03
		624 — GC/MS	2.8
		1624 — GC/MS (isotope)	10
16V 1,1-Dichloroethy- lene (75354)	10	601 — GC/Hal.	0.13
		624 — GC/MS	2.8
		1624 — GC/MS (isotope)	10
17V 1,2-Dichloropro- pane (78875)	10	601 — GC/Hal.	0.04
		624 — GC/MS	6.0
		1624 — GC/MS (isotope)	10
18V 1,3-Dichloropropy- lene (542756)	10	601 — GC/Hal.	0.34 - cis - 0.20 - trans -
		624 — GC/MS	5.0 - cis
		1624 — GC/MS (isotope)	10 - trans
19V Ethyl benzene (100414)	10	602 — GC/PID	0.20
		624 — GC/MS	7.2
		1624 — GC/MS (isotope)	10
20V Methyl bromide (74839)	10	601 — GC/Hal.	1.18
		624 — GC/MS	N.A.
		1624 — GC/MS (isotope)	50
21V Methyl chloride (748731)	10	601 — GC/Hal.	0.08
		624 — GC/MS	N.A.
		1624 — GC/MS (isotope)	50

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TABLE 2
APPROVED EPA ANALYTICAL METHODS
AND DETECTION LIMITS: ORGANICS

Parameter (CAS)	Screening Detection Limit ($\mu\text{g/l}$)	Method Number (Description)	MDL ($\mu\text{g/l}$)
22V Methylene chloride (75092)	10	601 — GC/Hal.	0.25
		624 — GC/MS	2.8
		1624 — GC/MS (isotope)	10
23V 1,1,2,2-Tetra- chloroethane (79345)	10	601 — GC/Hal.	0.03
		624 — GC/MS	6.9
		1624 — GC/MS (isotope)	10
24V Tetrachloroethylene (127184)	10	601 — GC/Hal.	0.03
		624 — GC/MS	4.1
		1624 — GC/MS (isotope)	10
25V Toluene (108883)	10	602 — GC/PID	0.20
		624 — GC/MS	6.0
		1624 — GC/MS (isotope)	10
26V 1,2-trans-Dichloro- ethylene (156605)	10	601 — GC/Hal.	0.01
		624 — GC/MS	1.6
		1624 — GC/MS (isotope)	10
27V 1,1,1,-Trichloro- ethane (71556)	10	601 — GC/Hal.	0.03
		624 — GC/MS	3.8
		1624 — GC/MS (isotope)	10
28V 1,1,2-Trichloro- ethane (79005)	10	601 — GC/Hal.	0.02
		624 — GC/MS	5.0
		1624 — GC/MS (isotope)	10
29V Trichloroethylene (79016)	10	601 — GC/Hal.	0.12
		624 — GC/MS	1.9
		1624 — GC/MS (isotope)	10
30V		Deleted	
31V Vinyl chloride (75014)	10	601 — GC/Hal.	0.18
		624 — GC/MS	N.A.
		1624 — GC/MS (isotope)	10
1B Acenaphthene (83329)	10	610 — GC/FID	N.A.
		610 — HPLC	1.8
		625 — GC/MS	1.9
2B Acenaphthylene (208968)	10	1624 — GC/MS (isotope)	10
		610 — GC/FID	N.A.
		610 — HPLC	2.3
3B Anthracene (120127)	10	625 — GC/MS	3.5
		1625 — GC/MS (isotope)	10
		610 — GC/FID	N.A.
4B Benzidine ^(2-See footnote) (92875)	50	610 — HPLC	0.66
		625 — GC/MS	1.9
		1625 — GC/MS (isotope)	10
4B Benzidine ^(2-See footnote) (92875)	50	605 — HPLC	0.08
		625 — GC/MS	44
		1625 — GC/MS (isotope)	50

TABLE 2
APPROVED EPA ANALYTICAL METHODS
AND DETECTION LIMITS: ORGANICS

Parameter (CAS)	Screening Detection Limit ($\mu\text{g/l}$)	Method Number (Description)	MDL ($\mu\text{g/l}$)
5B Benzo(a)anthracene (56553)	10	610 — GC/FID	N.A.
		610 — HPLC	0.01
		624 — GC/MS	7.8
		1624 — GC/MS (isotope)	50
6B Benzo(a)pyrene (50328)	10	610 — GC/FID	N.A.
		610 — HPLC	0.02
		625 — GC/MS	2.5
		1625 — GC/MS (isotope)	10
7B 3,4-Benzo(b) fluoranthene (250992)	10	610 — GC/FID	N.A.
		610 — HPLC	0.01
		625 — GC/MS	4.8
		1625 — GC/MS (isotope)	10
8B Benzo(ghi)perylene (191242)	20	610 — GC/FID	N.A.
		610 — HPLC	0.07
		625 — GC/MS	4.1
		1625 — GC/MS (isotope)	20
9B Benzo(k)fluoranthene (207089)	10	610 — GC/FID	N.A.
		610 — HPLC	0.01
		625 — GC/MS	2.5
		1625 — GC/MS (isotope)	10
10B Bis(2-chloroethoxy) methane (111911)	10	611 — GC/Hal.	0.5
		625 — GC/MS	5.3
		1625 — GC/MS (isotope)	10
11B Bis(2-chloroethyl) ether (111444)	10	611 — GC/Hal.	0.3
		625 — GC/MS	5.7
		1625 — GC/MS (isotope)	10
12B Bis(2-chloroisopropyl) ether (108601)	10	611 — GC/Hal.	0.8
		625 — GC/MS	5.7
		1625 — GC/MS (isotope)	10
13B Bis(2-ethylhexyl) phthalate (117817)	10	606 — GC/ECD	2.0
		625 — GC/MS	2.5
		1625 — GC/MS (isotope)	10
14B 4-Bromophenyl phenyl ether (101553)	10	611 — GC/Hal.	2.3
		625 — GC/MS	1.9
		1625 — GC/MS (isotope)	10
15B Butylbenzyl phthalate (85687)	10	606 — GC/ECD	0.34
		625 — GC/MS	2.5
		1625 — GC/MS (isotope)	10
16B 2-Chloronaphtha- lene (91587)	10	612 — GC/ECD	0.94
		625 — GC/MS	1.9
		1625 — GC/MS (isotope)	10
17B 4-Chlorophenyl phenyl ether (7005723)	10	611 — GC/Hal.	3.9
		625 — GC/MS	4.2
		1625 — GC/MS (isotope)	10

TABLE 2
APPROVED EPA ANALYTICAL METHODS
AND DETECTION LIMITS: ORGANICS

Parameter (CAS)	Screening Detection Limit ($\mu\text{g}/\text{l}$)	Method Number (Description)	MDL ($\mu\text{g}/\text{l}$)
18B Chrysene (218019)	10	610 — GC/FID	N.A.
		610 — HPLC	0.15
		625 — GC/MS	2.5
		1625 — GC/MS (isotope)	10
19B Dibenzo(a,h) anthracene (53703)	10	610 — GC/FID	N.A.
		610 — HPLC	0.03
		625 — GC/MS	2.5
		1625 — GC/MS (isotope)	20
20B 1,2-Dichlorobenzene (95501)	10	601 — GC/Hal.	0.15
		602 — GC/PID	0.40
		612 — GC/Hal.	1.14
		624 — GC/MS	N.A.
		625 — GC/MS	1.9
1625 — GC/MS (isotope)	10		
21B 1,3-Dichlorobenzene (541731)	10	601 — GC/Hal.	0.32
		602 — GC/PID	0.40
		612 — GC/ECD	1.19
		624 — GC/MS	N.A.
		625 — GC/MS	1.9
1625 — GC/MS (isotope)	10		
22B 1,4-Dichlorobenzene (106467)	10	601 — GC/Hal.	0.24
		602 — GC/PID	0.30
		612 — GC/ECD	1.34
		624 — GC/MS	N.A.
		625 — GC/MS	4.4
1625 — GC/MS (isotope)	10		
23B 3,3'-Dichlorobenzi- dene ⁽²⁾ (91941)	50	605 — HPLC	0.13
		625 — GC/MS	16.5
		1625 — GC/MS (isotope)	50
24B Diethyl phthalate (84662)	20	606 — GC/ECD	0.49
		625 — GC/MS	22
		1625 — GC/MS (isotope)	10
25B Dimethyl phthalate (131113)	20	606 — GC/ECD	0.29
		625 — GC/MS	1.6
		1625 — GC/MS (isotope)	10
26B Di-n-butyl phthalate (84742)	20	606 — GC/ECD	0.36
		625 — GC/MS	2.5
		1625 — GC/MS (isotope)	10
27B 2,4-Dinitrotoluene (121142)	10	609 — GC/ECD	0.02
		625 — GC/MS	5.7
		1625 — GC/MS (isotope)	10
28B 2,6-Dinitrotoluene (606202)	10	609 — GC/ECD	0.01
		625 — GC/MS	1.9
		1625 — GC/MS (isotope)	10

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TABLE 2
APPROVED EPA ANALYTICAL METHODS
AND DETECTION LIMITS: ORGANICS

Parameter (CAS)	Screening Detection Limit ($\mu\text{g/l}$)	Method Number (Description)	MDL ($\mu\text{g/l}$)
29B Di-n-octyl phthalate (117840)	20	606 — GC/ECD	3.0
		625 — GC/MS	2.5
		1625 — GC/MS (isotope)	20
30B 1,2-Diphenylhydra- zine (122667)	10	601 — GC/ECD	0.20
		625 — GC/MS	10
		1625 — GC/MS (isotope)	20
31B Fluoranthene (206440)	10	610 — GC/FID	N.A.
		610 — HPLC	0.21
		625 — GC/MS	2.2
32B Fluorene (86737)	10	1625 — GC/MS (isotope)	10
		610 — GC/FID	N.A.
		610 — HPLC	0.21
33B Hexachlorobenzene (118741)	10	625 — GC/MS	1.9
		1625 — GC/MS (isotope)	10
		612 — GC/ECD	0.05
34B Hexachlorobuta- diene (87683)	10	625 — GC/MS	1.5
		1625 — GC/MS (isotope)	10
		612 — GC/ECD	0.34
35B Hexachloropenta- diene ⁽³⁾ (77474)	10	625 — GC/MS	0.9
		1625 — GC/MS (isotope)	10
		612 — GC/ECD	0.01
36B Hexachloroethane (67721)	10	625 — GC/MS	N.A.
		1625 — GC/MS (isotope)	10
		612 — GC/ECD	0.03
37B Indeno(1,2,3-cd) pyrene (193395)	10	625 — GC/MS	1.6
		1625 — GC/MS (isotope)	10
		610 — GC/FID	N.A.
38B Isophorone (78591)	10	610 — HPLC	0.043
		625 — GC/MS	3.7
		1625 — GC/MS (isotope)	20
39B Naphthalene (91203)	10	609 — GC/FID	5.7
		609 — GC/ECD	15.7
		625 — GC/MS	2.2
40B Nitrobenzene (98953)	10	1625 — GC/MS (isotope)	10
		610 — GC/FID	N.A.
		610 — HPLC	1.8
41B N-Nitrosodi- methylamine ⁽⁴⁾ (62759)	20	625 — GC/MS	1.6
		1625 — GC/MS (isotope)	10
		609 — GC/FID	3.6
42B Nitrobenzene (98953)	10	609 — GC/ECD	13.7
		625 — GC/MS	1.9
		1625 — GC/MS (isotope)	10
43B N-Nitrosodi- methylamine ⁽⁴⁾ (62759)	20	607 — GC/N-PD	0.15
		625 — GC/MS	N.A.
		1625 — GC/MS (isotope)	50

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TABLE 2
APPROVED EPA ANALYTICAL METHODS
AND DETECTION LIMITS: ORGANICS

Parameter (CAS)	Screening Detection Limit ($\mu\text{g/l}$)	Method Number (Description)	MDL ($\mu\text{g/l}$)
42B N-Nitrosodi-n-propylamine (621647)	20	607 — GC/N-PD	0.46
		625 — GC/MS	N.A.
		1625 — GC/MS (isotope)	20
43B N-Nitrosodi-phenylamine ⁽⁴⁾ (86306)	20	607 — GC/N-PD	0.81
		625 — GC/MS	1.9
		1625 — GC/MS (isotope)	20
44B Phenanthrene (85018)	10	610 — GC/FID	N.A.
		610 — HPLC	0.64
		625 — GC/MS	5.4
		1625 — GC/MS (isotope)	10
45B Pyrene (129000)	10	610 — GC/FID	N.A.
		610 — HPLC	0.27
		625 — GC/MS	1.9
		1625 — GC/MS (isotope)	10
46B 1,2,4-Trichloro-benzene (120821)	10	612 — GC/ECD	0.05
		625 — GC/MS	1.9
		1625 — GC/MS (isotope)	10
1P Aldrin (309002)	10	608 — GC/ECD	0.004
		625 — GC/MS	1.9
2P alpha-BHC ⁽⁵⁾ (319846)	10	608 — GC/ECD	0.003
		625 — GC/MS	N.A.
3P beta-BHC (319857)	10	608 — GC/ECD	0.006
		625 — GC/MS	4.2
4P gamma-BHC (Lindane) ⁽⁵⁾ (58899)	10	608 — GC/ECD	0.004
		625 — GC/MS	N.A.
5P delta-BHC (319868)	10	608 — GC/ECD	0.009
		625 — GC/MS	3.1
6P Chlordane (57749)	10	608 — GC/ECD	0.014
		625 — GC/MS	N.A.
7P 4,4' - DDT (50293)	10	608 — GC/ECD	0.012
		625 — GC/MS	4.7
8P 4,4' - DDE (72559)	10	608 — GC/ECD	0.004
		625 — GC/MS	5.6
9P 4,4' - DDD (72548)	10	608 — GC/ECD	0.011
		625 — GC/MS	2.8
10P Dieldrin (60571)	10	608 — GC/ECD	0.002
		625 — GC/MS	2.5
11P alpha-Endosulfan ⁽⁵⁾ (95988)	10	608 — GC/ECD	0.014
		625 — GC/MS	N.A.
12P beta-Endosulfan ⁽⁵⁾ (33212659)	10	608 — GC/ECD	0.004
		625 — GC/MS	N.A.

TABLE 2
APPROVED EPA ANALYTICAL METHODS
AND DETECTION LIMITS: ORGANICS

Parameter (CAS)	Screening Detection Limit ($\mu\text{g/l}$)	Method Number (Description)	MDL ($\mu\text{g/l}$)
13P Endosulfan sulfate (1031078)	10	608 — GC/ECD	0.066
		625 — GC/MS	5.6
14P Endrin ⁽⁵⁾ (72208)	10	608 — GC/ECD	0.006
		625 — GC/MS	N.A.
15P Endrin aldehyde (7421934)	10	608 — GC/ECD	0.023
		625 — GC/MS	N.A.
16P Heptachlor (76448)	10	608 — GC/ECD	0.003
		625 — GC/MS	1.9
17P Heptachlor epoxide (1024573)	10	608 — GC/ECD	0.083
		625 — GC/MS	2.2
18P PCB-1242 (53469219)	20	608 — GC/ECD	0.068
		625 — GC/MS	N.A.
19P PCB-1254 (11097691)	20	608 — GC/ECD	N.A.
		625 — GC/MS	36
20P PCB-1221 (11104282)	20	608 — GC/ECD	0.10
		625 — GC/MS	30
21P PCB-1232 (11141165)	20	608 — GC/ECD	0.10
		625 — GC/MS	N.A.
22P PCB-1248 (12672296)	20	608 — GC/ECD	0.80
		625 — GC/MS	N.A.
23P PCB-1260 (11096825)	20	608 — GC/ECD	0.15
		625 — GC/MS	N.A.
24P PCB-1016 (12674112)	20	608 — GC/ECD	0.04
		625 — GC/MS	N.A.
25P Toxaphene (8001352)	10	608 — GC/ECD	0.24
		625 — GC/MS	N.A.
2,3,7,8 - TCDD (1746016)		613 — GC/MS	0.002

N.A. = Not available.

⁽¹⁾—If acrolein and/or acrylonitrile is expected, use method 603 as screening method.

⁽²⁾—EPA says "When Benzidine is known to be present, screen with EPA 605." However, because HPLC is a generally unavailable procedure at this time, GC-MS enhanced to achieve a detection level more sensitive than EPA's MDL can be used. Permit monitoring requirements for these two chemicals can also be set using EPA 625 as the acceptable analytical procedure.

⁽³⁾—When Hexachloropentadiene is known to be present, screen with EPA 612.

⁽⁴⁾—When N-Nitrosodimethylamine and/or N-Nitrosodi-phenylamine are known to be present, screen with EPA 607.

⁽⁵⁾—When alpha-BHC, gamma-BHC (Lindane), alpha-Endosulfan (I), beta-Endosulfan (II) and/or Endrin are known to be present, screen with EPA 608.

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TABLE 3
DESCRIPTION OF EPA METHODS FOR THE
ANALYSIS OF PRIORITY POLLUTANT ORGANICS

EPA Method Number	Description of Method	Types of Compounds Analyzed
601	Gas chromatography (GC) using purge and trap system with halide specific detector. (HAL).	29 Purgeable Halocarbons (Volatile fraction)
602	Gas chromatography using purge and trap system photorionization detector (PID).	Purgeable aromatics (4 Volatiles 3 base/neutrals)
603	Gas chromatography using purge and trap system with flame ionization detector (FID).	Acrolein Acrylonitrile
604	Gas chromatography preceded by extraction, using a flame ionization detector.	Acid extractable fraction (10 phenols)
605	High performance liquid chromatography (HPLC) preceded by acid-back extraction with electrochemical detector.	Benzidine 3,3'-Dichlorobenzidine
606	Gas chromatography preceded by extraction using a flame ionizator or electron capture detector (ECD).	6 Phthalate esters
607	Gas chromatography preceded by extraction using a nitrogenphosphorous detector.	N-Nitrosodimethylamine N-Nitrosodi-n-propylamine N-Nitrosodiphenylamine
608	Gas chromatography preceded by extraction and measured with a electron capture detector.	Pesticide fraction, including PCB's (25 cmpds)
609	Gas chromatography preceded by extraction using a flame ionization or electron capture detector.	2,4-Dinitrotoluene 2,6-Dinitrotoluene Isophorone Nitrobenzene
610	Extraction followed by separation by a) gas chromatography with flame ionization detector, or b) high performance liquid chromatography with ultraviolet (UV) or fluorescence detector.	16 Polynuclear aromatic hydrocarbons
611	Gas chromatography preceded by extraction using a halide specific detector.	5 Haloethers
612	Gas chromatography preceded by extraction using an electron capture detector.	9 chlorinated hydrocarbons
613	Gas chromatography preceded by extraction and measured with a mass spectrometer (MS)	2,3,7,8 - TCDD

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TABLE 3
DESCRIPTION OF EPA METHODS FOR THE
ANALYSIS OF PRIORITY POLLUTANT ORGANICS

EPA Method Number	Description of Method	Types of Compounds Analyzed
624	Gas chromatography, using purge and trap system, detected with a mass spectrometer.	Purgeable (volatile) fraction
625	Gas chromatography, preceded by separation via acid and basic extraction, detected with a mass spectrometer.	Acid and base/neutral fractions
1624	Volatile organic compounds by isotope dilution GC/MS.	Purgeable (volatile) fraction
1625	Semivolatile organic compounds by isotope dilution GC/MS.	Acid and base/neutral fractions

93.1 Definitions.

The following words and terms, when used in this chapter, have the following meanings, unless the context clearly indicates otherwise:

Ambient stream concentration — The range in concentration or level of a water quality parameter which would be expected to occur in the absence of human activities. The value is normally determined from quality measurements of waters that are not affected by waste discharges or other human activities.

Ambient temperature — The temperature of the water body upstream or outside the influence of a heated waste discharge or waste discharge complex. The ambient temperature sampling point would be unaffected by a source of waste heat.

Application factor — The ratio of the site concentration to the 96-hour LC₅₀ concentration which is assumed to be constant for related groups of chemicals and multiplied by an LC₅₀ value to produce the estimated safe concentration of a pollutant necessary to protect the balanced indigenous community in the receiving body of water.

Balanced indigenous aquatic community — A group of populations occupying a common area which consists of desirable species of fish and shellfish, including the tota of other trophic levels which are necessary as part of the food chain or otherwise ecologically important to the

maintenance of these populations.

Carcinogen — A substance that causes an increased incidence in benign or malignant neoplasms, or a substantial decrease in the latency period between exposure and the onset of neoplasms in man or other species as evidenced by toxicological or epidemiological studies, or both.

Carcinogenesis — The onset of cancer.
Clean Streams Law — The Clean Streams Law (35 P.S. §691.1 — 691.1001).

Clean Water Act — 33 U.S.C.A. §1251-1265, 1281-1292, 1311-1328, 1341-1345 and 1361-1376.

Cumulative pollutant — A pollutant which is measurably increased in concentration within aquatic organisms relative to concentrations in the receiving waters.

Daily average — The arithmetic average of the samples collected during a continuous 24-hour period.

Effluent limits — Restrictions established by the Department on quantities, rate and concentrations of pollutants which are discharged into the waters of this Commonwealth.

Epilimion — Warm upper layer of nearly uniform temperature in a stratified body of water, such as a lake or impoundment.

Existing potable water supply — A source of water supply which is presently being used by humans after conventional treatment for drinking, culinary and other purposes such as inclusion in food

products.

Existing sensitive industrial water supply — An existing industrial water supply use which would require installation of additional water treatment by the industrial user if the total dissolved solids concentration in-stream exceeds 500 mg/l as a monthly average and 750 mg/l at one time.

Four-day average — The arithmetic average of the samples collected during a consecutive 4-day period.

LC₅₀ value — The concentration of a pollutant in test waters that is lethal to 50% of the test organisms during continuous exposure for a specified period of time.

Margin of safety — The combination of uncertainty and modifying factors applied to the results of toxicity tests to compensate for incomplete characterization of the effect on the population to be protected.

Maximum allowable daily load (MDL) — The maximum amount of a pollutant from point and nonpoint sources which the receiving waters can assimilate at the accepted design stream flow without endangering the achievement of the water quality standards.

Monthly average — The arithmetic average of the samples collected during a calendar month.

Mutagenic — Producing adverse changes in the genes.

No demonstrable adverse effect on an ecological community — A condition

which would exist only if appropriate statistical analysis reveals that the relative abundance of each major grouping of organisms — that is, family, genus, and species taxonomic levels — and the species diversity for major communities at upstream and downstream sampling stations is within the 95% confidence limits and that there is no shift in species from a mixed sensitive/facultative/tolerant composition structure to one favoring a facultative, tolerant composition structure.

Noncumulative pollutant — A pollutant which is not measurably increased in concentration within aquatic organisms relative to concentrations in the receiving waters.

Nonthreshold effect — An adverse impact, including carcinogenesis, for which no exposure greater than zero assures protection to the exposed individual.

One-hour average — The arithmetic average of the samples collected during a continuous 1-hour period.

Osmotic pressure — The pressure which, when applied to a solution, will just prevent the passage of solvent — usually water — from an area of low solute concentration through a semipermeable membrane to an area of high solute concentration.

Priority pollutants — The chemicals identified by the EPA for priority in water pollution control, under section 307(a)(1) of the Clean Water Act (33 U.S.C.A. §1317(a)(1)).

Q7-10 — The actual or estimated lowest 7 consecutive-day average flow that occurs once in 10 years for a stream with unregulated flow, or the estimated minimum flow for a stream with regulated flow.

Representative important species — Species of aquatic life whose protection and propagation will assure the sustained presence of a balanced indigenous community. The species are representative in the sense that maintenance of water quality criteria will assure both the natural completion of the species' life cycles and the overall protection and sustained propagation of the balanced indigenous community.

Risk assessment — The characterization of the potential adverse effects of exposure to environmental hazards. The term includes hazard identification, dose-response assessment, exposure assessment and risk characterization.

Risk management — The process of evaluation and selection between alterna-

tive regulatory options. Risk management decisions may include consideration of risk assessment, analytical, socio-economic and political factors.

Safe concentration value — An estimated pollutant concentration as may be determined by the Department from relevant aquatic field studies, substantial available scientific literature or bioassay tests tailored to the ambient quality of the receiving waters which will allow the survival of representative important species that have been chronically exposed to the concentration in the receiving waters.

State water plan — The reports, studies, inventories and plans prepared by the Department to guide the conservation, development and administration of the Commonwealth's water and related land resources as authorized by section 1904-A of The Administrative Code of 1929 (71 P.S. §510-4).

Test water — A receiving water directly upstream from a waste discharge which is relatively unaffected by human activities, or a reconstituted water which approximates the ambient chemical characteristics of these receiving waters.

Threshold effect — An adverse impact that occurs in the exposed individual only after a physiological reserve is depleted. For these effects there exists a dose below which no adverse response will occur.

Toxic substance — A chemical or compound in sufficient quantity or concentration which is, or may become, harmful to human, animal or plant life. The term includes, but is not limited to, priority

pollutants and those substances which are identified in Chapter 16 (relating to water quality toxic management strategy statement of policy).

Water-quality-based effluent limitation — An effluent limitation based on the need to attain or maintain specific water quality criteria in order to assure protection of a designated use.

Water quality criteria — Levels of parameters or stream conditions that need to be maintained or attained to prevent or eliminate pollution.

Water quality standards — The combination of water uses to be protected and the water quality criteria necessary to protect those uses.

93.2. Scope.

(a) This chapter sets forth water quality standards for the waters of this Commonwealth. These standards are based upon water uses which are to be protected and will be considered by the Department in its regulation of discharges.

(b) Where interstate or international agencies under an interstate compact or international agreement establish water quality standards regulations applicable to the waters of this Commonwealth more stringent than those in this title the more stringent standards shall apply.

93.3. Protected water uses.

Water uses which shall be protected and upon which the development of water quality criteria shall be based, are set forth, accompanied by their identifying symbols, in the following Table 1:

Table 1

<i>Symbol</i>	<i>Protected Use</i>
	Aquatic Life
CWF	<i>Cold Water Fishes</i> — Maintenance and/or propagation of fish species including the family Salmonidae and additional flora and fauna which are indigenous to a cold water habitat.
WWF	<i>Warm Water Fishes</i> — Maintenance and propagation of fish species and additional flora and fauna which are indigenous to a warm water habitat.
MF	<i>Migratory Fishes</i> — Passage, maintenance and propagation of anadromous and catadromous fishes and other fishes which ascend to flowing waters to complete their life cycle.

TSF *Trout Stocking* — Maintenance of stocked trout from February 15 to July 31 and maintenance and propagation of fish species and additional flora and fauna which are indigenous to a warm water habitat.

Water Supply

PWS *Potable Water Supply* — Used by the public as defined by the Federal Safe Drinking Water Act, 42 U.S.C. § 300F, or by other water users that require a permit from the Department under The Pennsylvania Safe Drinking Water Act (35 P.S. §§ 721.1 — 721.18), or the act of June 24, 1939 (P.L. 842, No. 365) (32 P.S. §§ 631 — 641), after conventional treatment, for drinking, culinary, and other domestic purposes, such as inclusion into foods, either directly or indirectly.

IWS *Industrial Water Supply* — Use by industry for inclusion into nonfood products, processing and cooling.

LWS *Livestock Water Supply* — Use by livestock and poultry for drinking and cleansing.

AWS *Wildlife Water Supply* — Use for waterfowl habitat and for drinking and cleansing by wildlife.

IRS *Irrigation* — Used to supplement precipitation for growing crops.

Recreation

B *Boating* — Use of the water for power boating, sail boating, canoeing, and rowing for recreational purposes when surface water flow or impoundment conditions allow.

F *Fishing* — Use of the water for the legal taking of fish.

WC *Water Contact Sports* — Use of the water for swimming and related activities.

E *Esthetics* — Use of the water as an esthetic setting to recreational pursuits.

Special Protection

HQ *High Quality Waters* — A stream or watershed which has excellent quality waters and environmental or other features that require special water quality protection.

EV *Exceptional Value Waters* — A stream or watershed which constitutes an outstanding national, State, regional or local resource, such as waters of national, State or county parks or forests, or waters which are used as a source of unfiltered potable water supply, or waters of wildlife refuges or State game lands, or waters which have been characterized by the Fish Commission as "Wilderness Trout Streams," and other waters of substantial recreational or ecological significance.

Other

N *Navigation* — Use of the water for the commercial transfer and transport of persons, animals, and goods.

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93.4. Statewide water uses.

(a) Those uses set forth in the following Table 2 were considered in determining the water quality criteria applicable to the

particular waters listed in §93.9 (relating to designated water uses and water quality criteria) except where otherwise indicated in such section.

quality indicators, the ambient stream concentrations shall be deemed to be applicable criteria used to establish specific effluent limits.

Table 2

<i>Symbol</i>	<i>Use</i>
	<i>Aquatic Life</i>
WWF	Warm Water Fishes
	<i>Water Supply</i>
PWS	Potable Water Supply
IWS	Industrial Water Supply
LWS	Livestock Water Supply
AWS	Wildlife Water Supply
IRS	Irrigation
	<i>Recreation</i>
B	Boating
F	Fishing
WC	Water Contact Sports
E	Esthetics

(b) Less restrictive uses than those currently designated for particular waters listed in §93.9 may be adopted where it is demonstrated that:

(1) The existing designated use is not attainable because of natural background conditions;

(2) The existing designated use is not attainable because of irretrievable man-induced conditions; or

(3) Application of effluent limitations for existing sources more stringent than those required under 33 U.S.C. §1311, in order to attain the existing designated use, would result in substantial and widespread adverse economic and social impact.

93.5. Application of water quality criteria to discharge of pollutants.

(a) Application of effluent limitations. The water quality criteria prescribed in this chapter for the various designated uses of the waters of this Commonwealth apply to receiving waters and are not to be necessarily deemed to constitute the effluent limit for a particular discharge, but rather one of the major factors to be considered in developing specific limitations on the discharge of pollutants. Where water quality criteria become the controlling factor in developing specific effluent limitations, the procedures in

§95.3 (relating to waste load allocations) will be employed.

(b) Design conditions.

(1) Except if otherwise specified in this chapter, the water quality criteria in this chapter shall be achieved at stream flows equal to or exceeding Q_{7-10} . For streams where the Q_{7-10} flow is estimated to be zero, water quality criteria shall be achieved at the first downstream point where the stream is capable of supporting designated water uses, as defined in §93.4 (relating to Statewide water uses).

(2) The Department may impose more restrictive design stream flow conditions where, in its judgment, the conditions are necessary for the protection of designated water uses.

(3) In establishing effluent limitations based on water quality criteria in this chapter, the Department may consider design conditions including, but not limited to, temperature, pH and hardness. The combination of design conditions shall provide a minimum 99% level of protection.

(c) Application of ambient stream concentrations. Where adopted water quality criteria as set forth in §93.9 (relating to designated water uses and water quality criteria) are more stringent than ambient stream concentrations of specific water

(d) Application of osmotic pressure criterion for protection of aquatic life. To protect aquatic life and irrigation where occurs, the amount and composition of total dissolved solids in discharges into surface waters of this Commonwealth shall be controlled so that the osmotic pressure of the receiving waters does not exceed either the criteria listed in paragraph (1) or (2):

(1) Fifty milliosmoles per kilogram at any time.

(2) A less stringent osmotic pressure criterion established and based upon data obtained from bioassay or aquatic life studies conducted in accordance with methodologies specified in subparagraph (i) or (ii) respectively. In either case, the discharger shall submit a plan proposing the studies to be conducted; progress reports as the Department may require; a report of the completed results of testing including data collected and calculations made in recording, evaluating and interpreting the data. The alternate methodologies are as follows:

(i) Bioassays. Data shall be obtained from continuous flow bioassay tests conducted in a water environment which is equal to or closely approximates the natural quality of the receiving water. A safe osmotic pressure for a test solution which simulates projected instream conditions will be determined by establishment of a no-effect level — maximum acceptable toxicant concentration — or by determination of an experimentally derived application factor which would be applied to a 96-hour LC_{50} bioassay result utilizing one or more representative important species of benthic macroinvertebrates and fishes obtained from commercially available strains or wild populations from unpolluted stream or impoundment. Remaining bioassay testing protocols shall be conducted in accordance with continuous flow methodologies outlined in Ecological Research Series Publication EPA-660/3-75-009, Methods of Acute Toxicity Tests with Fish, Macroinvertebrates, and Amphibians (April, 1975) EPA Environmental Monitoring System Publication, EPA-600/4-78-012, M

ods for Measuring the Acute Toxicity of Effluents to Aquatic Organisms (July, 1978); Standard Methods for the Examination of Water and Wastewater (15th Edition, 1980); Standard Method of Test for ASTM D 1345-59 (Reapproved 1970 and published in the 1975 Annual Book of ASTM Standards) — Part 31 — Water: or Biological Methods for the Assessment of Water Quality, ASTM Special Technical Publication 528, 1973. The use of other methodologies is subject to prior written approval by the Department.

(ii) Aquatic field studies. The studies may be used when the stream above the source of total dissolved solids supports a balanced, indigenous aquatic community. Instream sampling stations shall be located directly upstream and downstream of the source of total dissolved solids and free of harm from other abatable point and nonpoint source of pollution. Biological parameters including, but not limited to, benthic macroinvertebrates and fishes, shall be collected qualitatively or quantitatively, or both, on a quarterly basis for a minimum of 1 year. Sample replication should be adequate to determine precision of the data collected and to conduct appropriate statistical test. Remaining biological field methods shall be conducted in accordance with Standard Methods for the Examination of Water and Wastewater (15th Edition, 1980); EPA-Biological Field and Laboratory Methods for Measuring the Quality of Surface Waters and Effluents, EPA-670/4-73-001, July, 1973, Cornelius I. Weber, ed: Techniques of Water Resources Investigations of the United States Geological Survey, Chapter A4, Methods for Collection and Analysis of Aquatic Biological and Microbiological Samples by K. V. Slack, et al, 1973; EPA-Model State Water Monitoring Program, edited by Water Monitoring Task Force, R. L. Crim, Chairman,

EPA-440/9-74-002, June, 1975. It shall be demonstrated that the existing point source discharge of total dissolved solids will not result in a demonstrable adverse effect on the ecological community structure when upstream and downstream biological data are compared.

(e) Application of potable water supply use criteria.

(1) Water quality criteria for total dissolved solids (TDS_i), nitrite-nitrate nitrogen (N), phenolics (Phen_i) and fluoride (F_i) established for the protection of Statewide potable water use shall be applied so instream criteria are met at the point of withdrawal for existing potable water supply systems, and at the point of projected withdrawal for new potable water supplies identified by the State Water Plan or a river basin commission plan as necessary to satisfy the demands of an existing or new potable water supply within the next 20 years. Criteria necessary to protect other designated uses shall be met at the point of waterwater discharge.

(2) The Department will include in every public notice of a draft NPDES permit published under §92.61 (relating to public notice of permit application and public hearing) the location of the nearest downstream potable water supply considered in establishing proposed effluent limitations under this section, or a finding that no potable water supply will be affected by the proposed discharge.

(3) Wastewater discharges to waters designated for special protection in §93.9 will continue to be regulated under §95.1 (relating to general requirements).

(4) Whenever a point of projected withdrawal for a new potable water supply not previously considered is identified by an update to the State Water Plan or a river basin commission plan, or by the application for a water allocation permit from the

Department, the Department will notify a discharger of total dissolved solids, nitrite-nitrate nitrogen, phenolics and fluoride of more stringent effluent limitations needed to protect the point of withdrawal. The discharger shall meet more stringent effluent limitations in accordance with a schedule approved by the Department. The Department will issue orders directing dischargers to achieve compliance, when necessary.

93.6. General water quality criteria.

(a) Water may not contain substances attributable to point or nonpoint source waste discharges in concentration or amounts sufficient to be inimical or harmful to the water uses to be protected or to human, animal, plant or aquatic life.

(b) In addition to other substances listed within or addressed by this chapter, specific substances to be controlled include, but are not limited to, floating materials, oil, grease, scum and substances which produce color, tastes, odors, turbidity or settle to form deposits.

93.7. Specific water quality criteria.

(a) Waters of this Commonwealth for which specific criteria have been established are listed in §93.9 (relating to designated water uses and water quality criteria).

(b) References to specific criteria in §93.9 shall be keyed to the list of specific criteria set forth in subsection (c) and to the groups of criteria set forth in subsection (d).

(c) The following Table 3 shall display the specific water quality criteria. Unless otherwise specified, the specific criteria concentration limits are for the total, rather than the dissolved, form of a substance.

TABLE 3

Parameter	Symbol	Criteria	Critical Use*
Aluminum	Al	Maximum 0.1 of the 96-hour LC ₅₀ for representative important species as determined through substantial available literature data or bioassay tests tailored to the ambient quality of the receiving waters.	
Alkalinity	Alk ₁	Minimum 20 mg/l as CaCO ₃ , except where natural conditions are less. Where discharges are to waters with 20 mg/l or less alkalinity, the discharge should not further reduce the alkalinity of the receiving waters.	1
	Alk ₂	Minimum 20 mg/l as CaCO ₃ .	1
	Alk ₃	Between 20 and 100 mg/l.	DRBC
	Alk ₄	Between 20 and 120 mg/l.	DRBC
Ammonia Nitrogen	Am	<p>The maximum total ammonia nitrogen concentration at all times shall be the numerical value given by: un-ionized ammonia nitrogen (NH₃ - N) × (log⁻¹ [pK_T - pH] + 1), where:</p> <p>un-ionized ammonia nitrogen = 0.12 × f(T)/f(pH)</p> <p>f(pH) = 1 + 10^{1.03(7.32 - pH)}</p> <p>f(T) = 1, T ≥ 10°C</p> <p>f(T) = $\frac{1 + 10^{(9.73 - \text{pH})}}{1 + 10^{(\text{pK}_T - \text{pH})}}$, T < 10°C</p> <p>and</p> <p>$\text{pK}_T = \left[\frac{2730}{(T + 273.2)} \right]$, the dissociation constant for ammonia in water.</p> <p>The average total ammonia nitrogen concentration over any 300 consecutive days shall be less than or equal to the numerical value given by:</p> <p>un-ionized ammonia nitrogen (NH₃ - N) × (log⁻¹ [pK_T - pH] + 1), where:</p> <p>un-ionized ammonia nitrogen = 0.025 × f(T)/f(pH)</p> <p>f(pH) = 1, pH ≥ 7.7</p> <p>f(pH) = 10^{0.74(7.7 - pH)}, pH < 7.7</p> <p>f(T) = 1, T ≥ 10°C</p> <p>f(T) = $\frac{1 + 10^{(9.73 - \text{pH})}}{1 + 10^{(\text{pK}_T - \text{pH})}}$, T < 10°C</p> <p>The pH and temperature use to derive the appropriate ammonia criteria shall be determined by one of the following methods:</p> <ol style="list-style-type: none"> 1) Instream measurements, representative of median pH and temperature — July through September. 2) Estimates of median pH and temperature — July through September — based upon available data or values determined by the Department. <p>For purposes of calculating effluent limitations based on this value the accepted design stream flow shall be the actual or estimated lowest 30-consecutive-day average flow that occurs once in 100 years.</p>	

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<i>Parameter</i>	<i>Symbol</i>	<i>Criteria</i>	<i>Critical Use*</i>
Bacteria	Bac ₁	During the swimming season (May 1 through September 30), the maximum fecal coliform level shall be a geometric mean of 200 per 100 milliliters (ml) based on five consecutive samples each sample collected on different days; for the remainder of the year, the maximum fecal coliform level shall be a geometric mean of 2,000 per 100 milliliters (ml) based on five consecutive samples collected on different days.	3
	Bac ₂	(Coliforms/100 ml) — Maximum of 5,000/100 ml as a monthly average value, no more than this number in more than 20% of the samples collected during a month, nor more than 20,000/100 ml in more than 5% of the samples.	2
	Bac ₃	(Coliforms/100 ml) — Not more than 5,000/100 ml as a monthly geometric mean.	2
	Bac ₄	(Fecal Coliforms/100 ml)—Maximum geometric mean of 770/100 ml; samples shall be taken at a frequency and location to permit valid interpretation.	DRBC
	Bac ₅	The fecal coliform density in five consecutive samples may not exceed a geometric mean of 200/100 ml.	DRBC
Chloride	Ch ₁	Maximum 150 mg/l.	4
	Ch ₂	Maximum 250 mg/l.	2
	Ch ₃	Not more than 200 mg/l.	DRBC
	Ch ₄	Maximum 15-day mean 50 mg/l.	DRBC
Color	Col ₁	Maximum 50 units on the platinum-cobalt scale; no other colors perceptible to the human eye.	3
	Col ₂	Maximum 75 units on the platinum-cobalt scale; no other colors perceptible to the human eye.	2
Dissolved Oxygen	DO ₁	Minimum daily average 6.0 mg/l; minimum 5.0 mg/l. For lakes, ponds and impoundments only, minimum 5.0 mg/l at any point.	1
	DO ₂	Minimum daily average 5.0 mg/l; minimum 4.0 mg/l. For the epilimnion of lakes, ponds and impoundments, minimum daily average of 5.0 mg/l, minimum 4.0 mg/l.	1
	DO ₃	Minimum daily average not less than 5.0 mg/l; during periods April 1—June 15 and September 16—December 31, not less than 6.5 mg/l as a seasonal average.	DRBC
	DO ₄	Minimum daily average not less than 3.5 mg/l; during periods April 1—June 15 and September 16—December 31, not less than 6.5 mg/l as a seasonal average.	DRBC

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<i>Parameter</i>	<i>Symbol</i>	<i>Criteria</i>	<i>Critical Use*</i>
	DO ₁	For the period February 15 to July 31 of any year, minimum daily average of 6.0 mg/l, minimum 5.0 mg/l. For the remainder of the year, minimum daily average of 5.0 mg/l, minimum 4.0 mg/l.	1
	DO ₂	Minimum 7.0 mg/l.	1
Fluoride	F ₁	Daily average 2.0 mg/l.	2
	F ₂	Four-day average 0.01 of the 96-hour LC ₅₀ ; one-hour average 0.05 of the 96-hour LC ₅₀ for representative important species as determined through substantial available literature data or bioassay tests tailored to the ambient quality of the receiving water, or both.	1
Hardness	Hd ₁	Maximum monthly mean 150 mg/l.	DRBC
	Hd ₂	Maximum monthly mean 95 mg/l.	DRBC
Iron	Fe	Daily average 1.5 mg/l as total iron; maximum 0.3 mg/l as dissolved iron.	1,2
Manganese	Mn	Maximum 1.0 mg/l.	2
Methylene Blue Active Substance	MBAS ₁	Not more than 0.5 mg/l.	DRBC
	MBAS ₂	Not more than 1.0 mg/l.	DRBC
Nitrite plus Nitrate	N	Maximum 10 mg/l as nitrogen.	2
Osmotic Pressure	OP	Maximum 50 milliosmoles per kilogram or criteria developed using § 93.5(d) (relating to the application of water quality criteria to discharge of pollutants).	1
pH	pH ₁	From 6.0 to 9.0 inclusive.	1
	pH ₂	Not less than 6.5 and not more than 8.5	DRBC
	pH ₃	From 7.0 to 9.0 inclusive.	1
	pH ₄	Not less than 6.0 and not more than 8.5.	DRBC
Phenolics (except Section 307(a)(1) (33 U.S.C.A. §1317(a)(1)), Priority Pollutants)	Phen ₁	Maximum 0.005 mg/l.	2
	Phen ₂	Maximum 0.02 mg/l.	DRBC
	Phen ₃	Four-day average 0.02 mg/l; 1-hour average 0.1 mg/l.	1
Radioactivity	Rad	Alpha emitters, maximum 3 pc/l; beta emitters, maximum 1,000 pc/l.	DRBC
Sulfate	Sul	Maximum 250 mg/l.	2

<i>Parameter</i>	<i>Symbol</i>	<i>Criteria</i>	<i>Critical Use*</i>																																						
Temperature	Temp ₁	Maximum temperatures in the receiving water body resulting from heated waste sources regulated under Chapter 97 (relating to industrial wastes), and other sources where the Department determines that temperature limits are necessary to protect designated uses, are as follows. Additionally, these wastes may not result in a change by more than 2°F during a 1-hour period. Exceptions to these thermal maxima may be granted on a case-specific basis under §97.82(a)(2) (relating to allowable discharges).	1																																						
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	Temp,	No rise when ambient temperature is 87°F DRBC or above; not more than a 5° F rise above ambient temperature until stream temperature reaches 87° F; not to be changed by more than 2° F during any 1-hour period.																																									
	Temp,	Not more than 5° F above the average daily temperature during the 1961-66 period, which is shown below, or a maximum of 86° F, whichever is less.	DRBC																																								

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Average Daily Temperature
1961-1966
(Temperature may be interpolated)

Date	Delaware Estuary, Head of Tide to River Mile 108.4 (about 1 mile below Pennypack Creek)	Delaware Estuary, River Mile 108.4 (about 1 mile below Pennypack Creek) to Big Timber Creek	Delaware Estuary From Big Timber Creek To Pennsylvania-Delaware State Line
	°F	°F	°F
January 1	37	41	42
February 1	35	35	36
March 1	38	38	40
April 1	46	46	47
May 1	58	58	58
June 1	71	71	72
July 1	79	79	80
August 1	81	81	81
September 1	78	79	78
September 15	76	77	78
October 1	70	70	70
November 1	59	61	60
December 1	46	50	50
December 15	40	45	45

Parameter	Symbol	Criteria	Critical Use*
Temp,		Not more than 5° F rise above the ambient temperatures until stream temperatures reach 50° F; nor more than 2° F rise above ambient temperature when temperatures are between 50° F and 58° F; nor may temperatures exceed 58° F, whichever is less, except in designated heat dissipation areas.	DRBC
Temp,		As a guideline, the maximum length of heat dissipation areas may not be longer than 3,500 feet measured from the point where the waste discharge enters the stream. The width of heat dissipation areas may not exceed two-thirds the surface width measured from shore to shore at any stage of tide or the width encompassing one-fourth the cross-sectional area of the stream, whichever is less. Within any one heat dissipation area only one shore shall be used in determining the limits of the area. Where waste discharges are close to each other, additional limitations may be prescribed to protect water uses. Controlling temperatures shall be measured outside the heat dissipation area. The rate of temperature change in the heat dissipation area may not cause mortality of the fish.	DRBC

<i>Parameter</i>	<i>Symbol</i>	<i>Criteria</i>	<i>Critical Use*</i>
	Temp,	As a guideline, the maximum length of heat dissipation areas may not be longer than 3,500 feet or 20 times the average stream width, whichever is less, measured from the point where the waste discharge enters the stream. Heat dissipation areas may not exceed one-half the surface stream width or the width encompassing one-half the cross-sectional area of the stream, whichever is less. Within any one heat dissipation area only one shore may be used in determining the limits of the area. Where waste discharges are close to each other, additional limitations may be prescribed to protect stream uses. Controlling temperatures shall be measured outside the heat dissipation zone. The rate of temperature change in designated heat dissipation areas may not cause mortality of the fish.	DRBC
	Temp,	As a guideline, the maximum length of heat dissipation areas may not be longer than 1,000 feet or 20 times the average width of the stream, whichever is less, measured from the point where the waste discharge enters the stream. Heat dissipation areas may not exceed one-half the surface stream width or the width encompassing one-half the entire cross-sectional area of the stream, whichever is less. Within any one heat dissipation area only one shore shall be used in determining the limits of the area. Where waste discharges are close to each other, additional limitations may be prescribed to protect water uses. Controlling temperatures shall be measured outside the heat dissipation zone. The rate of temperature change in designated heat dissipation areas may not cause mortality of the fish.	DRBC
Threshold Odor Number	TON	Maximum 24 at 60° C.	3
Total Dissolved Solids	TDS ₁	500 mg/l as a monthly average value; maximum 750 mg/l.	2
	TDS ₂	Maximum 1,500 mg/l.	1
	TDS ₃	Not to exceed 133% of ambient stream concentration or 500 mg/l, whichever is less.	DRBC
	TDS ₄	Not to exceed 133% of ambient stream concentration.	DRBC
Turbidity	Tur ₁	Not more than 30 NTU during the period May 30— September 15, nor more than a monthly mean of 40 NTU or a maximum of 150 NTU during the remainder of the year.	DRBC

<i>Parameter</i>	<i>Symbol</i>	<i>Criteria</i>	<i>Critical Use*</i>
	Tur ₂	Maximum monthly mean 40 NTU, maximum value not more than 150 NTU.	DRBC
	Tur ₃ Tur ₄	Not more than 100 NTU. For the period May 15—September 15 of any year, not more than 40 NTU; for the period September 16—May 14 of any year, not more than 100 NTU.	1
	Tur ₃	Maximum monthly mean of 10 NTU, maximum 150 NTU.	DRBC
	Tur ₃	Maximum monthly mean of 20 NTU, maximum 150 NTU.	DRBC
	Tur ₃	Maximum monthly mean of 30 NTU, maximum 150 NTU.	DRBC

*Critical use: The most sensitive designated water use the criteria are intended to protect, identified by the following:

- 1 = Aquatic Life
- 2 = Water Supply
- 3 = Recreation (including esthetics)
- 4 = Special Protection

DRBC = Criteria adopted by agreement with the Delaware River Basin Commission and that apply only to selected portions of the Delaware River Basin in this Commonwealth.

