
Estimate of Fiscal Impact

Water Classification Workgroup Meeting

April 8, 2010



*Department of Natural Resources
Water Protection Program*

Water Classification Rule

- ◆ Application of “fishable/swimmable” designated uses to all waters of the state.
- ◆ Program priority of the U.S. Environmental Protection Agency (EPA) and the Department.
- ◆ Part of the 2012 Triennial Review of Missouri’s Water Quality Standards at 10 CSR 20-7.031.
- ◆ Draft rule language developed with input from the Water Classification Workgroup

Water Classification Rule

“Fishable/Swimmable” designated uses to include:

- ◆ Whole Body Contact Recreation – Category B
- ◆ Secondary Contact Recreation
- ◆ Warm Water Aquatic Community
- ◆ Human Health Protection
- ◆ Livestock and Wildlife Protection

Water Classification Rule

- ◆ Currently over 24,600 miles of streams have “fishable/swimmable” designated uses.
- ◆ Following rulemaking, over 183,600 miles of stream will have “fishable/swimmable” designated uses.
- ◆ Extends to all waters of the state, except ground water and man-made exceptions as found in draft rule.
- ◆ Draft rule satisfies the rebuttable presumption of Section 101(a) of the federal Clean Water Act

Facilities Affected

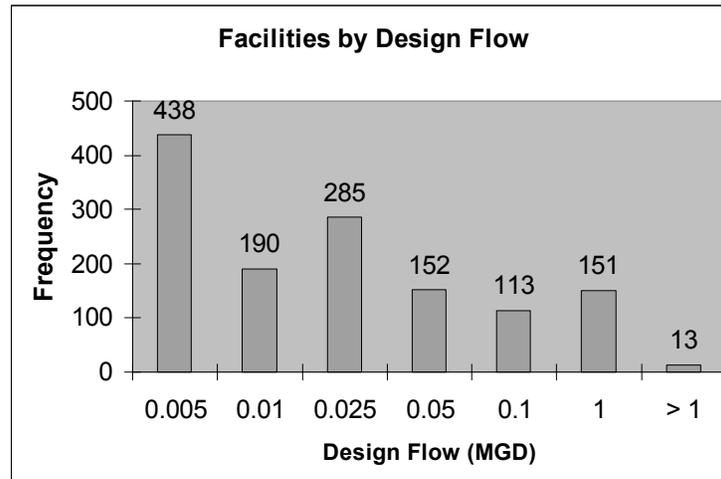
- ◆ Before approving the Finding of Necessity, the Clean Water Commission requested an estimate of cost.
- ◆ Surveyed permit database for all domestic facilities discharging to “unclassified” streams.
- ◆ Industrial, general, and storm water permits not directly affected.
- ◆ Separated domestic facilities into “municipal” and “non-municipal” (i.e. public vs. private).

Facilities Affected

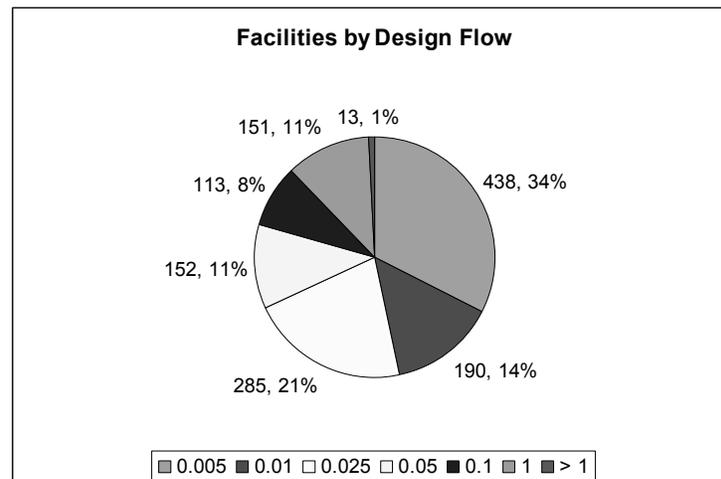
- ◆ Total Domestic Facilities = 1,342
- ◆ Distribution of facilities by design flow (DF):