(d) Unless otherwise specified in subsection (e), §§93.5(d) and (e) and 93.9, Statewide specific criteria set forth in the following Table 4 apply to the surface waters of this Commonwealth:

TABLE 4

<i>Symbol</i>	<i>Specific Water Quality Criteria</i>
Al	Aluminum
Alk ₁	Alkalinity
Am	Ammonia Nitrogen
Bac ₁	Bacteria
F ₁ & F ₂	Fluoride
Fe	Iron
Mn	Manganese
N	Nitrite plus Nitrate
OP	Osmotic Pressure
pH ₁	pH
Phen ₁ & Phen ₃	Phenolics
TDS ₁	Total Dissolved Solids

(e) Table 5 contains groups of specific water quality criteria based upon water uses to be protected. When the symbols listed in Table 5 appear in the *Water Uses Protected* column in §93.9, they have the meaning listed in the Table 5. Exceptions to these standardized groupings will be indicated on a stream-by-stream or segment-by-segment basis by the words "Add" or "Delete" followed by the appropriate symbols described elsewhere in this chapter.

Table 5

<i>Symbol</i>	<i>Water Uses Included</i>	<i>Specific Criteria</i>
WWF	Statewide list	Statewide list plus DO ₂ and Temp ₂
CWF	Statewide list plus Cold Water Fish	Statewide list plus DO ₁ and Temp ₁
TSF	Statewide list plus Trout Stocking	Statewide list plus DO ₅ and Temp ₃
HQ-WWF	Statewide list plus High Quality Waters	Statewide list plus DO ₁ and Temp ₂
HQ-CWF	Statewide list plus High Quality Waters and Cold Water Fish	Statewide list plus DO ₆ and Temp ₁
HQ-TSF	Statewide list plus High Quality Waters and Trout Stocking	Statewide list plus DO ₁ and Temp ₃
EV	Statewide list plus Exceptional Value Waters	Existing quality

(f) The list of specific water quality criteria does not include all possible substances that could cause pollution. For substances not listed, the general criterion that these substances shall not be inimical or injurious to the designated water uses applies. The best scientific information available will be used to adjudge the suitability of a given waste discharge where these substances are involved.

93.8 Development of specific water quality criteria for the protection of aquatic life.

(a) When a specific water quality criterion has not been established for a pollutant in §93.7(c), Table 3, or under §93.7(f) (relating to specific water quality criteria) and a discharge of a pollutant into waters of this Commonwealth designated to be protected for aquatic life in §93.9 (relating to designated water uses and water quality criteria) is proposed, a specific water quality criterion for such pollutant may be determined by the Department through establishment of a safe concentration value.

(b) Establishment of a safe concentration value shall be based upon data obtained from relevant aquatic field studies, standard continuous flow bioassay test data which exists in substantial available literature, or data obtained from specific tests utilizing one or more representative important species of aquatic life designated on a case-by-case basis by the Department and conducted in a water environment which is equal to or closely approximates that of the natural quality of the receiving waters.

(c) In those cases where it has been determined that there are insufficient available data to establish a safe concen-

tration value for a pollutant, the safe concentration value shall be determined by applying the appropriate application factor to the 96-hour (or greater) LC₅₀ value. Except where the Department determines based upon substantial available data, that an experimentally derived application factor exists for a pollutant, the following application factors shall be used in the determination of safe concentration values:

(1) Concentrations of pollutants that are noncumulative shall not exceed 0.1 (1/20) of the 96-hour LC₅₀.

(2) Concentrations of pollutants that are cumulative shall not exceed 0.1

(1/100) of the 96-hour LC₅₀.

(3) Concentrations of pollutants with known synergistic or antagonistic effects with pollutants in the effluent or receiving water will be established on a case-by-case basis using the best available scientific data.

(d) Persons seeking issuance of a permit under the Clean Streams Law and 33 U.S.C. §1342 authorizing the discharge of a pollutant for which a safe concentration value is to be established using specific bioassay tests under subsection (b) shall perform such testing with the approval of the Department and shall submit the following in writing to the Department:

(1) A plan proposing the bioassay testing to be performed.

(2) Such periodic progress reports of the testing as may be required by the Department.

(3) A report of the completed results of such testing including, but not limited to, the following:

(i) All data obtained during the course of testing; and

(ii) All calculations made in the recording, collection, interpretation, and evaluation of such data.

(e) Bioassay testing shall be conducted in accordance with the continuous flow methodologies outlined in EPA Ecological Research Series Publication, EPA-660/3-75-009, Methods of Acute Toxicity Tests with Fish, Macroinvertebrates, and Amphibians (April, 1975); Standard Methods for the Examination of Water and Wastewater (15th Edition, 1980); Standard Method of Test for ASTM D1345-59 (Reapproved 1970) and published in the 1975 Annual Book of ASTM Standards — Part 31 — Water; or EPA Environmental Monitoring Series Publica-

tion, EPA-600/4-78-012, Methods for Measuring the Acute Toxicity of Effluents to Aquatic Organisms (January, 1978). Use of any other methodologies shall be subject to prior written approval by the Department. Test waters shall be reconstituted according to recommendations and methodologies specified in the previously cited references, or methodologies approved in writing by the Department.

§93.8a. Toxic substances.

(a) The waters of this Commonwealth may not contain toxic substances attributable to point or nonpoint source waste discharges in concentrations or amounts that are inimical to the water uses to be protected.

(b) Water quality criteria for toxic substances shall be established under Chapter 16 (relating to water quality toxics management strategy — statement of policy) wherein the criteria and analytical procedures will also be listed. Chapter 16 along with changes made to it is hereby specifically incorporated by reference.

(c) Water quality criteria for toxics substances which exhibit threshold effects will be established by application of margins of safety to the results of toxicity testing to prevent the occurrence of a threshold effect.

(d) Nonthreshold carcinogenic effects of toxic substances, will be controlled to a risk management level of one excess case of cancer in a population of one million (1×10^{-6}) over a 70-year lifetime. Other nonthreshold effects of toxic substances will be controlled at a risk management level as determined by the Department.

(e) Design conditions for toxics shall be determined under §93.5(b) (relating to application of water quality criteria to discharge of pollutants), except that for

carcinogens, the design stream flow shall be that which results in a lifetime — 70 years — average exposure corresponding to the risk management level specified in subsection (d).

(f) The Department will consider both the acute and chronic toxic impacts to aquatic life and human health.

(g) The Department may consider synergistic, antagonistic and additive toxic impacts.

(h) The Department may require effluent toxicity testing as a basis for limiting the addition of toxic substances to waters of this Commonwealth, and may establish water quality based effluent limitations based on the results of effluent toxicity testing.

(i) At intervals not exceeding 1 year, the Department will publish a new or revised water quality criteria for toxic substances, and revised procedures for criteria development in the *Pennsylvania Bulletin*.

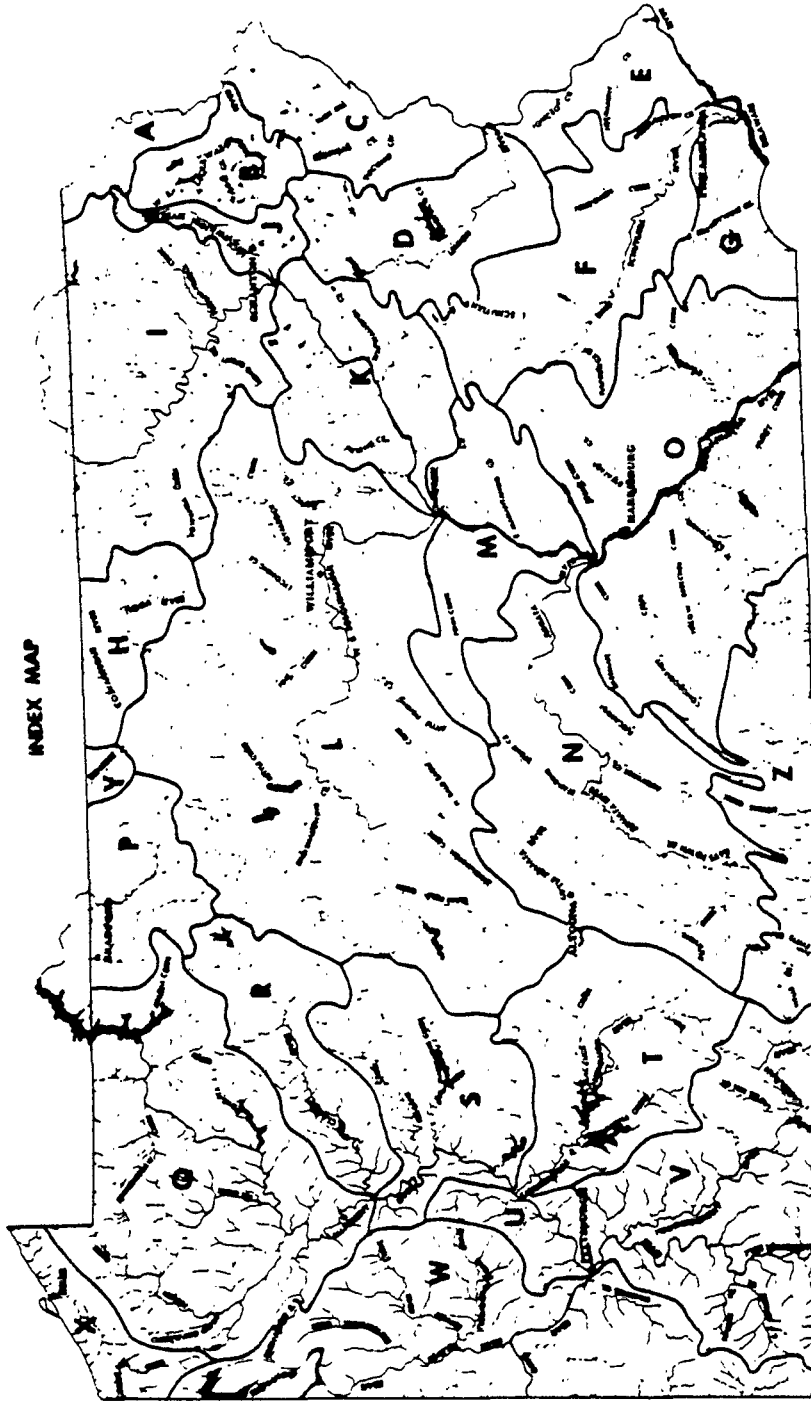
(j) A person challenging criteria established by the Department under this section shall have the burden of proof to demonstrate that the criteria does not meet the requirements of this section. In addition, a person who proposes an alternative site-specific criterion shall have the burden of proof to demonstrate that the site specific criterion meets the requirements of this section.

93.9 Designated water uses and water quality criteria.

Except as provided in §93.5(d) and (e) (relating to the application of water quality criteria to discharge of pollutants), the following tables display designated water uses and water quality criteria. The county column in Drainage Lists A through Z indicates the county in which the mouth of the stream is located.

PENNSYLVANIA GAZETTEER OF STREAMS

INDEX MAP



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DRAINAGE LIST A
 Delaware River Basin in Pennsylvania
 Delaware River

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Delaware River				
West Branch Delaware River	Main Stem, PA-NY Border to Main Stem Delaware River	Wayne	CWF, MF	Delete Bac ₁ , pH ₁ , Temp ₁ , and TDS ₁ ; Add Bac ₂ , pH ₂ , Temp ₂ , Temp ₃ , TDS ₂ , Tur ₂ , TON, Rad, and MBAS ₂
Unnamed Tributaries to West Branch Delaware River	Basins, Wayne-Susquehanna Twp. Border to West Branch Delaware River; and From PA-NY Border to Main Stem Delaware River	Wayne	HQ-CWF	None
Sand Pond Creek	Basin, Source to Sherman Creek	Wayne	CWF	None
Sherman Creek	Basin	Wayne	HQ-CWF	None
Sand Pond Creek	Main Stem, Sherman Creek to PA-NY Border	Wayne	CWF	None
Unnamed Tributaries to Sand Pond Creek	Basins, Sherman Creek to PA-NY Border	Wayne	CWF	None
Starbrook Creek	Basin	Wayne	CWF	None
Cat Hollow	Basin	Wayne	CWF	None
Faulkner Brook	Basin	Wayne	HQ-CWF	None
Balls Creek	Basin	Wayne	HQ-CWF	None
Shehawken Creek	Basin	Wayne	HQ-CWF	None
Delaware River				
	Main Stem, Confluence of East and West Branches to PA Rte 652 Bridge (Narrowsburg, NY)	Wayne	CWF, MF	Delete Bac ₁ , pH ₁ , Temp ₁ , and TDS ₁ ; Add Bac ₂ , pH ₂ , Temp ₂ , Temp ₃ , TDS ₂ , Tur ₂ , TON, MBAS ₂ , and Rad
Unnamed Tributaries to Delaware River	Basins, West Branch Delaware River to PA Rte 652 Bridge (Narrowsburg, NY)	Wayne	HQ-CWF	None
Shingle Hollow	Basin	Wayne	HQ-CWF	None
Stockport Creek	Basin	Wayne	HQ-CWF	None
Factory Creek	Basin	Wayne	HQ-CWF	None
Equinunk Creek	Basin	Wayne	HQ-CWF	None
Weston Brook	Basin	Wayne	HQ-CWF	None
Little Equinunk Creek	Basin	Wayne	HQ-CWF	None
Cooley Creek	Basin	Wayne	HQ-CWF	None
Hollister Creek	Basin	Wayne	HQ-CWF	None
Schoolhouse Creek	Basin	Wayne	HQ-CWF	None
Beaver Dam Creek	Basin	Wayne	HQ-CWF	None
Calkins Creek	Basin	Wayne	HQ-CWF	None
Delaware River				
	Main Stem, PA Rte 652 Bridge (Narrowsburg, NY) to Tocks Island	Pike	WWF, MF	Delete Bac ₁ , pH ₁ , and TDS ₁ ; Add Bac ₂ , pH ₂ , Temp ₂ , TON, TDS ₂ , Tur ₂ , to R. M. 254.75 at Port Jervis and TUR ₂ upstream of R. M. 254.75, MBAS ₂ , and Rad
Unnamed Tributaries to Delaware River	Basins, PA Rte 652 Bridge (Narrowsburg, NY) to Tocks Island	Pike-Wayne Monroe	HQ-CWF	None
Peggy Run	Basin	Wayne	HQ-CWF	None
Masthope Creek	Basin	Pike	HQ-CWF	None

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DRAINAGE LIST B
Delaware River Basin in Pennsylvania
Lackawaxen River

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Delaware River				
Lackawaxen River				
West Branch Lackawaxen River	Basin, Source to Prompton Reservoir	Wayne	HQ-CWF	None
West Branch Lackawaxen River	Main Stem, Prompton Reservoir to Dyberry Creek	Wayne	HQ-TSF, MF	None
Unnamed Tributaries to West Branch Lackawaxen River	Basin, Prompton Reservoir to Dyberry Creek	Wayne	HQ-CWF, MF	None
Johnson Creek	Basin	Wayne	HQ-CWF, MF	None
Van Auken Creek	Basin	Wayne	HQ-TSF, MF	None
Dyberry Creek	Basin	Wayne	HQ-CWF, MF	None
Lackawaxen River	Main Stem, Dyberry Creek to Mouth	Wayne	HQ-TSF, MF	None
Unnamed Tributaries to Lackawaxen River	Basins, Dyberry Creek to Mouth	Wayne	HQ-CWF, MF	None
Carley Brook	Basin	Wayne	HQ-CWF, MF	None
Middle Creek	Basin	Wayne	HQ-CWF, MF	None
Wallenpaupack Creek	Basin, Source to Lake Wallenpaupack Dam	Wayne-Pike	HQ-CWF	None
Wallenpaupack Creek	Basin, Lake Wallenpaupack Dam to Mouth	Wayne-Pike	HQ-WWF	None
Swamp Brook	Basin	Wayne	HQ-CWF, MF	None
Tinkwig Creek	Basin	Pike	HQ-CWF, MF	None
Decker Creek	Basin	Pike	HQ-CWF, MF	None
Tadyuskung Creek	Basin	Pike	HQ-CWF, MF	None
Blooming Grove Creek	Basin	Pike	HQ-CWF, MF	None
Little Blooming Grove Creek	Basin	Pike	HQ-CWF, MF	None
Grassy Island Creek	Basin	Pike	HQ-CWF, MF	None
Kirkham Creek	Basin	Pike	HQ-CWF, MF	None
West Falls Creek	Basin	Pike	HQ-CWF, MF	None
Mill Creek	Basin	Pike	HQ-CWF, MF	None
O'Donnell Creek	Basin	Pike	HQ-CWF, MF	None
Lords Creek	Basin	Pike	HQ-CWF, MF	None

DRAINAGE LIST C
Delaware River Basin in Pennsylvania
Delaware River

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Delaware River				
Panther Creek	Basin	Pike	HQ-CWF	None
Shohola Creek	Basin	Pike	HQ-CWF	None
Walker Lake Creek	Basin	Pike	HQ-CWF	None
Pond Eddy Creek	Basin	Pike	HQ-CWF	None
Bush Kill	Basin	Pike	HQ-CWF	None
Cummins Creek	Basin	Pike	HQ-CWF	None
Crawford Branch	Basin	Pike	HQ-CWF	None
Vandermark Creek	Basin	Pike	HQ-CWF	None
Saw Kill Creek	Basin, except Vantine Brook	Pike	EV	None
Vantine Brook	Basin	Pike	HQ-CWF	None

LIST C—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Raymond Kill	Basin	Pike	HQ-CWF	None
Conashaugh Creek	Basin	Pike	HQ-CWF	None
Dry Brook	Basin	Pike	HQ-CWF	None
Adams Creek	Basin	Pike	HQ-CWF	None
Dingman's Creek	Basin	Pike	HQ-CWF	None
Hornbecks Creek	Basin	Pike	HQ-CWF	None
Toms Creek	Basin	Pike	HQ-CWF	None
Bushkill Creek	Basin, Source to and Including Saw Creek	Pike	HQ-CWF	None
Bushkill Creek	Main Stem, Saw Creek to Mouth	Monroe	HQ-TSF	None
Tributaries to Bushkill Creek	Basins, Saw Creek to Mouth	Monroe	HQ-CWF	None
Delaware River	Main Stem, Tocks Island to Lehigh River	Monroe-Northampton	WWF, MF	Delete Bac ₁ , pH ₁ and TDS ₁ ; Add Bac ₂ , pH ₂ , Temp ₂ , TON ₂ , TDS ₂ , Tur ₂ , MBAS ₂ and Rad
Unnamed Tributaries to Delaware River	Basins, Tocks Island to Brodhead Creek	Monroe	HQ-CWF	None
Brodhead Creek	Main Stem, Source to Paradise Creek	Monroe	HQ-CWF	None
Unnamed Tributaries to Brodhead Creek	Basins, Source to Paradise Creek	Monroe	HQ-CWF	None
Spruce Mountain Run	Basin	Monroe	HQ-CWF	None
Leavitt Branch	Basin	Monroe	HQ-CWF	None
Buck Hill Creek	Basin	Monroe	HQ-CWF	None
Goose Pond Run	Basin	Monroe	HQ-CWF	None
Spruce Cabin Run	Basin	Monroe	HQ-CWF	None
Mill Creek	Basin, Source to T577 Bridge	Monroe	EV	None
Mill Creek	Basin, T577 Bridge to Rattlesnake Creek	Monroe	HQ-CWF	None
Rattlesnake Creek	Basin, Source to North End of T594	Monroe	EV	None
Rattlesnake Creek	Basin, North End of T594 to Mill Creek	Monroe	HQ-CWF	None
Mill Creek	Basin, Rattlesnake Creek to Mouth	Monroe	HQ-CWF	None
Lucky Run	Basin	Monroe	HQ-CWF	None
Stony Run	Basin	Monroe	HQ-CWF	None
Poplar Run	Basin	Monroe	EV	None
Pine Mountain Run	Basin	Monroe	HQ-CWF	None
Paradise Creek	Main Stem	Monroe	HQ-CWF	None
Unnamed Tributaries to Paradise Creek	Basins	Monroe	HQ-CWF	None
Devils Hole Creek	Basin, Source to South Boundary of State Game Land 221 (About 0.25 mile North Erie-Lackawanna R. R.)	Monroe	EV	None
Devils Hole Creek	Basin, South Boundary of State Game Land 221 to Mouth	Monroe	HQ-CWF	None

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LIST C—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Yankee Run	Basin	Monroe	HQ-CWF	None
Swiftwater Creek	Basin	Monroe	HQ-CWF	None
Cranberry Creek	Basin	Monroe	HQ-CWF	None
Butz Run	Basin	Monroe	HQ-CWF	None
Brodhead Creek	Basin, Paradise Creek to Michael Creek	Monroe	HQ-CWF	None
Michael Creek	Basin	Monroe	HQ-CWF	None
Brodhead Creek	Main Stem, From Michael Creek to LR 45060 Bridge	Monroe	HQ-CWF	None
Brodhead Creek	Main Stem, From LR 45060 Bridge to Delaware River	Monroe	TSF, MF	None
Unnamed Tributaries to Brodhead Creek	Basins, Michael Creek LR 45060 Bridge	Monroe	HQ-CWF	None
Unnamed Tributaries to Brodhead Creek	Basins, LR 45060 Bridge to Delaware River	Monroe	TSF	None
Sambo Creek	Basin	Monroe	TSF	None
McMichaels Creek	Main Stem, Source to Pocono Creek	Monroe	HQ-CWF	None
Unnamed Tributaries to McMichaels Creek	Basins, Source to Pocono Creek	Monroe	HQ-CWF	None
Hypsy Creek	Basin	Monroe	HQ-CWF	None
Fall Creek	Basin	Monroe	HQ-CWF	None
Lake Creek	Basin	Monroe	HQ-CWF	None
Appenzell Creek	Basin	Monroe	HQ-CWF	None
Little Pocono Creek	Basin	Monroe	HQ-CWF	None
Pocono Creek	Main Stem	Monroe	HQ-CWF	None
Unnamed Tributaries to Pocono Creek	Basins	Monroe	HQ-CWF	None
Dry Sawmill Run	Basin	Monroe	HQ-CWF	None
Sand Spring Run	Basin	Monroe	EV	None
Wolf Swamp Run	Basin	Monroe	EV	None
Scot Run	Basin	Monroe	HQ-CWF	None
Bulgers Run	Basin	Monroe	HQ-CWF	None
Cranberry Creek	Basin	Monroe	HQ-CWF	None
Reeders Run	Basin	Monroe	HQ-CWF	None
Wigwam Run	Basin	Monroe	HQ-CWF	None
Flagler Run	Basin	Monroe	HQ-CWF	None
Big Meadow Run	Basin	Monroe	HQ-CWF	None
McMichaels Creek	Basin, Pocono Creek to Mouth	Monroe	TSF	None
Marshall Creek	Basin	Monroe	HQ-CWF	None
Unnamed Tributaries to Delaware River	Basins, Brodhead Creek to Lehigh River	Monroe-Northampton	CWF	None
Cherry Creek	Basin, Source to LR 45010 bridge	Monroe	HQ-CWF, MF	None
Caledonia Creek	Basin	Monroe	CWF	None
Slateford Creek	Basin	Northampton	CWF	None
Jacoby Creek	Basin	Northampton	CWF	None
Allegheny Creek	Basin	Northampton	CWF	None
Oughoughton Creek	Basin	Northampton	CWF	None
Martins Creek	Basin, Source to Confluence of East and West Forks	Northampton	CWF	None

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LIST C—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Martins Creek	Main Stem. Confluence of East and West Forks to Mouth		Northampton	TSF, MF None
Unnamed Tributaries to Martins Creek	Basins. Confluence of East and West Forks to mouth		Northampton	TSF None
Brushy Meadow Creek	Basin		Northampton	TSF, MF None
Little Martins Creek	Basin	Northampton	CWF	None
Mud Run	Basin	Northampton	CWF	None
Bushkill Creek	Basin, Source to Shoeneck Creek	Northampton	HQ-CWF	None
Little Bushkill Creek	Basin	Northampton	HQ-CWF, MF	None
Shoeneck Creek	Basin	Northampton	WWF	None
Bushkill Creek	Basin, Shoeneck Creek to Mouth	Northampton	HQ-CWF	None

DRAINAGE LIST D
Delaware River Basin in Pennsylvania
Lehigh River

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Delaware River Lehigh River	Main Stem. Source to PA Rte 903 Bridge at Jim Thorpe	Luzerne-Monroe-Carbon	HQ-CWF	None
Unnamed Tributaries to Lehigh River	Basins. Source to PA Rte 903 Bridge at Jim Thorpe	Luzerne-Monroe-Carbon	HQ-CWF	None
West Fork	Basin	Wayne-Lackawanna	HQ-CWF	None
Tamarack Creek	Basin	Lackawanna	HQ-CWF	None
Fritz Run	Basin	Monroe	HQ-CWF	None
Rucks Run	Basin	Lackawanna	HQ-CWF	None
Silver Creek	Basin	Lackawanna	HQ-CWF	None
Ash Creek	Basin	Lackawanna	HQ-CWF	None
Spruce Run	Basin	Lackawanna	HQ-CWF	None
Wolf Run	Basin	Monroe	HQ-CWF	None
Buckey Run	Basin	Lackawanna	HQ-CWF	None
Pond Creek	Basin	Lackawanna	HQ-CWF	None
Sand Spring Creek	Basin	Lackawanna	HQ-CWF	None
Trout Creek	Basin	Monroe	HQ-CWF	None
Choke Creek	Basin	Lackawanna	HQ-CWF	None
Kendall Creek	Basin	Luzerne	HQ-CWF	None
Tobyhanna Creek	Main Stem	Monroe-Carbon	HQ-CWF	None
Unnamed Tributaries to Tobyhanna Creek	Basins	Monroe-Carbon	HQ-CWF	None
Jim Smith Run	Basin	Monroe	HQ-CWF	None
Pole Bridge Run	Basin	Monroe	HQ-CWF	None
Singer Run	Basin	Monroe	HQ-CWF	None
East Branch Dresser Run	Basin	Monroe	HQ-CWF	None
Pollys Run	Basin	Monroe	HQ-CWF	None
Hummier Run	Basin	Monroe	HQ-CWF	None
Cross Keys Run	Basin	Monroe	EV	None
Frame Cabin Run	Basin	Monroe	EV	None
Kistler Run	Basin	Monroe	HQ-CWF	None
Wagner Run	Basin	Monroe	HQ-CWF	None
Tunkhanna Creek	Basin	Monroe-Carbon	HQ-CWF	None

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LIST D--CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Wolfs Spring Run	Basin	Monroe	HQ-CWF	None
Deep Run	Basin	Monroe	HQ-CWF	None
Davey Run	Basin	Monroe	HQ-CWF	None
Red Run	Basin	Monroe	HQ-CWF	None
Tunkhannock Creek	Basin	Monroe-Carbon	HQ-CWF	None
Shingle Mill Run	Basin	Carbon	HQ-CWF	None
Twomile Run	Basin	Monroe	HQ-CWF	None
Stony Run	Basin	Monroe	HQ-CWF	None
Porter Run	Basin	Carbon	HQ-CWF	None
White House Run	Basin	Luzerne	HQ-CWF	None
Stony Run	Basin	Luzerne	HQ-CWF	None
Bear Creek	Basin	Luzerne	HQ-CWF	None
Cider Run	Basin	Carbon	HQ-CWF	None
Pine Creek	Basin	Luzerne	HQ-CWF	None
Fawn Run	Basin	Carbon	HQ-CWF	None
Wright Creek	Basin	Luzerne	HQ-CWF	None
Linesville Creek	Basin	Luzerne	HQ-CWF	None
Black Creek	Basin	Carbon	HQ-CWF	None
Sandy Run	Basin	Luzerne	HQ-CWF	None
Hickory Run	Basin	Carbon	HQ-CWF	None
Leslie Run	Basin	Carbon	HQ-CWF	None
Mud Run	Basin	Carbon	HQ-CWF	None
Buck Mountain Creek	Basin	Carbon	HQ-CWF	None
Drakes Creek	Basin	Carbon	HQ-CWF	None
Stony Creek	Basin	Carbon	EV	None
Penn Springs	Basin	Carbon	HQ-CWF	None
Black Creek	Basin, Source to Beaver Creek	Carbon	HQ-CWF	None
Beaver Creek	Basin	Carbon	CWF	None
Black Creek	Main Stem, Beaver Creek to Lehigh River	Carbon	CWF	None
Unnamed Tributaries to Black Creek	Basins, Beaver Creek to Lehigh River	Carbon	HQ-CWF	None
Quakake Creek	Basin, Source to Wetzel Creek	Carbon	HQ-CWF	None
Quakake Creek	Basin, from and including Wetzel Creek to Black Creek	Carbon	CWF	None
Maple Hollow	Basin	Carbon	HQ-CWF	None
Bear Creek	Basin	Carbon	HQ-CWF	None
Nesquehoning Creek	Basin, Source to Lake Greenwood	Schuylkill-Carbon	HQ-CWF	None
Nesquehoning Creek	Main Stem, from and including Lake Greenwood, Lake Hauto, and to and including Tibbetts Pond	Carbon	HQ-WWF	None
Unnamed Tributaries to Nesquehoning Creek	Basins, Tributaries to Lake Greenwood, Lake Hauto and Tibbetts Pond	Schuylkill-Carbon	HQ-CWF	None
Swartz Run	Basin	Schuylkill	HQ-CWF	None
Grass Meadow Run	Basin	Carbon	HQ-CWF	None
Bear Creek	Basin	Carbon	HQ-CWF	None
Nesquehoning Creek	Main Stem, Tibbetts Pond Dam to Lehigh River	Carbon	CWF	None

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LIST D—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Unnamed Tributaries to Nesquehoning Creek	Basins, Tibbetts Pond Dam to Lehigh River	Carbon	HQ-CWF	None
Dennison Run	Basin	Carbon	HQ-CWF	None
Broad Run	Basin	Carbon	HQ-CWF	None
Deep Run	Basin	Carbon	EV	None
First Hollow Run	Basin	Carbon	EV	None
Jeans Run	Basin	Carbon	HQ-CWF	None
Robertson Run	Basin	Carbon	HQ-CWF	None
Lehigh River	Main Stem, PA Rte 903 Bridge at Jim Thorpe to Allentown Dam	Carbon-Lehigh	TSF	None
Unnamed Tributaries to Lehigh River	Basins, PA Rte 903 Bridge at Jim Thorpe to Allentown Dam	Carbon-Lehigh	CWF	None
Silkmill Run	Basin	Carbon	CWF	None
Mauch Chunk Creek	Main Stem	Carbon	CWF	None
Unnamed Tributaries to Mauch Chunk Creek	Basins	Carbon	CWF	None
White Bear Creek	Basin, Source to PA Rte 902 Bridge	Carbon	EV	None
White Bear Creek	Basin, PA Rte 902 Bridge to Mauch Chunk Creek	Carbon	CWF	None
Beaverdam Run	Basin	Carbon	CWF	None
Long Run	Basin	Carbon	CWF	None
Mahoning Creek	Basin	Carbon	CWF	None
Pohopoco Creek	Basin, Source to Wild Creek	Monroe-Carbon	CWF	None
Wild Creek	Basin	Carbon	EV	None
Pohopoco Creek	Basin, Wild Creek to Mouth	Carbon	CWF	None
Fireline Creek	Basin	Carbon	CWF	None
Lizard Creek	Basin	Carbon	TSF	None
Aquashicola Creek	Basin, Source to and including Buckwa Creek	Carbon	CWF, MF	None
Aquashicola Creek	Main Stem, Buckwa Creek to Mouth	Carbon	TSF	None
Unnamed Tributaries to Aquashicola Creek	Basins, Buckwa Creek to Mouth	Carbon	CWF	None
Mill Creek	Basin	Carbon	CWF	None
Trout Creek	Basin	Lehigh	CWF	None
Bertsch Creek	Basin	Northampton	CWF	None
Rockdale Creek	Basin	Lehigh	CWF	None
Fells Creek	Basin	Lehigh	CWF	None
Spring Creek	Basin	Lehigh	CWF	None

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LIST D—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Hokendagua Creek	Basin	Northampton	CWF	None
Dry Run	Basin	Northampton	CWF	None
Coplay Creek	Basin	Lehigh	CWF	None
Catawquaque Creek	Basin	Lehigh	CWF	None
Lehigh River	Main Stem, Allentown Dam to Delaware River	Lehigh-Northampton	WWF	None
Unnamed Tributaries to Lehigh River	Basins, Allentown Dam to Delaware River	Lehigh-Northampton	CWF	None
Little Lehigh Creek	Basin, except for Jordan Creek	Lehigh	HQ-CWF	None
Jordan Creek	Main Stem	Lehigh	TSF, MF	None
Jordan Creek	Basin, except for Mill Creek	Lehigh	HQ-CWF, MF	None
Mill Creek	Basin	Lehigh	CWF, MF	None
Monocacy Creek	Basin	Northampton	HQ-CWF	None
Saucon Creek	Basin	Northampton	CWF	None
Nancy Run	Basin	Northampton	CWF	None
Bull Run	Basin	Northampton	CWF	None

DRAINAGE LIST E
 Delaware River Basin in Pennsylvania
Delaware River

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Delaware River	Main Stem Lehigh River to Head of Tide	Northampton-Bucks	WWF, MF	<i>Delete</i> Bac., pH ₁ , and TDS; <i>Add</i> Bac., MBAS, pH ₂ , Rad, TDS ₂ , Temp., Temp., TON and Tur-
Unnamed Tributaries to Delaware River	Basins, Lehigh River to Pidcock Creek	Northampton	TSF	None
Frya Run	Basin	Northampton	TSF	None
Cooks Creek	Basin	Bucks	HQ-CWF	None
Gallows Run	Basin	Bucks	CWF	None
Tinicum Creek	Basin	Bucks	HQ-CWF	None
Rapp Creek	Basin, Source to 50 Ft. Upstream From Quarry Road Bridge T-449	Bucks	HQ-CWF	None
Rapp Creek	Basin, 50 Ft. Upstream from Quarry Road Bridge, T-449 to Confluence with Beaver Creek	Bucks	CWF	None
Beaver Creek	Basin	Bucks	HQ-CWF	None
Tinicum Creek	Basin, Confluence of Rapp and Beaver Creeks to Mouth	Bucks	CWF	None
Tohickon Creek	Basin, Source to Nockamixon Dam	Bucks	TSF	None
Tohickon Creek	Basin, Nockamixon Dam to Mouth, except Deep Run	Bucks	CWF	None
Deep Run	Basin	Bucks	WWF	None
Hickory Creek	Basin	Bucks	TSF	None
Paunacussing Creek	Basin	Bucks	HQ-CWF	None
Cuttalossa Creek	Basin	Bucks	HQ-CWF	None
Rabbit Run	Basin	Bucks	TSF	None
Aquetong Creek	Basin	Bucks	HQ-CWF	None
Dark Hollow Run	Basin	Bucks	TSF	None
Pidcock Creek	Basin	Bucks	WWF	None

LIST E—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Unnamed Tributaries to Delaware River	Basins, Pidcock Creek to Head of Tide	Bucks	WWF	None
Jericho Creek	Basin	Bucks	WWF	None
Houghs Creek	Basin	Bucks	WWF	None
Dyers Creek	Basin	Bucks	WWF	None
Buck Creek	Basin	Bucks	WWF	None
Delaware Estuary and Tidal Portions of Tributaries	Head of Tide to Burlington-Bristol Bridge	Bucks	WWF, MF; Delete LWS and IRS	Delete Alk., Bac., DO, pH, Temp., TDS, and Am Add Alk., Bac., Ch., DO, Hd., MBAS, pH, Rad., TDS, Temp., Temp., TON and Tur, Delete Bac. 10/1/87 until 4/30/88
Non-Tidal Portions of Unnamed Tributaries to Delaware Estuary	Basins, Head of Tide to Burlington Bristol Bridge	Bucks	WWF	None
Martins Creek	Basin, Source to Tide	Bucks	WWF	None
Levittown Lake	Basin	Bucks	TSF	None
Mill Creek	Basin, Source to Tide	Bucks	WWF	None
Neshaminy Creek	Basin	Bucks	WWF, MF	Add Col., Tur.
West Branch Neshaminy Creek	Basin	Bucks	TSF, MF	Add Col., Tur.
North Branch Neshaminy Creek	Basin	Bucks	TSF, MF	Add Col., Tur.
Neshaminy Creek	Main Stem, Confluence of West and North Branches to PA 614 Dam	Bucks	TSF, MF	Add Col., Tur.
Unnamed Tributaries to Neshaminy Creek	Basins, Confluence of West and North Branches to PA 614 Dam	Bucks	TSF, MF	Add Col., Tur.
Cooks Run	Basin	Bucks	WWF, MF	Add Col., Tur.
Mill Creek	Basin	Bucks	TSF, MF	Add Col., Tur.
Country Club Creek	Basin	Bucks	WWF, MF	Add Col., Tur.
Neshaminy Creek	Main Stem PA 614 Dam to Delaware Estuary	Bucks	WWF, MF	Add Col. and Tur.
Unnamed Tributaries to Neshaminy Creek	Basins, PA 614 Dam to the Delaware Estuary	Bucks	WWF, MF	Add Col. and Tur.
Little Neshaminy Creek	Basin	Bucks	WWF, MF	Add Col. and Tur.
Mill Creek	Basin, Source to and including Watson Creek	Bucks	CWF, MF	Add Col. and Tur.
Mill Creek	Basin, Watson Creek to Mouth	Bucks	WWF, MF	Add Col. and Tur.
Core Creek	Basin, Source PA 620 Dam	Bucks	CWF, MF	Add Col. and Tur.
Core Creek	Basin, PA 620 Dam to Mouth	Bucks	WWF, MF	Add Col. and Tur.
Mill Creek	Basin	Bucks	WWF, MF	Add Col. and Tur.
Delaware Estuary and Tidal Portions of Tributaries	Burlington-Bristol Bridge to R.M. 108.4 (approx. 1 Mile below Pennypack Creek)	Bucks-Philadelphia	WWF, MF; Delete E, LWS, IRS and WC	Delete Alk., Bac., DO, pH, Temp., TDS, and Am Add Alk., Bac., Ch., DO, Hd., MBAS, pH, Rad., TDS, Temp., Temp., Tur and TON Delete Bac. 10/1/87 until 4/30/88

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LIST E—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Non-Tidal Portions of Unnamed Tributaries to Delaware Estuary	Basins, Burlington-Bristol Bridge to R.M. 108.4 (approx. 1 Mile below Pennypack Creek)	Bucks-Philadelphia	WWF	None
Poquessing Creek	Basin, Source to Tide	Philadelphia-Bucks	WWF	None
Pennypack Creek	Basin, Source to US Rte 13 Bridge	Philadelphia	TSF, MF	None
Pennypack Creek	Basin, US Rte 13 Bridge to Tide	Philadelphia	WWF, MF	None
Delaware Estuary and Tidal Portions of Tributaries	R.M. 108.4 (Approx. 1 Mile Below Pennypack Creek) to Approx. 2.6 Miles Above Schuylkill River (at Big Timber Creek in NJ)	Philadelphia	WWF (Maintenance Only), MF (Passage Only), Delete E, W.C., LWS and IRS	Delete Alk, Bac., DO ₂ , pH, Temp., TDS, and Am Add Alk., Bac., Ch., DO ₂ , Hd., MBAS ₂ , pH ₂ , TDS ₂ , Temp., TON, Tur, and Rad Delete Bac., 10/1/87 until 4/30/88
Non-Tidal Portions of Unnamed Tributaries to Delaware Estuary	Basins, R.M. 108.4 (Approx. 1 Mile below Pennypack Creek) to About 2.6 Miles Above Schuylkill River (at Big Timber Creek in NJ)	Philadelphia	WWF	None
Frankford Creek	Basin	Philadelphia	WWF	None
Delaware Estuary and Tidal Portions of Tributaries	Approx. 2.6 Miles Above Schuylkill River (Big Timber Creek in NJ) to Philadelphia-Delaware County Line	Philadelphia-Delaware	WWF (Maintenance Only), MF (Passage Only), N Delete E, W.C., PWS, LWS and IRS	Delete Alk., Bac., DO ₂ , F, N, pH ₂ , Phen., Temp., TDS ₂ , and Am Add Alk., Bac., and Ch., at R.M. 92.47, DO ₂ , MBAS ₂ , pH ₂ , Phens, Rad, TDS ₂ , Temp., Temp., TON and Tur, Delete Bac., 10/1/87 until 4/30/88
Non-Tidal Portions of Unnamed Tributaries to Delaware Estuary	Basins, Approx. 2.6 Miles Above Schuylkill River (Big Timber Creek, in NJ) to Philadelphia-Delaware County Border	Philadelphia-Delaware	WWF	None

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DRAINAGE LIST F

Delaware River Basin in Pennsylvania
Schuylkill River

Stream	Zone	County	Water Uses Protected	Exceptions to Specific Criteria
Delaware Estuary				
Schuylkill River	Main Stem, Source to Little Schuylkill River	Schuylkill	CWF	None
Unnamed Tributaries to Schuylkill River	Basins, Source to Little Schuylkill River	Schuylkill	CWF	None
Big Creek	Basin	Schuylkill	CWF	None
Silver Creek	Basin	Schuylkill	CWF	None
Mill Creek	Basin, Source to Mud Run	Schuylkill	CWF	None
Mud Run	Basin, Source to Schuylkill County Municipal Dam	Schuylkill	HQ-CWF	None
Mud Run	Basin, Schuylkill County Municipal Dam to Kaufman Run	Schuylkill	CWF	None
Kaufman Run	Basin, Source to Schuylkill County Municipal Dam	Schuylkill	HQ-CWF	None
Kaufman Run	Basin, Schuylkill County Municipal Dam to Mouth	Schuylkill	CWF	None
Mud Run	Basin, Kaufman Run to Tar Run	Schuylkill	CWF	None
Tar Run	Basin, Source to Schuylkill County Municipal Dam	Schuylkill	HQ-CWF	None
Tar Run	Basin, Schuylkill County Municipal Dam to Mouth	Schuylkill	CWF	None
Mud Run	Basin, From Tar Run to Wolf Creek	Schuylkill	CWF	None
Wolf Creek	Basin, Source to Schuylkill County Municipal Dam	Schuylkill	HQ-CWF	None
Wolf Creek	Basin, Schuylkill County Municipal Dam to Mouth	Schuylkill	CWF	None
Mud Run	Basin, Wolf Creek to Mouth	Schuylkill	CWF	None
Mill Creek	Basin, Mud Run to Mouth	Schuylkill	CWF	None
Tumbling Run	Basin, Source to Schuylkill Haven Dam	Schuylkill	HQ-CWF	None
Tumbling Run	Basin, Schuylkill Haven Dam to Mouth	Schuylkill	CWF	None
West Branch Schuylkill River	Basin	Schuylkill	CWF	None
Mahannon Creek	Basin	Schuylkill	CWF	None
Red Creek	Basin	Schuylkill	CWF	None
Plum Creek	Basin	Schuylkill	CWF	None
Pine Creek	Basin	Schuylkill	CWF	None

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Stream	Zone	County	Water Uses Protected	Exceptions to Specific Criteria
Bear Creek	Basin	Schuylkill	CWF	None
Stony Creek	Basin	Schuylkill	CWF	None
Little Schuylkill River	Basin, Source to Still Creek	Schuylkill	CWF	None
Still Creek	Basin, Source to Tamaqua Water Supply Dam	Schuylkill	HQ-CWF	None
Still Creek	Basin, Tamaqua Water Supply Dam to Mouth	Schuylkill	CWF	None
Little Schuylkill River	Basin, Still Creek to Owl Creek	Schuylkill	CWF	None
Owl Creek	Basin, Source to Lower Tamaqua Dam	Schuylkill	HQ-CWF	None
Owl Creek	Basin, Lower Tamaqua Dam to Mouth	Schuylkill	CWF	None
Little Schuylkill River	Basin, Owl Creek to Mouth	Schuylkill	CWF	None
Schuylkill River	Main Stem, Little Schuylkill River to Tide	Berks-Montgomery-Chester-Philadelphia	WWF, MF	None
Unnamed Tributaries to Schuylkill River	Basins, Little Schuylkill River to Tide, except those between Berks-Chester County Border and Valley Creek	Berks-Montgomery-Chester-Philadelphia	WWF	None
Mill Creek	Basin	Berks	TSF	None
Pigeon Creek	Basin	Berks	WWF	None
Irish Creek	Basin	Berks	WWF	None
Maiden Creek	Main Stem, Source to Pine Creek	Berks-Lehigh	CWF	None
Unnamed Tributaries to Maiden Creek	Basins, Source to Pine Creek	Berks-Lehigh	CWF	None
Ontelaunee Creek	Basin	Berks	CWF	None
Kistler Creek	Basin	Berks	CWF	None
Stony Run	Basin	Berks	CWF	None
Pine Creek	Source to eastern intersection of T 803 and LR 061219	Berks	HQ-CWF	None
Pine Creek	Eastern intersection of T 803 and LR 061219 to Mouth	Berks	CWF	None
Maiden Creek	Main Stem, Pine Creek to Moselem Creek	Berks	TSF	None
Unnamed Tributaries to Maiden Creek	Basins, Pine Creek to Moselem Creek	Berks	TSF	None
Furnace Creek	Basin	Berks	TSF	None
Maiden Creek Tributary	Basin	Berks	TSF	None
Sacony Creek	Basin, Source to LR 06141 Bridge in Kutztown	Berks	CWF	None

Stream	Zone	County	Water Uses Protected	Exceptions to Specific Criteria
Sacony Creek	Basin, LR 06141 Bridge to Mouth	Berks	TSF	None
Maiden Creek	Basin, Moselem Creek to Lake Ontelaunee Dam	Berks	WWF	None
Maiden Creek	Main Stem, Lake Ontelaunee Dam to Mouth	Berks	WWF	None
Unnamed Tributaries to Maiden Creek	Basins, Lake Ontelaunee Dam to Mouth	Berks	WWF	None
Baily Creek	Basin	Berks	WWF	None
Willow Creek	Basin	Berks	CWF	None
Laurel Run	Basin	Berks	WWF	None
Bernhart Creek	Basin	Berks	WWF	None
Tulpehocken Creek	Basin, Source to T 560 at Romano	Berks	CWF	None
Tulpehocken Creek	Main Stem, T 560 to Tailwaters of Blue Marsh Impoundment	Berks	TSF	None
Unnamed Tributaries to Tulpehocken Creek	Basins, T 560 to Tailwaters of Blue Marsh Impoundment	Berks	TSF	None
Tulpehocken Creek	Blue Marsh Impoundment	Berks	WWF	None
Unnamed Tributaries to Tulpehocken Creek	Basins, Tributary to Blue Marsh Impoundment	Berks	TSF	None
Northkill Creek	Headwaters to I-78 Bridge	Berks	EV	None
Northkill Creek	I-78 Bridge to Mouth	Berks	CWF	None
Licking Creek	Basin	Berks	TSF	None
Spring Creek	Main Stem	Berks	TSF	None
Unnamed Tributaries to Spring Creek	Basins	Berks	TSF	None
Furnace Run	Basin	Berks	CWF	None
Hospital Creek	Basin	Berks	TSF	None
Tulpehocken Creek	Basin, Blue Marsh Dam to Mouth	Berks	WWF	None
Wyomissing Creek	Basin	Berks	CWF	None
Angelica Creek	Basin	Berks	CWF	None
Trout Run	Basin	Berks	WWF	None
Allegheny Creek	Basin	Berks	CWF	None
Seidel Creek	Basin	Berks	WWF	None
Antietam Creek	Basin	Berks	CWF	None
Indian Corn Creek	Basin	Berks	WWF	None
Heisters Creek	Basin	Berks	WWF	None
Hay Creek	Basin	Berks	CWF	None
Sixpenny Creek	Basin	Berks	WWF	None
Monocacy Creek	Basin	Berks	WWF	None

Stream	Zone	County	Water Uses Protected	Exceptions to Specific Criteria
Unnamed Tributaries to Schuylkill River	Basins, Berks-Chester County Border to Valley Creek, (except those in Spring City and Phoenixville)	Chester	HQ-TSF	None
Unnamed Tributaries to Schuylkill River	Basins, In Spring City and Phoenixville	Chester	WWF	None
Manatawny Creek	Basin, except for Pine Creek, Trout Run and Ironstone Creek	Berks	CWF	None
Pine Creek	Basin	Berks	EV	None
Trout Run	Basin	Berks	EV	None
Ironstone Creek	Basin	Berks	TSF	None
Sprogels Run	Basin	Montgomery	WWF	None
Sanatoga Creek	Basin	Montgomery	WWF	None
Poosum Hollow Run	Basin	Montgomery	WWF	None
Brooke Evans Creek	Basin	Montgomery	WWF	None
Pigeon Creek	Basin	Chester	HQ-TSF	None
Mingo Creek	Basin	Montgomery	WWF	None
Stony Run	Basin	Chester	HQ-TSF	None
French Creek	Basin, Source to South Branch French Creek	Chester	HQ-CWF	None
French Creek	Basin, from and including South Branch French Creek to the junction of West Vincent Twp., East Vincent Twp., and East Pikeland Twp. Boundaries	Chester	HQ-TSF	None
French Creek	Basin, Junction of West Vincent Twp., East Vincent Twp. and East Pikeland Twp. Boundaries to Mouth	Chester	TSF	None
Pickering Creek	Basin, Source to Philadelphia Suburban Water Company Dam	Chester	HQ-TSF	None
Pickering Creek	Basin, Philadelphia Suburban Water Company Dam to Mouth	Chester	WWF	None
Perkiomen Creek	Main Stem, Source to Green Lane Reservoir Dam	Montgomery	TSF	None
Unnamed Tributaries to Perkiomen Creek	Basins	Montgomery-Berks-Lehigh	TSF	None
Northwest Branch Perkiomen Creek	Basin	Montgomery	CWF	None
Perkiomen Creek	Main Stem, Green Lane Reservoir Dam to Mouth	Montgomery	WWF, MF	None
Macoby Creek	Basin	Montgomery	TSF	None
Deep Creek	Basin	Montgomery	TSF	None

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Stream	Zone	County	Water Uses Protected	Exceptions to Specific Criteria
Unami Creek	Basin	Montgomery	TSF	None
Swamp Creek	Basin	Montgomery	TSF	None
Mine Run	Basin	Montgomery	TSF	None
East Branch Perkiomen Creek	Basin	Montgomery	TSF	None
Lodal Creek	Basin	Montgomery	TSF	None
Schoolhouse Run	Basin	Montgomery	TSF	None
Doe Run	Basin	Montgomery	TSF	None
Skippack Creek	Basin	Montgomery	TSF	None
Mine Run	Basin	Montgomery	TSF	None
Valley Creek	Basin	Montgomery	CWF	None
Mellshamic Creek	Basin	Montgomery	WWF	None
Trout Creek	Basin	Montgomery	WWF	None
Indian Creek	Basin	Montgomery	WWF	None
Crow Creek	Basin	Montgomery	WWF	None
Stony Creek	Basin	Montgomery	WWF	None
Sawmill Run	Basin	Montgomery	WWF	None
Diamond Run	Basin	Montgomery	WWF	None
Gulph Creek	Basin	Montgomery	WWF	None
Plymouth Creek	Basin	Montgomery	WWF	None
Arrowmink Creek	Basin	Montgomery	WWF	None
Sawmill Run	Basin	Montgomery	WWF	None
Mill Creek	Basin	Montgomery	TSF	None
Gulley Run	Basin	Montgomery	WWF	None
Wissahickon Creek	Basin	Philadelphia	TSF	None

DRAINAGE LIST G
Delaware River Basin in Pennsylvania
Delaware River

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Delaware Estuary and Tidal Portions of Tributaries	Philadelphia-Delaware County Line to PA-DE State Line	Philadelphia-Delaware	WWF (Maintenance Only); MF (Passage Only); Delete E, PWS, LWS, IRS, WC	Delete Alk ₁ , Bac ₁ , DO ₂ , F, N, pH ₁ , Phen ₁ , Temp ₁ , TDS ₁ , and Am Add Alk ₂ , Bac ₂ , DO ₂ , MBAS ₂ , pH ₂ , Phen ₂ , TDS ₂ , Temp ₂ , TON, Tur ₂ and Rad Delete Bac ₂ , 10-1-87 until 4-30-88
Non-Tidal Portions of Unnamed Tributaries to Delaware Estuary	Basins, Philadelphia-Delaware County Border to PA-DE State Border	Philadelphia-Delaware	WWF	None

LIST G—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Darby Creek	Main Stem, Source to PA Rte 3 Bridge	Delaware	CWF	None
Unnamed Tributaries to Darby Creek	Basins, Source to PA Rte 3 Bridge	Delaware	CWF	None
Little Darby Creek	Basin	Delaware	CWF	None
Camp Run	Basin	Delaware	CWF	None
Miles Run	Basin	Delaware	CWF	None
Foxes Run	Basin	Delaware	CWF	None
Ithan Creek	Basin	Delaware	CWF	None
Langford Run	Basin	Delaware	CWF	None
Darby Creek	Main Stem, PA Rte 3 Bridge to Tide	Delaware	WWF	None
Unnamed Tributaries to Darby Creek	Basins, PA Rte 3 Bridge to Tide	Delaware	WWF	None
Whetstone Run	Basin, Source to Tide	Delaware	WWF	None
Cobbs Creek	Basin, Source to Tide	Delaware	WWF	None
Hermesprota Creek	Basin, Source to Tide	Delaware	WWF	None
Muckinipattis Creek	Basin, Source to Tide	Delaware	WWF	None
Stony Creek	Basin, Source to Tide	Delaware	WWF	None
Crum Creek	Basin, Source to junction of Newtown, Edgemont and Willistown Township Boundaries	Chester	HQ-CWF	None
Crum Creek	Basin, junction of Newtown, Edgemont and Willistown Township Boundaries to Springton Reservoir	Delaware	CWF	None
Crum Creek	Basin, Springton Reservoir to Tide.	Delaware	WWF	None
Ridley Creek	Basin, Source to Media Water Intake	Delaware	HQ-TSF	None
Ridley Creek	Basin, Media Water Intake to Tide	Delaware	WWF, MF	None
Chester Creek				
East Branch Chester Creek	Basin, Source to Goose Creek	Delaware	TSF	None
Goose Creek	Basin	Chester	WWF	None
East Branch Chester Creek	Basin, Goose Creek to West Branch Chester Creek	Delaware	TSF	None
West Branch Chester Creek	Basin, Source to East Branch Chester Creek	Delaware	TSF	None
Chester Creek	Basin, Confluence of East and West Branches Chester Creek to Dutton Mills Road Bridge	Delaware	TSF	None

LIST G—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Chester Creek	Basin, Dutton Mills Road Bridge to Tide	Delaware	WWF	None
Stony Creek	Basin, Source to Tide	Delaware	WWF	None
Marcus Hook Creek	Basin, Source to Tide	Delaware	WWF	None
Naaman Creek	Basin, Source to Tide	Delaware	WWF	None
White Clay Creek East Branch White Clay Creek	Basin, Source to Northern Boundary of Avondale Borough	Chester	EV	None
East Branch White Clay Creek	Basin, Northern Boundary of Avondale Borough to Middle Branch White Clay Creek	Chester	CWF	None
Middle Branch White Clay Creek	Basin, Source to East Branch White Clay Creek	Chester	TSF, MF	None
White Clay Creek	Basin, Confluence of East and Middle Branches to PA-DE Border	Chester	CWF	None
Red Clay Creek				
West Branch Red Clay Creek	Basin, Source to Confluence with East Branch	Chester	TSF	None
East Branch Red Clay Creek	Basin, Source to Confluence with West Branch	Chester	TSF	None
Red Clay Creek	Basin, Confluence of East and West Branches Red Clay Creek to PA-DE State Border	Chester	CWF	None
Brandywine Creek				
West Branch Brandywine Creek	Basin, Source to T-437 (about half-way between Bradamore and Cedar Knoll)	Chester	HQ-TSF, MF	None
West Branch Brandywine Creek	Main Stem, T-437 (about half-way between Bradamore and Cedar Knoll) to Dam at Valley Station	Chester	TSF, MF	None
Tributaries to West Branch Brandywine Creek	Basins, T-437 (about half-way between Bradamore and Cedar Knoll) to Dam at Valley Station except those within West Brandywine Twp	Chester	TSF, MF	None

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LIST G—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Tributaries to West Branch Brandywine Creek	Basins, Within and along the West Brandywine Twp. Border	Chester	HQ-TSF, MF	None
West Branch Brandywine Creek	Main Stem, Dam at Valley Station to Confluence with East Branch Brandywine Creek	Chester	WWF, MF	None
Unnamed Tributaries to West Branch Brandywine Creek	Basins, Dam at Valley Station to Confluence with East Branch Brandywine Creek	Chester	WWF, MF	None
Sukher Run	Basin	Chester	WWF, MF	None
Dennis Run	Basin	Chester	WWF, MF	None
Buck Run	Basin	Chester	TSF, MF	None
Broad Run	Basin	Chester	TSF, MF	None
East Branch Brandywine Creek	Basin, Source to and including Shamona Creek except Indian Run	Chester	HQ-TSF, MF	None
Indian Run	Basin	Chester	HQ-CWI	None
East Branch Brandywine Creek	Main Stem, Shamona Creek to Confluence with West Branch Brandywine Creek	Chester	WWF, MF	None
Unnamed Tributaries to East Branch Brandywine Creek	Basins, Shamona Creek to Confluence with West Branch Brandywine Creek, except those within East Brandywine and Uwchlan Twps.	Chester	WWF, MF	None
Tributaries to East Branch Brandywine Creek	Basins, Within and Along the Borders of East Brandywine and Uwchlan Twps.	Chester	HQ-TSF, MF	None
Beaver Creek	Basin, East Brandywine-Cain Twp. Border to Mouth	Chester	TSF, MF	None
Valley Creek	Basin, Source to Broad Run	Chester	CWF, MF	None
Broad Run	Basin	Chester	HQ-CWF, MF	None
Valley Creek	Basin, Broad Run to mouth	Chester	CWF, MF	None
Taylor Run	Basin	Chester	TSF, MF	None
Blackhorse Run	Basin	Chester	TSF, MF	None
Brandywine Creek	Main Stem, Confluence of East and West Branches Brandywine Creek to PA-DE State Border	Chester	WWF, MF	Add TON

LIST G—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Unnamed Tributaries to Brandywine Creek	Basins, Confluence of East and West Branches Brandywine Creek to PA-DE State Border	Chester	WWF, MF	None
Plum Run	Basin	Chester	WWF, MF	None
Radley Run	Basin	Chester	WWF, MF	None
Pocopson Creek	Basin	Chester	TSF, MF	None
Bennetts Run	Basin	Chester	WWF, MF	None
Brinton Run	Basin	Chester	WWF, MF	None
Ring Run	Basin	Chester	WWF, MF	None
Harvey Run	Basin	Chester	WWF, MF	None

DRAINAGE LIST H
Susquehanna River Basin in Pennsylvania
Tioga River

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Susquehanna River				
Tioga River	Main Stem, Source to Crooked Creek	Tioga	CWF	None
Unnamed Tributaries to Tioga River	Basins, Source to Crooked Creek	Tioga	CWF	None
Webier Creek	Basin	Tioga	CWF	None
Rathbone Creek	Basin	Tioga	CWF	None
McIntosh Hollow	Basin	Tioga	CWF	None
Rundall Creek	Basin	Tioga	CWF	None
Fellows Creek	Basin	Tioga	CWF	None
South Creek	Basin	Tioga	CWF	None
Bear Run	Basin	Tioga	CWF	None
Fall Brook	Basin	Tioga	CWF	None
Carpenter Run	Basin	Tioga	CWF	None
Taylor Run	Basin	Tioga	CWF	None
Morris Run	Basin	Tioga	CWF	None
Coal Creek	Basin	Tioga	CWF	None
Johnson Creek	Basin	Tioga	CWF	None
Bear Creek	Basin	Tioga	CWF	None
East Creek	Basin	Tioga	CWF	None
Frost Hollow	Basin	Tioga	CWF	None
Limekiln Hollow	Basin	Tioga	CWF	None
Tan Creek	Basin	Tioga	CWF	None
Marvin Creek	Basin	Tioga	CWF	None
Wilson Creek	Basin	Tioga	CWF	None
Elk Run	Basin	Tioga	CWF	None
Canoe Camp Creek	Basin	Tioga	CWF	None
Slate Creek	Basin	Tioga	CWF	None
Ellen Run	Basin	Tioga	CWF	None
Corey Creek	Basin	Tioga	CWF	None
Manns Creek	Basin	Tioga	CWF	None
Kelly Creek	Basin	Tioga	CWF	None
Lambs Creek	Basin	Tioga	CWF	None
Big Rift Creek	Basin	Tioga	CWF	None
Mill Creek	Basin	Tioga	TSF	None
Crooked Creek	Main Stem	Tioga	WWF	None
Unnamed Tributaries to Crooked Creek	Basins	Tioga	WWF	None
Hornby Hollow	Basin	Tioga	WWF	None
Blair Creek	Basin	Tioga	WWF	None
Monks Hollow	Basin	Tioga	WWF	None
Button Hollow	Basin	Tioga	WWF	None
Losey Creek	Basin	Tioga	WWF	None
Keeney Hollow	Basin	Tioga	WWF	None
Daly Hollow	Basin	Tioga	WWF	None
Carlin Hollow	Basin	Tioga	TSF	None
Sweet Hollow	Basin	Tioga	WWF	None

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LIST H—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
North Run	Basin	Tioga	WWF	None
Hills Creek	Basin	Tioga	WWF	None
Stephenhouse Run	Basin	Tioga	CWF	None
Ives Run	Basin	Tioga	WWF	None
Elkhorn Creek	Basin	Tioga	WWF	None
Tioga River	Main Stem, Crooked Creek to PA-NY State Border	Tioga	WWF	None
Unnamed Tributaries to Tioga River	Basins, Crooked Creek to PA-NY State Border	Tioga	WWF	None
Bear Creek	Basin	Tioga	WWF	None
Bentley Creek	Basin	Tioga	WWF	None
Mitchell Creek	Basin	Tioga	WWF	None
Mutton Lane Creek	Basin	Tioga	WWF	None
Harts Creek	Basin	Tioga	WWF	None
Smith Creek	Basin	Tioga	WWF	None
Daily Creek	Basin	Tioga	WWF	None
Watson Creek	Basin	Tioga	CWF	None
Cowanesque River	Main Stem, Source to North Fork	Tioga	CWF	None
Unnamed Tributaries to Cowanesque River	Basins, Source to North Fork	Tioga	CWF	None
Marsh Creek	Basin	Tioga	CWF	None
North Branch Cowanesque River	Basin	Tioga	CWF	None
Dodge Hollow	Basin	Tioga	CWF	None
Moore Hollow	Basin	Tioga	CWF	None
Dibble Hollow	Basin	Tioga	CWF	None
Teed Hollow	Basin	Tioga	CWF	None
Potter Hollow	Basin	Tioga	CWF	None
Pritchard Hollow	Basin	Tioga	CWF	None
Hancock Hqllow	Basin	Tioga	CWF	None
Crance Brook	Basin	Tioga	CWF	None
North Fork Cowanesque River	Main Stem	Tioga	CWF	None
Unnamed Tributaries to North Fork Cowanesque River	Basins	Tioga	CWF	None
White Branch	Basin	Tioga	WWF	None
Mink Hollow	Basin	Tioga	CWF	None
Scott Hollow	Basin	Tioga	CWF	None
Rexford Hollow	Basin	Tioga	CWF	None
Cowanesque River	Main Stem, North Fork to PA-NY State Border	Tioga	WWF	None
Unnamed Tributaries to Cowanesque River	Basins, North Fork to PA-NY State Border	Tioga	WWF	None
Krusen Hollow	Basin	Tioga	CWF	None
Mill Creek	Basin	Tioga	TSF	None
California Brook	Basin	Tioga	WWF	None
Broughton Hollow	Basin	Tioga	WWF	None
Brace Hollow	Basin	Tioga	WWF	None
Purple Brook	Basin	Tioga	WWF	None
Jemison Creek	Basin	Tioga	WWF	None
Skinner Hollow	Basin	Tioga	WWF	None
Rose Valley	Basin	Tioga	WWF	None
Boatman Brook	Basin	Tioga	WWF	None
Troups Creek	Basin	Tioga	CWF	None
Yarnell Brook	Basin	Tioga	WWF	None
Wheaton Hollow	Basin	Tioga	WWF	None
Bulkeley Creek	Basin	Tioga	WWF	None

LIST H—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Windfall Brook	Basin	Tioga	WWF	None
Holden Creek	Basin	Tioga	WWF	None
Camp Brook	Basin	Tioga	WWF	None
Bill Hess Creek	Basin	Tioga	WWF	None
Thornbottom Creek	Basin	Tioga	WWF	None
Cummings Creek	Basin	Tioga	WWF	None
Strait Creek	Basin	Tioga	WWF	None
Mapes Creek	Basin	Tioga	WWF	None
Baldwin Creek	Basin	Tioga	WWF	None
Cook Creek	Basin	Tioga	WWF	None

DRAINAGE LIST I
Susquehanna River Basin in Pennsylvania
Susquehanna River (North Branch)

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Susquehanna River (North Branch)	Main Stem, NY-PA State Border to PA-NY State Border (Great Bend Area)	Susquehanna	WWF	None
Unnamed Tributaries to Susquehanna River (North Branch)	Basins, NY-PA State Border to PA-NY State Border (Great Bend Area)	Susquehanna	CWF	None
Unnamed Tributaries to Susquehanna River (North Branch) and Chemung River	Basins, Delaware-Susquehanna River Divide to the Susquehanna-Tioga River Divide Along the NY-PA State Border	Susquehanna-Tioga-Bradford	CWF	None
Cascade Creek	Basin	Susquehanna	CWF	None
Hilborn Creek	Basin	Susquehanna	CWF	None
Starrucca Creek	Basin, Source to Unnamed Tributary flowing through Thompson Wetlands	Susquehanna	CWF	None
Unnamed Tributary to Starrucca Creek (Thompson Wetlands)	Basin	Wayne	EV	None
Starrucca Creek	Basin, Unnamed Tributary flowing through Thompson Wetlands to Mouth	Susquehanna	CWF	None
Canawacta Creek	Basin	Susquehanna	CWF	None
Drinker Creek	Basin	Susquehanna	CWF	None
Lewis Creek	Basin	Susquehanna	CWF	None
Bedbug Brook	Basin	Susquehanna	CWF	None
Denton Creek	Basin	Susquehanna	CWF	None
Mitchell Creek	Basin	Susquehanna	CWF	None
Little Egypt Creek	Basin	Susquehanna	CWF	None
Salt Lick Creek	Basin	Susquehanna	HQ-CWF	None
DuBois Creek	Basin	Susquehanna	CWF	None
Trowbridge Creek	Basin	Susquehanna	CWF	None
Snake Creek	Basin	Susquehanna	CWF	None
Little Snake Creek	Basin	Susquehanna	CWF	None
Choconut Creek	Basin	Susquehanna	WWF	None
Apalachin Creek	Basin	Susquehanna	WWF	None
Wappasening Creek	Basin	Bradford	CWF	None
Sackett Creek	Basin	Bradford	WWF	None
Parks Creek	Basin	Bradford	WWF	None
Susquehanna River (North Branch)	Main Stem, NY-PA State Border to Lackawanna River	Luzerne	WWF	Add TON and Mn

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LIST I—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Unnamed Tributaries to Susquehanna River (North Branch)	Basins, NY-PA State Border to Wyalusing Creek	Bradford	WWF	None
Cayuta Creek	Basin	Bradford	WWF	None
Saterlee Creek	Basin	Bradford	CWF	None
Chemung River	Main Stem	Bradford	WWF	None
Unnamed Tributaries to Chemung River	Basins	Bradford	WWF	None
Seeley Creek	Basin	Bradford	CWF	None
Bentley Creek	Basin	Bradford	WWF	None
Stone Lick Creek	Basin	Bradford	WWF	None
Orcutt Creek	Basin	Bradford	WWF	None
Dry Brook	Basin	Bradford	WWF	None
Tutelow Creek	Basin	Bradford	WWF	None
Murray Creek	Basin	Bradford	WWF	None
Walcott Creek	Basin	Bradford	WWF	None
Buck Creek	Basin	Bradford	WWF	None
Mallory Creek	Basin	Bradford	WWF	None
Spaulding Creek	Basin	Bradford	WWF	None
Snyder Creek	Basin	Bradford	WWF	None
Cash Creek	Basin	Bradford	WWF	None
Toad Hollow	Basin	Bradford	WWF	None
Horn Brook	Basin	Bradford	WWF	None
Hemlock Run	Basin	Bradford	WWF	None
Sugar Creek	Basin, Source to Tomjack Creek	Bradford	TSF	None
Tomjack Creek	Basin	Bradford	TSF	None
Sugar Creek	Basin, Tomjack Creek to Mouth	Bradford	WWF	None
Towanda Creek	Basin, Source to Canton Boro	Bradford	CWF	None
Towanda Creek	Main Stem, Canton Boro to South Branch	Bradford	TSF	None
Unnamed Tributaries to Towanda Creek	Basins, Canton Boro to South Branch	Bradford	CWF	None
Mill Creek	Basin	Bradford	CWF	None
Alba Creek	Basin	Bradford	CWF	None
North Branch Towanda Creek	Basin	Bradford	CWF	None
Preacher Brook	Basin	Bradford	CWF	None
Schrader Creek	Basin	Bradford	HQ-CWF	None
Towanda Creek	Main Stem, South Branch to Mouth	Bradford	WWF	None
Unnamed Tributaries to Towanda Creek	Basins, South Branch to Mouth	Bradford	CWF	None
South Branch Towanda Creek	Basin	Bradford	CWF	None
Little Wysox Creek	Basin	Bradford	WWF	None
Wysox Creek	Basin	Bradford	CWF	None
Youghr Creek	Basin	Bradford	WWF	None
Bennetts Creek	Basin	Bradford	WWF	None
Durell Creek	Basin	Bradford	WWF	None
King Creek	Basin	Bradford	WWF	None
Rummerfield Creek	Basin	Bradford	WWF	None
Wyalusing Creek	Main Stem, Confluence East and Middle Branches To Mouth	Bradford	WWF	None
Unnamed Tributaries to Wyalusing Creek	Basins, Confluence East and Middle Branches to Mouth	Bradford-Susquehanna	WWF	None

LIST I—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
East Branch Wyalusing Creek	Main Stem	Susquehanna	CWF	None
Unnamed Tributaries to East Branch Wyalusing Creek	Basins	Susquehanna	CWF	None
Beebe Creek	Basin	Susquehanna	CWF	None
Pettis Creek	Basin	Susquehanna	WWF	None
Forest Lake Creek	Basin	Susquehanna	CWF	None
South Branch	Basin	Susquehanna	WWF	None
Roe Creek	Basin	Susquehanna	CWF	None
Snell Creek	Basin	Susquehanna	CWF	None
Devel Creek	Basin	Susquehanna	CWF	None
Elk Lake Stream	Basin	Susquehanna	CWF	None
Deer Lick Creek	Basin	Susquehanna	CWF	None
Middle Branch Wyalusing Creek	Basin	Susquehanna	CWF	None
Terry Creek	Basin	Susquehanna	WWF	None
North Branch Wyalusing Creek	Basin	Susquehanna	CWF	None
Wolf Creek	Basin	Bradford	WWF	None
Ross Creek	Basin	Bradford	WWF	None
Rockwell Creek	Basin	Bradford	WWF	None
Bennet Creek	Basin	Bradford	WWF	None
Cold Creek	Basin	Bradford	WWF	None
Camp Creek	Basin	Bradford	WWF	None
Billings Creek	Basin	Bradford	WWF	None
Brewer Creek (Staffords Creek)	Basin	Bradford	WWF	None
Unnamed Tributaries to Susquehanna River (North Branch)	Basins, Wyalusing Creek to Lackawanna River	Bradford-Wyoming-Lackawanna	CWF	None
Sugar Run Creek	Basin	Bradford	CWF	None
Rocky Forest Creek	Basin	Wyoming	CWF	None
Little Tuscarora Creek	Basin	Wyoming	CWF	None
Tuscarora Creek	Basin	Wyoming	CWF	None
Roaring Run	Basin	Wyoming	CWF	None
Black Walnut Creek	Basin	Wyoming	CWF	None
Meshoppen Creek	Basin	Wyoming	CWF	None
Little Mehoopany Creek	Basin	Wyoming	CWF	None
Mehoopany Creek	Basin, Source to North Fork	Wyoming	HQ-CWF	None
North Fork Mehoopany Creek	Basin	Wyoming	CWF	None
Mehoopany Creek	Basin, North Fork to Mouth	Wyoming	CWF	None
Taques Creek	Basin	Wyoming	CWF	None
Tunkhannock Creek	Main Stem, Source to South Branch	Wyoming	WWF	None
Tunkhannock Creek	Tunkhannock Creek			
Tunkhannock Creek	Main Stem, South Branch	Wyoming	TSF	None
Tunkhannock Creek	Tunkhannock Creek to Mouth			
Unnamed Tributaries to Tunkhannock Creek	Basins	Wyoming	CWF	None
Bear Swamp Creek	Basin	Susquehanna	CWF	None
Bell Creek	Basin	Susquehanna	CWF	None
Leslie Creek	Basin	Susquehanna	CWF	None
Partners Creek	Basin	Susquehanna	CWF	None
Tower Branch	Basin	Susquehanna	CWF	None

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LIST I—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Millard Creek	Basin	Susquehanna	CWF	None
East Branch Tunkhannock Creek	Basin	Susquehanna	CWF	None
Willow Brook	Basin	Wyoming	CWF	None
Martins Creek	Basin	Wyoming	CWF	None
Horton Creek	Basin	Wyoming	CWF	None
Field Brook	Basin	Wyoming	CWF	None
Monroe Creek	Basin	Wyoming	CWF	None
Oxbow Creek	Basin	Wyoming	CWF	None
South Branch Tunkhannock Creek	Main Stem	Wyoming	TSF	None
Unnamed Tributaries to South Branch Tunkhannock Creek	Basins	Lackawanna-Wyoming	CWF	None
Kennedy Creek	Basin	Lackawanna	CWF	None
Ackerly Creek	Main Stem	Lackawanna	TSF	None
Unnamed Tributaries to Ackerly Creek	Basins	Lackawanna	CWF	None
Billings Mill Brook	Basin	Wyoming	CWF	None
Swale Brook	Basin	Wyoming	CWF	None
Bowman Creek	Main Stem	Wyoming	HQ-CWF	None
Unnamed Tributaries to Bowman Creek	Basins	Luzerne-Wyoming	HQ-CWF	None
South Branch Bowman Creek	Basin	Luzerne	HQ-CWF	None
North Branch Bowman Creek	Basin	Luzerne	HQ-CWF	None
Bean Run	Basin	Luzerne	HQ-CWF	None
Wolf Run	Basin	Luzerne	HQ-CWF	None
Beth Run	Basin	Luzerne	HQ-CWF	None
Butternut Run	Basin	Luzerne	HQ-CWF	None
Cider Run	Basin	Wyoming	EV	None
Sugar Run	Basin	Wyoming	HQ-CWF	None
Broad Hollow Run	Basin	Wyoming	HQ-CWF	None
Baker Run (Windfall Run)	Basin	Wyoming	HQ-CWF	None
Sorber Run	Basin	Wyoming	EV	None
Stone Run	Basin	Wyoming	HQ-CWF	None
York Run	Basin	Wyoming	HQ-CWF	None
Hettesheimer Run	Basin	Wyoming	HQ-CWF	None
Beaver Run	Basin	Wyoming	HQ-CWF	None
South Run	Basin	Wyoming	HQ-CWF	None
Leonards Creek	Basin	Wyoming	HQ-CWF	None
Roaring Run	Basin	Wyoming	HQ-CWF	None
Marsh Creek	Basin	Wyoming	HQ-CWF	None
Sugar Hollow	Basin	Wyoming	HQ-CWF	None
Benson Hollow	Basin	Wyoming	HQ-CWF	None
Mill Run (Osterhout Creek)	Basin	Wyoming	CWF	None
Money penny Creek	Basin	Wyoming	CWF	None
Martin Creek	Basin	Wyoming	CWF	None
Fitch Creek	Basin	Wyoming	CWF	None
Buttermilk Creek	Basin	Wyoming	CWF	None
Whitelock Creek	Basin	Wyoming	CWF	None
Keeler Creek	Basin	Wyoming	CWF	None
Dymond Creek	Basin	Luzerne	CWF	None
Sutton Creek	Basin	Luzerne	CWF	None
Lewis Creek	Basin	Lackawanna	CWF	None
Gardner Creek	Basin	Luzerne	CWF	None
Obendoffers Creek	Basin	Luzerne	CWF	None
Hicks Creek	Basin	Luzerne	CWF	None

DRAINAGE LIST J
Susquehanna River Basin in Pennsylvania
Lackawanna River

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Susquehanna River (North Branch)				
Lackawanna River				
West Branch Lackawanna River	Basin. Source to Confluence with East Branch	Susquehanna	CWF	None
East Branch Lackawanna River	Basin. Source to Confluence with West Branch	Susquehanna	CWF	None
Lackawanna River	Main Stem. Confluence East and West Branches to Rush Brook	Lackawanna	TSF	None

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LIST I—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Unnamed Tributaries to Lackawanna River	Basins, Confluence of East and West Branches to Rush Brook	Susquehanna-Wayne-Lackawanna	CWF	None
Brace Brook	Basin	Susquehanna	CWF	None
Wilson Creek	Basin	Lackawanna	CWF	None
Coal Brook	Basin	Lackawanna	CWF	None
Racket Brook	Basin	Lackawanna	CWF	None
Fall Brook	Basin	Lackawanna	CWF	None
Lees Creek	Basin	Lackawanna	CWF	None
Powderly Creek	Basin	Lackawanna	CWF	None
Rush Brook	Basin	Lackawanna	CWF	None
Lackawanna River	Main Stem, Rush Brook to Mouth	Luzerne	WWF	None
Unnamed Tributaries to Lackawanna River	Basins, Rush Brook to Mouth	Lackawanna-Luzerne-Susquehanna	CWF	None
Aylesworth Creek	Basin	Lackawanna	CWF	None
White Oak Run	Basin	Lackawanna	CWF	None
Laurel Run	Basin	Lackawanna	CWF	None
Grassey Island Creek	Basin, Source to Elevation 1100	Lackawanna	HQ-CWF	None
Grassey Island Creek	Basin, Elevation 1100 to Mouth	Lackawanna	CWF	None
Sterry Creek	Basin	Lackawanna	CWF	None
Wildcat Creek	Basin	Lackawanna	CWF	None
Hull Creek	Basin	Lackawanna	CWF	None
Eddy Creek	Basin	Lackawanna	WWF	None
Leggetts Creek	Basin, Source to Summit Lake Creek	Lackawanna	CWF	None
Leggetts Creek	Basin, from and including Summit Lake Creek to Mouth	Lackawanna	TSF	None
Meadow Brook	Basin	Lackawanna	CWF	None
Roaring Brook	Basin, Source to Elmhurst Reservoir	Lackawanna	HQ-CWF	None
Roaring Brook	Basin, Elmhurst Reservoir to Mouth	Lackawanna	CWF	None
Stafford Meadow Brook	Basin, source to farthest downstream crossing of Scranton-Moosic boundary	Lackawanna	HQ-CWF	None
Stafford Meadow Brook	Basin, farthest downstream crossing of Scranton-Moosic boundary to mouth	Lackawanna	WWF	None
Keyser Creek	Basin	Lackawanna	CWF	None
Spring Brook	Basin, Source to N. E. Ext. PA Turnpike	Lackawanna	HQ-CWF	None
Spring Brook	Basin, N. E. Ext. PA Turnpike to Mouth	Lackawanna	CWF	None
Mill Creek	Basin	Lackawanna	CWF	None
St. Johns Creek	Basin	Luzerne	CWF	None
Red Spring Run	Basin	Luzerne	CWF	None

DRAINAGE LIST K

Susquehanna River Basin in Pennsylvania
Susquehanna River (North Branch)

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Susquehanna River (North Branch)	Main Stem, Lackawanna River to West Branch Susquehanna River	Northumberland	WWF	None

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LIST K—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Unnamed Tributaries to Susquehanna River (North Branch)	Basins, Lackawanna River to West Branch Susquehanna River	Luzerne-Northumberland	CWF	None
Abrahams Creek	Basin	Luzerne	CWF	None
Mill Creek (Warden Creek)	Basin	Luzerne	CWF	None
Toby Creek	Basin, Source to and including Huntsville Creek	Luzerne	CWF	None
Toby Creek	Basin, Huntsville Creek to the point where the stream is piped underground at Pringle	Luzerne	TSF	None
Toby Creek	Basin, from the point where the stream is piped underground at Pringle to the Mouth	Luzerne	WWF	None
Brown Creek	Basin	Luzerne	CWF	None
Wadham Creek	Basin	Luzerne	CWF	None
Coal Creek	Basin	Luzerne	CWF	None
Solomon Creek	Basin	Luzerne	CWF	None
Warrior Creek	Basin	Luzerne	CWF	None
Nanticoke Creek	Basin	Luzerne	CWF	None
Harvey Creek	Basin, Source to Pikes Creek	Luzerne	HQ-CWF	None
Pikes Creek	Basin	Luzerne	HQ-CWF	None
Harvey Creek	Basin, Pikes Creek to Mouth	Luzerne	CWF	None
Hunlock Creek	Basin	Luzerne	CWF	None
Shickshinny Creek	Main Stem	Luzerne	CWF	None
Unnamed Tributaries to Shickshinny Creek	Basins	Luzerne	CWF	None
Culver Creek	Basin	Luzerne	CWF	None
Reyburn Creek	Basin	Luzerne	CWF	None
Little Shickshinny Creek	Basin	Luzerne	HQ-CWF	None
Black Creek	Basin	Luzerne	CWF	None
Turtle Creek	Basin	Luzerne	CWF	None
Rocky Run	Basin	Luzerne	CWF	None
Little Wapwallopen Creek	Basin	Luzerne	CWF	None
Wapwallopen Creek (Big Wapwallopen Creek)	Basin	Luzerne	CWF	None
Walker Run	Basin	Luzerne	CWF	None
Salem Creek	Basin	Luzerne	CWF	None
Nescopeck Creek	Basin, Source to PA Rte 309 Bridge	Luzerne	HQ-CWF	None
Nescopeck Creek	Main Stem, PA Rte 309 Bridge to Mouth	Luzerne-Columbia	TSF	None
Unnamed Tributaries to Nescopeck Creek	Basins, PA Rte 309 Bridge to Mouth	Luzerne-Columbia	CWF	None
Creasy Creek	Basin	Luzerne	CWF	None
Little Nescopeck Creek	Basin	Luzerne	CWF	None
Oley Run	Basin	Luzerne	CWF	None
Long Run	Basin	Luzerne	CWF	None
Little Nescopeck Creek	Basin	Luzerne	CWF	None
Black Creek	Basin	Luzerne	CWF	None
Briar Creek	Basin	Columbia	CWF	None
Tenmile Run	Basin	Columbia	CWF	None
Neals Run	Basin	Columbia	CWF	None
West Branch Fishing Creek	Basin, Source to Shingle Mill Run	Sullivan	HQ-CWF	None
Shingle Mill Run	Basin	Sullivan	EV	None
West Branch Fishing Creek	Basin, Shingle Mill Run to Elk Run	Columbia	HQ-CWF	None

LIST K—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Elk Run	Basin	Columbia	EV	None
West Branch Fishing Creek	Basin, Elk Run to Confluence with East Branch	Columbia	HQ-CWF	None
East Branch Fishing Creek	Basin, Source to Confluence with West Branch	Columbia	HQ-CWF	None
Fishing Creek	Basin, Confluence of East and West Branches to Huntington Creek	Columbia	CWF	None
Huntingdon Creek	Basin, Source to Kitchen Creek	Luzerne	HQ-CWF	None
Kitchen Creek	Basin	Luzerne	HQ-CWF	None
Huntingdon Creek	Main Stem, Kitchen Creek to Mouth	Columbia	TSF	None
Unnamed Tributaries to Huntingdon Creek	Basins, Kitchen Creek to Mouth	Luzerne	CWF	None
Rogers Creek	Basin	Luzerne	CWF	None
Kingsbury Brook	Basin	Luzerne	CWF	None
Pine Creek	Basin	Luzerne	CWF	None
Fishing Creek	Basin, Huntington Creek to Green Creek	Columbia	TSF	None
Green Creek	Basin	Columbia	TSF	None
Fishing Creek	Main Stem, Green Creek to Mouth	Columbia	WWF	None
Unnamed Tributaries to Fishing Creek	Basins, Green Creek to Mouth	Columbia	CWF	None
Stony Brook	Basin	Columbia	CWF	None
Little Fishing Creek	Basin	Columbia	CWF	None
Hemlock Creek	Basin	Columbia	CWF	None
Montour Run	Basin	Columbia	CWF	None
Corn Run	Basin	Columbia	CWF	None
Catawissa Creek	Main Stem, Source to Rattling Run	Schuylkill	CWF	None
Unnamed Tributaries to Catawissa Creek	Basins, Source to Rattling Run	Schuylkill-Columbia	CWF	None
Hunkydory Creek	Basin	Luzerne	CWF	None
Messers Run	Basin	Schuylkill	HQ-CWF	None
Davis Run	Basin	Schuylkill	HQ-CWF	None
Rattling Run	Basin	Schuylkill	CWF	None
Catawissa Creek	Main Stem, Rattling Run to Mouth	Columbia	TSF	None
Unnamed Tributaries to Catawissa Creek	Basins, Rattling Run to Mouth	Columbia	CWF	None
Derk Run	Basin	Schuylkill	CWF	None
Little Catawissa Creek	Basin	Schuylkill	CWF	None
Tomhicken Creek	Basin	Schuylkill	CWF	None
Crooked Run	Basin	Schuylkill	CWF	None
Cranberry Run	Basin	Columbia	CWF	None
Klingermans Run	Basin	Columbia	CWF	None
Beaver Run	Basin	Columbia	CWF	None
Mine Gap Run	Basin	Columbia	CWF	None
Fisher Run	Basin	Columbia	CWF	None
Scotch Run	Basin	Columbia	CWF	None
Furnace Run	Basin	Columbia	CWF	None
Roaring Creek	Main Stem	Columbia	TSF	None
Unnamed Tributaries to Roaring Creek	Basins	Columbia	CWF	None
Mill Creek	Basin	Columbia	CWF	None
Lick Run	Basin	Columbia	CWF	None
South Branch Roaring Creek	Basin	Columbia	HQ-CWF	None

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LIST K—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Little Roaring Creek	Basin	Northumberland	CWF	None
Logan Run	Basin	Northumberland	CWF	None
Toby Run	Basin	Montour	CWF	None
Sechler Run	Basin	Montour	CWF	None
Mahoning Creek	Main Stem, Source to PA Rte 54 Bridge	Montour	TSF	None
Mahoning Creek	Main Stem, PA Rte 54 Bridge to Mouth	Montour	WWF	None
Unnamed Tributaries to Mahoning Creek	Basin	Montour	CWF	None
Kase Run	Basin	Montour	CWF	None
Mauses Creek	Basin	Montour	CWF	None
Wilson Run	Basin	Northumberland	CWF	None
Gravel Run	Basin	Northumberland	CWF	None
Lithia Spring Creek	Basin	Northumberland	CWF	None

DRAINAGE LIST L

Susquehanna River Basin in Pennsylvania
West Branch Susquehanna River

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Susquehanna River West Branch Susquehanna River	Main Stem	Northumberland	WWF	None
Unnamed Tributaries to West Branch Susquehanna River	Basins, Source to Moshannon Creek	Cambria-Clearfield	CWF	None
Leslie Run	Basin	Cambria	CWF	None
Hoppel Run	Basin	Cambria	CWF	None
Fox Run	Basin	Cambria	CWF	None
Browns Run	Basin	Cambria	CWF	None
Walnut Run	Basin	Cambria	CWF	None
Porter Run	Basin	Cambria	CWF	None
Moss Creek	Basin	Cambria	CWF	None
Douglas Run	Basin	Cambria	CWF	None
Emeigh Run	Basin	Cambria	CWF	None
Peg Run	Basin	Cambria	CWF	None
Cush Cushion Creek	Basin	Indiana	HQ-CWF	None
Kilns Run	Basin	Clearfield	CWF	None
Kings Run	Basin	Clearfield	CWF	None
Shryock Run	Basin	Clearfield	CWF	None
Boiling Spring Run	Basin	Clearfield	CWF	None
Sawmill Run	Basin	Clearfield	CWF	None
Rock Run	Basin	Clearfield	CWF	None
Cush Creek	Basin	Clearfield	CWF	None
Martin Run	Basin	Clearfield	CWF	None
North Run	Basin	Clearfield	CWF	None
Deer Run	Basin	Clearfield	CWF	None
Bear Run	Basin	Clearfield	CWF	None
Whisky Run	Basin	Clearfield	CWF	None
Chest Creek	Basin, Source to Patton Water Supply	Cambria	HQ-CWF	None
Chest Creek	Basin, Patton Water Supply to mouth, except Rogues Harbor Run	Clearfield	CWF	None
Rogues Harbor Run	Basin	Clearfield	EV	None
Miller Run	Basin	Clearfield	CWF	None
Laurel Run	Basin	Clearfield	CWF	None
Hasielt Run	Basin	Clearfield	CWF	None
Curry Run	Basin	Clearfield	CWF	None
McCracken Run	Basin	Clearfield	CWF	None

LIST L—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Bell Run	Basin	Clearfield	CWF	None
Hiles Run	Basin	Clearfield	CWF	None
Passmore Run	Basin	Clearfield	CWF	None
Porter Run	Basin	Clearfield	CWF	None
Anderson Creek	Basin, Source to DuBois Dam	Clearfield	HQ-CWF	None
Anderson Creek	Basin, DuBois Dam to Mouth	Clearfield	CWF	None
Hogback Run	Basin	Clearfield	CWF	None
Hartshorn Run	Basin	Clearfield	CWF	None
Montgomery Creek	Basin, Source to Montgomery Dam	Clearfield	HQ-CWF	None
Montgomery Creek	Basin, Montgomery Dam to Mouth	Clearfield	CWF	None
Moose Creek	Basin, Source to Dam	Clearfield	HQ-CWF	None
Moose Creek	Basin, Dam to Mouth	Clearfield	CWF	None
Wolf Run	Basin	Clearfield	CWF	None
Clearfield Creek	Main Stem	Clearfield	WWF	None
Unnamed Tributaries to Clearfield Creek	Basins	Cambria-Clearfield	CWF	None
Bradley Run	Basin	Cambria	CWF	None
Beaverdam Run	Basin	Cambria	CWF	None
Swartz Run	Basin	Cambria	CWF	None
Little Laurel Run	Basin	Cambria	CWF	None
Indian Run	Basin	Cambria	CWF	None
Laurel Run	Basin	Cambria	CWF	None
Brubaker Run	Basin	Cambria	CWF	None
Sandy Run	Basin	Cambria	CWF	None
Powell Run	Basin	Cambria	CWF	None
Beaverdam Run	Basin	Cambria	CWF	None
Turner Run	Basin	Clearfield	CWF	None
Blain Run	Basin	Clearfield	CWF	None
North Wimer Run	Basin	Clearfield	CWF	None
DeWitt Run	Basin	Clearfield	CWF	None
Pine Run	Basin	Clearfield	CWF	None
Dotts Hollow	Basin	Clearfield	CWF	None
Coffman Run	Basin	Clearfield	CWF	None
Blue Run	Basin	Clearfield	CWF	None
Buck Run (Porter Run)	Basin	Clearfield	CWF	None
Maplepole Run	Basin	Clearfield	CWF	None
Muddy Run	Basin, Source to Little Muddy Run	Clearfield	CWF	None
Little Muddy Run	Basin, Source to Janesville Sportsman Dam	Clearfield	HQ-CWF	None
Little Muddy Run	Basin, Janesville Sportsman Dam to Mouth	Clearfield	CWF	None
Muddy Run	Basin, Little Muddy Run to Mouth	Clearfield	CWF	None
Japling Run	Basin	Clearfield	CWF	None
Pine Run	Basin	Clearfield	CWF	None
Loss Run	Basin	Clearfield	CWF	None
Upper Morgan Run	Basin	Clearfield	CWF	None
Potts Run	Basin	Clearfield	CWF	None
Dunlap Run	Basin	Clearfield	CWF	None
Lytle Run	Basin	Clearfield	CWF	None
Cherry Run	Basin	Clearfield	CWF	None
Raccoon Run	Basin	Clearfield	CWF	None
Sanhorn Run	Basin	Clearfield	CWF	None
Camp Hope Run	Basin	Clearfield	CWF	None
Morgan Run	Basin	Clearfield	CWF	None
Little Clearfield Creek	Basin	Clearfield	HQ-CWF	None

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LIST L—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Long Run	Basin	Clearfield	CWF	None
Roaring Run	Basin	Clearfield	CWF	None
Abes Run	Basin	Clearfield	CWF	None
Lick Run	Basin	Clearfield	HQ-CWF	None
Devils Run	Basin	Clearfield	CWF	None
Bloody Run	Basin	Clearfield	CWF	None
Trout Run	Basin	Clearfield	HQ-CWF	None
Millstone Run	Basin	Clearfield	CWF	None
Surveyor Run	Basin	Clearfield	CWF	None
Bear Run	Basin	Clearfield	CWF	None
Bald Hill Run	Basin	Clearfield	CWF	None
Moravian Run	Basin	Clearfield	CWF	None
Deer Creek	Basin	Clearfield	CWF	None
Big Run	Basin	Clearfield	CWF	None
Willholm Run	Basin	Clearfield	CWF	None
Sandy Creek	Basin	Clearfield	CWF	None
Alder Run	Basin	Clearfield	CWF	None
Rolling Stone Run	Basin	Clearfield	CWF	None
Mowry Run	Basin	Clearfield	CWF	None
Basin Run	Basin	Clearfield	CWF	None
Rock Run	Basin	Clearfield	CWF	None
Potter Run	Basin	Clearfield	CWF	None
Rupley Run	Basin	Clearfield	CWF	None
Moshannon Creek	Main Stem	Clearfield-Centre	TSF	None
Unnamed Tributaries to Moshannon Creek	Basin	Clearfield-Centre	CWF	None
Wilson Run	Basin	Clearfield	CWF	None
Roup Run	Basin	Centre	CWF	None
Whiteside Run	Basin	Clearfield	CWF	None
Mountain Branch	Basin, Source to Trim Root Run	Centre	HQ-CWF	None
Trim Root Run	Basin	Centre	HQ-CWF	None
Mountain Branch	Basin, Trim Root Run to Mouth	Centre	CWF	None
Bear Run	Basin	Centre	CWF	None
Beaver Run	Basin	Clearfield	CWF	None
Big Run	Basin	Clearfield	CWF	None
Trout Run	Basin, Source to Montola Dam	Centre	HQ-CWF	None
Trout Run	Basin, Montola Dam to Mouth	Centre	CWF	None
Shimej Run	Basin	Clearfield	CWF	None
Laurel Run	Basin	Clearfield	CWF	None
Cold Stream	Basin, Source to US Rte 322	Centre	HQ-CWF	None
Cold Stream	Basin, US Rte 322 to Mouth	Centre	CWF	None
Emigh Run	Basin	Clearfield	CWF	None
Onemile Run	Basin	Centre	CWF	None
Hawk Run	Basin	Clearfield	CWF	None
Wolf Run	Basin	Centre	CWF	None
Sulphur Run	Basin	Clearfield	CWF	None
Black Bear Run	Basin	Centre	HQ-CWF	None
Sixmile Run	Basin	Centre	HQ-CWF	None
Tark Hill Run	Basin	Centre	CWF	None
Potter Run	Basin	Centre	CWF	None
Laurel Run	Basin	Centre	CWF	None
Browns Run	Basin	Clearfield	CWF	None
Grassflat Run	Basin	Clearfield	CWF	None
Weber Run	Basin	Clearfield	CWF	None
Crawford Run	Basin	Clearfield	CWF	None
Black Moshannon Creek	Main Stem	Centre	HQ-CWF	None

LIST L—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Unnamed Tributaries to Black Moshannon Creek	Basins	Centre	HQ-CWF	None
Shirks Run	Basin	Centre	HQ-CWF	None
Smays Run	Basin	Centre	HQ-CWF	None
North Run	Basin	Centre	HQ-CWF	None
Benner Run	Basin, Source to Pine Haven Camp	Centre	EV	None
Benner Run	Basin, Pine Haven Camp to Mouth	Centre	HQ-CWF	None
Hall Run	Basin	Centre	HQ-CWF	None
Myers Run	Basin	Centre	HQ-CWF	None
Rock Run	Basin	Centre	EV	None
Pine Run	Basin	Centre	HQ-CWF	None
Hicklen Run	Basin	Centre	HQ-CWF	None
Sevenmile Run	Basin	Centre	CWF	None
Ames Run	Basin	Clearfield	HQ-CWF	None
Unnamed Tributaries to West Branch Susquehanna River	Basins, Moshannon Creek to Queens Run	Clearfield-Clinton-Centre	HQ-CWF	None
Redlick Run	Basin	Centre	HQ-CWF	None
Mosquito Creek	Main Stem	Clearfield	HQ-CWF	None
Unnamed Tributaries to Mosquito Creek	Basins	Clearfield	HQ-CWF	None
Pebble Run	Basin	Elk	HQ-CWF	None
Beaver Run	Basin	Elk	HQ-CWF	None
McNerny Run	Basin	Clearfield	HQ-CWF	None
Meeker Run	Basin	Clearfield	HQ-CWF	None
Panther Run	Basin	Clearfield	HQ-CWF	None
Twelvemile Run	Basin	Clearfield	EV	None
Gifford Run	Basin	Clearfield	HQ-CWF	None
Susman Run	Basin	Clearfield	HQ-CWF	None
Cole Run	Basin	Clearfield	EV	None
Grimes Run	Basin	Clearfield	HQ-CWF	None
Dutch Hollow	Basin	Clearfield	HQ-CWF	None
Curleys Run	Basin	Clearfield	HQ-CWF	None
Laurel Run	Basin	Centre	HQ-CWF	None
Saltlick Run	Basin	Clearfield	HQ-CWF	None
Upper Three Runs	Basin	Clearfield	HQ-CWF	None
Lower Three Runs	Basin	Clearfield	HQ-CWF	None
Sterling Run	Basin	Centre	HQ-CWF	None
Loop Run	Basin	Clinton	CWF	None
Spruce Run	Basin	Centre	HQ-CWF	None
Unnamed Tributary to West Branch Susquehanna River	Basin	Clinton	CWF	None
Bougher Run	Basin	Centre	HQ-CWF	None
Little Bougher Run	Basin	Clinton	CWF	None
Leaning Pine Run	Basin	Clinton	HQ-CWF	None
Moore's Run	Basin	Centre	HQ-CWF	None
Sugarcamp Run	Basin	Clinton	HQ-CWF	None
Birch Island Run	Basin	Clinton	HQ-CWF	None
Black Stump Run	Basin	Clinton	HQ-CWF	None
Grove Run	Basin	Clinton	HQ-CWF	None
Fields Run	Basin	Centre	HQ-CWF	None
Yost Run	Basin	Centre	EV	None
Morris Run	Basin	Clinton	HQ-CWF	None
Dry Run	Basin	Clinton	HQ-CWF	None
Burns Run	Basin	Centre	EV	None
Jews Run	Basin	Clinton	HQ-CWF	None
Sinnemahoning Creek				
Bennett Branch Sinnemahoning Creek	Main Stem Source to Mill Run	Cameron	CWF	None
Bennett Branch Sinnemahoning Creek	Main Stem, Mill Run to Confluence with Driftwood Branch	Cameron	WWF	None

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LIST L—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Unnamed Tributaries to Bennett Branch Sinnemahoning Creek	Basins	Clearfield-Cameron	CWF	None
McCracken Run	Basin	Clearfield	CWF	None
South Branch Bennett Branch	Basin	Clearfield	HQ-CWF	None
Heath Run	Basin	Clearfield	CWF	None
Bark Camp Run	Basin	Clearfield	CWF	None
Mountain Run	Basin	Clearfield	CWF	None
Matley Hollow	Basin	Clearfield	CWF	None
Wilson Run	Basin, Source to East Branch Wilson Run	Clearfield	CWF	None
East Branch Wilson Run	Basin	Clearfield	HQ-CWF	None
Wilson Run	Basin, East Branch Wilson Run to Mouth	Clearfield	CWF	None
Moose Run	Basin	Clearfield	CWF	None
Horning Run	Basin	Clearfield	CWF	None
Lamb Hollow	Basin	Clearfield	CWF	None
Horning Hollow	Basin	Clearfield	CWF	None
Mill Run	Basin	Clearfield	CWF	None
Tyler Run	Basin	Clearfield	CWF	None
Cherry Run	Basin, Source to Shawmut Home Water Supply Dam	Elk	HQ-CWF	None
Cherry Run	Basin, Shawmut Dam to Mouth	Elk	CWF	None
Kersey Run	Basin, Source to Byrnes Run	Elk	CWF	None
Byrnes Run	Basin	Elk	EV	None
Kersey Run	Basin, Byrnes Run to mouth	Elk	CWF	None
Laurel Run	Basin	Elk	HQ-CWF	None
Bakemans Run	Basin	Elk	CWF	None
Medix Run	Basin	Elk	HQ-CWF	None
Trout Run	Basin	Elk	CWF	None
Jimmy Run	Basin	Elk	CWF	None
Johnson Run	Basin	Elk	CWF	None
Wainwright Run	Basin	Elk	CWF	None
Charles Run	Basin	Elk	CWF	None
Dentis Run	Basin	Elk	CWF	None
Hicks Run				
East Branch Hicks Run	Main Stem	Elk	HQ-CWF	None
Unnamed Tributaries to East Branch Hicks Run	Basins	Cameron-Elk	HQ-CWF	None
Bell Run	Basin	Cameron	HQ-CWF	None
Bigger Run	Basin	Elk	HQ-CWF	None
Barr Run	Basin	Elk	HQ-CWF	None
Sand Spring Run	Basin	Elk	HQ-CWF	None
West Branch Hicks Run	Basin	Elk	EV	None
Hicks Run	Basin, Confluence of East and West Branches to Mouth	Cameron	HQ-CWF	None
Hicks Hollow	Basin	Cameron	CWF	None
Beaverdam Run	Basin	Cameron	CWF	None
Stone Quarry Hollow	Basin	Cameron	CWF	None
Miller Run	Basin	Cameron	CWF	None
Water Plug Hollow	Basin	Cameron	CWF	None
Mix Run	Basin, Source to English Draft Run	Elk	EV	None

LIST L - CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
English Draft Run	Basin	Elk	HQ-CWF	None
Mix Run	Basin, English Draft Run to Mouth	Cameron	HQ-CWF	None
Little Dent Run	Basin	Cameron	CWF	None
Nanny Run	Basin	Cameron	CWF	None
Boyer Run	Basin	Cameron	CWF	None
Driftwood Branch Sinnemahoning Creek	Main Stem, Source to Confluence with Bennett Branch	Cameron	TSF	None
Unnamed Tributaries to Driftwood Branch Sinnemahoning Creek	Basins	Elk-Cameron	HQ-CWF	None
Devils Hole	Basin	Elk	HQ-CWF	None
Billy Buck Run	Basin	Elk	HQ-CWF	None
Cherry Run	Basin	Elk	HQ-CWF	None
Windfall Run	Basin	Elk	HQ-CWF	None
Robinson Run	Basin	Cameron	HQ-CWF	None
Indian Camp Run	Basin	Cameron	HQ-CWF	None
Elk Fork	Basin, Source to Nichols Run	Cameron	EV	None
Nichols Run	Basin	Cameron	HQ-CWF	None
Elk Fork	Basin, Nichols Run to Mouth	Cameron	HQ-CWF	None
Big Run	Basin	Cameron	HQ-CWF	None
Bobby Run	Basin	Cameron	HQ-CWF	None
Cooks Run	Basin	Cameron	EV	None
Johns Run	Basin	Cameron	HQ-CWF	None
Britton Run	Basin	Cameron	HQ-CWF	None
Clear Creek	Basin, Source to Mud Run	Cameron	EV	None
Mud Run	Basin	Cameron	HQ-CWF	None
Clear Creek	Basin, Mud Run to Mouth	Cameron	HQ-CWF	None
Ferguson Hollow	Basin	Cameron	HQ-CWF	None
North Creek	Basin	Cameron	HQ-CWF	None
Swoesey Hollow	Basin	Cameron	HQ-CWF	None
Dodge Hollow	Basin	Cameron	HQ-CWF	None
Eddy Run	Basin	Cameron	HQ-CWF	None
Wheaton Hollow	Basin	Cameron	HQ-CWF	None
West Creek	Basin	Cameron	HQ-CWF	None
Sinnemahoning Portage Creek	Basin	Cameron	CWF	None
Bauer Hollow	Basin	Cameron	HQ-CWF	None
Canoe Run	Basin	Cameron	HQ-CWF	None
Hunts Run	Basin	Cameron	HQ-CWF	None
Stillhouse Run	Basin	Cameron	HQ-CWF	None
Square Timber Run	Basin	Cameron	HQ-CWF	None
Sterling Run	Basin	Cameron	CWF	None
Mason Grove Run	Basin	Cameron	HQ-CWF	None
Wash Mason Run	Basin	Cameron	HQ-CWF	None
John Mason Run	Basin	Cameron	HQ-CWF	None
Big Run	Basin	Cameron	HQ-CWF	None
Dry Run	Basin	Cameron	HQ-CWF	None
Tanglefoot Run	Basin	Cameron	HQ-CWF	None
Nelson Run	Basin	Cameron	HQ-CWF	None
Grindstone Hollow	Basin	Cameron	HQ-CWF	None
Johnson Run	Basin	Cameron	HQ-CWF	None
Sinnemahoning Creek	Main Stem	Clinton	WWF	None
Unnamed Tributaries to Sinnemahoning Creek	Basins	Cameron-Clinton	HQ-CWF	None
Grove Run	Basin	Cameron	HQ-CWF	None
First Fork Sinnemahoning Creek	Main Stem	Cameron	HQ-CWF	None

LIST I.—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Unnamed Tributaries to First Fork Sinnemahoning Creek	Basin	Cameron	HQ-CWF	None
Prouty Run	Basin	Potter	HQ-CWF	None
Borne Branch	Basin	Potter	HQ-CWF	None
Beech Run	Basin	Potter	HQ-CWF	None
Pine Run	Basin	Potter	HQ-CWF	None
Elk Lick Run	Basin	Potter	HQ-CWF	None
Big Hollow	Basin	Potter	HQ-CWF	None
Little Hollow	Basin	Potter	HQ-CWF	None
Ross Hollow	Basin	Potter	HQ-CWF	None
Burt Hollow	Basin	Potter	HQ-CWF	None
Big Moores Run	Basin	Potter	HQ-CWF	None
Gravel Lick Run	Basin	Potter	HQ-CWF	None
Nestor Hollow	Basin	Potter	HQ-CWF	None
Elevenmile Hollow	Basin	Potter	HQ-CWF	None
Schoolhouse Hollow	Basin	Potter	HQ-CWF	None
South Woods Branch	Basin	Potter	HQ-CWF	None
Layton Hollow	Basin	Potter	HQ-CWF	None
Freeman Run	Basin	Potter	HQ-CWF	None
Young Hollow	Basin	Potter	HQ-CWF	None
East Darian Run	Basin	Potter	HQ-CWF	None
West Darian Run	Basin	Potter	HQ-CWF	None
Big Nelson Run	Basin, Source to Right Branch Big Nelson Run	Potter	HQ-CWF	None
Right Branch Big Nelson Run	Basin	Potter	EV	None
Big Nelson Run	Basin, Right Branch to Mouth	Potter	HQ-CWF	None
Fish Basket Hollow	Basin	Potter	HQ-CWF	None
Little Nelson Run	Basin	Potter	HQ-CWF	None
East Fork Sinnemahoning Creek	Basin, Source to Dolliver Trail	Potter	EV	None
East Fork Sinnemahoning Creek	Main Stem, Dolliver Trail to Mouth	Potter	HQ-CWF	None
Unnamed Tributaries to East Fork Sinnemahoning Creek	Basins	Potter	HQ-CWF	None
Shinglebolt Hollow	Basin	Potter	HQ-CWF	None
Horton Run	Basin	Potter	HQ-CWF	None
Siony Lick Run	Basin	Potter	EV	None
Wild Boy Run	Basin	Potter	HQ-CWF	None
Jackson Lick Run	Basin	Potter	HQ-CWF	None
Graveyard Hollow	Basin	Potter	HQ-CWF	None
Siony Run	Basin	Potter	HQ-CWF	None
Jamison Run	Basin	Potter	HQ-CWF	None
Little Joe Run	Basin	Potter	HQ-CWF	None
Camp Run	Basin	Potter	HQ-CWF	None
Gravel Lick Run	Basin	Potter	HQ-CWF	None
Mud Lick Run	Basin	Potter	HQ-CWF	None
Williams Run	Basin	Potter	HQ-CWF	None
Marvin Run	Basin	Potter	HQ-CWF	None
Birch Run	Basin	Potter	EV	None
Long Hollow	Basin	Potter	HQ-CWF	None
Jordan Hollow	Basin	Potter	HQ-CWF	None
Schoolhouse Run	Basin	Potter	HQ-CWF	None
Black Stump Hollow	Basin	Potter	HQ-CWF	None
Upper Vag Hollow	Basin	Potter	HQ-CWF	None
Hunter Hollow	Basin	Potter	HQ-CWF	None
Avers Hollow	Basin	Potter	HQ-CWF	None
Bentley Hollow	Basin	Potter	HQ-CWF	None
Elk Lick Run	Basin	Potter	HQ-CWF	None
Schoolhouse Run	Basin	Potter	HQ-CWF	None
Dry Hollow	Basin	Potter	HQ-CWF	None
Pine Island Run	Basin	Potter	HQ-CWF	None

LIST L--CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Bailey Run	Basin, Source to Little Bailey Run	Potter	EV	None
Little Bailey Run	Basin	Potter	HQ-CWF	None
Bailey Run	Basin, Little Bailey Run to Mouth	Potter	HQ-CWF	None
Barrett Slide	Basin	Potter	HQ-CWF	None
Mahon Run	Basin	Potter	HQ-CWF	None
Berge Run	Basin	Potter	HQ-CWF	None
Upper Logue Hollow	Basin	Cameron	HQ-CWF	None
Logue Run	Basin	Cameron	HQ-CWF	None
Owl Hollow	Basin	Cameron	HQ-CWF	None
Norcross Run	Basin	Cameron	HQ-CWF	None
Rattlesnake Run	Basin	Cameron	HQ-CWF	None
Muley Run	Basin	Cameron	HQ-CWF	None
Mill Run	Basin	Cameron	HQ-CWF	None
Lushbaugh Run	Basin	Cameron	EV	None
Brooks Run	Basin	Cameron	HQ-CWF	None
Little Bailey Run	Basin	Cameron	HQ-CWF	None
Short Bend Run	Basin	Cameron	HQ-CWF	None
Woodrock Run	Basin	Cameron	HQ-CWF	None
Roaring Run	Basin	Cameron	HQ-CWF	None
Bronson Run	Basin	Cameron	HQ-CWF	None
Joes Run	Basin	Cameron	HQ-CWF	None
Guys Hollow	Basin	Cameron	HQ-CWF	None
Lick Island Run	Basin	Cameron	HQ-CWF	None
Pumpkin Hollow	Basin	Cameron	HQ-CWF	None
Arksill Run	Basin	Cameron	HQ-CWF	None
Pepperhill Run	Basin	Cameron	HQ-CWF	None
Riddles Hollow	Basin	Cameron	HQ-CWF	None
Whiteoak Run	Basin	Cameron	HQ-CWF	None
Board Rock Hollow	Basin	Cameron	HQ-CWF	None
Ellicott Run	Basin	Cameron	HQ-CWF	None
Wykoff Run	Basin	Cameron	HQ-CWF	None
Upper Jerry Run	Basin	Cameron	HQ-CWF	None
Lower Jerry Run	Basin	Cameron	HQ-CWF	None
Pfoutz Run	Basin	Clinton	HQ-CWF	None
Montour Run	Basin	Clinton	HQ-CWF	None
Round Island Run	Basin	Clinton	HQ-CWF	None
Mill Run	Basin	Clinton	HQ-CWF	None
Commissioners Run	Basin	Clinton	HQ-CWF	None
Grass Flats Run	Basin	Clinton	HQ-CWF	None
Moccasin Run (Moccasin Falls Run)	Basin	Clinton	HQ-CWF	None
Upper Stimpson Run	Basin	Clinton	HQ-CWF	None
Cook's Run	Basin	Clinton	HQ-CWF	None
Milligan Run	Basin	Clinton	HQ-CWF	None
Smith Run	Basin	Clinton	HQ-CWF	None
North Smith Run	Basin	Clinton	HQ-CWF	None
Fish Dam Run	Basin	Clinton	EV	None
Kettle Creek	Basin, Source to Hammersley Fork	Clinton	HQ-TSF	None
Hammersley Fork	Basin	Potter-Clinton	EV	None
Kettle Creek	Basin, Hammersley Fork to Trout Run	Clinton	HQ-TSF	None
Trout Run	Basin, Source to John Summerson Branch	Clinton	HQ-TSF	None
John Summerson Branch	Basin	Clinton	EV	None
Trout Run	Basin, John Summerson Branch to Mouth	Clinton	HQ-TSF	None
Kettle Creek	Basin, Trout Run to Alvin Bush Dam	Clinton	HQ-TSF	None
Kettle Creek	Basin, Alvin Bush Dam to Mouth	Clinton	TSF	None

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LIST L — CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Dry Run	Basin	Clinton	HQ-CWF	None
Barney Run	Basin	Clinton	EV	None
Shintown Run	Basin	Clinton	HQ-CWF	None
Hall Run	Basin	Clinton	HQ-CWF	None
Drury Run	Basin	Clinton	HQ-CWF	None
Brewery Run	Basin	Clinton	HQ-CWF	None
Peters Run	Basin	Clinton	HQ-CWF	None
Paddy Run	Basin	Clinton	HQ-CWF	None
Boggs Hollow	Basin	Clinton	EV	None
Young, Womans Creek	Basin	Clinton	HQ-CWF	None
Caldwell Run	Basin	Clinton	HQ-CWF	None
Dry Run	Basin	Clinton	HQ-CWF	None
Hyner Run	Basin	Clinton	HQ-CWF	None
Little McCloskey Run	Basin	Clinton	HQ-CWF	None
Big McCloskey Run	Basin	Clinton	HQ-CWF	None
Huff Run	Basin	Clinton	HQ-CWF	None
Schoolhouse Hollow	Basin	Clinton	HQ-CWF	None
Goodman Hollow	Basin	Clinton	HQ-CWF	None
Johnson Run	Basin	Clinton	HQ-CWF	None
Ritchie Run	Basin	Clinton	HQ-CWF	None
Green Run	Basin	Clinton	HQ-CWF	None
Rattlesnake Run	Basin	Clinton	HQ-CWF	None
Grugan Hollow	Basin	Clinton	HQ-CWF	None
Mill Run	Basin	Clinton	HQ-CWF	None
Baker Run	Basin	Clinton	HQ-CWF	None
McCloskey Run	Basin	Clinton	HQ-CWF	None
Ferney Run	Basin	Clinton	HQ-CWF	None
East Ferney Run	Basin	Clinton	HQ-CWF	None
Holland Run	Basin	Clinton	HQ-CWF	None
Tangascootak Creek	Main Stem	Clinton	CWF	None
Unnamed Tributaries to Tangascootak Creek	Basins	Clinton	CWF	None
North Fork Tangascootak Creek	Basin	Clinton	HQ-CWF	None
Bird Run	Basin	Clinton	CWF	None
Lick Run	Basin, Source to LR 18011 Bridge	Clinton	EV	None
Lick Run	Basin, LR 18001 Bridge to Mouth	Clinton	HQ-CWF	None
Queens Run	Basin	Clinton	HQ-CWF	None
Unnamed Tributaries to West Branch Susquehanna River	Queens Run to Pine Creek	Clinton-Lycoming	CWF	None
Sugar Run	Basin	Clinton	CWF	None
Reeds Run	Basin	Clinton	CWF	None
Bald Eagle Creek	Basin, Source to Laurel Run at Port Matilda	Centre	CWF	None
Laurel Run	Basin	Centre	CWF	None
Bald Eagle Creek	Main Stem, Laurel Run to Nittany Creek	Centre	TSF	None
Unnamed Tributaries to Bald Eagle Creek	Basins, Laurel Run to Nittany Creek	Centre-Clinton	CWF	None
Mudlick Run	Basin	Centre	CWF	None
Laurel Run	Basin	Centre	CWF	None
Dicks Run	Basin	Centre	CWF	None
Dewitt Run	Basin	Centre	CWF	None
Wallace Run	Basin, Source to Grindstone Gap Run	Centre	EV	None
Grindstone Gap Run	Basin	Centre	CWF	None
Wallace Run	Basin, Grindstone Gap Run to Mouth	Centre	CWF	None
Moose Run	Basin	Centre	CWF	None
Spring Creek	Main Stem	Centre	CWF	None

LIST L - CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Unnamed Tributaries to Spring Creek	Basins	Centre	CWF	None
Galbraith Gap Run	Basin	Centre	HQ-CWF	None
Cedar Run	Basin	Centre	CWF	None
Markles Gap Run	Basin	Centre	HQ-CWF	None
McBrides Run	Basin	Centre	HQ-CWF	None
Slab Cabin Run	Basin, Source to PA Rte 26	Centre	HQ-CWF	None
Slab Cabin Run	Basin, PA Rte 26 to Mouth	Centre	CWF	None
Logan Branch	Basin	Centre	CWF	None
Buffalo Run	Basin	Centre	CWF	None
Antis Run	Basin	Centre	CWF	None
Nittany Creek	Basin	Centre	CWF	None
Bald Eagle Creek	Main Stem, Nittany Creek to Mouth	Centre	WWF	Add Col,
Unnamed Tributaries to Bald Eagle Creek	Basins, Nittany Creek to Mouth	Centre-Clinton	CWF	None
Bullit Run	Basin	Centre	CWF	None
Greens Run	Basin	Centre	CWF	None
Lick Run				
East Branch Lick Run	Basin, Source to Confluence with West Branch	Centre	HQ-CWF	None
West Branch Lick Run	Basin, Source to Confluence with East Branch	Centre	HQ-CWF	None
Lick Run	Basin, Confluence of East and West Branches to Mouth	Centre	CWF	None
Hunters Run	Basin	Centre	CWF	None
Marsh Creek	Basin	Centre	CWF	None
Beech Creek	Main Stem	Clinton-Centre	CWF	None
Unnamed Tributaries to Beech Creek	Basins	Clinton-Centre	CWF	None
South Fork Beech Creek	Basin, Source to Stinktown Run	Centre	CWF	None
Stinktown Run	Basin	Centre	HQ-CWF	None
Horsehead Run	Basin	Centre	CWF	None
Jonathan Run	Basin	Centre	CWF	None
North Fork Beech Creek	Basin	Centre	CWF	None
Rock Run	Basin	Centre	EV	None
Sandy Run	Basin	Centre	CWF	None
Wolf Run	Basin	Centre	CWF	None
Panther Run	Basin	Centre	EV	None
Eddy Lick Run	Basin	Centre	CWF	None
Logway Run	Basin	Centre	CWF	None
Council Run	Basin	Centre	CWF	None
Two Rock Run	Basin	Centre	EV	None
Three Rock Run	Basin	Centre	CWF	None
Hayes Run	Basin	Centre	EV	None
Big Run	Main Stem	Clinton	CWF	None
Unnamed Tributaries to Big Run	Basins	Clinton	CWF	None
Middle Branch Big Run	Basin, Source to Thornapple Run	Clinton	EV	None
Thornapple Run	Basin	Clinton	CWF	None
Middle Branch Big Run	Basin, Thornapple Run to Mouth	Clinton	CWF	None

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LIST L — CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
East Branch Big Run	Basin, Source to 4.5 Miles Upstream from Mouth	Clinton	EV	None
East Branch Big Run	Basin, 4.5 Miles Upstream from Mouth to Mouth	Clinton	CWF	None
West Branch Big Run	Basin	Clinton	EV	None
Monument Run	Basin	Clinton	HQ-CWF	None
Twin Run	Basin	Clinton	CWF	None
Bitner Run	Basin	Clinton	CWF	None
Sugar Run	Basin	Clinton	CWF	None
Laurel Run	Basin	Clinton-Centre	CWF	None
Susquehanna River				
West Branch Susquehanna River				
Fishing Creek	Basin, Source to Cherry Run	Clinton	HQ-CWF	None
Cherry Run	Basin	Clinton	EV	None
Fishing Creek	Main Stem, Cherry Run to Long Run	Clinton	HQ-CWF	None
Unnamed Tributaries to Fishing Creek	Basins, Cherry Run to Long Run	Clinton	HQ-CWF	None
Little Fishing Creek	Main Stem	Clinton	HQ-CWF	None
Unnamed Tributaries to Little Fishing Creek	Basins	Clinton	HQ-CWF	None
Roaring Run	Basin, Source to Camp Krisland	Centre	EV	None
Roaring Run	Basin, Camp Krisland to Mouth	Centre	HQ-CWF	None
Cedar Run	Basin	Clinton	HQ-CWF	None
Long Run	Basin	Clinton	HQ-CWF	None
Fishing Creek	Basin, Long Run to Mouth	Clinton	CWF	None
Harveys Run	Basin, Source to Castanea Reservoir Water Supply Intake	Clinton	HQ-CWF	None
Harveys Run	Basin, Water Supply Intake to Mouth	Clinton	CWF	None
McElhattan Creek	Basin, Source to Keller Res. Water Supply Intake	Clinton	HQ-CWF	None
McElhattan Creek	Basin, Water Supply Intake to Mouth	Clinton	CWF	None
Chatham Run	Basin, Source to Chatham Water Co Intake	Clinton	HQ-CWF	None
Chatham Run	Basin, Water Supply Intake to Mouth	Clinton	CWF	Add Col.
Henry Run	Basin	Clinton	CWF	None
Pine Creek	Basin, Source to South Branch Pine Creek	Potter	HQ-CWF	None
South Branch Pine Creek	Basin	Potter	HQ-CWF	None
Pine Creek	Main Stem, South Branch Pine Creek to Marsh Creek	Tioga	TSF	None
Pine Creek	Main Stem, Marsh Creek to Mouth	Lycoming	HQ-TSF	None
Unnamed Tributaries to Pine Creek	Basins, South Branch Pine Creek to Mouth	Potter-Lycoming	HQ-CWF	None

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LIST L -- CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Johnson Brook	Basin, Source to State Gamelands No. 64 downstream boundary	Potter	EV	None
Johnson Brook	Basin, State Gamelands No. 64 downstream boundary to Mouth	Potter	HQ-CWF	None
Phoenix Run	Basin	Tioga	HQ-CWF	None
Elk Run	Basin	Tioga	CWF	None
Benaux Hollow	Basin	Tioga	HQ-CWF	None
Long Run	Basin	Tioga	CWF	None
Lick Run	Basin	Tioga	HQ-CWF	None
Shin Hollow	Basin	Tioga	HQ-CWF	None
Painter Run	Basin	Tioga	HQ-CWF	None
Steele Run Hollow	Basin	Tioga	HQ-CWF	None
Woodruff Hollow	Basin	Tioga	HQ-CWF	None
Schanbacher Hollow	Basin	Tioga	HQ-CWF	None
Bee Tree Hollow	Basin	Tioga	HQ-CWF	None
Harrington Hollow	Basin	Tioga	HQ-CWF	None
Marsh Creek	Main Stem, Source to Straight Run	Tioga	WWF	None
Marsh Creek	Main Stem, Straight Run to Mouth	Tioga	CWF	None
Unnamed Tributaries to Marsh Creek	Basins	Tioga	CWF	None
Charleston Creek	Basin	Tioga	WWF	None
Kelsey Creek	Basin	Tioga	WWF	None
Horse Thief Run	Basin	Tioga	CWF	None
Baldwin Run	Basin	Tioga	CWF	None
Hibard Hollow	Basin	Tioga	CWF	None
Fuller Hollow	Basin	Tioga	CWF	None
Wolf Run	Basin	Tioga	CWF	None
Heise Run	Basin	Tioga	CWF	None
Smith Run	Basin	Tioga	CWF	None
Gee Hollow	Basin	Tioga	CWF	None
Canada Run	Basin	Tioga	CWF	None
Dantz Run	Basin	Tioga	CWF	None
Straight Run	Basin	Tioga	HQ-CWF	None
Asaph Run	Basin	Tioga	HQ-CWF	None
Gray Hollow	Basin	Tioga	CWF	None
Kinney Hollow	Basin	Tioga	CWF	None
Sirap Mill Hollow	Basin	Tioga	HQ-CWF	None
Darling Run	Basin	Tioga	HQ-CWF	None
Owassee Slide Run	Basin	Tioga	HQ-CWF	None
Pinafore Run	Basin	Tioga	HQ-CWF	None
Bear Run	Basin	Tioga	HQ-CWF	None
Little Fourmile Run	Basin	Tioga	HQ-CWF	None
Fourmile Run	Basin	Tioga	HQ-CWF	None
Stowell Run	Basin	Tioga	HQ-CWF	None
Burdie Run	Basin	Tioga	HQ-CWF	None
Horse Run	Basin	Tioga	HQ-CWF	None
Tumbling Run	Basin	Tioga	HQ-CWF	None
Little Slate Run	Basin	Tioga	HQ-CWF	None
Ice Break Run	Basin	Tioga	HQ-CWF	None
Campbells Run	Basin	Tioga	HQ-CWF	None
Straight Creek	Basin	Tioga	HQ-CWF	None
Good Spring Hollow	Basin	Tioga	HQ-CWF	None
Rail Island Run	Basin	Tioga	HQ-CWF	None
Pine Island Run	Basin	Tioga	EV	None
Benjamin Hollow	Basin	Tioga	HQ-CWF	None
Dillon Hollow	Basin	Tioga	HQ-CWF	None
Clay Mine Run	Basin	Tioga	HQ-CWF	None
Water Tank Run	Basin	Tioga	HQ-CWF	None
Bohen Run	Basin	Tioga	HQ-CWF	None
Stone Quarry Run	Basin	Tioga	HQ-CWF	None
Jerry Run	Basin	Tioga	HQ-CWF	None
Babb Creek	Main Stem	Tioga	CWF	None
Unnamed Tributaries to Babb Creek	Basins	Tioga	CWF	None
Sand Run	Basin	Tioga	CWF	None

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LIST L — CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Lick Creek	Basin	Tioga	CWF	None
Nickel Run	Basin	Tioga	EV	None
Rock Run	Basin	Tioga	CWF	None
Long Run	Basin, Source to Custard Run	Tioga	EV	None
Custard Run	Basin	Tioga	CWF	None
Long Run	Basin, Custard Run to Mouth	Tioga	CWF	None
Wilson Creek	Basin	Tioga	CWF	None
Harrison Run	Basin	Tioga	CWF	None
McCloskey Hollow	Basin	Tioga	CWF	None
Brooks Hill Hollow	Basin	Tioga	CWF	None
Stony Fork	Basin	Tioga	CWF	None
Dixie Run	Basin	Tioga	CWF	None
Ayers Hollow	Basin	Tioga	CWF	None
Windfall Hollow	Basin	Tioga	CWF	None
Big Run	Basin	Tioga	HQ-CWF	None
Schoolhouse Run	Basin	Lycoming	HQ-CWF	None
Lloyd Run	Basin	Lycoming	HQ-CWF	None
Woodhouse Run	Basin	Lycoming	HQ-CWF	None
Bull Run	Basin	Lycoming	HQ-CWF	None
Trout Run	Basin	Lycoming	HQ-CWF	None
Cedar Run	Basin	Lycoming	HQ-CWF	None
Jacobs Run	Basin	Lycoming	HQ-CWF	None
Gamble Run	Basin	Lycoming	HQ-CWF	None
Elk Run	Basin	Lycoming	HQ-CWF	None
Hilborn Run	Basin	Lycoming	HQ-CWF	None
Slate Run	Main Stem	Lycoming	HQ-CWF	None
Unnamed Tributaries to Slate Run	Basins	Lycoming	HQ-CWF	None
Francis Branch Slate Run	Basin	Tioga	HQ-CWF	None
Cushman Branch Slate Run	Basin, Source to Bear Run	Tioga	EV	None
Bear Run	Basin	Tioga	HQ-CWF	None
Cushman Branch Slate Run	Basin, Bear Run to Mouth	Tioga	HQ-CWF	None
Big Dam Hollow	Basin	Lycoming	HQ-CWF	None
Morris Run	Basin	Lycoming	HQ-CWF	None
Red Run	Basin	Lycoming	HQ-CWF	None
Manor Fork	Basin	Lycoming	HQ-CWF	None
Putt Hollow	Basin	Lycoming	HQ-CWF	None
Little Slate Run	Basin	Lycoming	HQ-CWF	None
Naval Run	Basin	Lycoming	HQ-CWF	None
Callahan Run	Basin	Lycoming	HQ-CWF	None
Bonnell Run	Basin	Lycoming	HQ-CWF	None
Wolf Run	Basin	Lycoming	HQ-CWF	None
Ross Run	Basin	Lycoming	HQ-CWF	None
Mill Run	Basin, Source to Bull Run	Lycoming	EV	None
Bull Run	Basin	Lycoming	HQ-CWF	None
Mill Run	Basin, Bull Run to Mouth	Lycoming	HQ-CWF	None
Trout Run	Basin	Lycoming	HQ-CWF	None
Miller Run	Basin	Lycoming	HQ-CWF	None
Truman Run	Basin	Lycoming	HQ-CWF	None
Bluestone Run	Basin	Lycoming	HQ-CWF	None
Solomon Run	Basin	Lycoming	HQ-CWF	None
Shanty Run	Basin	Lycoming	HQ-CWF	None
McClure Run	Basin	Lycoming	HQ-CWF	None
Callahan Run	Basin	Lycoming	HQ-CWF	None
Browns Run	Basin	Lycoming	HQ-CWF	None
Dry Run	Basin	Lycoming	HQ-CWF	None

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LIST L - CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Upper Pine Bottom Run	Basin	Lycoming	HQ-CWF	None
Lower Pine Bottom Run	Basin	Lycoming	HQ-CWF	None
Bull Run	Basin	Lycoming	HQ-CWF	None
Little Pine Creek	Main Stem, Source to Little Pine Creek Dam	Lycoming	CWF	None
Little Pine Creek	Main Stem, Little Pine Creek Dam to Mouth	Lycoming	TSF	None
Unnamed Tributaries to Little Pine Creek	Basins	Tioga-Lycoming	HQ-CWF	None
Texas Creek (Zimmerman Creek)	Basin	Lycoming	HQ-CWF	None
Blockhouse Creek	Basin	Lycoming	CWF	None
Bear Run	Basin	Lycoming	HQ-CWF	None
Bonnell Run	Basin	Lycoming	HQ-CWF	None
Lick Run	Basin	Lycoming	HQ-CWF	None
English Run	Basin	Lycoming	CWF	None
Coal Run	Basin	Lycoming	HQ-CWF	None
Rogers Run	Basin	Lycoming	HQ-CWF	None
Otter Run	Basin	Lycoming	CWF	None
Carsons Run	Basin	Lycoming	HQ-CWF	None
McKees Run	Basin	Lycoming	HQ-CWF	None
Panther Run	Basin	Lycoming	HQ-CWF	None
Naval Run	Basin	Lycoming	HQ-CWF	None
Love Run	Basin	Lycoming	HQ-CWF	None
English Run	Basin	Lycoming	HQ-CWF	None
Boone Run	Basin	Lycoming	HQ-CWF	None
Dam Run	Basin	Lycoming	HQ-CWF	None
Ramsey Run	Basin	Lycoming	HQ-CWF	None
Bonnell Run	Basin	Lycoming	HQ-CWF	None
Tombs Run	Basin	Lycoming	HQ-CWF	None
Gamble Run	Basin	Lycoming	HQ-CWF	None
Furnace Run	Basin	Lycoming	HQ-CWF	None
Sulphur Run	Basin	Clinton	HQ-CWF	None
Nichols Run	Basin	Lycoming	HQ-CWF	None
Unnamed Tributaries to North Bank West Branch Susquehanna River	Basins, Pine Creek to Loyalsock Creek	Lycoming	WWF	None
Unnamed Tributaries to South Bank West Branch Susquehanna River	Basins, Pine Creek to Loyalsock Creek	Lycoming	CWF	None
Aughanbaugh Run	Basin	Lycoming	CWF	None
Antes Creek	Basin	Lycoming	CWF	None
Stewards Run	Basin	Lycoming	WWF	None
Larrys Creek	Basin, Source to Second Fork	Lycoming	HQ-CWF	None
Second Fork Larrys Creek	Basin	Lycoming	HQ-CWF	None
Larrys Creek	Basin, Second Fork to Mouth (except First Fork)	Lycoming	WWF	None
First Fork Larrys Creek	Basin	Lycoming	HQ-CWF	None
Big Run	Basin	Lycoming	CWF	None
Pine Run	Basin	Lycoming	WWF	None
Quenshukeny Run	Basin	Lycoming	WWF	None
Bender Run	Basin	Lycoming	CWF	None
Daugherty Run	Basin	Lycoming	WWF	None
Mosquito Creek	Basin	Lycoming	CWF	None
Lycoming Creek	Main Stem, Source to Long Run	Lycoming	CWF	None
Unnamed Tributaries to Lycoming Creek	Basins, Source to Long Run	Lycoming	HQ-CWF	None

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LIST L—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Cascade Run	Basin	Lycoming	HQ-CWF	None
Sugar Works Run	Basin	Tioga	HQ-CWF	None
Mill Creek	Basin	Tioga	HQ-CWF	None
Roaring Brook	Basin	Tioga	HQ-CWF	None
Abbott Run	Basin	Lycoming	HQ-CWF	None
Red Run	Basin	Lycoming	CWF	None
Rock Run	Basin	Lycoming	HQ-CWF	None
Frozen Run	Basin	Lycoming	HQ-CWF	None
Heylman Run	Basin	Lycoming	HQ-CWF	None
Pleasant Stream	Basin	Lycoming	HQ-CWF	None
Slacks Run	Basin	Lycoming	HQ-CWF	None
Shoemakers Run	Basin	Lycoming	HQ-CWF	None
Grays Run	Basin	Lycoming	HQ-CWF	None
Hagermans Run	Basin	Lycoming	HQ-CWF	None
Glendene Run	Basin	Lycoming	HQ-CWF	None
Trout Run	Basin	Lycoming	HQ-CWF	None
Wolf Run	Basin	Lycoming	HQ-CWF	None
Daugherty Run	Basin	Lycoming	HQ-CWF	None
Hoagland Run	Basin	Lycoming	HQ-CWF	None
Long Run	Basin	Lycoming	HQ-CWF	None
Lycoming Creek	Basin, Long Run to Mouth	Lycoming	WWF	None
Graffius Run	Basin	Lycoming	WWF	None
Hagermans Run	Basin	Lycoming	CWF	None
Millers Run	Basin	Lycoming	WWF	None
Loyalsock Creek	Main Stem, Source to Lycoming-Sullivan County Line	Lycoming	CWF	None
Loyalsock Creek	Main Stem, Lycoming-Sullivan County Line to Mouth	Lycoming	TSF	None
Unnamed Tributaries to Loyalsock Creek	Basins, Source to Little Loyalsock Creek	Sullivan	CWF	None
Cold Run	Basin	Sullivan	CWF	None
Santee Creek	Basin	Sullivan	CWF	None
Long Run	Basin	Sullivan	CWF	None
Pigeon Creek	Basin	Sullivan	CWF	None
Lopez Creek	Basin	Sullivan	CWF	None
Bierman Run	Basin	Sullivan	CWF	None
Ellis Creek	Basin	Sullivan	CWF	None
Glass Creek	Basin	Sullivan	CWF	None
Floodwood Creek	Basin	Sullivan	CWF	None
Birch Creek	Basin	Sullivan	CWF	None
Dutchman Run	Basin	Sullivan	CWF	None
Mill Run	Basin	Sullivan	CWF	None
Bear Run	Basin	Sullivan	CWF	None
Mill Creek	Basin	Sullivan	CWF	None
Coal Run	Basin	Sullivan	CWF	None
Pole Bridge Run	Basin	Sullivan	HQ-CWF	None
Shanerburg Run	Basin, Source to end of Jeep Trail, 1.5 Miles from Mouth	Sullivan	EV	None
Shanerburg Run	Basin, Jeep Trail to Mouth	Sullivan	HQ-CWF	None
Tamarack Run	Basin	Sullivan	HQ-CWF	None
Big Run	Basin	Sullivan	HQ-CWF	None
Double Run	Basin	Sullivan	CWF	None
High Rock Run	Basin	Sullivan	CWF	None
Little Loyalsock Creek	Basin	Sullivan	CWF	None
Unnamed Tributaries to Loyalsock Creek	Basins, Little Loyalsock Creek to PA Rte 973 Bridge	Sullivan	HQ-CWF	None

LIST L—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Scar Run	Basin	Sullivan	HQ-CWF	None
Ketchum Run	Basin	Sullivan	EV	None
Cape Run	Basin	Sullivan	HQ-CWF	None
Barkshed Run	Basin	Sullivan	HQ-CWF	None
Joes Run	Basin	Sullivan	HQ-CWF	None
Elk Creek	Basin	Sullivan	HQ-CWF	None
Slab Run	Basin	Sullivan	HQ-CWF	None
Mill Creek	Basin	Sullivan	HQ-CWF	None
Huckle Run	Basin	Sullivan	HQ-CWF	None
Dry Run	Basin	Sullivan	HQ-CWF	None
Kettle Creek ^A	Basin, Source to Ogdonia Creek	Sullivan	EV	None
Ogdonia Creek	Basin	Sullivan	HQ-CWF	None
Kettle Creek	Basin, Ogdonia Creek to Mouth	Sullivan	HQ-CWF	None
Plunketts Creek	Main Stem	Lycoming	HQ-CWF	None
Unnamed Tributaries to Plunketts Creek	Basins	Lycoming	HQ-CWF	None
Reibsan Run	Basin	Lycoming	HQ-CWF	None
Mock Creek	Basin	Lycoming	HQ-CWF	None
Wolf Run	Basin, Source to Noon Branch	Lycoming	HQ-CWF	None
Noon Branch Wolf Run	Basin	Lycoming	EV	None
Wolf Run	Basin, Noon Branch to Mouth	Lycoming	HQ-CWF	None
King Run	Basin, Source to Engle Run	Lycoming	HQ-CWF	None
Engle Run	Basin	Lycoming	EV	None
King Run	Basin, Engle Run to Mouth	Lycoming	HQ-CWF	None
Dry Run	Basin	Lycoming	HQ-CWF	None
Bear Creek	Basin	Lycoming	HQ-CWF	None
Little Bear Creek	Basin	Lycoming	HQ-CWF	None
Dry Run	Basin	Lycoming	HQ-CWF	None
Butternut Grove Run	Basin	Lycoming	HQ-CWF	None
Wallis Run	Basin	Lycoming	HQ-CWF	None
Unnamed Tributaries to Loyalsock Creek	Basins, PA Rte 973 Bridge to Mouth	Lycoming	TSF	None
Mill Creek (West)	Basin	Lycoming	TSF	None
Mill Creek (East)	Basin	Lycoming	TSF	None
Unnamed Tributaries to West Branch Susquehanna River	Basins, Loyalsock Creek to Mouth	Lycoming-Northumberland-Union	WWF	None
Tules Run	Basin	Lycoming	WWF	None
Turkeys Run	Basin	Lycoming	WWF	None
Carpenters Run	Basin	Lycoming	WWF	None
Muncy Creek	Main Stem, Source to US Rte 220 Bridge at Muncy Valley	Sullivan	CWF	None
Muncy Creek	Main Stem, US Rte 220 Bridge at Muncy Valley to Mouth	Lycoming	TSF	None
Unnamed Tributaries to Muncy Creek	Basins, Source to Laurel Run	Sullivan-Lycoming	HQ-CWF	None
Unnamed Tributaries to Muncy Creek	Basins, Laurel Run to Mouth	Lycoming	CWF	None
Lopez Pond Brook	Basin	Sullivan	HQ-CWF	None
South Brook	Basin	Sullivan	HQ-CWF	None
Rock Run	Basin	Sullivan	HQ-CWF	None
Tublick Run	Basin	Sullivan	HQ-CWF	None
Peters Creek	Basin	Sullivan	HQ-CWF	None
Big Run	Basin	Sullivan	HQ-CWF	None

LIST L--CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Cherry Run	Basin	Sullivan	HQ-CWF	None
Elklick Run	Basin	Sullivan	EV	None
Long Brook	Basin	Sullivan	HQ-CWF	None
Slip Run	Basin	Sullivan	HQ-CWF	None
Big Run	Basin	Sullivan	HQ-CWF	None
The Outlet	Basin	Sullivan	HQ-CWF	None
Trout Run	Basin	Lycoming	HQ-CWF	None
Spring Run	Basin	Lycoming	HQ-CWF	None
Rock Run	Basin	Lycoming	HQ-CWF	None
Lick Run	Basin	Lycoming	HQ-CWF	None
Big Run	Basin	Lycoming	HQ-CWF	None
Roaring Run	Basin	Lycoming	HQ-CWF	None
Laurel Run	Basin	Lycoming	HQ-CWF	None
Pine Run	Basin	Lycoming	CWF	None
Gregs Run	Basin	Lycoming	CWF	None
Sugar Run	Basin	Lycoming	CWF	None
Little Muncy Creek	Basin	Lycoming	CWF	None
Wolf Run	Basin	Lycoming	CWF	None
Glade Run	Basin	Lycoming	WWF	None
Turkey Run	Basin	Lycoming	WWF	None
Black Hole Creek	Basin	Lycoming	TSF	None
Black Run	Basin	Lycoming	WWF	None
White Deer Hole Creek	Basin, Source to Spring Creek	Union	HQ-CWF	None
Spring Creek	Basin	Union	TSF	None
White Deer Hole Creek	Basin, Spring Creek to Mouth	Union	TSF	None
Delaware Run	Basin	Northumberland	WWF	None
Dry Run	Basin	Northumberland	WWF	None
Spring Run	Basin	Northumberland	WWF	None
White Deer Creek	Basin	Union	HQ-CWF	None
Warrior Run	Basin	Northumberland	WWF	None
Muddy Run	Basin	Northumberland	WWF	None
Limestone Run	Basin	Northumberland	WWF	None
Buffalo Creek	Basin, Source to LR 59042 Bridge	Union	HQ-CWF	None
Buffalo Creek	Main Stem, LR 59042 to Rapid Run	Union	CWF	None
Buffalo Creek	Main Stem, Rapid Run to Mouth	Union	TSF	None
Unnamed Tributaries to Buffalo Creek	Basins, LR 59042 Bridge to Mouth	Union	CWF	None
North Branch Buffalo Creek	Basin, Source to Mifflinburg Water Supply Dam	Union	EV	None
North Branch Buffalo Creek	Basin, Water Supply Dam to Mouth	Union	HQ-CWF	None
Rapid Run	Basin	Union	HQ-CWF	None
Stony Run	Basin	Union	HQ-CWF	None
Beaver Run	Basin	Union	CWF	None
Spruce Run	Basin	Union	HQ-CWF	None
Little Buffalo Creek	Basin	Union	CWF	None
Limestone Run	Basin	Union	WWF	None
Chillisquaque Creek	Basin	Montour-Northumberland	WWF	None
Turtle Creek	Basin	Union	WWF	None
Winfield Creek	Basin	Union	WWF	None

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DRAINAGE LIST M

Susquehanna River Basin in Pennsylvania
Susquehanna River

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Susquehanna River	Main Stem, West Branch Susquehanna River to Juniata River	Perry	WWF	Add Mn
Unnamed Tributaries to Susquehanna River	Basins, West Branch Susquehanna River to Juniata River	Northumberland- Perry	WWF	None
Shamokin Creek	Main Stem	Northumberland	WWF	None
Unnamed Tributaries to Shamokin Creek	Basins	Northumberland- Columbia	CWF	None
North Branch	Basin	Northumberland	CWF	None
Locust Creek	Basin	Northumberland	CWF	None
Quaker Run	Basin	Northumberland	CWF	None
Buck Run	Basin	Northumberland	CWF	None
Coal Run	Basin	Northumberland	CWF	None
Carbon Run	Basin	Northumberland	CWF	None
Furnace Run	Basin	Northumberland	CWF	None
Trout Run	Basin	Northumberland	CWF	None
Buddys Run	Basin	Northumberland	CWF	None
Millers Run	Basin	Northumberland	CWF	None
Lica Creek	Basin	Northumberland	CWF	None
Little Shamokin Creek	Basin	Northumberland	CWF	None
Rolling Green Run	Basin	Snyder	WWF	None
Seaholtz Run	Basin	Northumberland	WWF	None
Hallowing Run	Basin	Northumberland	WWF	None
Boile Run	Basin	Northumberland	WWF	None
Penns Creek	Basin, Source to Elk Creek	Centre	CWF	None
Elk Creek	Main Stem	Centre	CWF	None
Unnamed Tributaries to Elk Creek	Basins	Centre	CWF	None
Railroad Creek	Basin	Centre	CWF	None
Phillips Creek	Basin	Centre	HQ-CWF	None
Pine Creek	Basin, Source to Voneida Run	Centre	HQ-CWF	None
Voneida Run	Basin	Centre	HQ-CWF	None
Pine Creek	Basin, Voneida Run to Mouth	Centre	CWF	None
Penns Creek	Basin, Elk Creek to Cherry Run	Union	HQ-CWF	None
Cherry Run	Basin	Union	EV	None
Penns Creek	Basins, Cherry Run to Laurel Run near Laurelton	Union-Snyder- Mifflin	HQ-CWF	None
Laurel Run	Basin	Union	CWF	None
Penns Creek	Main Stem, Laurel Run to Mouth	Snyder	WWF	None
Unnamed Tributaries to Penns Creek	Basins, Laurel Run to RM 26.50	Union	CWF	None
Furnace Run	Basin	Northumberland	CWF	None
Unnamed Tributary to Penns Creek at RM 26.50	Basin	Union	TSF	None
Unnamed Tributaries to Penns Creek	Basins, RM 26.50 to RM 24.95	Union	CWF	None
Cold Run	Basin	Union	TSF	None
Unnamed Tributary to Penns Creek at RM 24.95	Basin	Union	TSF	None
Unnamed Tributaries to Penns Creek	Basins, RM 24.95 to Mouth	Union-Snyder	CWF	None
Dry Run	Basin	Snyder	CWF	None
Sweitzers Run	Basin	Union	CWF	None
Tuscarora Creek	Basin	Snyder	CWF	None
Monongahela Creek	Basin	Snyder	CWF	None
Middle Creek	Main Stem	Snyder	TSF	None
Unnamed Tributaries to Middle Creek	Basins	Snyder	CWF	None
Kreb Gap Run	Basin	Snyder	HQ-CWF	None
Ulsh Gap Run	Basin	Snyder	HQ-CWF	None

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LIST M - CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
South Branch Middle Creek	Main Stem	Snyder	TSF	None
Unnamed Tributaries to South Branch Middle Creek	Basins	Snyder	CWF	None
Beaver Creek	Basin	Snyder	CWF	None
North Branch Middle Creek	Main Stem	Snyder	TSF	None
Unnamed Tributaries to North Branch Middle Creek	Basins	Snyder	CWF	None
Moyers Mill Run	Basin	Snyder	CWF	None
Swift Run	Basin	Snyder	HQ-CWF	None
Stony Run	Basin	Snyder	CWF	None
Kern Run	Basin	Snyder	CWF	None
Bowersox Run	Basin, Source to FAS 690	Snyder	HQ-CWF	None
Erb Run	Basin, Source to FAS 690	Snyder	HQ-CWF	None
Susquehocka Creek (Freeburg Run)	Basin	Snyder	CWF	None
Mahanoy Creek	Main Stem	Northumberland	WWF	None
Unnamed Tributaries to Mahanoy Creek	Basins	Northumberland	CWF	None
North Mahanoy Creek	Basin	Schuylkill	CWF	None
Sbenadoah Creek	Basin	Schuylkill	CWF	None
Little Mahanoy Creek	Basin	Schuylkill	CWF	None
Crab Run	Basin	Schuylkill	CWF	None
Zerbe Run	Basin	Schuylkill	CWF	None
Schwaben Creek	Basin	Northumberland	TSF	None
Fidlers Run	Basin	Northumberland	WWF	None
Silver Run	Basin	Snyder	WWF	None
Harrold Run	Basin	Snyder	WWF	None
Chapman Creek	Basin	Snyder	WWF	None
Independence Run	Basin	Snyder	WWF	None
Dalmatia Creek	Basin	Northumberland	WWF	None
Hoffer Creek	Basin	Snyder	WWF	None
Susquehanna River				
Mahantango Creek				
North Branch Mahantango Creek	Main Stem, Source to Confluence with West Branch	Snyder	TSF	None
Unnamed Tributaries to North Branch Mahantango Creek	Basins	Snyder	CWF	None
Aline Creek	Basin	Snyder	CWF	None
West Branch Mahantango Creek	Main Stem, Source to Confluence with North Branch	Snyder	TSF	None
Unnamed Tributaries to West Branch Mahantango Creek	Basins	Snyder	CWF	None
Quaker Run	Basin	Juniata	CWF	None
Leiningers Run	Basin	Juniata	CWF	None
Dobson Run	Basin	Snyder	CWF	None
Mahantango Creek	Basin, Confluence of North and West Branches to Mouth	Snyder	WWF	None
Boyers Run	Basin	Perry	WWF	None
Mahantango Creek	Basin, Source to Pine Creek	Schuylkill-Northumberland	CWF	None
Pine Creek	Basin	Schuylkill	CWF	None
Mahantango Creek	Basin, Pine Creek to Mouth	Dauphin-Northumberland	WWF	None

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LIST M — CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Bargers Run	Basin	Perry	WWF	None
Wiconisco Creek	Main Stem	Dauphin	WWF	None
Unnamed Tributaries to Wiconisco Creek	Basins, Source to US Rte 209 Bridge at Loyalton	Dauphin	CWF	None
Bear Creek	Basin	Dauphin	CWF	None
Rattling Creek	Basin	Dauphin	HQ-CWF	None
Unnamed Tributaries to Wiconisco Creek	Basins, US Rte 209 Bridge at Loyalton to Mouth of Wiconisco Creek	Dauphin	WWF	None
Little Wiconisco Creek	Basin	Dauphin	WWF	None
Hunters Run	Basin	Perry	WWF	None
Bucks Run	Basin	Perry	WWF	None
Gurdy Run	Basin	Dauphin	WWF	None
Armstrong Creek	Basin, Source to LR 22028 Bridge	Dauphin	CWF	None
Armstrong Creek	Basin, LR 22028 Bridge to Mouth	Dauphin	TSF	None
Buffalo Creek	Basin	Perry	WWF	None
Susquehanna River				
North Fork Powell Creek	Basin	Dauphin	CWF	None
South Fork Powell Creek	Basin	Dauphin	CWF	None
Powell Creek	Basin, Confluence of North and South Forks to Mouth	Dauphin	TSF	None

DRAINAGE LIST N

Susquehanna River Basin in Pennsylvania
Juniata River

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Susquehanna River				
Juniata River				
Frankstown Branch Juniata River	Basin, Source to Source Poplar Run	Blair	CWF	None
Frankstown Branch Juniata River	Main Stem, South to Poplar Run to Halter Creek	Blair	TSF	None
Frankstown Branch Juniata River	Main Stem, Halter Creek to Piney Creek	Blair	WWF	Add Col.
Frankstown Branch Juniata River	Main Stem, Piney Creek to US Rte 22 Bridge	Blair	TSF	Add Col.
Frankstown Branch Juniata River	Main Stem, US Rte 22 Bridge to Mouth	Huntingdon	WWF	Add Col.
Unnamed Tributaries to Frankstown Branch Juniata River	Basins, South Poplar Run to Mouth	Blair-Huntingdon	WWF	None
Beaverdam Creek	Basin	Blair	CWF	None
Pine Run	Basin	Blair	WWF	None
South Poplar Run	Basin	Blair	CWF	None
Polecat Run	Basin	Blair	WWF	None
Pawpaw Run	Basin	Blair	WWF	None
South Dry Run	Basin	Blair	WWF	None
McDonald Run	Basin	Blair	WWF	None
Halter Creek	Basin	Blair	WWF	Add Col.
Poplar Run	Basin	Blair	CWF	None

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LIST N -- CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Old Town Run	Basin	Blair	WWF	None
Beaverdam Branch	Main Stem, Source to PA Rte 36 Bridge	Blair	TSF	None
Unnamed Tributaries to Beaverdam Branch	Basins	Blair	WWF	None
Burgoon Run	Main Stem	Blair	TSF	None
Unnamed Tributaries to Burgoon Run	Basins	Blair	WWF	None
Glenwhite Run	Basin	Blair	CWF	None
Kittanning Run	Basin	Blair	CWF	None
Scotch Gap Run	Basin	Blair	WWF	None
Mill Run	Basin, Source to Allegheny Reservoir	Blair	HQ-CWF	None
Mill Run	Basin, Allegheny Reservoir to Mouth	Blair	WWF	None
Sugar Run	Basin	Blair	CWF	None
Spencer Run	Basin	Blair	WWF	None
Blair Gap Run	Basin, Source to Altoona Municipal Water Authority's Reservoirs	Blair	CWF	None
Blair Gap Run	Main Stem and Unnamed Tributaries, Altoona Municipal Water Authority's Reservoirs to Mouth.	Blair	TSF	None
Dry Run	Basin	Blair	WWF	None
Gillans Run	Basin	Blair	CWF	None
Brush Run	Basin	Blair	WWF	None
Beaverdam Branch	Basin, PA Rte 36 Bridge to Mouth	Blair	WWF	None
Brush Creek	Basin	Blair	WWF	None
Robinson Run	Basin	Blair	WWF	None
Canoe Creek	Basin	Blair	HQ-CWF	None
Township Run	Basin	Blair	WWF	None
Piney Creek	Basin	Blair	HQ-CWF	None
Clover Creek	Basin	Blair	HQ-CWF	None
Schmucker Run	Basin	Blair	WWF	None
Yellow Spring Run	Basin	Blair	WWF	None
Roaring Run	Basin	Blair	WWF	None
Fox Run	Basin	Blair-Huntingdon	WWF	None
Robinson Run	Basin	Huntingdon	WWF	None
Little Juniata River	Main Stem, Source to South Bald Eagle Creek	Huntingdon	TSF	None
Little Juniata River	Main Stem, South Bald Eagle Creek to Spruce Creek	Huntingdon	TSF	Add Col,
Little Juniata River	Main Stem, Spruce Creek to Mouth	Huntingdon	CWF	Add Col,
Unnamed Tributaries to Little Juniata River	Basins, Source to Mouth	Blair-Huntingdon	WWF	None
Spring Run	Basin	Blair	WWF	None
Kettle Creek	Basin	Blair	WWF	None
Homer Gap Run	Basin	Blair	WWF	None
Sandy Run	Basin	Blair	CWF	None
Riggles Gap Run	Basin	Blair	CWF	None
Sugar Run	Basin	Blair	WWF	None
Bells Gap Run	Basin	Blair	TSF	None
Tipton Run	Basin	Blair	HQ-CWF	None
Hutchinson Run	Basin	Blair	WWF	None
Schell Run	Basin	Blair	WWF	None
South Bald Eagle Creek	Main Stem	Blair	TSF	None

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LIST N — CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Unnamed Tributaries to South Bald Eagle Creek	Basins	Blair	TSF	None
Big Fill Run	Basin, Source to Blair County Line	Blair	HQ-CWF	None
Big Fill Run	Basin, Blair County Line to Mouth	Blair	CWF	None
Vanscoyoc Run	Basin	Blair	CWF	None
Decker Run	Basin	Blair	TSF	None
Laurel Run	Basin	Blair	TSF	None
Sink Run	Basin	Blair	TSF	None
Logan Spring Run	Basin	Huntingdon	WWF	None
Elk Run	Basin	Blair	WWF	None
Gensimore Run	Basin	Huntingdon	WWF	None
Sinking Run	Basin	Huntingdon	CWF	None
Spruce Creek	Basin	Huntingdon	HQ-CWF	None
McLain Run	Basin	Huntingdon	WWF	None
Juniata River	Main Stem	Perry	WWF	None
Unnamed Tributaries to Juniata River	Basins, Frankstown Branch to Raystown Branch	Huntingdon	WWF	None
Unnamed Tributaries to Juniata River	Basins, Raystown Branch to Kishacoquillas Creek	Huntingdon-Mifflin	HQ-CWF	None
Unnamed Tributaries to Juniata River	Basins, Kishacoquillas Creek to Little Buffalo Creek	Mifflin-Perry	CWF	None
Unnamed Tributaries to Juniata River	Basin, Little Buffalo Creek to Mouth	Perry	WWF	None
Shaver Creek	Basin	Huntingdon	HQ-CWF	None
Standing Stone Creek	Basin	Huntingdon	HQ-CWF	None
Crooked Creek	Basin	Huntingdon	WWF	None
Snyders Run	Basin	Huntingdon	WWF	None
Raystown Branch Juniata River	Basin, Source to Somerset-Bedford County Line	Bedford-Somerset	CWF	None
Raystown Branch Juniata River	Main Stem, Somerset-Bedford County Line to Huntingdon-Bedford County Line	Huntingdon-Bedford	TSF	None
Raystown Branch Juniata River	Main Stem, Huntingdon-Bedford County Line to Mouth	Huntingdon	WWF	None
Unnamed Tributaries to Raystown Branch Juniata River	Basins, Somerset-Bedford County Line to Huntingdon-Bedford County Line	Bedford-Huntingdon	WWF	None
Unnamed Tributaries to Raystown Branch Juniata River	Basins, Huntingdon-Bedford County Line to Mouth	Huntingdon	WWF	None
Breastwork Run	Basin	Somerset	HQ-CWF	None
Spicer Brook	Basin	Bedford	WWF	None
Shawnee Branch	Basin	Bedford	WWF	None
Buffalo Run	Basin	Bedford	WWF	None
Cumberland Valley Run	Basin	Bedford	WWF	None
Shobers Run	Basin	Bedford	HQ-CWF	None
Dunning Creek	Main Stem	Bedford	WWF	None
Unnamed Tributaries to Dunning Creek	Basins	Bedford	WWF	None
Rocklick Creek	Basin	Bedford	WWF	None
Bearfoot Run	Basin	Bedford	WWF	None
Georges Creek	Basin	Bedford	WWF	None
Bobs Creek	Basin	Bedford	CWF	None

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LIST N -- CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Adams Run	Basin	Bedford	WWF	None
Oppenheimer Run	Basin	Bedford	WWF	None
Brush Run	Basin	Bedford	WWF	None
Imbertown Run	Basin	Bedford	TSF	None
Pleasant Valley Run	Basin	Bedford	CWF	None
Cove Creek	Basin	Bedford	CWF	None
Snakespring Valley Run	Basin	Bedford	WWF	None
Clear Creek	Basin	Bedford	TSF	None
Greys Run	Basin	Bedford	WWF	None
Brush Creek	Basin, Source to Bedford County Border	Bedford	HQ-CWF	None
Brush Creek	Basin, Bedford County Border to Mouth	Bedford	WWF	None
Tub Mill Run	Basin	Bedford	WWF	None
French Run	Basin	Bedford	WWF	None
Sherman Valley Run	Basin	Bedford	CWF	None
Pipers Run	Basin	Bedford	WWF	None
Sandy Run	Basin	Bedford	WWF	None
Yellow Creek	Basin	Bedford	HQ-CWF	None
Sixmile Run	Basin	Bedford	WWF	None
Ravers Run	Basin	Bedford	TSF	None
Shoup Run	Basin	Bedford	WWF	None
Shy Beaver Creek	Basin	Huntingdon	WWF	None
Tatman Run	Basin	Huntingdon	WWF	None
Coffee Run	Basin	Huntingdon	WWF	None
Great Trough Creek	Basin	Huntingdon	TSF	None
James Creek	Basin	Huntingdon	WWF	None
Hawns Run	Basin	Huntingdon	WWF	None
Unnamed Tributaries to Juniata River	Basins, Raystown Branch to Kishacoquillas Creek	Huntingdon-Mifflin	HQ-CWF	None
Pike Run	Basin	Huntingdon	HQ-CWF	None
Sugar Grove Run	Basin	Huntingdon	HQ-CWF	None
Mill Creek	Basin	Huntingdon	TSF	None
Shaughnessy Run	Basin	Huntingdon	HQ-CWF	None
Smith Run	Basin	Huntingdon	TSF	None
Hares Valley Creek	Basin	Huntingdon	TSF	None
Scrub Run	Basin	Huntingdon	HQ-CWF	None
Deep Hollow Run	Basin	Huntingdon	HQ-CWF	None
Furnace Run	Basin	Mifflin	HQ-CWF	None
Hill Valley Creek	Basin	Huntingdon	HQ-CWF	None
Aughwick Creek	Main Stem	Huntingdon	TSF	None
Unnamed Tributaries to Aughwick Creek	Basins	Huntingdon	TSF	None
Sideling Hill Creek	Basin	Huntingdon	HQ-CWF	None
Little Aughwick Creek	Main Stem	Huntingdon	TSF	None
Unnamed Tributaries to Little Aughwick Creek	Basins	Huntingdon	TSF	None
North Branch Little Aughwick Creek	Basin	Fulton	HQ-CWF	None
South Branch Little Aughwick Creek	Basin	Fulton	HQ-CWF	None
Ninemile Run	Basin	Fulton	TSF	None
Plum Run	Basin	Fulton	TSF	None
Lick Run	Basin	Huntingdon	TSF	None
Three Springs Creek	Basin	Huntingdon	CWF	None
Blacklog Creek	Basin, Source to Shade Creek	Huntingdon	HQ-CWF	None
Blacklog Creek	Basin, Shade Creek to Mouth	Huntingdon	CWF	None
Shade Creek	Basin	Huntingdon	TSF	None
West Licking Creek	Basin	Huntingdon	HQ-CWF	None
Beaverdam Run	Basin	Mifflin	HQ-CWF	None
Wharton Run	Basin	Mifflin	HQ-CWF	None
Shanks Run	Basin	Mifflin	HQ-CWF	None

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LIST N — CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Musser Run	Basin	Mifflin	HQ-CWF	None
Town Run	Basin	Mifflin	HQ-CWF	None
Wakefield Run	Basin	Mifflin	HQ-CWF	None
Carlisle Run	Basin	Mifflin	HQ-CWF	None
Strodes Run	Basin	Mifflin	HQ-CWF	None
Minehart Run	Basin	Mifflin	HQ-CWF	None
Granville Run	Basin	Mifflin	HQ-CWF	None
Kishacoquillas Creek	Basin, Source to Tea Creek	Mifflin	CWF	None
Kishacoquillas Creek	Main Stem, Tea Creek to Mouth	Mifflin	TSF	None
Unnamed Tributaries to Kishacoquillas Creek	Basins, Tea Creek to Mouth	Mifflin	TSF	None
Tea Creek	Basin	Mifflin	CWF	None
Honey Creek	Basin, Source to Laurel Creek	Mifflin	HQ-CWF	None
Honey Creek	Basin, Laurel Creek to Mouth	Mifflin	CWF	None
Laurel Creek	Basin, Source to Laurel Creek Dam	Mifflin	HQ-CWF	None
Laurel Creek	Basin, Laurel Creek Dam to Mouth	Mifflin	CWF	None
Buck Run	Basin	Mifflin	TSF	None
Unnamed Tributaries to Juniata River	Basins, Kishacoquillas Creek to Little Buffalo Creek	Mifflin-Perry	CWF	None
Jacks Creek	Basin, Source to Meadow Creek	Mifflin	CWF	None
Meadow Creek	Basin	Mifflin	CWF	None
Jacks Creek	Basin, Meadow Creek to Mouth	Mifflin	TSF	None
Roaring Run	Basin	Juniata	CWF	None
Macedonia Run	Basin	Juniata	HQ-CWF	None
Muddy Run	Basin	Juniata	CWF	None
Horning Run	Basin	Juniata	CWF	None
Lost Creek	Basin, Source to Little Lost Creek	Juniata	CWF	None
Little Lost Creek	Basin	Juniata	TSF	None
Lost Creek	Basin, Little Lost Creek to Mouth	Juniata	TSF	None
Schweyer Run	Basin	Juniata	CWF	None
Tuscarora Creek	Basin, Source to East Licking Creek	Juniata	CWF	None
East Licking Creek	Basin, Source to Clearview Reservoir Water Supply Intake	Juniata	HQ-CWF	None
East Licking Creek	Basin, Water Supply Intake to Mouth	Juniata	CWF	None
Tuscarora Creek	Basin, East Licking Creek to Mouth	Juniata	CWF	None
Doe Run	Basin	Juniata	TSF	None
Locust Run	Basin	Juniata	CWF	None
Delaware Creek	Basin	Juniata	TSF	None
Raccoon Creek	Basin	Perry	CWF	None
Sugar Run	Basin	Juniata	CWF	None
Cocolamus Creek	Basin	Perry	TSF	None

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LIST N - CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Reiders Run	Basin	Perry	CWF	None
Wildcat Run	Basin	Perry	CWF	None
Buffalo Creek	Basin	Perry	HQ-CWF	None
Little Buffalo Creek	Basin, Source to State Park Dam	Perry	HQ-CWF	None
Little Buffalo Creek	Basin, State Park Dam to Mouth	Perry	CWF	None
Unnamed Tributaries to Juniata River	Basins, Little Buffalo Creek to Mouth	Perry	WWF	None
Bailey Run	Basin	Perry	WWF	None
Howe Run	Basin	Perry	WWF	None
Board Run	Basin	Perry	WWF	None
White Run	Basin	Perry	WWF	None
Losh Run	Basin	Perry	WWF	None

DRAINAGE LIST O

Susquehanna River Basin in Pennsylvania
Susquehanna River

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Susquehanna River	Main Stem, Juniata River to PA-MD Border	York-Lancaster	WWF	Add Mn
Unnamed Tributaries to West Bank Susquehanna River	Basins, Juniata River to PA-MD Border	Perry-Cumberland-York	WWF	None
Unnamed Tributaries to East Bank Susquehanna River	Basins, Powell Creek to Conewago Creek	Dauphin-Lancaster	WWF	None
Unnamed Tributaries to East Bank Susquehanna River	Basins, Conewago Creek to Muddy Run	Lancaster	WWF	None
Unnamed Tributaries to East Bank Susquehanna River	Basins, Muddy Run to PA-MD Border	Lancaster	HQ-WWF	None
Little Juniata Creek	Basin	Perry	CWF	None
Sherman Creek	Basin, Source to Cisna Run Village	Perry	HQ-CWF	None
Sherman Creek	Main Stem, Cisna Run Village to Mouth	Perry	WWF	None
Unnamed Tributaries to Sherman Creek	Basins, Cisna Run Village to Mouth	Perry	WWF	None
Bixler Run	Basin	Perry	CWF	None
Muddy Run	Basin	Perry	WWF	None
Laurel Run	Basin	Perry	EV	None
North Branch Laurel Run	Basin	Perry	HQ-CWF	None
South Branch Laurel Run	Basin	Perry	HQ-CWF	None
Laurel Run	Basin, Confluence of North and South Branches to T-339	Perry	HQ-CWF	None
Laurel Run	Basin, T-339 to Mouth	Perry	CWF	None
Montour Creek	Basin	Perry	CWF	None
Baken Creek	Basin	Perry	CWF	None
McCabe Run	Basin	Perry	CWF	None
Green Valley Run	Basin	Perry	CWF	None
Perry Furnace Run	Basin	Perry	CWF	None
Pisgah Run	Basin	Perry	WWF	None
Fishing Run	Basin	Perry	WWF	None

LIST O - CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Dark Run	Basin	Perry	CWF	None
Cove Creek	Basin	Perry	CWF	None
Clark Creek	Basin	Dauphin	HQ-CWF	None
Stony Creek	Basin, Source to Ellendale Dam	Dauphin	HQ-CWF	None
Stony Creek	Basin, Ellendale Dam to Mouth	Dauphin	CWF	None
Susquehanna River				
Fishing Creek	Basin	Perry	CWF	None
Fishing Creek	Basin	Dauphin	WWF	None
Conodoguinet Creek	Basin, Source to Letterkenny Reservoir Dam	Franklin	HQ-CWF	None
Conodoguinet Creek	Basin, Letterkenny Reservoir Dam to Trout Run	Franklin	CWF	None
Trout Run	Basin, Source to Water Supply Dam	Franklin	EV	None
Conodoguinet Creek	Basin, Trout Run to PA Rte 997 at Roxbury Village	Franklin	CWF	None
Conodoguinet Creek	Main Stem, PA Rte 997 to Roxbury Village to Mouth	Cumberland	WWF	None
Unnamed Tributaries to Conodoguinet Creek	Basins, PA Rte 997 to Mouth	Cumberland	WWF	None
Muddy Run	Basin	Franklin	WWF	None
Keasey Run	Basin	Franklin	WWF	None
Rowe Run	Basin	Franklin	CWF	None
Middle Spring Creek	Basin	Franklin-Cumberland	CWF	None
Paxton Run	Basin	Cumberland	WWF	None
Newburg Run	Basin	Cumberland	WWF	None
Peebles Run	Basin	Cumberland	WWF	None
Three Square Hollow Run	Basin	Cumberland	WWF	None
Green Spring Creek	Basin	Cumberland	CWF	None
Brandy Run	Basin	Cumberland	CWF	None
Whisky Run	Basin	Cumberland	TSF	None
Back Creek	Basin	Cumberland	WWF	None
Doubling Gap Creek	Basin, Source to PA Rte 944	Cumberland	HQ-CWF	None
Doubling Gap Creek	Basin, PA Rte 944 to Mouth	Cumberland	CWF	None
Big Spring Creek	Basin	Cumberland	CWF	None
Rock Run	Basin	Cumberland	WWF	None
Bloser Creek	Basin	Cumberland	WWF	None
Locust Creek	Basin	Cumberland	WWF	None
Mount Rock Spring Creek	Basin	Cumberland	WWF	None
Opossum Creek	Basin, Source to PA Fish Commission Dam	Cumberland	HQ-TSF	None
Opossum Creek	Basin, PA Fish Commission Dam to Mouth	Cumberland	TSF	None
Alexanders Spring Creek	Basin	Cumberland	CWF	None
Meetinghouse Run	Basin	Cumberland	WWF	None
Wertz Run	Basin	Cumberland	WWF	None
Spring Run	Basin	Cumberland	WWF	None
Letort Spring Run	Basin, Source to Railroad Bridge at Letort Park	Cumberland	HQ-CWF	None
Susquehanna River				
Letort Spring Run	Basin, Railroad Bridge at Letort Park to Mouth	Cumberland	CWF	None

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LIST O — CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Simmons Creek	Basin	Cumberland	WWF	None
Hogestown Run	Basin	Cumberland	CWF	None
Trindle Spring Run	Basin	Cumberland	CWF	None
Paxton Creek	Basin	Dauphin	WWF	None
Spring Creek	Basin	Dauphin	WWF	None
Yellow Breeches Creek	Main Stem, Source to L.R. 21012	Cumberland-York	HQ-CWF	None
Unnamed Tributaries to Yellow Breeches Creek	Basins, Source to L.R. 21012	Cumberland	HQ-CWF	None
Yellow Breeches Creek	Main Stem, LR 21012 to Mouth	Dauphin-Cumberland-York	CWF	Delete DO, Add DO ₁
Unnamed Tributaries to Yellow Breeches Creek	Basin, LR 21012 to Mouth	Cumberland-York	CWF	None
Hairy Springs Hollow	Basin	Cumberland	HQ-CWF	None
Sithromes Hollow	Basin	Cumberland	HQ-CWF	None
Watery Hollow	Basin	Cumberland	HQ-CWF	None
Peach Orchard Hollow	Basin	Cumberland	HQ-CWF	None
Bettem Hollow	Basin	Cumberland	HQ-CWF	None
State Road Hollow	Basin	Cumberland	HQ-CWF	None
Irishtown Gap Hollow	Basin	Cumberland	HQ-CWF	None
Kings Gap Hollow	Basin	Cumberland	HQ-CWF	None
Spruce Run	Basin	Cumberland	HQ-CWF	None
Mountain Creek	Basin, Source to Toland	Cumberland	HQ-CWF	None
Mountain Creek	Basin, Toland to Mt. Holly Springs	Cumberland	CWF	None
Mountain Creek	Basin, Mt. Holly Springs to Mouth	Cumberland	TSF	None
Old Town Run	Basin	Cumberland	HQ-CWF	None
Dogwood Run	Basin	Cumberland	CWF	None
Stony Run	Basin	York	CWF	None
Pippins Run	Basin	York	CWF	None
Cedar Run	Basin	York	CWF	None
Marsh Run	Basin	York	WWF	None
Laurel Run	Basin	Dauphin	WWF	None
Swatara Creek	Basin, Source to Proposed Swatara Gap Dam	Lebanon	CWF	None
Swatara Creek	Main Stem, Proposed Swatara Gap Dam to Mouth	Dauphin	WWF	None
Unnamed Tributaries to Swatara Creek	Basins, Proposed Swatara Gap Dam to Mouth	Dauphin	WWF	None
Little Swatara Creek	Basin, Source to Berks-Lebanon County Border	Berks-Lebanon	CWF	None
Susquehanna River				
Little Swatara Creek	Basin, Berks-Lebanon County Line to Mouth	Lebanon	WWF	None
Quittapahilla Creek	Basin	Lebanon	TSF	None
Manada Creek	Basin, Source to Interstate 81	Dauphin	CWF	None
Manada Creek	Basin, Interstate 81 to Mouth	Dauphin	WWF	None
Spring Creek	Basin	Dauphin	WWF	None
Beaver Creek	Basin	Dauphin	WWF	None
Iron Run	Basin	Dauphin	WWF	None
Fishing Creek	Basin	York	TSF	None
Conewago Creek	Basin	Lancaster-Dauphin	TSF	None
West Conewago Creek	Basin, Source to Pleasant Dale Creek	Adams	HQ-CWF	None

LIST O - CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Pleasant Dale Creek	Basin	Adams	WWF	None
West Conewago Creek	Main Stem, Pleasant Dale Creek to Opossum Creek	Adams	CWF	None
West Conewago Creek	Main Stem, Opossum Creek to Adams-York County Border	Adams-York	WWF	None
Unnamed Tributaries to West Conewago Creek	Basins, Pleasant Dale Creek to Mouth	Adams-York	WWF	None
Opossum Creek	Basin	Adams	TSF	None
Beaverdam Creek	Basin	Adams	WWF	None
Plum Run	Basin	Adams	WWF	None
Swift Run	Basin	Adams	WWF	None
South Branch Conewago Creek	Main Stem, PA-MD State Border to Mouth	Adams	WWF	None
Unnamed Tributaries to South Branch Conewago Creek	Basins, PA-MD Border to Mouth	Adams	WWF	None
Long Arm Creek	Basin, PA-MD State Border to Mouth	Adams	WWF	None
Haldeman Quarries	Basin	Adams-York	CWF	None
Indian Run	Basin	Adams	WWF	None
Plum Creek	Basin	Adams	WWF	None
Pine Run	Basin	Adams	WWF	None
Market Run	Basin	Adams	WWF	None
Beaver Creek	Basin	Adams	WWF	None
Bermudian Creek	Main Stem	York	WWF	None
Unnamed Tributaries to Bermudian Creek	Basins	Adams-York	WWF	None
Gardner Run	Basin	Adams	WWF	None
Latimore Creek	Basin	Adams	CWF	None
North Branch Bermudian Creek	Basin	York	WWF	None
Mud Run	Basin	York	WWF	None
Doe Run	Basin	York	WWF	None
Red Run	Basin	York	WWF	None
Beaver Creek	Basin	York	WWF	None
Laurel Run	Basin	York	WWF	None
Bennett Run	Basin	York	WWF	None
Little Conewago Creek	Basin	York	TSF	None
Musser Run	Basin	York	WWF	None
Snitz Creek	Basin	Lancaster	WWF	None
Hartman Run	Basin	York	WWF	None
Conoy Creek	Basin	Lancaster	TSF	None
Codorus Creek	Basin, Source to West Branch Codorus Creek	York	WWF	None
Codorus Creek	Main Stem, West Branch Codorus Creek to Oil Creek	York	CWF	None
Codorus Creek	Main Stem, Oil Creek to Mouth	York	WWF	AddCol.
Unnamed Tributaries to Codorus Creek	Basins, West Branch Codorus to Mouth of Codorus Creek	York	WWF	None
South Branch Codorus Creek	Main Stem	York	WWF	None
Unnamed Tributaries to South Branch Codorus Creek	Basins	York	WWF	None
Trout Run	Basin	York	WWF	None
Foust Creek	Basin	York	WWF	None
Centerville Creek	Basin	York	WWF	None
Cherry Run	Basin	York	WWF	None
Fishel Creek	Basin	York	WWF	None
East Branch Codorus Creek	Basin, Source to PA Rte 214	York	HQ-CWF	None

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LIST O - CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
East Branch Codorus Creek	Basin, PA Rte 214 to Mouth	York	CWF	None
West Branch Codorus Creek	Basin	York	WWF	None
Porters Creek	Basin	York	WWF	None
Oil Creek	Basin	York	WWF	None
Bunch Creek	Basin	York	WWF	None
Stoverstown Branch	Basin	York	WWF	None
Willis Run	Basin	York	WWF	None
Mill Creek	Basin	York	WWF	None
Dee Run	Basin	York	WWF	None
Trout Run	Basin	York	WWF	None
Wildcat Run	Basin	York	WWF	None
Dugan Run	Basin	York	WWF	None
Chickies Creek	Main Stem	Lancaster	WWF	None
Unnamed Tributaries to Chickies Creek	Basins	Lancaster	WWF	None
Shearers Creek	Basin	Lancaster	HQ-CWF	None
Boyers Run	Basin	Lancaster	WWF	None
Rife Run	Basin	Lancaster	WWF	None
Dellinger Run	Basin	Lancaster	WWF	None
Little Chickies Creek	Basin	Lancaster	TSF	None
Donegal Creek	Main Stem	Lancaster	TSF	None
Unnamed Tributaries to Donegal Creek	Basins	Lancaster	CWF	None
Donegal Springs	Basin	Lancaster	HQ-CWF	None
Kreutz Creek	Basin	York	WWF	None
Shawnee Run	Basin	Lancaster	WWF	None
Strickler Run	Basin	Lancaster	WWF	None
Shumans Run	Basin	Lancaster	WWF	None
Stamans Run	Basin	Lancaster	WWF	None
Klines Run	Basin	York	WWF	None
Dry Run	Basin	Lancaster	WWF	None
Witmers Run	Basin	Lancaster	WWF	None
Canadochly Creek	Basin	York	WWF	None
Cabin Creek	Basin	York	WWF	None
Wisslers Run	Basin	Lancaster	HQ-CWF	None
Bull Run	Basin	York	WWF	None
Fishing Creek	Basin, Source to PA Rte 624 Bridge	York	TSF	None
Fishing Creek	Main Stem, PA Rte 624 Bridge to Mouth	York	TSF	None
Unnamed Tributaries to Fishing Creek	Basins, PA Rte 624 Bridge to Mouth	York	CWF	None
Beaver Creek	Basin	York	CWF	None
Green Branch	Basin	York	WWF	None
Manns Run	Basin	Lancaster	WWF	None
Mahala Run	Basin	York	WWF	None
Fisherman Run	Basin	Lancaster	WWF	None
Cuffs Run	Basin	York	WWF	None
Frys Run	Basin	Lancaster	WWF	None
Wilson Run	Basin	York	WWF	None
Conestoga River	Main Stem	Lancaster	WWF	None
Unnamed Tributaries to Conestoga River	Basins	Lancaster	WWF	None
Muddy Creek	Main Stem, Source to Little Muddy Creek	Lancaster	TSF	None
Muddy Creek	Main Stem, Little Muddy Creek to Mouth	Lancaster	WWF	None
Unnamed Tributaries to Muddy Creek	Basins	Lancaster	WWF	None

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LIST O—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Rock Run	Basin	Lancaster	HQ-TSF	None
Black Creek	Basin	Lancaster	HQ-WWF	None
Little Muddy Creek	Basin, Source to PA Rte 897 Bridge	Lancaster	TSF	None
Little Muddy Creek	Basin, PA Rte 897 Bridge to Mouth	Lancaster	WWF	None
Groff Creek	Basin	Lancaster	WWF	None
Cocalico Creek	Basin Source to Blue Lake	Lancaster	HQ-WWF	None
Blue Lake	Entire Lake	Lancaster	WWF	None
Cocalico Creek	Main Stem, Blue Lake to Mouth	Lancaster	WWF	None
Unnamed Tributaries to Cocalico Creek	Basins, Blue Lake to Mouth	Lancaster	WWF	None
Harnish Run	Basin	Lancaster	WWF	None
Little Cocalico Creek	Basin	Lancaster	TSF	None
Stony Run	Basin	Lancaster	WWF	None
Coover Run	Basin	Lancaster	WWF	None
Indian Run	Basin	Lancaster	TSF	None
Meadow Run	Basin	Lancaster	WWF	None
Middle Creek	Main Stem	Lancaster	HQ-TSF	None
Unnamed Tributaries to Middle Creek	Basins	Lancaster	HQ-TSF	None
Elders Run	Basin	Lancaster	HQ-TSF	None
Furnace Run	Main Stem	Lancaster	HQ-TSF	None
Unnamed Tributaries to Furnace Run	Basins	Lancaster	HQ-TSF	None
Segloch Run	Basin	Lancaster	HQ-CWF	None
Hammer Creek	Basin, Source to Speedwell Forge Lake Dam	Lancaster	HQ-CWF	None
Hammer Creek	Basin, Speedwell Forge Lake Dam to Mouth	Lancaster	TSF	None
Lititz Run	Basin	Lancaster	WWF	None
Landis Run	Basin	Lancaster	WWF	None
Stauffer Run	Basin	Lancaster	WWF	None
Mill Creek	Basin, Source to Rte A 352	Lancaster	HQ-CWF	None
Mill Creek	Basin, Rte A 352 to Mouth	Lancaster	WWF	None
Stehman Run	Basin	Lancaster	WWF	None
Little Conestoga Creek	Basin, Source to Swarr Run	Lancaster	TSF	None
Swarr Run	Main Stem	Lancaster	TSF	None
Unnamed Tributaries to Swarr Run	Basins	Lancaster	CWF	None
Millers Run	Basin	Lancaster	CWF	None
Little Conestoga Creek	Basin, Swarr Run to West Branch Little Conestoga Creek	Lancaster	WWF	None
West Branch Little Conestoga Creek	Basin	Lancaster	TSF	None
Little Conestoga Creek	Basin, West Branch Little Conestoga Creek to Mouth	Lancaster	WWF	None
Witmer Run	Basin	Lancaster	WWF	None
Boyds Run	Basin	York	WWF	None
Grubb Hollow	Basin	Lancaster	HQ-WWF	None
Pequea Creek	Main Stem, Source to PA Rte 897	Lancaster	HQ-CWF	None
Unnamed Tributaries to Pequea Creek	Basins, Source to PA Rte 897	Lancaster	HQ-CWF	None
Susquehanna River				
Pequea Creek	Main Stem, PA Rte 897 to Mouth	Lancaster	WWF	None

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LIST O - CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Unnamed Tributaries to Pequea Creek	Basins, PA Rte 897 to Eshleman Run	Lancaster	CWF	None
Indian Spring Run	Basin	Lancaster	CWF	None
White Horse Run	Basin	Lancaster	HQ-CWF	None
Umbles Run	Basin	Lancaster	HQ-CWF	None
Houston Run	Basin	Lancaster	CWF	None
Eshleman Run	Basin	Lancaster	CWF	None
Unnamed Tributaries to Pequea Creek	Basins, Eshleman Run to Mouth	Lancaster	WWF	None
Watson Run	Basin	Lancaster	WWF	None
Walnut Run	Basin	Lancaster	WWF	None
Little Beaver Creek	Basin	Lancaster	TSF	None
Big Beaver Creek	Basin	Lancaster	TSF	None
Huber Run	Basin	Lancaster	CWF	None
Goods Run	Basin	Lancaster	TSF	None
Silver Mine Run	Basin	Lancaster	TSF	None
Climbers Run	Main Stem	Lancaster	CWF	None
Unnamed Tributaries to Climbers Run	Basins	Lancaster	CWF	None
Trout Run	Basin	Lancaster	HQ-CWF	None
Otter Creek	Main Stem, Source to Upstream Boundary of State Game Lands No. 83 (T 616)	York	CWF	None
Unnamed Tributaries to Otter Creek	Basins, Source to Upstream Boundary of State Game Lands No. 83 (T 616)	York	CWF	None
Mill Branch	Basin	York	WWF	None
South Fork Otter Creek	Basin	York	WWF	None
Otter Creek	Basin, Upstream Boundary State Game Lands No. 83 (T 616) to Mouth	York	HQ-CWF	None
Sawmill Run	Main Stem	York	WWF	None
Unnamed Tributaries to Sawmill Run	Basins	York	WWF	None
Furnace Run	Basin	York	CWF	None
House Rock Run	Basin	Lancaster	WWF	None
Brubaker Run	Basin	Lancaster	WWF	None
Reed Run	Basin	Lancaster	HQ-WWF	None
Counselman Run	Basin	York	WWF	None
Tucquan Creek	Basin	Lancaster	HQ-CWF	None
Duncan Run	Basin	York	WWF	None
Oakland Run	Basin	York	CWF	None
Kellys Run	Basin	Lancaster	WWF	None
Tobe Run	Basin	Lancaster	WWF	None
Anderson Run	Basin	York	WWF	None
Susquehanna River				
Muddy Run	Basin, Source to Muddy Run Dam	Lancaster	TSF	None
Muddy Run	Basin, Muddy Run Dam to the Mouth	Lancaster	WWF	None
Wissler Run	Basin	Lancaster	HQ-WWF	None
Muddy Creek				
North Branch Muddy Creek	Basin, Source to Confluence with South Branch	York	CWF	None
South Branch Muddy Creek	Basin, Source to Confluence with North Branch	York	HQ-CWF	None
Muddy Creek	Basin, Confluence of North and South Branches to Mouth	York	TSF	None

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LIST O -- CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Fishing Creek	Basin	Lancaster	HQ-CWF	None
Robinson Run	Basin	York	WWF	None
Peters Creek	Basin	Lancaster	HQ-WWF	None
Haines Run	Basin	Lancaster	HQ-WWF	None
Michael Run	Basin	York	WWF	None
Conowingo Creek	Main Stem, Source to PA-MD Border	Lancaster	CWF	None
Unnamed Tributaries to Conowingo Creek	Basins, Source to PA-MD State Border	Lancaster	HQ-CWF	None
Jackson Run	Basin	Lancaster	HQ-CWF	None
Little Conowingo Creek	Basin	Lancaster	HQ-CWF	None
Octoraro Creek	Main Stem, Confluence of East and West Branches to PA-MD State Border	Lancaster	WWF	None
East Branch Octoraro Creek	Main Stem	Lancaster	TSF	None
Unnamed Tributaries to the Right Bank, East Branch Octoraro Creek	Basins	Lancaster	CWF	None
Unnamed Tributaries to the Left Bank, East Branch Octoraro Creek	Basins	Lancaster	TSF	None
Buck Run	Main Stem	Lancaster	CWF	None
Unnamed Tributaries to Buck Run	Basins	Lancaster	CWF	None
Williams Run	Basin	Lancaster	CWF	None
Pine Creek	Basin	Lancaster	CWF	None
Valley Run	Basin	Lancaster	HQ-CWF	None
Valley Creek	Basin	Chester	TSF	None
Knott Run	Basin	Lancaster	CWF	None
Annan Run	Basin	Lancaster	HQ-CWF	None
Knight Run	Basin	Chester	TSF	None
Ball Run	Basin	Lancaster	CWF	None
Bells Run	Basin	Lancaster	CWF	None
Muddy Run	Basin	Chester	TSF	None
Coopers Run	Basin	Lancaster	CWF	None
Susquehanna River				
Leech Run	Basin	Chester	TSF	None
West Branch Octoraro Creek	Basin	Lancaster	HQ-CWF	None
Tweed Creek	Basin	Chester	TSF	None
McCreary Run	Basin	Lancaster	HQ-CWF	None
Blackburn Run	Basin	Chester	TSF	None
Black Run	Basin	Chester	TSF	None
Hog Run	Basin	Chester	TSF	None
Reynolds Run	Basin	Lancaster	HQ-CWF	None
Stone Run	Basin	Chester	TSF	None
Deer Creek	Basin	York	CWF	None
Chesapeake Bay				
Gunpowder Falls	Basin	York	WWF	None
Northeast River (Northeast Creek)	Main Stem	Chester	WWF	None
Unnamed Tributaries to Northeast River	Basins	Chester	TSF	None
Little Northeast Creek	Basin	Chester	TSF	None
Elk River (Big Elk Creek)	Main Stem	Chester	WWF	None
Unnamed Tributaries to Elk River	Basins	Chester	TSF	None
East Branch Elk River	Basin	Chester	TSF	None
West Branch Elk River	Basin	Chester	TSF	None
Hodgson Run	Basin	Chester	TSF	None
Little Elk Creek	Main Stem, Source to PA-MD State Border	Chester	WWF	None
Unnamed Tributaries to Little Elk Creek	Basins, Source to PA-MD State Border	Chester	TSF	None
Jordan Run	Basin	Chester	TSF	None
Barren Brook	Basin	Chester	TSF	None

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DRAINAGE LIST P
Ohio River Basin in Pennsylvania
Allegheny River

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Ohio River				
Allegheny River	Main Stem	McKean	CWF	Add Ch, MBAS, and TON
Unnamed Tributaries to Allegheny River	Basins	Potter-McKean	CWK	None
Tunungwant Creek	Main Stem	McKean	WWF	Add Ch ₂
Unnamed Tributaries to Tunungwant Creek	Basins	McKean	CWF	None
Woodcock Creek	Basin	Potter	HQ-CWF	None
Gross Hollow	Basin	Potter	CWF	None
Wambold Hollow	Basin	Potter	HQ-CWF	None
Pigeon Hollow	Basin	Potter	CWF	None
Toombs Hollow	Basin	Potter	CWF	None
Kohler Hollow	Basin	Potter	CWF	None
Dwight Creek	Basin	Potter	CWF	None
Peet Brook	Basin	Potter	CWF	None
Lent Hollow	Basin	Potter	CWF	None
Prosser Hollow	Basin	Potter	CWF	None
Baker Creek	Basin	Potter	CWF	None
Steer Run	Basin	Potter	HQ-CWF	None
Reese Hollow	Basin	Potter	CWF	None
Mill Creek	Main Stem	Potter	CWF	None
Unnamed Tributaries to Mill Creek	Basins	Potter	CWF	None
Nelson Run	Basin	Potter	CWF	None
Bates Hollow	Basin	Potter	CWF	None
Trout Run	Basin	Potter	HQ-CWF	None
Lyman Creek	Basin	Potter	CWF	None
North Hollow	Basin	Potter	CWF	None
South Hollow	Basin	Potter	CWF	None
Dingman Run	Basin	Potter	HQ-CWF	None
Earl Hollow	Basin	Potter	CWF	None
Pump Station Hollow	Basin	Potter	CWF	None
Eim Flat	Basin	Potter	CWF	None
Gleason Hollow	Basin	Potter	CWF	None
Reed Run	Basin	Potter	HQ-CWF	None
Trout Brook	Basin	Potter	CWF	None
Laninger Creek	Basin	Potter	HQ-CWF	None
Fishing Creek	Main Stem	Potter	CWF	None
Unnamed Tributaries to Fishing Creek	Basins	Potter	CWF	None
East Branch Fishing Creek	Basin	Potter	HQ-CWF	None
Card Creek	Basin	Potter	CWF	None
Sartwell Creek	Basin	McKean	CWF	None
Allegheny Portage Creek	Main Stem	McKean	TSF	None
Unnamed Tributaries to Allegheny Portage Creek	Basins	McKean	CWF	None
Planing Mill Hollow	Basin	Potter	CWF	None
Brown Hollow	Basin	Potter	HQ-CWF	None
Indian Run	Basin	Potter	CWF	None
Heath Hollow	Basin	McKean	CWF	None
Fair Run	Basin	McKean	HQ-CWF	None
Rock Run	Basin	McKean	CWF	None
Scaffold Lick Run	Basin	McKean	CWF	None
Cady Hollow	Basin	McKean	CWF	None
Hamilton Run	Basin	McKean	CWF	None
Tramroad Hollow	Basin	McKean	CWF	None
Combs Creek	Basin	McKean	CWF	None
Lillibridge Creek	Basin	McKean	CWF	None
Skinner Creek	Basin	McKean	HQ-CWF	None
Twomile Creek	Basin	McKean	CWF	None
Annin Creek	Basin	McKean	CWF	None
Rock Run	Basin	McKean	CWF	None
Open Brook	Basin	McKean	CWF	None
Newell Creek	Basin	McKean	CWF	None
Potato Creek	Main Stem, Source to Cole Creek	McKean	TSF	None
Potato Creek	Main Stem, Cole Creek to Mouth	McKean	WWF	None

LIST P—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Unnamed Tributaries to Potato Creek	Basins	McKean	CWF	None
East Branch Potato Creek	Basin	McKean	HQ-CWF	None
Havens Run	Basin	McKean	CWF	None
Indian Run	Basin	McKean	CWF	None
Frog Camp Hollow	Basin	McKean	CWF	None
Kimball Hollow	Basin	McKean	CWF	None
West Branch Potato Creek	Basin	McKean	HQ-CWF	None
Sackett Hollow	Basin	McKean	CWF	None
Brewer Run	Basin	McKean	HQ-CWF	None
Evans Hollow	Basin	McKean	CWF	None
Red Mill Brook	Main Stem	McKean	CWF	None
Unnamed Tributaries to Red Mill Brook	Basins	McKean	CWF	None
Wernwag Hollow	Basin	McKean	HQ-CWF	None
Browns Mill Hollow	Basin	McKean	CWF	None
Combs Hollow	Basin	McKean	CWF	None
Colegrove Brook	Basin	McKean	HQ-CWF	None
Robbins Brook	Basin	McKean	HQ-CWF	None
Walcott Brook	Basin	McKean	CWF	None
Bayer Brook	Basin	McKean	HQ-CWF	None
Daly Brook	Basin	McKean	HQ-CWF	None
Marvin Creek	Main Stem	McKean	CWF	None
Unnamed Tributaries to Marvin Creek	Basins	McKean	CWF	None
Sherman Run	Basin	McKean	HQ-CWF	None
Santeen Run	Basin	McKean	HQ-CWF	None
Wildcat Hollow	Basin	McKean	CWF	None
Warner Brook	Basin	McKean	HQ-CWF	None
Stanton Brook	Basin	McKean	HQ-CWF	None
Bloomster Hollow	Basin	McKean	CWF	None
Blacksmith Run	Basin from Source to Smethport Water Intake	McKean	HQ-CWF	None
Blacksmith Run	Basin from Smethport Water Intake to Marvin Creek	McKean	CWF	None
Cole Creek	Basin	McKean	CWF	None
Pierce Brook	Basin	McKean	CWF	None
Carpenter Creek	Basin	McKean	CWF	None
Canfield Creek	Basin	McKean	CWF	None
Barden Brook	Basin	McKean	CWF	None
Knapp Creek	Main Stem	McKean	CWF	Add Ch.
Unnamed Tributaries to Knapp Creek	Basins	McKean	CWF	None
Tram Hollow Run	Basin	McKean	CWF	None
Kansas Branch	Basin	McKean	CWF	None
South Branch Knapp Creek	Basin	McKean	CWF	None
Indian Creek	Main Stem	McKean	CWF	Add Ch.
Unnamed Tributaries to Indian Creek	Basins	McKean	CWF	None
North Branch Indian Creek	Basin	McKean	CWF	None
Mix Creek	Basin	McKean	CWF	None
McCrea Run	Basin	McKean	CWF	None
Oswayo Creek	Main Stem, Source to Honeoye Creek	McKean	CWF	Add Ch.
Oswayo Creek	Main stem, Honeoye Creek to PA-NY State Border	McKean	WWF	Add Ch.
Unnamed Tributaries to Oswayo Creek	Basins	McKean	CWF	None

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LIST P — CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Tyler Hollow	Basin	McKean	CWF	None
Brazzee Hollow	Basin	Potter	HQ-CWF	None
Bryant Hollow	Basin	McKean	CWF	None
South Branch Oswayo Creek	Basin	McKean	CWF	None
Topeka Creek	Basin	McKean	CWF	None
Clara Creek	Main Stem	McKean	CWF	None
Unnamed Tributaries to Clara Creek	Basins	McKean	CWF	None
Bradley Run	Basin	Potter	HQ-CWF	None
Elevenmile Creek	Basin	Potter	HQ-CWF	None
Canada Run	Basin	McKean	CWF	None
Wildcat Creek	Basin	McKean	CWF	None
Cow Run	Basin	Potter	HQ-CWF	None
Honeoye Creek	Main Stem	McKean	CWF	Add Ch,
Unnamed Tributaries to Honeoye Creek	Basins	McKean	CWF	None
Butter Creek	Basin	Potter	HQ-CWF	None
Plank Creek	Basin	McKean	CWF	None
Janders Run	Basin	McKean-Potter	HQ-CWF	None
Horse Run	Basin	McKean	CWF	None
Bell Run	Main Stem	McKean	CWF	None
Unnamed Tributaries to Bell Run	Basins	McKean	CWF	None
Shaytown Branch	Basin	McKean	CWF	None
Chapman Brook	Basin	McKean	CWF	None
Taylor Brook	Basin	McKean	HQ-CWF	None
Kings Run	Basin	McKean	CWF	None
Tunungwant Creek	Main Stem	McKean	WWF, Delete WC	Add Ch,
Unnamed Tributaries to Tunungwant Creek	Basins	McKean	CWF	None
East Branch Tunungwant Creek	Basin	McKean	CWF	None
Unnamed Tributaries to East Branch of Tunungwant Creek	Basins	McKean	CWF	None
Bear Run	Basin	McKean	HQ-CWF	None
Railroad Run	Basin	McKean	CWF	None
Lewis Run	Basin	McKean	CWF	None
Sheppard Run	Basin	McKean	CWF	None
Minard Run	Basin	McKean	CWF	None
Rutherford Run	Basin	McKean	CWF	None
West Branch Tunungwant Creek	Basin, Source to Marilla Brook	McKean	HQ-CWF	None
Marilla Brook	Basin, Above Bradford Water Dam	McKean	HQ-CWF	None
Marilla Brook	Main Stem, Bradford Water Dam to West Branch Tunungwant Creek	McKean	CWF	None
Unnamed Tributaries to Marilla Brook	Basins, Bradford Water Dam to Tunungwant Creek	McKean	CWF	None
Gilbert Brook	Basin	McKean	HQ-CWF	None
West Branch Tunungwant Creek	Basin, Marilla Brook to Tunungwant Creek	McKean	CWF	None
Kendall Creek	Basin	McKean	WWF	None
Bolivar Run	Basin	McKean	CWF	None
Foster Brook	Basin	McKean	CWF	None

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DRAINAGE LIST Q

Ohio River Basin in Pennsylvania
Allegheny River

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Allegheny River	Main Stem	Clarion	WWF	Add Ch, MBAS, and TON
Unnamed Tributaries to Allegheny River	Basins, French Creek to RM 106.70	Venango	WWF	None
Unnamed Tributaries to Allegheny River	Basin	Venango	CWF	None
Unnamed Tributaries to Allegheny River	Basins, RM 106.70 to Clarion River	Venango-Clarion	WWF	None
Quaker Run (NY)	Basin (Willis Creek, Chandler Run, Coon Run and Yeager Brook in PA)	McKean	HQ-CWF	None
Wolf Run	Basin, Source to PA-NY State Border	McKean	HQ-CWF	None
State Line Run	Basin	Warren	CWF	None
Willow Creek	Basin	Warren	HQ-CWF	None
Carr Brook	Basin	Warren	CWF	None
Hooks Brook	Basin	Warren	CWF	None
Williams Brook	Basin	Warren	CWF	None
Tracy Run	Basin	Warren	CWF	None
Cornplanter Run	Basin	Warren	HQ-CWF	None
Whisky Run	Basin	Warren	CWF	None
Johnnycake Run	Basin	Warren	CWF	None
Hodge Run	Basin	Warren	HQ-CWF	None
Sugar Run	Basin	Warren	HQ-CWF	None
Billies Run	Basin	Warren	CWF	None
Kinzua Creek	Basin, Source to Wintergreen Run	McKean	CWF	None
Kinzua Creek	Main Stem, Wintergreen Run to Allegheny River	Warren	CWF	None
Unnamed Tributaries to Kinzua Creek	Basins, Wintergreen Run to Allegheny River	McKean-Warren	HQ-CWF	None
Wintergreen Run	Basin	McKean	CWF	None
Windfall Run	Basin	McKean	HQ-CWF	None
Camp Run	Basin	McKean	HQ-CWF	None
Turnup Run	Basin	McKean	HQ-CWF	None
Thundershower Run	Basin	McKean	HQ-CWF	None
Libby Run	Basin	McKean	HQ-CWF	None
Whiting Run	Basin	McKean	HQ-CWF	None
Markham Run	Basin	McKean	HQ-CWF	None
Meade Run	Basin	McKean	HQ-CWF	None
Little Meade Run	Basin	McKean	HQ-CWF	None
Root Run	Basin	McKean	HQ-CWF	None
South Branch Kinzua Creek	Main Stem	McKean	HQ-CWF	None
Unnamed Tributaries to South Branch Kinzua Creek	Basins	McKean	HQ-CWF	None
Glad Run	Basin	McKean	HQ-CWF	None
Watermill Run	Basin	McKean	HQ-CWF	None
Hubert Run	Basin	McKean	CWF	None
Mud Lick Run	Basin	McKean	HQ-CWF	None
Chappel Fork	Main Stem	McKean	CWF	None
Unnamed Tributaries to Chappel Fork	Basins	McKean	HQ-CWF	None
Buck Lick Run	Basin	McKean	HQ-CWF	None
Crary Run	Basin	McKean	HQ-CWF	None
White Grave Creek	Basin	McKean	HQ-CWF	None
Bump Run	Basin	McKean	HQ-CWF	None
North Fork	Basin	McKean	HQ-CWF	None
Coon Run	Basin	McKean	HQ-CWF	None
Briggs Run	Basin	McKean	HQ-CWF	None
Hemlock Run	Basin	McKean	HQ-CWF	None
Morrison Run	Basin	McKean	HQ-CWF	None

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LIST Q — CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Indian Camp Run	Basin	Warren	CWF	None
McKinney Run	Basin	Warren	CWF	None
Irvine Run	Basin	Warren	CWF	None
Lenhart Run	Basin	Warren	CWF	None
Sulphur Run	Basin	Warren	CWF	None
Dunn Run	Basin	Warren	CWF	None
Charley Run	Basin	Warren	CWF	None
Nigger Run	Basin	Warren	CWF	None
Hedgehog Run	Basin	Warren	HQ-CWF	None
Clark Run	Basin	Warren	CWF	None
Dry Run	Basin	Warren	CWF	None
Thompson Run	Basin	Warren	CWF	None
Slater Run	Basin	Warren	HQ-CWF	None
Little Run	Basin	Warren	CWF	None
Conklin Run	Basin	Warren	CWF	None
Station Run	Basin	Warren	CWF	None
Connelly Run	Basin	Warren	CWF	None
Alex Magee Run	Basin	Warren	CWF	None
Perry Magee Run	Basin	Warren	CWF	None
Ward Run	Basin	Warren	CWF	None
Snow Run	Basin	Warren	CWF	None
Bimber Run	Basin	Warren	CWF	None
Potter Run	Basin	Warren	CWF	None
McGuire Run	Basin	Warren	CWF	None
Tidioute Creek	Basin, Source to Ben George Reservoir Dam	Warren	HQ-CWF	None
Tidioute Creek	Basin, Ben George Reservoir Dam to Allegheny River	Warren	CWF	None
Gordon Run	Basin	Warren	CWF	None
Myers Run	Basin	Warren	CWF	None
Grove Run	Basin	Warren	CWF	None
Dale Run	Basin	Warren	CWF	None
Dunn Run	Basin	Warren	CWF	None
Schwab Run	Basin	Forest	CWF	None
Jones Run	Basin	Forest	CWF	None
East Hickory Creek	Basin, Source to Middle Hickory Creek	Forest	EV	None
Middle Hickory Creek	Basin	Warren	HQ-CWF	None
East Hickory Creek	Basin, Middle Hickory Creek to Allegheny River	Forest	HQ-CWF	None
Siggins Run	Basin	Forest	CWF	None
Little Hickory Run	Basin	Forest	HQ-CWF	None
West Hickory Creek	Basin	Forest	CWF	None
Dawson Run	Basin	Forest	CWF	None
Sibbald Run	Basin	Forest	CWF	None
Tubbs Run	Basin	Forest	HQ-CWF	None
Jamison Run	Basin	Forest	CWF	None
Hunter Run	Basin	Forest	CWF	None
Tionesta Creek (West Branch)	Main Stem, Source to Farnsworth Branch	Warren	HQ-CWF	None
Unnamed Tributaries to Tionesta Creek (West Branch)	Basins, Source to Farnsworth Branch	Warren	HQ-CWF	None
Tom Run	Basin	Warren	HQ-CWF	None
Jones Run	Basin	Warren	HQ-CWF	None
Shaw Run	Basin	Warren	HQ-CWF	None
Wildcat Run	Basin	Warren	EV	None
Adams Run	Basin	Warren	HQ-CWF	None
Elkhorn Run	Basin	Warren	HQ-CWF	None
Mead Run	Basin	Warren	HQ-CWF	None
Farnsworth Branch	Basin	Warren	HQ-CWF	None
Tionesta Creek (West Branch)	Main Stem, Farnsworth Branch to Mouth	Forest	CWF	None
Unnamed Tributaries to Tionesta Creek (West Branch)	Basins, Farnsworth Branch to Mouth	Warren-Forest	CWF	None

LIST Q — CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Dutchman Run	Basin	McKean	HQ-CWF	None
Dewdrop Run	Basin	Warren	HQ-CWF	None
Campbell Run	Basin	Warren	HQ-CWF	None
Wolf Run	Basin	Warren	HQ-CWF	None
Jackson Run	Basin	Warren	HQ-CWF	None
Bent Run	Basin	Warren	HQ-CWF	None
Hemlock Run	Basin	Warren	HQ-CWF	None
Browns Run	Basin	Warren	CWF	None
Glade Run	Basin, Source to Concrete Channel	Warren	CWF	None
Glade Run	Basin, Concrete Channel to Mouth, (a Distance of approximately 1,500 feet)	Warren	WWF	None
Ott Run	Basin	Warren	CWF	None
Conewango Creek	Main Stem	Warren	WWF	None
Unnamed Tributaries to Conewango Creek	Basins	Warren	CWF	None
Stillwater Creek	Basin	Warren	CWF	None
Kiantone Creek	Basin	Warren	CWF	None
Wiltzie Run	Basin	Warren	CWF	None
Storehouse Run	Basin	Warren	CWF	None
Johnny Run	Basin	Warren	CWF	None
North Branch Akeley Run	Main Stem	Warren	CWF	None
Unnamed Tributaries to North Branch Akeley Run	Basins	Warren	CWF	None
Vanarsdale Run	Basin	Warren	HQ-CWF	None
Akeley Run	Main Stem	Warren	CWF	None
Unnamed Tributaries to Akeley Run	Basins	Warren	CWF	None
Reynolds Run	Basin	Warren	CWF	None
Mill Run	Basin	Warren	HQ-CWF	None
Widdlefield Run	Basin	Warren	CWF	None
Wolcott Run	Basin	Warren	CWF	None
Rhine Run	Basin	Warren	CWF	None
Dougherty Run	Basin	Warren	CWF	None
Hatch Run	Basin	Warren	CWF	None
Jackson Run	Basin	Warren	CWF	None
Sill Run	Basin	Warren	CWF	None
Morse Run	Basin	Warren	HQ-CWF	None
Grunder Run	Basin	Warren	CWF	None
Scott Run	Basin	Warren	CWF	None
Brokenstraw Creek	Main Stem	Warren	CWF	Add Ch.
Unnamed Tributaries to Brokenstraw Creek	Basins	Eric-Warren	CWF	None
Coffee Creek	Basin	Warren	CWF	None
Whites Run	Basin	Warren	CWF	None
Hare Creek	Basin, Source to Scotia Street Bridge (Corry Borough)	Warren	CWF	None
Hare Creek	Main Stem, Scotia Street Bridge to Mouth	Warren	WWF	None
Unnamed Tributaries to Hare Creek	Basins	Warren Erie	CWF	None
Damon Run	Basin	Warren	CWF	None
Spring Creek	Basin	Warren	HQ-CWF	None
Gar Run	Basin	Warren	CWF	None
Blue Eye Run	Basin	Warren	CWF	None
Little Brokenstraw Creek	Basin	Warren	CWF	None
Andrews Run	Basin	Warren	CWF	None
Mead Run	Basin	Warren	CWF	None
Mathews Run	Basin	Warren	CWF	None

LIST Q - CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Pacard Run	Basin	Warren	CWF	None
Arnot Run	Basin	Warren	EV	None
Sixmile Run	Basin	Warren	HQ-CWF	None
Fourmile Run	Basin	Warren	HQ-CWF	None
Dunham Run	Basin	Warren	CWF	None
Twomile Run	Basin	Warren	HQ-CWF	None
Dodge Run	Basin	Warren	CWF	None
South Branch Tionesta Creek	Main Stem	Warren	HQ-CWF	None
Unnamed Tributaries to South Branch Tionesta Creek	Basins	Elk-Forest-McKean-Warren	HQ-CWF	None
Martin Run	Basin	Elk	HQ-CWF	None
Coon Run	Basin	Elk	HQ-CWF	None
Crane Run	Basin	Elk	EV	None
Iron Run	Basin	Forest	HQ-CWF	None
Fork Run	Basin	Forest	HQ-CWF	None
Bogus Run	Basin	Forest	HQ-CWF	None
Rock Run	Basin	Forest	HQ-CWF	None
Cherry Run	Basin	Warren	HQ-CWF	None
East Branch Tionesta Creek	Basin	Warren	HQ-CWF	None
Rock Run	Basin	Warren	CWF	None
Duck Eddy Run	Basin	Warren	CWF	None
Pell Run	Basin	Warren	CWF	None
Mead Run	Basin	Warren	CWF	None
Thad Shanty Run	Basin	Forest	CWF	None
Bluejay Creek	Basin	Forest	HQ-CWF	None
Rocky Run	Basin	Forest	CWF	None
Bush Creek	Basin	Forest	CWF	None
Martin Run	Basin	Forest	CWF	None
Hastings Run	Basin	Forest	CWF	None
Reagan Run	Basin	Forest	CWF	None
Upper Sheriff Run	Basin	Forest	HQ-CWF	None
Lower Sheriff Run	Basin	Forest	HQ-CWF	None
Fools Creek	Basin	Forest	HQ-CWF	None
Wildcat Run	Basin	Forest	CWF	None
Minister Creek	Basin	Forest	HQ-CWF	None
Porcupine Run	Basin	Forest	CWF	None
Blood Run	Basin	Forest	HQ-CWF	None
Logan Run	Basin	Forest	CWF	None
Phelps Run	Basin	Forest	CWF	None
Kingsley Run	Basin	Forest	CWF	None
Bobbs Creek	Basin	Forest	HQ-CWF	None
Little Minister Run	Basin	Forest	CWF	None
Fork Run	Basin	Forest	HQ-CWF	None
Salmon Creek	Main Stem	Forest	HQ-CWF	None
Unnamed Tributaries to Salmon Creek	Basins	Forest	HQ-CWF	None
Little Salmon Creek	Basin	Forest	HQ-CWF	None
Guiton Run	Basin	Forest	HQ-CWF	None
Fourmile Run	Basin	Forest	EV	None
Twomile Run	Basin	Forest	HQ-CWF	None
The Branch	Basin	Forest	HQ-CWF	None
Church Run	Basin	Forest	CWF	None
Carpenter Run	Basin	Forest	CWF	None
Lamentation Run	Basin	Forest	CWF	None
Bear Creek	Basin	Forest	HQ-CWF	None
Ross Run	Basin	Forest	HQ-CWF	None
Jakes Run	Basin	Forest	CWF	None
Jug Handle Run	Basin	Forest	CWF	None
Little Coon Creek	Basin	Forest	HQ-CWF	None
Coon Creek	Basin	Forest	CWF	None
Piney Run	Basin	Forest	CWF	None
Sugar Run	Basin	Forest	CWF	None
Little Piney Run	Basin	Forest	CWF	None
Glasner Run	Basin	Forest	CWF	None
Johns Run	Basin	Forest	CWF	None
Peters Run	Basin	Forest	CWF	None
Little Tionesta Creek	Basin	Forest	CWF	None

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LIST Q--CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Bates Run	Basin	Forest	CWF	None
Indian Camp Creek	Basin	Forest	CWF	None
Holeman Run	Basin	Venango	CWF	None
Stewart Run	Basin	Venango	CWF	None
Fox Run	Basin	Venango	CWF	None
Johnston Run	Basin	Venango	CWF	None
Hemlock Creek	Basin	Venango	CWF	None
McCrea Run	Basin	Venango	CWF	None
Culver Run	Basin	Venango	CWF	None
Muskrat Run	Basin	Venango	CWF	None
Pithole Creek	Basin	Venango	CWF	None
Panther Run	Basin	Venango	CWF	None
Lamb Run	Basin	Venango	CWF	None
Horse Creek	Basin	Venango	CWF	None
Carney Run	Basin	Venango	CWF	None
Sage Run	Basin	Venango	CWF	None
Oil Creek	Main Stem, Source to Cherrytree Run	Venango	CWF	Add TON
Oil Creek	Main Stem, Cherryhill Run to Mouth	Venango	WWF	Add TON
Unnamed Tributaries to Oil Creek	Basins	Crawford-Venango	CWF	Add TON
West Shreve Run	Basin	Crawford	CWF	Add TON
East Shreve Run	Basin	Crawford	CWF	Add TON
Mosey Run	Basin	Crawford	CWF	Add TON
Bloomfield Run	Basin	Crawford	CWF	Add TON
East Branch Oil Creek	Basin	Crawford	CWF	Add TON
Marsh Run	Basin	Crawford	CWF	Add TON
Thompson Creek	Basin	Crawford	CWF	Add TON
Church Run	Basin	Crawford	CWF	Add TON
Pine Creek	Main Stem	Crawford	CWF	Add TON
Unnamed Tributaries to Pine Creek	Basins	Warren-Crawford	CWF	Add TON
Campbell Creek	Basin	Warren	CWF	Add TON
Dunham Run	Basin	Warren	CWF	Add TON
Caldwell Creek	Basin	Crawford	HQ-CWF	Add TON
Henderson Run	Basin	Crawford	CWF	Add TON
Benninghof Run	Basin	Venango	CWF	Add TON
Cherrytree Run	Basin	Venango	CWF	Add TON
Cherry Run	Basin	Venango	CWF	Add TON
Cornplanter Run	Basin	Venango	CWF	Add TON
Holiday Run	Basin	Venango	CWF	None
Charley Run	Basin	Venango	CWF	None
Brannon Run	Basin	Venango	CWF	None
Seneca Run	Basin	Venango	CWF	None
Twomile Run	Basin	Venango	CWF	None
French Creek	Main Stem	Venango	WWF	Add MBAS, TON
Unnamed Tributaries to French Creek	Basins	Erie-Crawford-Venango	WWF	None
Cutting Brook	Basin	Erie	WWF	None
Herrick Creek	Basin	Erie	WWF	None
Hubble Run	Basin Source to the 1350 Foot Contour (Union City 7 1/2 Minute Quadrangle) Crossing Hubble Run (including the Wattsburg Fen)	Erie	HQ-WWF	None
Hubble Run	Basin, Below Wattsburg Fen to Mouth	Erie	WWF	None
West Branch French Creek	Main Stem	Erie	WWF	None
Unnamed Tributaries to West Branch French Creek	Basins	Erie	WWF	None

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LIST Q—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Darrow Brook	Basin	Erie	WWF	None
Townley Run	Basin	Erie	WWF	None
Alder Brook	Basin	Erie	WWF	None
Bailey Brook	Basin	Erie	WWF	None
Lake Pleasant Outlet	Basin	Erie	HQ-CWF	None
Alder Run	Basin	Erie	CWF	None
South Branch French Creek	Basin	Erie	CWF	None
Wheeler Creek	Basin	Erie	WWF	None
LeBoeuf Creek	Basin	Erie	TSF	None
Campbell Run	Basin	Crawford	WWF	None
Muddy Creek	Basin	Crawford	TSF	None
Mohawk Run	Basin	Crawford	WWF	None
Conneauttee Creek	Main Stem	Crawford	TSF	None
Unnamed Tributaries to Conneauttee Creek	Basins	Erie-Crawford	WWF	None
Shenango Creek	Basin	Crawford	WWF	None
Darrows Creek	Basin	Crawford	WWF	None
Torry Run	Basin	Crawford	WWF	None
Little Conneauttee Creek	Basin	Crawford	CWF	None
Boles Run	Basin	Crawford	WWF	None
Gravel Run	Basin	Crawford	WWF	None
Wolf Run	Basin	Crawford	WWF	None
Woodcock Creek	Basin. Source to Woodcock Creek Reservoir Dam	Crawford	HQ-CWF	None
Woodcock Creek	Basin. Woodcock Creek Reservoir Dam to Mouth	Crawford	CWF	None
Cussewago Creek	Basin	Crawford	WWF	None
Van Horne Creek	Basin	Crawford	WWF	None
Conneaut Outlet	Basin. Source to Conneaut Lake Dam	Crawford	HQ-WWF	None
Conneaut Outlet	Basin. Conneaut Lake Dam to French Creek	Crawford	WWF	None
Little Sugar Creek	Basin	Crawford	CWF	None
Foulk Run	Basin	Mercer	WWF	None
Powdermill Run	Basin	Mercer	WWF	None
North Deer Creek	Basin	Mercer	WWF	None
McCune Run	Basin	Venango	CWF	None
Mill Creek	Basin	Venango	CWF	None
Sugar Creek	Basin	Venango	CWF	None
Patchell Run	Basin	Venango	WWF	None
Lower Twomile Run	Basin	Venango	CWF	None
Siefer Run	Basin	Venango	WWF	None
Ajax Run	Basin	Venango	WWF	None
East Sandy Creek	Basin	Venango	CWF	None
Snyder Run	Basin	Venango	CWF	None
Sandy Creek	Main Stem	Venango	WWF	None
Unnamed Tributaries to Sandy Creek	Basins	Mercer-Venango	WWF	None
Black Run	Basin	Mercer	WWF	None
Mill Run	Basin	Mercer	WWF	None
Schofield Run	Basin	Mercer	WWF	None
Dugan Run	Basin	Mercer	WWF	None
Sawmill Run	Basin	Mercer	WWF	None
McCutcheon Run	Basin	Mercer	WWF	None
Butchery Creek	Basin	Mercer	WWF	None
McConnell Run	Basin	Mercer	WWF	None
Sulphur Run	Basin	Venango	WWF	None
Little Sandy Creek	Basin	Venango	CWF	None
South Sandy Creek	Basin	Venango	CWF	None

LIST Q — CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Morrison Run	Basin	Venango	WWF	None
Victory Run	Basin	Venango	WWF	None
Ditzenberger Run	Basin	Venango	WWF	None
Clark Run	Basin	Venango	WWF	None
Pine Hill Run	Basin	Venango	CWF	None
Dennison Run	Basin	Venango	EV	None
Scrubgrass Creek	Basin	Venango	CWF	None
Roberts Run	Basin	Venango	CWF	None
Falling Spring Run	Basin	Venango	WWF	None
Whitherup Run	Basin	Venango	CWF	None
Perry Run	Basin	Venango	WWF	None
Whann Run	Basin	Venango	WWF	None
Little Scrubgrass Creek	Basin	Venango	CWF	None
Shull Run	Basin	Venango	CWF	None
Mill Creek	Basin	Venango	CWF	None
Richey Run	Basin	Venango	CWF	None
Lowrey Run	Basin	Venango	WWF	None
Fowler Run	Basin	Armstrong	WWF	None

DRAINAGE LIST R

Ohio River Basin in Pennsylvania
Clarion River

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Ohio River				
Allegheny River				
Clarion River				
Clarion River (East Branch)	Basin, Source to West Branch	Elk	HQ-CWF	Add TON
West Branch Clarion River	Main Stem	Elk	CWF	Add TON
Unnamed Tributaries to West Branch Clarion River	Basins	McKean-Elk	CWF	Add TON
Windfall Run	Basin	McKean	CWF	Add TON
Sicily Run	Basin	McKean	CWF	Add TON
Buck Run	Basin	McKean	CWF	Add TON
Rocky Run	Basin	Elk	CWF	Add TON
Nearing Run	Basin	Elk	CWF	Add TON
Wilson Run	Basin	Elk	CWF	Add TON
Oil Creek	Basin	Elk	CWF	Add TON
Wolf Run	Basin	Elk	HQ-CWF	Add TON
Meffert Creek	Basin	Elk	CWF	Add TON
Silver Creek	Basin	Elk	HQ-CWF	Add TON
Clarion River	Main Stem, Confluence of East and West Branches to Mouth	Clarion	CWF	Add TON
Unnamed Tributaries to Clarion River	Basins	Elk-Forest-Jefferson-Clarion	CWF	Add TON
Johnson Run	Basin	Elk	CWF	Add TON
Powers Run	Basin	Elk	CWF	Add TON
Riley Run	Basin	Elk	WWF	Add TON
Little Mill Creek	Basin	Elk	HQ-CWF	Add TON
Mason Creek	Basin	McKean	CWF	Add TON
Elk Creek	Basin	Elk	CWF	Add TON
Island Run	Basin	Elk	CWF	Add TON
Big Mill Creek	Basin	Elk	HQ-CWF	Add TON
Connerville Run	Basin	Elk	CWF	Add TON
Dog Hollow Run	Basin	Elk	CWF	Add TON
Gillis Run	Basin	Elk	CWF	Add TON
Little Toby Creek	Main Stem	Elk	CWF	Add TON
Unnamed Tributaries to Little Toby Creek	Basins	Elk-Jefferson	CWF	Add TON
Limestone Run	Basin	Elk	CWF	Add TON
Kyler Run	Basin	Elk	CWF	Add TON
McCauley Run	Basin	Elk	CWF	Add TON
Sawmill Run	Main Stem	Elk	CWF	Add TON
Unnamed Tributaries to Sawmill Run	Basins	Elk	CWF	Add TON

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LIST R — CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Lost Run	Basin, Source to Fox Twp. M.A. Dam	Elk	HQ-CWF	Add TON
Lost Run	Basin, Fox Twp. M.A. Dam to Mouth	Elk	CWF	Add TON
Brandy Camp Creek	Basin	Elk	CWF	Add TON
Johnson Run	Basin	Elk	CWF	Add TON
Bear Run	Basin	Elk	CWF	Add TON
Oyster Run	Basin	Elk	CWF	Add TON
Mead Run	Basin	Elk	CWF	Add TON
Boggy Run	Basin	Elk	HQ-CWF	Add TON
Ohio River				
Allegheny River				
Clarion River				
Whetstone Branch	Basin, Source to Brockway M.A. No. 1 Dam	Elk	HQ-CWF	Add TON
Whetstone Branch	Basin, Brockway M.A. No. 1 Dam to Mouth	Elk	CWF	Add TON
Walburn Run	Basin	Jefferson	CWF	Add TON
Rattlesnake Creek	Basin, Source to Brockway M.A. Dam	Jefferson	HQ-CWF	Add TON
Rattlesnake Creek	Basin, Brockway M.A. Dam to Mouth	Jefferson	CWF	Add TON
Baghdad Run	Basin	Jefferson	CWF	Add TON
Jenkins Run	Basin	Jefferson	CWF	Add TON
Little Vineyard Run	Basin	Jefferson	CWF	Add TON
Vineyard Run	Basin	Jefferson	CWF	Add TON
Coward Run	Basin	Elk	CWF	Add TON
Laurel Run	Basin	Elk	CWF	Add TON
Bearmouth Run	Basin	Elk	CWF	Add TON
Bear Creek	Basin	Elk	HQ-CWF	Add TON
Mahood Run	Basin	Elk	CWF	Add TON
Beech Bottom Run	Basin	Elk	CWF	Add TON
Lake City Run	Basin	Elk	CWF	Add TON
Cole Run	Main Stem	Elk	CWF	Add TON
Unnamed Tributaries to Cole Run	Basins	Elk	CWF	Add TON
Crow Run	Basin	Elk	HQ-CWF	Add TON
Irwin Run	Basin	Elk	CWF	Add TON
Spring Creek	Basin	Elk	HQ-CWF	Add TON
Maxwell Run	Basin	Elk	HQ-CWF	Add TON
Elliott Run	Basin	Elk	CWF	Add TON
Daugherty Run	Basin	Jefferson	CWF	Add TON
Raught Run	Basin	Elk	CWF	Add TON
Painter Run	Basin	Elk	CWF	Add TON
Church Run	Basin	Elk	CWF	Add TON
Callen Run	Basin	Jefferson	HQ-CWF	Add TON
Cline Run	Basin	Elk	CWF	Add TON
Wyncoop Run	Basin	Elk	HQ-CWF	Add TON
Leeper Run	Basin	Elk	CWF	Add TON
Pine Run	Basin	Elk	CWF	Add TON
Mill Stone Creek	Basin	Elk	HQ-CWF	Add TON
Shippen Run	Basin	Forest	CWF	Add TON
Clear Creek	Basin	Jefferson	HQ-CWF	Add TON
Tadler Run	Basin	Jefferson	CWF	Add TON
Cherry Run	Basin	Forest	HQ-CWF	Add TON
Maple Creek	Basin	Forest	HQ-CWF	Add TON
Coleman Run	Basin	Forest	HQ-CWF	Add TON
Troutman Run	Basin	Forest	HQ-CWF	Add TON
Henry Run	Basin	Forest	CWF	Add TON
Toms Run	Basin	Forest	CWF	Add TON
Cather Run	Basin	Clarion	HQ-CWF	Add TON
Maxwell Run	Basin	Clarion	HQ-CWF	Add TON
Blyson Run	Basin	Clarion	EV	None
Mill Creek	Main Stem, Source to Little Mill Creek	Clarion	HQ-CWF	Add TON

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LIST R -- CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Mill Creek	Main Stem, Little Mill Creek to Mouth	Clarion	CWF	Add TON
Unnamed Tributaries to Mill Creek	Basins	Clarion-Jefferson	HQ-CWF	Add TON
Ohio River				
Allegheny River				
Clarion River				
Parks Run	Basin	Jefferson	HQ-CWF	Add TON
Martin Run	Basin	Jefferson	HQ-CWF	Add TON
Rankin Run	Basin	Jefferson	HQ-CWF	Add TON
Updike Run	Basin	Jefferson	HQ-CWF	Add TON
McCanna Run (Pendleton Run)	Basin	Clarion	EV	None
Little Mill Creek	Basin	Clarion	CWF	Add TON
Douglas Run	Basin	Clarion	CWF	Add TON
Woods Run	Basin	Clarion	HQ-CWF	Add TON
Stroup Run	Basin	Clarion	HQ-CWF	Add TON
Trap Run	Basin	Clarion	HQ-CWF	Add TON
Whites Run	Basin	Clarion	CWF	Add TON
Reeds Run	Basin	Clarion	CWF	Add TON
Toby Creek	Basin	Clarion	CWF	Add TON
Trout Run	Basin	Clarion	CWF	Add TON
Courtleys Run	Basin	Clarion	CWF	Add TON
Piney Creek	Basin	Clarion	CWF	Add TON
Deer Creek	Basin	Clarion	CWF	Add TON
Canoe Creek	Basin	Clarion	HQ-CWF	Add TON
Beaver Creek	Basin	Clarion	HQ-CWF	Add TON
Licking Creek	Basin	Clarion	CWF	Add TON
Turkey Run	Basin	Clarion	HQ-CWF	Add TON

DRAINAGE LIST S

Ohio River Basin in Pennsylvania
Allegheny River

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Ohio River				
Allegheny River	Main Stem	Armstrong	WWF, Add N	None
Unnamed Tributaries to Allegheny River	Basins, Clarion River to Kiskiminetas River	Armstrong	WWF	None
Bear Creek	Main Stem	Armstrong	CWF	None
Unnamed Tributaries to Bear Creek	Basins	Butler-Armstrong	CWF	None
Rays Run	Basin	Butler	CWF	None
Silver Creek	Basin, Source to LR 10079 bridge at Walley Mill	Butler	EV	None
Silver Creek	Basin, LR 10079 bridge at Walley Mill to mouth	Butler	HQ-CWF	None
South Branch Bear Creek	Basin	Butler	WWF	None
North Branch Bear Creek	Basin	Butler	CWF	None
Dunlap Creek	Basin	Clarion	WWF	None
Black Fox Run	Basin	Clarion	WWF	None
Birch Run	Basin	Armstrong	WWF	None
Armstrong Run	Basin	Armstrong	WWF	None
Catfish Run	Basin	Clarion	WWF	None
Sugar Creek	Basin	Armstrong	WWF	None
Snyders Run	Basin	Armstrong	CWF	None
Huling Run	Basin	Armstrong	TSF	None
Redbank Creek	Main Stem	Armstrong	TSF	None
Unnamed Tributaries to Redbank Creek	Basin	Jefferson-Clarion-Armstrong	CWF	None

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LIST S—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Sandy Lick Creek	Main Stem	Jefferson	TSF	None
Unnamed Tributaries to Sandy Lick Creek	Basins	Clearfield-Jefferson	CWF	None
Coal Run	Basin	Clearfield	CWF	None
Muddy Run	Basin	Clearfield	CWF	None
Narrows Creek	Basin	Clearfield	CWF	None
Gravel Lick Run	Basin	Clearfield	CWF	None
Laborde Branch	Basin	Clearfield	CWF	None
Reisinger Run	Basin	Clearfield	CWF	None
Pent Run	Basin	Clearfield	CWF	None
Beaver Run	Basin	Clearfield	CWF	None
Juniata Run	Basin	Clearfield	CWF	None
Clear Run	Basin	Clearfield	CWF	None
Slab Run	Basin	Clearfield	CWF	None
Wolf Run	Main Stem	Clearfield	CWF	None
Unnamed Tributaries to Wolf Run	Basins	Clearfield-Jefferson	CWF	None
Fall Creek	Basin	Jefferson	HQ-CWF	None
Panther Run	Basin	Jefferson	CWF	None
Pitchpine Run	Basin	Jefferson	CWF	None
Soldier Run	Basin	Jefferson	CWF	None
Trout Run	Basin	Jefferson	CWF	None
Schoolhouse Run	Basin	Jefferson	HQ-CWF	None
O'Donnell Run	Basin	Jefferson	CWF	None
Camp Run	Basin	Jefferson	CWF	None
Fuller Run	Basin	Jefferson	CWF	None
Cable Run	Basin	Jefferson	CWF	None
Mill Creek	Main Stem	Jefferson	CWF	None
Unnamed Tributaries to Mill Creek	Basins	Jefferson	CWF	None
Horn Run	Basin	Jefferson	CWF	None
Fivemile Run	Basin	Jefferson	CWF	None
Little Mill Creek	Basin	Jefferson	HQ-CWF	None
Fivemile Run	Basin	Jefferson	CWF	None
North Fork	Main Stem	Jefferson	HQ-CWF	None
Unnamed Tributaries to North Fork	Basins	Jefferson	HQ-CWF	None
Williams Run	Basin	Jefferson	HQ-CWF	None
Muddy Run	Basin	Jefferson	HQ-CWF	None
Bearpen Run	Basin	Jefferson	HQ-CWF	None
Manners Run	Basin	Jefferson	HQ-CWF	None
Mammy Hi Run	Basin	Jefferson	HQ-CWF	None
Lucas Run	Basin	Jefferson	HQ-CWF	None
South Branch	Basin	Jefferson	EV	None
Acy Run	Basin	Jefferson	HQ-CWF	None
Windfall Run	Basin	Jefferson	HQ-CWF	None
Clear Run	Basin	Jefferson	HQ-CWF	None
Miller Run	Basin	Jefferson	HQ-CWF	None
Shippen Run	Basin	Jefferson	EV	None
Craft Run	Basin	Jefferson	EV	None
Pekin Run	Basin	Jefferson	HQ-CWF	None
Red Lick Run	Basin	Jefferson	HQ-CWF	None
Sugarcamp Run	Basin	Jefferson	HQ-CWF	None
Coder Run	Basin	Jefferson	CWF	None
Rattlesnake Run	Basin	Jefferson	CWF	None
Simpson Run	Basin	Jefferson	CWF	None
Welch Run	Basin	Jefferson	CWF	None
Runaway Run	Basin	Jefferson	CWF	None
Carrier Run	Basin	Jefferson	CWF	None
Beaver Run	Basin, Source to PA Rte. 36	Jefferson	HQ-CWF	None
Beaver Run	Basin, PA Rte. 36 to Mouth	Jefferson	CWF	None

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LIST S—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Tarkiln Run	Basin	Jefferson	CWF	None
Patton Run	Basin	Jefferson	CWF	None
Little Sandy Creek	Basin	Armstrong	CWF	None
Pine Creek	Basin	Clarion	CWF	None
Town Run	Basin	Clarion	CWF	None
Middle Run	Basin	Clarion	CWF	None
Leisure Run	Basin	Clarion	CWF	None
Long Run	Basin	Clarion	CWF	None
Leatherwood Creek	Basin	Clarion	CWF	None
Middle Run	Basin	Clarion	CWF	None
Rock Run	Basin	Clarion	CWF	None
Wildcat Run	Basin	Clarion	CWF	None
Mast Run	Basin	Clarion	CWF	None
Mahoning Creek	Main Stem	Armstrong	WWF	None
Unnamed Tributaries to Mahoning Creek	Basins	Jefferson-Indiana-Armstrong	CWF	None
East Branch Mahoning Creek	Basin, Source to Clover Run	Jefferson	HQ-CWF	None
Clover Run	Basin	Jefferson	HQ-CWF	None
East Branch Mahoning Creek	Basin, Clover Run to Mouth	Jefferson	CWF	None
Stump Creek	Basin	Jefferson	CWF	None
Unnamed Tributaries to Stump Creek	Basin	Jefferson	CWF	None
Limestone Run	Basin	Jefferson	CWF	None
Sugarcamp Run	Basin, Source to the Helvetia Portal of the R&P Coal Company Mine (Cert. #196)	Jefferson	HQ-CWF	None
Sugarcamp Run	Basin, Helvetia Portal of the R&P Coal Company Mine (Cert. #196) to Mouth	Jefferson	CWF	None
Poose Run	Basin	Jefferson	CWF	None
Big Run	Basin	Jefferson	CWF	None
Rock Run	Basin	Jefferson	CWF	None
Canoe Creek	Basin	Jefferson	CWF	None
Elk Run	Basin	Jefferson	CWF	None
Sawmill Run	Basin	Jefferson	CWF	None
Rose Run	Basin	Jefferson	CWF	None
Nicely Run	Basin	Jefferson	CWF	None
Dutch Run	Basin	Jefferson	CWF	None
Perryville Run	Basin	Jefferson	CWF	None
Foundry Run	Basin	Jefferson	CWF	None
Steer Run	Basin	Indiana	CWF	None
Carr Run	Basin	Indiana	CWF	None
Hamilton Run	Basin	Indiana	CWF	None
Sugarcamp Run	Basin	Indiana	CWF	None
Little Mahoning Creek	Basin	Indiana	HQ-CWF	None
Foundry Run	Basin	Armstrong	CWF	None
Glade Run	Basin	Armstrong	CWF	None
Camp Run	Basin	Armstrong	CWF	None
Pine Run	Basin	Armstrong	CWF	None
Little Mudlick Creek	Basin	Armstrong	CWF	None
Cathart Run	Basin	Armstrong	CWF	None
Scrubgrass Creek	Basin	Armstrong	CWF	None
Pine Creek	Basin	Armstrong	HQ-CWF	None
Hays Run	Basin	Armstrong	WWF	None
Limestone Run	Basin	Armstrong	WWF	None
Cowanshannock Creek	Basin	Armstrong	WWF	None
Garretts Run	Basin	Armstrong	WWF	None
Tub Mill Run	Basin	Armstrong	WWF	None
Crooked Creek	Main Stem	Armstrong	WWF	None
Unnamed Tributaries to Crooked Creek	Basins, Source to Plum Creek	Indiana	CWF	None
Unnamed Tributaries to Crooked Creek	Basins, Plum Creek to Allegheny River	Armstrong	WWF	None
Rayne Run	Basin	Indiana	CWF	None
Brush Run	Basin	Indiana	CWF	None
Pine Run	Basin	Indiana	CWF	None
Twomile Run	Basin	Indiana	CWF	None

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LIST S—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
McKee Run	Basin	Indiana	CWF	None
Fulton Run	Basin	Indiana	CWF	None
Dark Hollow Run	Basin	Indiana	CWF	None
Mitchell Run	Basin	Indiana	CWF	None
Curry Run	Basin	Indiana	CWF	None
Anthony Run	Basin	Indiana	CWF	None
Walker Run	Basin	Indiana	CWF	None
Plum Creek	Main Stem	Armstrong	TSF	None
Unnamed Tributaries to Plum Creek	Basins	Indiana-Armstrong	CWF	None
South Branch Plum Creek	Basin, Source to Reddings Run	Armstrong	HQ-CWF	None
Reddings Run	Basin	Armstrong	CWF	None
South Branch Plum	Basin, Reddings Run to Plum Creek	Armstrong	CWF	None
North Branch Plum Creek	Basin	Armstrong	CWF	None
Cessna Run	Basin	Armstrong	CWF	None
Dutch Run	Basin	Armstrong	CWF	None
Gobblers Run	Basin	Armstrong	WWF	None
Craig Run	Basin	Armstrong	WWF	None
Lindsay Run	Basin	Armstrong	WWF	None
Sugar Run	Basin	Armstrong	WWF	None
Fagley Run	Basin	Armstrong	WWF	None
Cherry Run	Basin	Armstrong	CWF	None
Pine Run	Basin	Armstrong	WWF	None
Beers Run	Basin	Armstrong	WWF	None
Coal Bank Run	Basin	Armstrong	WWF	None
Horney Camp Run	Basin	Armstrong	WWF	None
Elbow Run	Basin	Armstrong	WWF	None
Campbell Run	Basin	Armstrong	WWF	None
Glade Run	Basin	Armstrong	TSF	None
Nicholson Run	Basin	Armstrong	WWF	None
Taylor Run	Basin	Armstrong	WWF	None
Watson Run	Basin	Armstrong	WWF	None
Hill Run	Basin	Armstrong	WWF	None
Knapp Run	Basin	Armstrong	WWF	None

DRAINAGE LIST T
Ohio River Basin in Pennsylvania
Kiskiminetas River

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Ohio River				
Allegheny River				
Kiskiminetas River	Main Stem	Armstrong	WWF	None
Unnamed Tributaries to Kiskiminetas River	Basins	Indiana-Armstrong-Westmoreland	WWF	None
Conemaugh River	Main Stem	Westmoreland	WWF	None
Unnamed Tributaries to Conemaugh River	Basins	Indiana-Cambria-Westmoreland	CWF	None
Stony Creek	Main Stem, Source to Beaverdam Creek	Somerset	CWF	None
Stony Creek	Main Stem, Beaverdam Creek to Quemahoning Creek	Somerset	TSF	None
Stony Creek	Main Stem, Quemahoning Creek to Conemaugh River	Cambria	WWF	None
Unnamed Tributaries to Stony Creek	Basins	Somerset-Cambria	CWF	None

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LIST T—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Reitz Creek	Basin	Somerset	CWF	None
Glades Creek	Basin	Somerset	CWF	None
Rhoads Creek	Basin	Somerset	CWF	None
Schrock Run	Basin	Somerset	CWF	None
Buck Run	Basin	Somerset	CWF	None
Grove Run	Basin	Somerset	CWF	None
Lamberts Run	Basin	Somerset	CWF	None
Wells Creek	Basin	Somerset	CWF	None
Beaverdam Creek	Basin	Somerset	HQ-CWF	None
Oven Run	Basin	Somerset	CWF	None
Fallen Timber Run	Basin	Somerset	CWF	None
Quemahoning Creek	Main Stem	Somerset	CWF	None
Unnamed Tributaries to Quemahoning Creek	Basins	Somerset	CWF	None
North Branch Quemahoning Creek	Main Stem	Somerset	CWF	None
Unnamed Tributaries to North Branch Quemahoning Creek	Basins	Somerset	CWF	None
Horner Run	Basin	Somerset	CWF	None
Beams Run	Basin	Somerset	CWF	None
Spruce Run	Basin	Somerset	HQ-CWF	None
Beaverdam Run	Basin	Somerset	CWF	None
Beaverdam Creek	Basin	Somerset	HQ-CWF	None
Roaring Run	Basin, Source to Boswell M.A. Water Dam	Somerset	HQ-CWF	None
Roaring Run	Basin, Boswell M.A. Water Dam to Quemahoning Creek	Somerset	CWF	None
Twomile Run	Basin	Somerset	CWF	None
Higgins Run	Basin	Somerset	CWF	None
Kiskiminetas River				
Shade Creek	Main Stem	Somerset	CWF	None
Unnamed Tributaries to Shade Creek	Basins	Somerset	CWF	None
Dark Shade Creek	Basin	Somerset	CWF	None
Clear Shade Creek	Main Stem	Somerset	HQ-CWF	None
Unnamed Tributaries to Clear Shade Creek	Basins	Somerset	HQ-CWF	None
Cub Run	Basin	Somerset	HQ-CWF	None
Piney Run	Basin, Source to T816	Somerset	EV	None
Piney Run	Basin, T816 to Clear Shade Creek	Somerset	HQ-CWF	None
Hinson Run	Basin	Somerset	CWF	None
Roaring Fork	Basin	Somerset	CWF	None
Spruce Run	Basin	Somerset	CWF	None
Paint Creek	Main Stem, Source to Little Paint Creek	Somerset-Cambria	CWF	None
Paint Creek	Main Stem, Little Paint Creek to Stony Creek	Cambria	TSF	None
Unnamed Tributaries to Paint Creek	Basins	Somerset-Cambria	CWF	None

LIST T—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Babcock Creek	Basin	Somerset	CWF	None
Seese Run	Basin	Somerset	CWF	None
Little Paint Creek	Basin	Cambria	CWF	None
Bens Creek	Main Stem	Cambria	CWF	None
Unnamed Tributaries to Bens Creek	Basins	Somerset	CWF	None
South Fork Bens Creek	Basin	Somerset	HQ-CWF	None
North Fork Bens Creek	Basin	Somerset	HQ-CWF	None
Dalton Run	Basin	Somerset	HQ-CWF	None
Mill Creek	Basin	Somerset	HQ-CWF	None
Sams Run	Basin	Cambria	WWF	None
Solomon Run	Basin	Cambria	WWF	None
Cherry Run	Basin	Cambria	WWF	None
Little Conemaugh River	Main Stem, Source to North Branch Little Conemaugh River	Cambria	CWF	None
Little Conemaugh River	Main Stem, North Branch to Conemaugh River to Conemaugh River	Cambria	WWF	None
Unnamed Tributaries to Little Conemaugh River	Basins	Cambria	CWF	None
Kiskiminetas River				
Bear Rock Run	Basin	Cambria	CWF	None
Bens Creek	Basin	Cambria	HQ-CWF	None
Noels Creek	Basin	Cambria	HQ-CWF	None
Spring Run	Basin	Cambria	CWF	None
Trout Run	Basin	Cambria	CWF	None
North Branch Little Conemaugh River	Basin	Cambria	CWF	None
Laurel Run	Basin	Cambria	CWF	None
South Fork Little Conemaugh River	Basin, Source to Beaverdam Run	Cambria	HQ-CWF	None
Beaverdam Run	Basin	Cambria	HQ-CWF	None
South Fork Little Conemaugh River	Basin, Beaverdam Run to Little Conemaugh River	Cambria	CWF	None
Bear Run	Basin	Cambria	CWF	None
Saltlick Run	Basin	Cambria	HQ-CWF	None
Clapboard Run	Basin	Cambria	WWF	None
Peggys Run	Basin	Cambria	WWF	None
Hinckston Run	Basin, Source to Hinckston Reservoir	Cambria	CWF	None
Hinckston Run	Basin, Hinckston Reservoir to Conemaugh River	Cambria	WWF	None
Elk	Basin	Cambria	CWF	None
St. Clair Run	Basin	Cambria	CWF	None
Laurel Run	Basin	Cambria	HQ-CWF	None
Clark Run	Basin	Indiana	HQ-CWF	None
Findley Run	Basin	Indiana	HQ-CWF	None
Big Spring Run	Basin, Source to Sugar Run	Westmoreland	CWF	None
Big Spring Run	Basin, Sugar Run to Conemaugh River	Westmoreland	CWF	None
Baldwin Creek	Basin, Source to New Florence Water Dam	Westmoreland	EV	None
Baldwin Creek	Main Stem, New Florence Water Dam to Conemaugh River	Westmoreland	HQ-CWF	None

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LIST T - CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Unnamed Tributaries to Baldwin Creek	Basins, New Florence Water Dam to Conemaugh River	Westmoreland	HQ-CWF	None
Powdermill Run	Basin	Westmoreland	EV	None
Poplar Run	Basin	Westmoreland	HQ-CWF	None
Shannon Run	Basin	Westmoreland	HQ-CWF	None
Richards Run	Basin	Indiana	CWF	None
Tubmill Creek	Basin, Source to Tubmill Reservoir Dam	Westmoreland	HQ-CWF	None
Kiskiminetas River				
Tubmill Creek	Basin, Tubmill Reservoir Dam to Conemaugh River	Westmoreland	TSF	None
Roaring Run	Basin	Indiana	CWF	None
Toms Run	Basin	Indiana	CWF	None
McGee Run	Main Stem, Source to Upstream Boundary of Derry Borough	Westmoreland	CWF	None
McGee Run	Main Stem, Upstream Boundary of Derry Borough to Mouth	Westmoreland	TSF	None
Unnamed Tributaries to McGee Run	Basins	Westmoreland	CWF	None
Trout Run	Basin	Westmoreland	CWF	None
Shirey Run	Basin	Westmoreland	HQ-CWF	None
Harbridge Run	Basin	Westmoreland	CWF	None
Stony Run	Basin	Westmoreland	CWF	None
Blacklick Creek	Main Stem	Indiana	TSF	None
Unnamed Tributaries to Blacklick Creek	Basins	Indiana	CWF	None
North Branch Blacklick Creek	Basin	Indiana	CWF	None
South Branch Blacklick Creek	Main Stem	Indiana	CWF	None
Unnamed Tributaries to South Branch Blacklick Creek	Basins	Cambria	CWF	None
Williams Run	Basin	Cambria	CWF	None
Stewart Run	Basin	Cambria	HQ-CWF	None
Coalpit Run	Basin	Cambria	CWF	None
Bracken Run	Basin	Cambria	CWF	None
Shuman Run	Basin	Cambria	CWF	None
Rummel Run	Basin	Indiana	CWF	None
Ramsey Run	Basin	Indiana	CWF	None
Clarke Run	Basin	Indiana	CWF	None
Mardis Run	Basin	Indiana	CWF	None
Mardis Run	Basin	Indiana	CWF	None
Brush Creek	Basin	Indiana	CWF	None
Ramsey Run	Basin	Indiana	CWF	None
Aulds Run	Basin	Indiana	CWF	None
Laurel Run	Basin	Indiana	CWF	None
Two Lick Creek	Main Stem	Indiana	TSF	None
Unnamed Tributaries to Two Lick Creek	Basins	Indiana	CWF	None
South Branch Two Lick Creek	Basin	Indiana	HQ-CWF	None
North Branch Two Lick Creek	Basin	Indiana	CWF	None
Browns Run	Basin	Indiana	CWF	None
Buck Run	Basin	Indiana	CWF	None
Dixon Run	Basin	Indiana	CWF	None
Penn Run	Basin	Indiana	CWF	None
Allen Run	Basin	Indiana	CWF	None
Ramsey Run	Basin	Indiana	CWF	None
Stoney Run	Basin	Indiana	CWF	None

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LIST T - CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Kiskiminetas River				
Yellow Creek	Main Stem, Source to Yellow Creek State Park Dam	Indiana	CWF	None
Yellow Creek	Main Stem, Yellow Creek State Park Dam to Two Lick Creek	Indiana	TSF	None
Unnamed Tributaries to Yellow Creek	Basins	Indiana	CWF	None
Leonard Run	Basin	Indiana	CWF	None
Laurel Run	Basin	Indiana	CWF	None
Rose Run	Basin	Indiana	CWF	None
Laurel Run	Basin	Indiana	CWF	None
Little Yellow Creek	Basin	Indiana	HQ-CWF	None
Ferrier Run	Basin	Indiana	CWF	None
Tearing Run	Basin	Indiana	CWF	None
Cherry Run	Basin	Indiana	CWF	None
Weirs Run	Basin	Indiana	CWF	None
Muddy Run	Basin	Indiana	CWF	None
Greys Run	Basin	Indiana	CWF	None
Stewart Run	Basin	Indiana	CWF	None
Aultmans Run	Basin	Indiana	TSF	None
Roaring Run	Basin	Indiana	CWF	None
Spruce Run	Basin	Westmoreland	HQ-CWF	None
Boatyard Run	Basin	Westmoreland	CWF	None
Elders Run	Basin	Indiana	CWF	None
Loyalhanna Creek	Basin, Source to Laughlinton Run	Westmoreland	HQ-CWF	None
Laughlinton Run	Basin	Westmoreland	HQ-CWF	None
Loyalhanna Creek	Main Stem, Laughlinton Run to Four Mile Run	Westmoreland	CWF	None
Loyalhanna Creek	Main Stem, Four Mile Run to Miller Run	Westmoreland	TSF	None
Loyalhanna Creek	Main Stem, Miller Run to Kiskiminetas River	Westmoreland	WWF	None
Unnamed Tributaries to Loyalhanna Creek	Basins, Laughlinton Run to Miller Run	Westmoreland	CWF	None
Unnamed Tributaries to Loyalhanna Creek	Basins, Millers' Run to Kiskiminetas River, Except the Tributary on Which Keystone Lake is Located (McCune Run)	Westmoreland	WWF	None
Zimmerman Run	Basin	Westmoreland	CWF	None
Mill Creek	Main Stem	Westmoreland	CWF	None
Unnamed Tributaries to Mill Creek	Basins	Westmoreland	CWF	None
Kiskiminetas River				
Middle Fork Mill Creek	Basin	Westmoreland	HQ-CWF	None
North Fork Mill Creek	Basin	Westmoreland	HQ-CWF	None
South Fork Mill Creek	Basin	Westmoreland	EV	None
Macks Run	Basin	Westmoreland	CWF	None
Hannas Run	Basin	Westmoreland	CWF	None
Coalpit Run	Basin	Westmoreland	HQ-CWF	None
Fourmile Run	Basin	Westmoreland	TSF	None
Miller Run	Basin	Westmoreland	HQ-CWF	None
Ninemile Run	Main Stem	Westmoreland	WWF	None
Unnamed Tributaries to Ninemile Run	Basins	Westmoreland	WWF	None

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LIST T - CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Indian Camp Run	Basin	Westmoreland	HQ-CWF	None
Sawmill Run	Basin	Westmoreland	WWF	None
Monastery Run	Basin	Westmoreland	WWF	None
Unity Run	Basin	Westmoreland	CWF	None
Saxman Run	Basin	Westmoreland	WWF	None
Union Run	Basin	Westmoreland	WWF	None
Keystone Lake Tributary (McCune Run)	Basin, Source to Keystone Lake Dam	Westmoreland	TSF	None
Keystone Lake Tributary (McCune Run)	Basin, Keystone Lake Dam to Loyalhanna Creek	Westmoreland	WWF	None
Crabtree Creek	Basin	Westmoreland	WWF	None
Whitethorn Creek	Basin	Westmoreland	WWF	None
Serviceberry Run	Basin	Westmoreland	HQ-WWF	None
Getty Run	Basin	Westmoreland	WWF	None
Blacklegs Creek	Basin	Indiana	CWF	None
Sulphur Run	Basin	Indiana	CWF	None
Long Run	Basin	Armstrong	WWF	None
Wolford Run	Basin	Westmoreland	WWF	None
Flat Run	Basin	Armstrong	WWF	None
Roaring Run	Basin	Armstrong	CWF	None
Beaver Run	Basin, Source to Westmoreland County M.A., Beaver Run Dam	Westmoreland	HQ-CWF	None
Beaver Run	Basin, Westmoreland County M.A., Beaver Run Dam to Kiskiminetas River	Westmoreland	TSF	None
Pine Run	Basin	Westmoreland	WWF	None
Carnahan Run	Basin	Armstrong	WWF	None
Guffy Run	Basin	Armstrong	WWF	None
Brady Run	Basin	Armstrong	WWF	None
Penn Run	Basin	Westmoreland	WWF	None
Elder Run	Basin	Armstrong	WWF	None

DRAINAGE LIST U

Ohio River Basin in Pennsylvania
Allegheny River

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Ohio River				
Allegheny River	Main Stem, Redbank Creek to Kiskiminetas River	Armstrong	WWF, <i>Add N</i>	None
Allegheny River	Main Stem, Kiskiminetas River to Ohio River	Allegheny	WWF, <i>Add N</i>	<i>Add TON</i>
Unnamed Tributaries to Allegheny River	Basins, Kiskiminetas River to Plum Creek	Westmoreland-Armstrong-Allegheny	WWF	None
Unnamed Tributaries to Allegheny River	Basins, Plum Creek to Ohio River	Allegheny	WWF, <i>Delete PWS</i>	<i>Delete TDS and Mn, Add TDS₁</i>
Buffalo Creek	Basin, Source to Little Buffalo Run	Butler-Armstrong	HQ-CWF	None
Buffalo Creek	Basin, Little Buffalo Run to Little Buffalo Creek	Butler	HQ-TSF	None

LIST U — CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Little Buffalo Creek	Basin	Butler	HQ-TSF	None
Buffalo Creek	Basin, Little Buffalo Creek to Mouth	Butler-Armstrong	TSF	None
Chartiers Run	Basin	Westmoreland	TSF	None
Bull Creek	Basin	Allegheny	TSF	None
Bailey Run	Basin	Allegheny	WWF	None
Crawford Run	Basin	Allegheny	WWF	None
Pucketa Creek	Basin	Allegheny	TSF	None
Riddle Run	Basin	Allegheny	WWF	None
Tawney Run	Basin	Allegheny	WWF	None
Blacks Run	Basin	Allegheny	WWF	None
Falling Springs Run	Basin	Allegheny	WWF	None
Deer Creek	Basin, Source to Little Deer Creek	Allegheny	CWF	None
Little Deer Creek	Basin	Allegheny	TSF	None
Deer Creek	Basin, Little Deer Creek to Allegheny River	Allegheny	WWF	None
Plum Creek	Basin	Allegheny	WWF	None
Powers Run	Basin	Allegheny	WWF, Delete PWS	Delete TDS, and Mn. Add TDS ₁
Indian Creek	Basin	Allegheny	WWF, Delete PWS	Delete TDS, and Mn. Add TDS ₁
Quigley Creek	Basin	Allegheny	WWF, Delete PWS	Delete TDS, and Mn. Add TDS ₁
Ohio River				
Allegheny River				
Sandy Creek	Basin	Allegheny	WWF, Delete PWS	Delete TDS, and Mn. Add TDS ₁
Squaw Run	Basin	Allegheny	HQ-WWF, Delete PWS	Delete TDS, and Mn. Add TDS ₁
Shades Run	Basin	Allegheny	WWF, Delete PWS	Delete TDS, and Mn. Add TDS ₁
Guyasuta Run	Basin, Source to PA Rte 28	Allegheny	HQ-WWF, Delete PWS	Delete TDS, and Mn. Add TDS ₁
Guyasuta Run	Basin, PA Rte 28 to Mouth	Allegheny	WWF, Delete PWS	Delete TDS, and Mn. Add TDS ₁
Pine Creek	Basin, Source to North Park Lake Dam	Allegheny	CWF	None
Pine Creek	Basin, North Park Lake Dam to Allegheny River	Allegheny	TSF	Delete TDS, Add TDS ₁
Girtys Run	Basin	Allegheny	WWF, Delete PWS	Delete TDS, and Mn. Add TDS ₁

DRAINAGE LIST V

Ohio River Basin in Pennsylvania
Monongahela River

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Ohio River				
Monongahela River	Main Stem	Allegheny	WWF, Add N	Add TON
Unnamed Tributaries to Monongahela River	Basins, PA-WVA State Border to Mingo Creek	Washington-Allegheny-Westmoreland-Greene-Fayette	WWF	None

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LIST V - CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Unnamed Tributaries to Monongahela River	Basins. Mingo Creek to Youghiogheny River	Allegheny-Washington	WWF	None
Unnamed Tributaries to Monongahela River	Basins. Youghiogheny River to Ohio River	Allegheny	WWF; <i>Delete</i> PWS	<i>Delete</i> TDS, and Mn; <i>Add</i> TDS,
Robinson Run	Basin	Greene	WWF	None
Crooked Run	Basin	Greene	WWF	None
Camp Run	Basin	Fayette	WWF	None
Cheat River	Main Stem	Fayette	WWF	None
Unnamed Tributaries to Cheat River	Basins	Fayette	WWF	None
Big Sandy Creek	Main Stem	Fayette	HQ-CWF	None
Unnamed Tributaries to Big Sandy Creek	Basins	Fayette	HQ-CWF	None
Braddock Run	Basin	Fayette	HQ-CWF	None
Chaney Run	Basin	Fayette	HQ-CWF	None
Scotts Run	Basin	Fayette	HQ-CWF	None
McIntire Run	Basin	Fayette	HQ-CWF	None
Stony Fork	Basin	Fayette	HQ-CWF	None
Quebec Run	Basin. Source to Mill Run	Fayette	EV	None
Mill Run	Basin	Fayette	HQ-CWF	None
Quebec Run	Basin. Mill Run to Big Sandy Creek	Fayette	HQ-CWF	None
Little Sandy Creek	Main Stem	Fayette	HQ-CWF	None
Unnamed Tributaries to Little Sandy Creek	Basins	Fayette	HQ-CWF	None
Fike Run	Basin	Fayette	HQ-CWF	None
Laurel Run	Basin	Fayette	HQ-CWF	None
Rubles Run	Basin	Fayette	CWF	None
Grassy Run	Basin	Fayette	WWF	None
Dunkard Creek	Main Stem	Greene	WWF	None
Unnamed Tributaries to Dunkard Creek	Basins	Greene	WWF	None
Pennsylvania Fork Dunkard Creek	Main Stem	Greene	WWF	None
Unnamed Tributaries to Pennsylvania Fork Dunkard Creek	Basins	Greene	WWF	None
Taylor Run	Basin	Greene	WWF	None
Six Run	Basin	Greene	WWF	None
White Creek (Brushy Fork)	Basin	Greene	WWF	None
Garrison Fork	Basin	Greene	WWF	None
Pumpkin Run	Basin	Greene	WWF	None
Clawson Run	Basin	Greene	WWF	None
Toms Runs	Basin	Greene	WWF	None
West Virginia Fork Dunkard Creek	Basin	Greene	WWF	None
Hoovers Run	Basin	Greene	WWF	None
Morris Run	Basin	Greene	WWF	None
Wrights Run	Basin	Greene	WWF	None
Roberts Run	Main Stem	Greene	WWF	None
Unnamed Tributaries to Roberts Run	Basins	Greene	WWF	None
Calico Run	Basin	Greene	WWF	None
Rush Run	Basin	Greene	WWF	None
Sheppards Run	Basin	Greene	WWF	None
Rudolph Run	Main Stem	Greene	WWF	None
Unnamed Tributaries to Rudolph Run	Basins	Greene	WWF	None

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LIST V - CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Haynes Run	Basin	Greene	WWF	None
Sharp Run	Basin	Greene	WWF	None
Hackelbender Run	Basin	Greene	WWF	None
Blacks Run	Basin	Greene	WWF	None
Ripleys Run	Basin	Greene	WWF	None
Shannon Run	Main Stem	Greene	WWF	None
Unnamed Tributaries to Shannon Run	Basins	Greene	WWF	None
Fox Run	Basin	Greene	WWF	None
Little Shannon Run	Basin	Greene	CWF	None
Bacon Run	Basin	Greene	WWF	None
Hobbs Run	Basin	Greene	WWF	None
Calvin Run	Basin	Greene	WWF	None
Dooley Run	Basin	Greene	WWF	None
Glade Run	Basin	Greene	WWF	None
Meadow Run	Basin	Greene	WWF	None
Georges Creek	Main Stem	Fayette	WWF	None
Unnamed Tributaries to Georges Creek	Basins	Fayette	WWF	None
Muddy Run	Basin	Fayette	WWF	None
Mountain Creek	Basin	Fayette	CWF	None
York Run	Basin	Fayette	WWF	None
War Branch	Basin	Fayette	WWF	None
Jacobs Creek	Basin	Fayette	WWF	None
Cats Run	Basin	Fayette	WWF	None
Whiteley Creek	Basin	Greene	WWF	None
Little Whiteley Creek	Basin	Greene	WWF	None
Browns Run	Basin	Fayette	WWF	None
Pegs Run	Basin	Greene	WWF	None
Middle Run	Basin	Fayette	WWF	None
Antram Run	Basin	Fayette	WWF	None
Wallace Run	Basin	Fayette	WWF	None
Muddy Creek	Basin	Greene	WWF	None
Neel Run	Basin	Greene	WWF	None
Pumpkin Run	Basin	Greene	WWF	None
Rush Run	Basin	Greene	WWF	None
Bates Run	Basin	Fayette	WWF	None
Tenmile Creek	Basin, Source to South Fork Tenmile Creek	Greene	TSF	None
South Fork Tenmile Creek	Basin, Source to Browns Creek	Greene	HQ-WWF	None
Browns Creek	Basin	Greene	HQ-WWF	None
South Fork Tenmile Creek	Basin, Browns Creek to Tenmile Creek	Greene	WWF	None
Tenmile Creek	Basin, South Fork Tenmile Creek to Monongahela River	Greene	WWF	None
Fishpot Run	Basin	Washington	WWF	None
Barneys Run	Basin	Washington	WWF	None
Meadow Run	Basin	Fayette	WWF	None
Kelley Run	Basin	Fayette	WWF	None
Rush Run	Basin	Fayette	WWF	None
Twomile Run	Basin	Washington	WWF	None
Dunlap Creek	Basin	Fayette	WWF	None
Redstone Creek	Basin	Fayette	WWF	None
Lilly Run	Basin	Washington	WWF	None
Pike Run	Basin	Washington	TSF	None
Little Redstone Creek	Basin	Fayette	WWF	None
Lamb Lick Run	Basin	Fayette	WWF	None
Downers Run	Basin	Fayette	WWF	None
Hooders Run	Basin	Washington	WWF	None
Speers Run	Basin	Westmoreland	WWF	None
Maple Creek	Basin	Washington	WWF	None
Beckets Run	Basin	Allegheny	WWF	None
Sunfish Run	Basin	Allegheny	WWF	None
Pigeon Creek	Basin	Washington	WWF	None
Dry Run	Basin	Washington	WWF	None

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LIST V — CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Mingo Creek	Basin, Source to Froman Run	Washington	HQ-TSF	None
Froman Run	Basin	Washington	TSF	None
Mingo Creek	Basin, Froman Run to Monongahela River	Washington	TSF	None
Huston Run	Basin	Washington	WWF	None
Bunola Run	Basin	Allegheny	WWF	None
Kelly Run	Basin	Allegheny	WWF	None
Perry Mill Run	Basin	Allegheny	WWF	None
Lobbs Run	Basin	Allegheny	WWF	None
Smiths Run	Basin	Allegheny	WWF	None
Fallen Timber Run	Basin	Allegheny	WWF	None
Wylie Run	Basin	Allegheny	WWF	None
Peters Creek	Basin	Allegheny	TSF	None
Youghiogheny River	Main Stem, PA-MD State Border to Youghiogheny River Dam	Fayette	WWF	Delete Temp, Add Temp,
Youghiogheny River	Main Stem, Youghiogheny Dam to Connell Run	Fayette	HQ-CWF	None
Youghiogheny River	Main Stem, Connell Run to Monongahela River	Allegheny	WWF	None
Unnamed Tributaries to Youghiogheny River	Basins, PA-MD State Border to Ramcat Run	Fayette-Somerset	CWF	None
Unnamed Tributaries to Youghiogheny River	Basins, Ramcat Run to Monongahela River	Fayette-Westmoreland-Allegheny	WWF	None
Buffalo Run	Basin	Fayette	WWF	None
Mill Run	Basin	Somerset	WWF	None
Collier Hollow	Basin	Somerset	WWF	None
Reason Run	Basin	Fayette	WWF	None
Braddocks Run	Basin	Somerset	WWF	None
Hall Run	Basin	Fayette	WWF	None
Tub Run	Basin	Fayette	WWF	None
Hen Run	Basin	Fayette	WWF	None
Casselman River	Main Stem	Somerset	WWF	None
Unnamed Tributaries to Casselman River	Basins, PA-MD State Border to Coxes Creek	Somerset	CWF	None
Unnamed Tributaries to Casselman River	Basins, Coxes Creek to Youghiogheny River	Somerset	WWF	None
Big Shade Run	Basin	Somerset	CWF	None
Crab Run	Basin	Somerset	CWF	None
Flag Run	Basin	Somerset	CWF	None
Meadow Run	Basin	Somerset	CWF	None
Tub Mill Run	Basin	Somerset	CWF	None
Piney Creek	Main Stem	Somerset	CWF	None
Unnamed Tributaries to Piney Creek	Basins	Somerset	CWF	None
Little Piney Creek	Basin	Somerset	CWF	None
Flaugherty Creek	Basin	Somerset	CWF	None
Elklick Creek	Basin	Somerset	CWF	None
Blue Lick Creek	Basin	Somerset	CWF	None
Swamp Creek	Basin	Somerset	CWF	None
Buffalo Creek	Basin	Somerset	CWF	None
Bigby Creek	Basin	Somerset	CWF	None
Piney Run	Basin	Somerset	CWF	None
Lick Run	Basin	Somerset	CWF	None
Shafer Run	Basin	Somerset	CWF	None
Stony Batter Run	Basin	Somerset	CWF	None
Weimer Run	Basin	Somerset	CWF	None
Coxes Creek	Main Stem	Somerset	WWF	None

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LIST V—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Unnamed Tributaries to Coxes Creek	Basins	Somerset	WWF	None
East Branch Coxes Creek	Basin, Source to PA Rte 281	Somerset	WWF	None
East Branch Coxes Creek	Main Stem, PA Rte 281 to Mouth	Somerset	TSF	None
Unnamed Tributaries to East Branch Coxes Creek	Basins, PA Rte 281 to Mouth	Somerset	TSF	None
Kimberly Run	Basin	Somerset	CWF	None
West Branch Coxes Creek	Basin	Somerset	WWF	None
Laurel Run	Basin	Somerset	WWF	None
Wilson Creek	Basin	Somerset	WWF	None
Rhoades Creek	Basin	Somerset	WWF	None
South Glade Creek	Basin	Somerset	WWF	None
Middle Creek	Basin	Somerset	TSF	None
Town Line Run	Main Stem	Somerset	WWF	None
Unnamed Tributaries to Town Line Run	Basin	Somerset	WWF	None
Iser's Run	Basin	Somerset	EV	None
McClintock Run	Basin	Somerset	CWF	None
Cucumber Run	Basin	Somerset	WWF	None
Whites Creek	Basin	Somerset	HQ-CWF	None
Laurel Hill Creek	Basin	Somerset	HQ-CWF	None
Blue Hole Creek	Basin	Somerset	EV	None
Jones Mill Run	Basin	Somerset	EV	None
Ramcat Run	Basin	Fayette	CWF	None
Drake Run	Basin	Somerset	HQ-CWF	None
Camp Run	Basin	Fayette	HQ-CWF	None
Lick Run	Basin	Fayette	HQ-CWF	None
Long Run	Basin	Fayette	HQ-CWF	None
Rock Spring Run	Basin	Fayette	HQ-CWF	None
Sheepskin Run	Basin	Fayette	HQ-CWF	None
Meadow Run	Basin	Fayette	HQ-CWF	None
Cucumber Run	Basin	Fayette	CWF	None
Jim Run	Basin	Fayette	CWF	None
Bear Run	Basin	Fayette	HQ-CWF	None
Jonathan Run	Basin	Fayette	HQ-CWF	None
Sugar Run	Basin	Fayette	HQ-CWF	None
Laurel Run	Basin	Fayette	HQ-CWF	None
Crooked Run	Basin	Fayette	CWF	None
Bruner Run (Haney Run)	Basin	Fayette	HQ-CWF	None
Johnson Run	Basin	Fayette	HQ-CWF	None
Workman Run	Basin	Fayette	CWF	None
Morgan Run	Basin	Fayette	HQ-CWF	None
Indian Creek	Basin, Source to Champion Creek	Fayette	HQ-CWF	None
Champion Creek	Basin	Fayette	CWF	None
Unnamed Tributaries to Indian Creek	Basins, Champion Creek to Youghiogheny River	Fayette	CWF	None
Wash Run	Basin	Fayette	CWF	None
Back Creek	Main Stem	Fayette	CWF	None
Unnamed Tributaries to Back Creek	Basins	Fayette	CWF	None
Trout Run	Basin	Fayette	HQ-CWF	None
Neals Run	Basin	Fayette	HQ-CWF	None
Poplar Run	Basin	Fayette	CWF	None
Laurel Run	Basin	Fayette	CWF	None
Stony Run	Basin	Fayette	CWF	None
Mill Run	Basin	Fayette	HQ-CWF	None
Rasler Run	Basin	Fayette	CWF	None
Richter Run	Basin	Fayette	CWF	None
Tates Run	Basin	Fayette	CWF	None
Laurel Run	Basin	Fayette	CWF	None
Dunbar Creek	Basin, Source to Gist Run	Fayette	HQ-CWF	None
Gist Run	Basin	Fayette	TSF	None
Dunbar Creek	Basin, Gist Run to Youghiogheny River	Fayette	TSF	None
Connell Run	Basin	Fayette	WWF	None
Opossum Run	Basin	Fayette	WWF	None
Mounds Creek	Basin	Fayette	WWF	None
Galley Run	Basin	Fayette	WWF	None
Hickman Run	Basin	Fayette	WWF	None
Dickerson Run	Basin	Fayette	WWF	None
Smiley Run	Basin	Fayette	WWF	None
Laurel Run	Basin	Fayette	WWF	None
Furnace Run	Basin	Fayette	WWF	None

LIST V—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Virgin Run	Basin, Source to Pennsylvania Fish Commission Dam at Virgin Run Lake	Fayette	HQ-TSF	None
Virgin Run	Basin, Pennsylvania Fish Commission Dam at Virgin Run Lake to Youghiogheny River	Fayette	TSF	None
Washington Run Browneller Run	Basin Basin	Fayette Fayette	WWF WWF	None None
Jacobs Creek	Basin, Source to Bridgeport Reservoir Dam	Fayette	CWF	None
Jacobs Creek	Basin from Bridgeport Reservoir Dam to Youghiogheny River	Fayette	WWF	None
Cedar Creek	Basin	Westmoreland	TSF	None
Sewickley Creek	Basin, Source to Brinkers Run	Westmoreland	HQ-CWF	None
Sewickley Creek	Main Stem, Brinkers Run to Youghiogheny Run	Westmoreland	WWF	None
Unnamed Tributaries to Sewickley Creek	Basins, Brinkers Run to Youghiogheny River	Westmoreland	WWF	None
Brinkers Run	Basin	Westmoreland	WWF	None
Boyer Run	Basin	Westmoreland	WWF	None
Township Line Run	Basin	Westmoreland	WWF	None
Jacks Run	Basin	Westmoreland	WWF	None
Wilson Run	Basin	Westmoreland	WWF	None
Belson Run	Basin	Westmoreland	WWF	None
Buffalo Run	Basin	Westmoreland	WWF	None
Lick Run	Basin	Westmoreland	WWF	None
Pinkerton Run	Basin	Westmoreland	WWF	None
Painters Run	Basin	Westmoreland	WWF	None
Kelly Run	Basin	Westmoreland	WWF	None
Little Sewickley Creek	Basin	Westmoreland	TSF	None
Pollock Run	Basin	Allegheny	WWF	None
Gillespie Run	Basin	Allegheny	WWF	None
Crawford Run	Basin	Allegheny	WWF	None
Long Run	Basin, Source to Jacks Run	Allegheny	HQ-TSF	None
Jacks Run	Basin	Allegheny	HQ-TSF	None
Long Run	Basin, Jacks Run to Youghiogheny River	Allegheny	TSF	None
Crooked Run	Basin	Allegheny	WWF: <i>Delete</i> PWS	<i>Delete</i> TDS, and Mn: <i>Add</i> TDS,
Thompson Run	Basin	Allegheny	WWF: <i>Delete</i> PWS	<i>Delete</i> TDS, and Mn: <i>Add</i> TDS,
Turtle Creek	Main Stem, Source to Brush Creek	Allegheny	TSF: <i>Delete</i> PWS	<i>Delete</i> TDS, and Mn: <i>Add</i> TDS,
Turtle Creek	Main Stem, Brush Creek to Monongahela River	Allegheny	WWF: <i>Delete</i> PWS	<i>Delete</i> TDS, and Mn: <i>Add</i> TDS,
Unnamed Tributaries to Turtle Creek	Basins, Source to Brush Creek	Westmoreland- Allegheny	TSF: <i>Delete</i> PWS	<i>Delete</i> TDS, and Mn: <i>Add</i> TDS,
Unnamed Tributaries to Turtle Creek	Basins, Brush Creek to Monongahela River	Allegheny	WWF: <i>Delete</i> PWS	<i>Delete</i> TDS, and Mn: <i>Add</i> TDS,
Steels Run	Basin	Westmoreland	HQ-CWF: <i>Delete</i> PWS	<i>Delete</i> TDS, and Mn: <i>Add</i> TDS,

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LIST V — CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Haymakers Run	Basin	Westmoreland	HQ-CWF; <i>Delete</i> PWS	<i>Delete</i> TDS ₁ and Mn; <i>Add</i> TDS ₂
Abers Creek	Basin	Allegheny	TSF; <i>Delete</i> PWS	<i>Delete</i> TDS ₁ and Mn; <i>Add</i> TDS ₂
Lyons Run	Basin	Westmoreland	TSF; <i>Delete</i> PWS	<i>Delete</i> TDS ₁ and Mn; <i>Add</i> TDS ₂
Simpson Run	Basin	Allegheny	TSF; <i>Delete</i> PWS	<i>Delete</i> TDS ₁ and Mn; <i>Add</i> TDS ₂
Brush Creek	Basin	Allegheny	TSF; <i>Delete</i> PWS	<i>Delete</i> TDS ₁ and Mn; <i>Add</i> TDS ₂
Thompson Run	Basin	Allegheny	WWF; <i>Delete</i> PWS	<i>Delete</i> TDS ₁ and Mn; <i>Add</i> TDS ₂
Homestead Run	Basin	Allegheny	WWF; <i>Delete</i> PWS	<i>Delete</i> TDS ₁ and Mn; <i>Add</i> TDS ₂
Ninemile Run	Basin	Allegheny	TSF; <i>Delete</i> PWS	<i>Delete</i> TDS ₁ and Mn; <i>Add</i> TDS ₂
West Run	Basin	Allegheny	WWF; <i>Delete</i> PWS	<i>Delete</i> TDS ₁ and Mn; <i>Add</i> TDS ₂
Streets Run	Basin	Allegheny	WWF; <i>Delete</i> PWS	<i>Delete</i> TDS ₁ and Mn; <i>Add</i> TDS ₂

DRAINAGE LIST W

Ohio River Basin In Pennsylvania
Ohio River

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Ohio River	Main Stem	Beaver	WWF; <i>Add</i> N	<i>Shown Below</i>

Exceptions to Specific Criteria for Ohio River Main Stem

Delete C_N and F;

Add:

Barium — Total barium shall not exceed 1.0 mg/l

Cadmium — Total cadmium shall not exceed 0.01 mg/l

Chloride — Chloride shall not exceed 250 mg/l

Cyanide — Total cyanide shall not exceed 0.025 mg/l; free cyanide shall not exceed 0.005 mg/l

Fluoride — Total fluoride shall not exceed 1.0 mg/l.

Nitrite — Nitrite shall not exceed 1.0 mg/l as N

Selenium — Total selenium shall not exceed 0.01 mg/l

Silver — Total silver shall not exceed 0.05 mg/l.

Radionuclides — Gross total alpha activity (including radium-226 but excluding radon and uranium) shall not exceed 15 picocurie per liter (pCi/l) and combined radium-226 and radium-228 shall not exceed 5 pCi/l; provided that specific determinations of radium-226 and radium-228 are not required if gross particle activity does not exceed 5 pCi/l. Concentration of total gross beta particle activity shall not exceed 50 pCi/l; the concentration of tritium shall not exceed 20,000 pCi/l; the concentration of total Strontium-90 shall not exceed 8 pCi/l

Mercury — Total organism body burden of any aquatic species shall not exceed 0.5 micrograms/gram as total mercury. Total mercury concentration (unfiltered) in any water sample shall not exceed 0.2 micrograms/liter.

PCB — Total PCB shall not exceed 1 nanogram per liter; however, when the level in water is less than the practical laboratory quantification level, a fish flesh body burden level in excess of 2 ppm shall be cause for concern and further investigation.

LIST W — CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Unnamed Tributaries to Ohio River	Basins	Allegheny-Beaver-Washington-Greene	WWF	None
Sawmill Run	Basin	Allegheny	WWF	None
Chartiers Creek	Main Stem	Allegheny	WWF	None
Unnamed Tributaries to Chartiers Creek	Basins	Washington-Allegheny	WWF	None
Reservoir No. 4	Basin	Washington	HQ-WWF	None
Reservoir No. 3	Basin	Washington	HQ-WWF	None
Reservoir No. 2	Basin	Washington	HQ-WWF	None
Catfish Creek	Basin	Washington	WWF	None
Georges Run	Basin	Washington	WWF	None
Chartiers Run	Basin	Washington	WWF	None
Brush Run	Basin	Washington	WWF	None
Little Chartiers Creek	Basin, Source to Alcoa Dam	Washington	HQ-WWF	None
Little Chartiers Creek	Basin From Alcoa Dam to Chartiers Creek	Washington	WWF	None
McPherson Creek	Basin	Washington	WWF	None
Brush Run	Basin	Washington	WWF	None
Coal Run	Basin	Allegheny	WWF	None
Millers Run	Basin	Allegheny	WWF	None
Thoms Run	Basin	Allegheny	TSF	None
McLaughlin Run	Basin	Allegheny	WWF	None
Painters Run	Basin	Allegheny	WWF	None
Scrubgrass Run	Basin	Allegheny	WWF	None
Georges Run	Basin	Allegheny	WWF	None
Robinson Run	Basin	Allegheny	WWF	None
Campbells Run	Basin	Allegheny	WWF	None
Whiskey Run	Basin	Allegheny	WWF	None
Jacks Run	Basin	Allegheny	WWF	None
Spruce Run	Basin	Allegheny	TSF	None
Lowries Run	Basin	Allegheny	WWF	None
Toms Run	Basin	Allegheny	WWF	None
Kilbuck Run	Basin	Allegheny	WWF	None
Moon Run	Basin	Allegheny	TSF	None
Montour Run	Basin	Allegheny	WWF	None
McCabe Run	Basin	Allegheny	WWF	None
Thorn Run	Basin	Allegheny	WWF	None
Narrows Run	Basin	Allegheny	WWF	None
Little Sewickley Creek	Basin	Allegheny	HQ-TSF	None
Flaugherty Run	Basin	Allegheny	WWF	None
Shouse Run	Basin	Allegheny	WWF	None
Big Sewickley Creek	Basin	Allegheny	TSF	None
Logtown Run	Basin	Beaver	WWF	None
Legionville Run	Basin	Beaver	WWF	None
Tevebau Run	Basin	Beaver	WWF	None
Crows Run	Basin	Beaver	WWF	None
Elkhorn Run	Basin	Beaver	WWF	None
Dutchman Run	Basin	Beaver	WWF	None
Fosburg Run	Basin	Beaver	WWF	None
Lacock Run	Basin	Beaver	WWF	None
Beaver River	Main Stem	Beaver	WWF: Add N	Add TON
Unnamed Tributaries to Beaver River	Basins	Lawrence-Beaver	WWF	None
Mahoning River	Main Stem	Lawrence	WWF	Shown Below

Exceptions to Specific Criteria for Mahoning River Main Stem

Delete the entire list except Am.

Add:

As. Ch., Cr. DO₅, F. Pb. Mn. N. S. Temp., TDS,

pH — Not less than 6.0 and not more than 8.5.

Total Iron — Not more than 1.0 mg/l

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LIST W — CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Threshold Odor Number — Not to exceed 24 at 60°C as a daily average.				
Total Cyanide — Not to exceed 0.025 mg/l.				
Free Cyanide — Not to exceed 0.005 mg/l.				
Phenolics — Not to exceed 0.010 mg/l.				
Cadmium — Not to exceed 0.01 mg/l (total)				
Total Chromium — Not to exceed 0.1 mg/l.				
PCB — Not to exceed 1 nanogram per liter.				
Copper — Not to exceed 0.02 mg/l (total).				
Nickel — Not to exceed 0.1 mg/l (total).				
Zinc — Not to exceed 0.2 mg/l (total)				
Unnamed Tributaries to Mahoning River	Basins	Lawrence	WWF	None
Coffee Run	Basin	Lawrence	WWF	None
Marshall Run	Basin	Lawrence	WWF	None
Hickory Run	Basin	Lawrence	TSF	None
Shenango River	Basin, Source to Pymatuning Reservoir	Crawford	WWF	None
Pymatuning Reservoir	Entire Lake	Crawford	WWF	Add TON
Shenango River	Main Stem, Pymatuning Dam to Shenango River Dam	Mercer	WWF	Add TON
Shenango River	Main Stem, Shenango River Dam Downstream for 1.0 River Mile	Mercer	TSF	Add TON
Shenango River	Main Stem, 1.0 River Mile Downstream from Shenango River Dam to Beaver River	Lawrence	WWF	Add TON
Unnamed Tributaries to Shenango River	Basins, Source to Shenango Reservoir Dam	Crawford-Mercer	WWF	None
Unnamed Tributaries to Shenango River	Basins, Shenango River Dam to Beaver River	Mercer- Lawrence	WWF	None
Linesville Creek	Basin	Crawford	WWF	None
Bennett Run	Basin	Crawford	WWF	None
Paden Creek	Basin	Crawford	WWF	None
Sugar Run	Basin	Crawford	WWF	None
Little Shenango River	Basin	Mercer	TSF	None
Mathay Run	Basin	Mercer	WWF	None
Big Run	Basin	Mercer	WWF	None
Lawango Run	Basin	Mercer	WWF	None
Lackawannock Creek	Basin	Mercer	TSF	None
Daley Run	Basin	Mercer	WWF	None
Magargee Run	Basin	Mercer	WWF	None
Golden Run	Basin	Mercer	WWF	None
Brush Run	Basin	Mercer	WWF	None
Pymatuning Creek	Basin	Mercer	WWF	None
Pine Hollow Run	Basin	Mercer	WWF	None
McCullough Run	Basin	Mercer	WWF	None
Thornton Run	Basin	Mercer	WWF	None
Big Run	Basin	Mercer	WWF	None
Pine Run	Basin	Mercer	WWF	None
Yankee Run	Basin	Mercer	WWF	None

LIST W - CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Little Yankee Run	Basin	Mercer	WWF	None
Bobby Run	Basin	Mercer	WWF	None
Hogback Run	Basin	Mercer	WWF	None
Turkey Run	Basin	Mercer	WWF	None
Buchanan Run	Basin	Lawrence	WWF	None
Deer Creek	Basin	Lawrence	WWF	None
Neshannock Creek	Basin	Lawrence	TSF	None
Big Run	Basin	Lawrence	WWF	None
McKee Run	Basin	Lawrence	WWF	None
Edwards Run	Basin	Lawrence	WWF	None
Jenkins Run	Basin	Lawrence	WWF	None
Eckles Run	Basin	Lawrence	WWF	None
Snake Run	Basin	Lawrence	WWF	None
Wampum Run	Basin	Lawrence	WWF	None
Connoquenessing Creek	Basin, Source to Oneida Dam	Butler	HQ-WWF	None
Connoquenessing Creek	Main Stem, Oneida Dam to Beaver River	Lawrence	WWF	None
Unnamed Tributaries to Connoquenessing Creek	Basins, Oneida Dam to Beaver River	Butler-Beaver Lawrence	WWF	None
Pine Run	Basin	Butler	WWF	None
Stoney Run	Basin	Butler	WWF	None
Thorn Creek	Basin, Source to Thorn Dam	Butler	HQ-WWF	None
Thorn Creek	Basin, Thorn Dam to Connoquenessing Creek	Butler	WWF	None
Bonnie Brook	Basin	Butler	WWF	None
Coal Run	Basin	Butler	WWF	None
Sullivan Run	Basin	Butler	WWF	None
Butcher Run	Basin	Butler	WWF	None
Sawmill Run	Basin	Butler	WWF	None
Rocklick Run	Basin	Butler	WWF	None
Thorn Creek	Basin	Butler	CWF	None
Glade Run	Basin	Butler	WWF	None
Breakneck Creek	Basin	Butler	WWF	None
Little Connoquenessing Creek	Basin	Butler	CWF	None
Scholars Run	Basin	Butler	WWF	None
Glade Run	Basin	Butler	WWF	None
Muntz Run	Basin	Beaver	WWF	None
Doe Run	Basin	Beaver	WWF	None
Camp Run	Basin	Beaver	WWF	None
Hazen Run	Basin	Beaver	WWF	None
Brush Creek	Basin	Beaver	WWF	None
Slippery Rock Creek	Basin, Source to Muddy Creek	Lawrence	CWF	None
Muddy Creek	Basin, Source to Moraine State Park Dam	Butler	HQ-CWF	None
Muddy Creek	Basin, Moraine State Park Dam to Slippery Rock Creek	Lawrence	WWF	None
Slippery Rock Creek	Basin, Muddy Creek to Hell Run	Lawrence	CWF	None
Hell Run	Basin	Lawrence	EV	None
Slippery Rock Creek	Basin, Hell Run to Connoquenessing Creek	Lawrence	CWF	None
Duck Run	Basin	Lawrence	WWF	None
Stockman Run	Basin	Beaver	WWF	None
Clarks Run	Basin	Beaver	WWF	None

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LIST W - CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Thompson Run	Basin	Beaver	WWF	None
Wallace Run	Basin	Beaver	WWF	None
Bennett Run	Basin	Beaver	WWF	None
Walnut Bottom Run	Basin	Beaver	WWF	None
Blockhouse Run	Basin	Beaver	WWF	None
Brady Run	Basin	Beaver	TSF	None
Hamilton Run	Basin	Beaver	WWF	None
McKinley Run	Basin	Beaver	WWF	None
Twomile Run	Basin	Beaver	WWF	None
Poorhouse Run	Basin	Beaver	WWF	None
Raccoon Creek	Main Stem	Beaver	WWF	None
Unnamed Tributaries to Raccoon Creek	Basins	Washington-Beaver	WWF	None
Cherry Run	Basin	Washington	WWF	None
Burgetts Fork	Basin	Washington	WWF	None
Little Raccoon Run	Basin	Washington	WWF	None
Chamberlain Run	Basin	Washington	WWF	None
Brush Run	Basin	Washington	WWF	None
Dilloe Run	Basin	Washington	WWF	None
Bigger Run	Basin	Washington	WWF	None
Wingfield Run	Basin	Beaver	WWF	None
Potato Garden Run	Basin	Beaver	WWF	None
Traverse Creek	Basin, Source to State Park Lake Dam	Beaver	HQ-CWF	None
Traverse Creek	Basin, State Park Dam to Raccoon Creek	Beaver	TSF	None
Little Traverse Run	Basin	Beaver	WWF	None
Raredon Run	Basin	Beaver	WWF	None
Service Creek	Basin, Source to J. C. Bacon Dam	Beaver	HQ-CWF	None
Service Creek	Basin, J. C. Bacon Dam to Raccoon Creek	Beaver	WWF	None
Frames Run	Basin	Beaver	WWF	None
Trampmill Run	Basin	Beaver	WWF	None
Gums Run	Basin	Beaver	WWF	None
Fishpot Run	Basin	Beaver	WWF	None
Fourmile Run	Basin	Beaver	WWF	None
Squirrel Run	Basin	Beaver	WWF	None
Sixmile Run	Basin	Beaver	WWF	None
Wolf Run	Basin	Beaver	WWF	None
Haden Run	Basin	Beaver	WWF	None
Peggs Run	Basin	Beaver	WWF	None
Smiths Run	Basin	Beaver	WWF	None
Upper Dry Run	Basin	Beaver	WWF	None
Little Beaver Creek	Main Stem	Beaver	WWF	None
Unnamed Tributaries to Little Beaver Creek	Basins	Lawrence-Beaver	WWF	None
North Fork Little Beaver Creek	Basin	Beaver	HQ-CWF	None
Bieler Run	Basin	Beaver	WWF	None
Island Run	Basin	Beaver	WWF	None
Mill Creek	Basin	Beaver	TSF	None
North Fork Tomlinson Run	Basin	Beaver	WWF	None
South Fork Tomlinson Run	Basin	Beaver	WWF	None
Kings Creek	Basin	Washington	CWF	None
Harmon Creek	Basin	Washington	WWF	None
Cross Creek	Basin, Source to Avella Water Intake	Washington	HQ-WWF	None
Cross Creek	Basin, Avella Water Intake to PA-WVA Border	Washington	WWF	None
Buffalo Creek	Basin	Washington	HQ-WWF	None
Wheeling Creek (WVA)	Main Stem	Greene	WWF	None

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LIST W—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Unnamed Tributaries to Wheeling Creek	Basins	Washington-Greene	WWF	None
Enlow Fork	Main Stem	Washington	TSF	None
Unnamed Tributaries to Enlow Fork	Basins	Washington-Greene	WWF	None
Boothe Run	Basin	Greene	WWF	None
Long Run	Basin	Washington	WWF	None
Templeton Fork	Basin	Washington	TSF	None
Owens Run	Basin	Greene	WWF	None
Robinson Fork	Basin	Washington	WWF	None
Spottedtail Run	Basin	Washington	WWF	None
Dunkard Fork	Main Stem	Greene	WWF	None
Unnamed Tributaries to Dunkard Fork	Basins	Greene	WWF	None
North Fork Dunkard Fork	Basin	Greene	TSF	None
South Fork Dunkard Fork	Basin	Greene	TSF	None
Crabapple Creek	Basin	Greene	WWF	None
Wharton Run	Basin	Greene	WWF	None
Stone Coal Run	Basin	Greene	WWF	None
Turkey Run	Basin	Greene	WWF	None
Middle Wheeling Creek	Basin	Greene	WWF	None
Grave Creek	Basin	Greene	WWF	None
Fish Creek (WVA)	Main Stem	Greene	WWF	None
Unnamed Tributaries to Fish Creek	Basins	Greene	WWF	None
Pennsylvania Fork Fish Creek	Main Stem	Greene	WWF	None
Unnamed Tributaries to Pennsylvania Fork Fish Creek	Basins	Greene	WWF	None
Hamilton Run	Basin	Greene	WWF	None
Herod Run	Basin	Greene	WWF	None
Laurel Run	Basin	Greene	WWF	None
Bissett Run	Basin	Greene	WWF	None
Wagonroad Run	Basin	Greene	WWF	None
Pigeon Run	Basin	Greene	WWF	None
Coon Run	Basin	Greene	WWF	None
Fall Run	Basin	Greene	WWF	None
Knob Run	Basin	Greene	WWF	None
Harts Run	Basin	Greene	WWF	None
West Virginia Fork Fish Creek	Basin	Greene	WWF	None

DRAINAGE LIST X

Lake Erie

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Lake Erie (Outer Erie Harbor and Presque Isle Bay)	Harbor area and central channel dredged and maintained by United States Army Corps of Engineers	Erie	WWF; delete WC	Delete pH1 and Bac1 Add pH3, Bac2, TON and MBAS1.
Lake Erie (Outer Erie Harbor and Presque Isle Bay)	Portion of Lake bordered by Presque Isle on West, Longitude 80°01'50" on East and Latitude 42°10'18" on North except Harbor area and central channel dredged and maintained by United States Army Corps of Engineers	Erie	WWF	Delete pH1 Add pH3, TON and MBAS1.
Lake Erie	All portions of the lake in Pennsylvania except Outer Erie Harbor and Presque Isle Bay	Erie	CWF	Delete Fe, pH, DO ₁ and Bac ₁ Add the "specific criteria for Lake Erie" as listed below.

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LIST X—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
				<p>Specific Criteria for Lake Erie</p> <p>Determination of compliance with specific criteria shall be based on statistically valid sampling data. For the lake-wide dissolved solids limits, the Great Lakes Regional Office of the IJC will determine compliance.</p> <p>pH—Values should not be outside range of 6.5 to 9.0</p> <p>Dissolved Oxygen—In the upper waters of the lakes, the dissolved oxygen level should be not less than 6.0 milligrams per liter at any time; in hypolimnetic waters, it should be not less than necessary for the support of fishlife, particularly cold water species.</p> <p>Iron (Fe)—Levels should not exceed 0.3 milligrams per liter or natural levels, whichever is greater.</p> <p>Temperature—Temp_i</p> <p>Dissolved Solids—In addition to TDS, the level of total dissolved should not exceed 200 milligrams per liter as an annual average based on representative lake-wide sampling.</p> <p>Bacteria—The geometric mean of not less than five samples taken over not more than a thirty-day period should not exceed 1,000/100 milliliters total coliforms, nor 200/100 milliliters fecal coliforms. Waters used for body contact recreation activities should be substantially free from bacteria, fungi, or viruses that may produce enteric disorders or eye, ear, nose, throat and skin infections or other human diseases and infections.</p> <p>Taste and Odor—Phenols and other objectionable taste and odor producing substances should be substantially absent.</p> <p>Phosphorus (P)—Concentrations should be limited to the extent necessary to prevent nuisance growths of algae, weeds, and slimes that are or may become injurious to any beneficial water use.</p> <p>Radioactivity—Radioactivity should be kept at the lowest practicable level and in any event should be controlled to the extent necessary to prevent harmful effects on health.</p> <p>Aldrin/Dieldrin—Not to exceed 1 nanogram per liter in water; not to exceed 0.3 mg/Kg in the edible portion of fish.</p> <p>Chlordane—Not to exceed 60 nanograms per liter</p> <p>DDT and Metabolites—Not to exceed 3 nanogram per liter in water; not to exceed 1 mg/Kg in the edible portion of fish.</p> <p>Endrin—Not to exceed 2 nanograms per liter in water; not to exceed 0.3 mg/Kg in the edible portion of fish.</p> <p>Heptachlor—Not to exceed 1 nanogram/liter in water; not to exceed 0.3 mg/Kg in the edible portion of fish.</p>
Lake Erie				<p>Lindane—Not to exceed 10 nanograms per liter in water; not to exceed 0.3 mg/Kg in the edible portion of fish.</p> <p>Methoxychlor—Not to exceed 40 nanograms per liter.</p> <p>Toxaphene—Not to exceed 8 nanograms per liter.</p> <p>Phthalate Esters: Dibutyl Phthalate—Not to exceed 4 micrograms per liter. Di-(2-ethylhexyl phthalate)—Not to exceed 0.6 micrograms per liter. Other phthalate esters—Not to exceed 0.2 micrograms per liter.</p> <p>PCB's—Not to exceed 1 nanogram per liter; not to exceed 0.1 mg/Kg in whole fish.</p> <p>Cadmium—Not to exceed 0.01 of the 96-hour LC⁵⁰ for representative important species.</p> <p>Mercury—Not to exceed 0.2 micrograms per liter in an unfiltered water sample.</p> <p>Selenium—Not to exceed 10 micrograms per liter.</p>

Unnamed Tributaries to Lake Erie	Basins (all sections in PA) PA-OH State Border to Presque Isle	Erie	CWF; MF	None
Ashtabula River (OH)	Basins	Erie	CWF; MF	None
Unnamed Tributaries to Ashtabula River	Basin	Erie	CWF; MF	None
East Branch Ashtabula River	Main Stem	Erie	WWF	None
Ashtabula Creek	Basins	Erie	CWF; MF	None
Unnamed Tributaries to Ashtabula Creek	Main Stem	Erie	WWF; MF	Delete DO ₁ and Temp ₁ ; Add DO ₂ and Temp ₂
Conneaut Creek	Basins	Erie	CWF; MF	None
Unnamed Tributaries to Conneaut Creek	Basin	Erie	CWF; MF	None
Fish Creek	Basin	Erie	CWF; MF	None
Foster Run	Basin	Erie	CWF; MF	None
Crazy Run	Basin	Erie	CWF; MF	None
Stone Run	Basin	Erie	CWF; MF	None

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LIST X—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
West Branch Conneaut Creek	Basin	Erie	CWF; MF	None
Marsh Run	Basin	Erie	CWF; MF	None
East Branch Conneaut Creek	Basin	Erie	CWF; MF	None
Turkey Creek	Main Stem	Erie	CWF	None
Unnamed Tributaries to Turkey Creek	Basins	Erie	CWF; MF	None
Raccoon Creek	Basin	Erie	CWF; MF	None
Crooked Creek	Basin	Erie	HQ-CWF; MF	None
Elk Creek	Main Stem	Erie	WWF; MF	Delete DO ₂ and Temp ₂ ; Add DO ₁ and Temp ₁
Unnamed Tributaries to Elk Creek	Basins	Erie	CWF; MF	None
Lamson Run	Basin	Erie	CWF; MF	None
Goodban Run	Basin	Erie	CWF; MF	None
Falk Run	Basin	Erie	CWF; MF	None
Little Elk Creek	Basin	Erie	CWF; MF	None
Brandy Run	Basin	Erie	CWF; MF	None
Halls Run	Basin	Erie	CWF; MF	None
Godfrey Run	Basin	Erie	HQ-CWF; MF	None
Trout Run	Basin	Erie	CWF; MF	None
Walnut Creek	Main Stem	Erie	CWF; MF	None
Unnamed Tributaries to Walnut Creek	Basins	Erie	CWF; MF	None
Bear Run	Basin	Erie	CWF; MF	None
Thomas Run	Basin	Erie	HQ-CWF; MF	None
Unnamed Tributaries to Lake Erie	Basins, Presque Isle to Unnamed Tributary at RM 23.22	Erie	WWF; MF	None
Unnamed Tributary to Lake Erie at RM 23.22	Basin	Erie	CWF; MF	None
Unnamed Tributaries to Lake Erie	Basins, Unnamed Tributary at RM 23.22 to Longitude 80°01'50"	Erie	WWF;MF	None
Cascade Creek	Basin	Erie	WWF; MF	None
Mill Creek	Basin	Erie	WWF; MF	None
Fourmile Creek	Basin	Erie	WWF; MF	Delete DO ₂ and Temp ₂ ; Add DO ₁ and Temp ₁
Unnamed Tributaries to Lake Erie	Basins, Longitude 80°01'50" to PA-NY State Border	Erie	CWF; MF	None
Sixmile Creek	Basin	Erie	CWF; MF	None
Sevenmile Creek	Basin	Erie	CWF; MF	None
Eightmile Creek	Basin	Erie	CWF; MF	None
Twelvemile Creek	Basin	Erie	HQ-CWF; MF	None
Sixteenmile Creek	Basin, Source to I-90	Erie	CWF; MF	None
Sixteenmile Creek	Basin, I-90 Mouth	Erie	WWF; MF	Delete DO ₂ and Temp ₂ ; Add DO ₁ and Temp ₁
Twentymile Creek	Main Stem	Erie	CWF	None
Unnamed Tributaries to Twentymile Creek	Basins	Erie	CWF; MF	None

DRAINAGE LIST Y

Susquehanna River Basin in Pennsylvania
Genesee River

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Genesee River	Main Stem, Source to PA-NY State Border	Potter	CWF	None
Unnamed Tributaries to Genesee River	Basins	Potter	CWF	None
Musto Hollow	Basin	Potter	CWF	None
Ludington Run	Basin	Potter	HQ-CWF	None
Turner Creek	Basin	Potter	CWF	None
Shanty Hollow	Basin	Potter	CWF	None
Wolf Hollow	Basin	Potter	CWF	None
Cotton Brook	Basin	Potter	HQ-CWF	None
Middle Branch Genesee River	Basin	Potter	CWF	None
Mundy Brook	Basin	Potter	CWF	None
West Branch Genesee River	Basin	Potter	HQ-CWF	None
Cryder Creek	Basin	Potter	CWF	None
Marsh Creek	Basin	Potter	CWF	None

DRAINAGE LIST Z

Potomac River Basin in Pennsylvania
Potomac River

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Potomac River				
Unnamed Tributaries to Potomac River	Basins Along PA-MD Border in Somerset, Bedford, Fulton, Franklin and Adams Counties	Somerset-Bedford-Fulton-Franklin-Adams	WWF	None
Wills Creek	Main Stem, Source to PA-MD Border	Bedford-Somerset	CWF	None
Unnamed Tributaries to Wills Creek	Basins, Source to PA-MD Border	Bedford-Somerset	HQ-CWF	None
Laurel Run	Basin, PA-MD border to PA-Rt. 313 Bridge	Somerset	EV	None
Laurel Run	Basin, PA Rte 313 Bridge to Mouth	Somerset	HQ-CWF	None
Mountain Run	Basin	Somerset	HQ-CWF	None
Brush Creek	Basin	Somerset	HQ-CWF	None
Shaffers Run	Basin	Somerset	HQ-CWF	None
Gooseberry Run	Basin	Bedford	CWF	None
Little Wills Creek	Basin	Bedford	HQ-CWF	None
Gladdens Run	Basin	Bedford	HQ-CWF	None
Jennings Run (MD)				
North Branch Jennings Run	Basin	Somerset	CWF	None
Evitts Creek	Basin, Source to PA-MD Border	Bedford	HQ-CWF	None
Town Creek	Basin, Source to PA-MD Border	Bedford	HQ-CWF	None
Fifteenmile Creek	Basin, Source to PA-MD Border	Bedford	WWF	None
Sideling Hill Creek	Main Stem, Source to PA-MD Border	Fulton	CWF	None
Unnamed Tributaries to Sideling Hill Creek	Basins	Bedford-Fulton	CWF	None
West Branch Sideling Hill Creek	Basin	Bedford	CWF	None
East Branch Sideling Hill Creek	Basin	Bedford	CWF	None
Piney Creek	Basin	Bedford	CWF	None
Crooked Run	Basin	Fulton	CWF	None
Trough Run	Basin	Fulton	CWF	None
Bear Creek	Basin, Source to PA-MD Border	Fulton	WWF	None
Tonoloway Creek	Main Stem, Source to PA-MD Border	Fulton	WWF	None
Unnamed Tributaries to Tonoloway Creek	Basins, Source to PA-MD Border	Fulton	WWF	None
Crane Run	Basin	Fulton	WWF	None
Sawmill Run	Basin	Fulton	WWF	None
Foster Creek	Basin	Fulton	WWF	None
Cummings Run	Basin	Fulton	WWF	None
Palmer Run	Basin	Fulton	WWF	None
Barnetts Run	Basin	Fulton	TSF	None
Little Tonoloway Creek	Basin, Source to I-70	Fulton	CWF	None
Little Tonoloway Creek	Basin, I-70 to Mouth	Fulton	TSF	None
Plum Run	Basin	Fulton	WWF	None
Ditch Run	Basin, Source to PA-MD Border	Fulton	WWF	None
Licking Creek	Main Stem, Source to PA-MD Border	Franklin-Fulton	CWF	None
Unnamed Tributaries to Licking Creek	Basins	Franklin-Fulton	CWF	None

LIST Z—CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
Fortune Teller Creek	Basin	Fulton	CWF	None
Sindeldecker Branch	Basin	Fulton	CWF	None
Baby Run	Basin	Fulton	CWF	None
Patterson Run	Basin	Fulton	CWF	None
Owl Creek	Basin	Fulton	CWF	None
Joes Run	Basin	Fulton	CWF	None
Cove Creek	Main Stem, Source to PA-MD Border	Fulton	CWF	None
Unnamed Tributaries to Cove Creek	Basins	Fulton	CWF	None
Kendall Run	Basin	Fulton	CWF	None
Buck Run	Basin	Fulton	CWF	None
Roaring Run	Basin	Fulton	HQ-CWF	None
Spring Run	Basin	Fulton	CWF	None
Esther Run	Basin	Fulton	CWF	None
Little Cove Creek	Basin	Franklin	CWF	None
Rabble Run	Basin	Franklin	CWF	None
Lanes Run	Basin	Franklin	CWF	None
Little Conococheague Creek	Basin	Franklin	WWF	None
Conococheague Creek	Main Stem, Source to L. R. 2801 ⁷	Franklin	CWF	None
Unnamed Tributaries to Conococheague Creek	Basins, Source to L. R. 2801 ⁷	Franklin	CWF	None
Birch Run	Basin	Adams	HQ-CWF	None
Stillhouse Run	Basin	Adams	HQ-CWF	None
Hosack Run	Basin	Adams	HQ-CWF	None
Rocky Mountain Creek	Main Stem	Franklin	HQ-CWF	None
Unnamed Tributaries to Rocky Mountain Creek	Basins	Franklin	HQ-CWF	None
Raccoon Creek	Basin	Franklin	HQ-CWF	None
Carbaugh Run	Basin, Source to First Upstream Pipeline Crossing Near US Rte 30	Adams	EV	None
Carbaugh Run	Basin, First Upstream Pipeline Crossing to Mouth	Franklin	HQ-CWF	None
Stump Run	Basin	Franklin	CWF	None
Cold Spring Run	Basin	Franklin	HQ-CWF	None
Mountain Run	Basin	Franklin	CWF	None
Conococheague Creek	Main Stem, L. R. 2801 ⁷ to PA-MD Border	Franklin	WWF	None
Unnamed Tributaries to Conococheague Creek	Basins, L. R. 2801 ⁷ to PA-MD Border	Franklin	WWF	None
Falling Spring Branch	Basin, Source to Chambersburg-Guilford Twp Border	Franklin	HQ-CWE	None
Falling Spring Branch	Basins, Chambersburg-Guilford Twp Border to Mouth	Franklin	TSF	None
Back Creek	Main Stem, Source to US Rte 30	Franklin	TSF	None
Unnamed Tributaries to Back Creek	Basins, Source to US Rte 30	Franklin	TSF	None
Rocky Spring Branch	Basin	Franklin	TSF	None
Dennis Creek	Basin	Franklin	CWF	None
Wilson Run	Basin	Franklin	TSF	None
Back Creek	Main Stem, US Rte 30 to Mouth	Franklin	WWF	None
Unnamed Tributaries to Back Creek	Basins, US Rte 30 to Mouth	Franklin	TSF	None
Campbell Run	Basin	Franklin	CWF	None
Muddy Run	Basin	Franklin	HQ-CWF	None
Paddy Run	Basin	Franklin	WWF	None
West Branch Conococheague Creek	Main Stem, Source to US Rte 30 Bridge	Franklin	CWF, MI	None
Unnamed Tributaries to West Branch Conococheague Creek	Basins, Source to US Rte 30 Bridge	Franklin	CWF, MI	None
Dry Run	Basin	Franklin	CWF, MI	None
Bricker Run	Basin	Franklin	CWF, MI	None

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LIST Z--CONTINUED

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
McKeldey Run	Basin	Franklin	CWF MF	None
Pump Run	Basin	Franklin	CWF, MF	None
Township Run	Basin	Franklin	HQ-CWF, MF	None
Rocky Hollow	Basin	Franklin	CWF MF	None
Broad Run	Basin	Franklin	HQ-CWF, MF	None
West Branch Conococheague Creek	Main Stem, US Rte 30 Bridge to PA-MD Border	Franklin	TSF, MF	None
Unnamed Tributaries to West Branch Conococheague Creek	Basins, US Rte 30 Bridge to PA-MD Border	Franklin	TSF, MF	None
Buck Run	Basin	Franklin	HQ-CWF, MF	None
Johnston Run	Basin	Franklin	WWF, MF	None
Licking Creek	Basin	Franklin	TSF, MF	None
Welsh Run	Basin	Franklin	TSF, MF	None
Rockdale Run	Basin	Franklin	WWF	None
Toms Run	Basin	Franklin	WWF	None
Antietam Creek	Basin, Source to and Including Vineyard Run	Adams-Franklin	HQ-CWF	None
East Branch Antietam Creek	Main Stem, Vineyard Run to Mouth	Franklin	CWF	Add Col;
Unnamed Tributaries to East Branch Antietam Creek	Basins, Vineyard Run to Mouth	Franklin	CWF	Add Col;
Deer Lick Run	Basin	Franklin	CWF	None
Biesecker Run	Basin	Franklin	CWF	Add Col;
Red Run	Main Stem	Franklin	CWF	Add Col;
Unnamed Tributaries to Red Run	Basins	Franklin	CWF	Add Col;
Devils Run	Basin	Franklin	CWF	Add Col;
Mackey Run	Basin	Franklin	CWF	Add Col;
Falls Creek	Basin	Franklin	WWF	Add Col;
West Branch Antietam Creek	Basin	Franklin	CWF	None
Marsh Run	Basin, Source to PA-MD Border	Franklin	WWF	None
Antietam Creek	Basin Confluence of East and West Branches Antietam Creek to PA-MD Border	Franklin	WWF	Add Col;
Monocacy River (MD)				
Marsh Creek	Basin Source to Willoughby Run	Adams	CWF	None
Willoughby Run	Basin	Adams	WWF	None
Marsh Creek	Basin, Willoughby Run to PA-MD Border	Adams	CWF	None
Rock Creek	Basin, Source to PA-MD Border	Adams	WWF	None
Alloway Creek	Basin, Source to PA-MD Border	Adams	WWF	None
Potomac River				
Cattail Branch	Basin, Source to PA-MD Border	Adams	WWF	None
Piney Creek	Basin, Source to PA-MD Border	Adams	WWF	None
Toms Creek	Basin, Source to L. R. 01053 Bridge Near Jacks Mountain Village	Adams	HQ-CWF	None
Toms Creek	Main Stem L. R. 01053 Near Jacks Mountain Village to PA-MD Border	Adams	CWF	None
Unnamed Tributaries to Toms Creek	Basins, L. R. 01053 Bridge Near Jacks Mountain Village to PA-MD Border	Adams	CWF	None
Miney Branch	Basin	Adams	CWF	None
Friends Creek	Basin	Adams	CWF	None
Flat Run	Basin, Source to PA-MD Border	Adams	WWF	None
Middle Creek	Basin, Source to PA Rte 116 Bridge at Fairfield	Adams	HQ-CWF	None
Middle Creek	Basin, PA Route 116 Bridge to Mouth	Adams	CWF	None