DF < = 0.05 MGD	1065
0.05 MGD < DF < = 1 MGD	264
1 MGD < DF < = 20 MGD	13
DF > 20 MGD	0

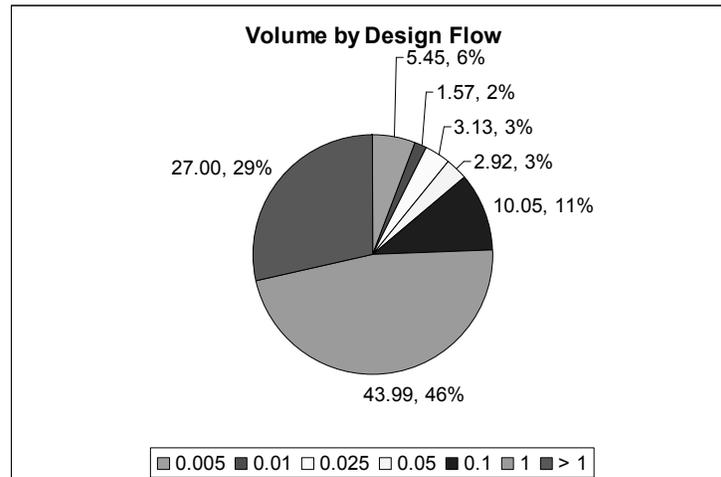
Facilities Affected



Facilities Affected



Facilities Affected



Facilities Affected

- ◆ Total Domestic Facilities = 1,342
- ◆ Number of Municipal (public) Facilities = 425
- ◆ Number of Non-municipal (private) Facilities = 917
- ◆ Disinfection to meet bacteria limits drive costs, current permits target chronic criteria for toxics and ammonia.
- ◆ Separated facilities into those that will likely disinfect using chlorination (lagoon) and UV (mechanical).

Facilities Affected

Number of Facilities that may be affected

Flow (MGD)	Public		Private		Total
	Chlorination	UV	Chlorination	UV	
Flow less than 0.05 MGD	137	48	544	336	1,065
Flow between 0.05 & 1.0 MGD	174	54	19	17	264
Flow between 1.0 & 20.0 MGD	5	7	1	0	13
Flow greater than 20.0 MGD	0	0	0	0	0
Total	316	109	564	353	1,342

Estimate of Cost

Total Installation Cost

Flow (MGD)	Public		Private		Total
	Chlorination	UV	Chlorination	UV	
Flow less than 0.05 MGD	\$1,370,000	\$1,983,840	\$5,440,000	\$13,886,880	\$22,680,720
Flow between 0.05 & 1.0 MGD	\$2,801,400	\$6,323,724	\$305,900	\$1,990,802	\$11,421,826
Flow between 1.0 & 20.0 MGD	\$8,908,245	\$6,804,000	\$1,781,649	\$0	\$17,493,894
Flow greater than 20.0 MGD	\$0	\$0	\$0	\$0	\$0
Total	\$13,079,645	\$15,111,564	\$7,527,549	\$15,877,682	\$51,596,440

Estimate of Cost

Total O & M Cost per Year

Flow (MGD)	Public		Private		Total
	Chlorination	UV	Chlorination	UV	
Flow less than 0.05 MGD	\$3,014,000	\$84,000	\$11,968,000	\$588,000	\$15,654,000
Flow between 0.05 & 1.0 MGD	\$23,111,898	\$267,624	\$2,523,713	\$84,252	\$25,987,487
Flow between 1.0 & 20.0 MGD	\$680,100	\$459,116	\$136,020	\$0	\$1,275,236
Flow greater than 20.0 MGD	\$0	\$0	\$0	\$0	\$0
Total	\$26,805,998	\$810,740	\$14,627,733	\$672,252	\$42,916,723

Estimate of Cost

Total Average Testing Cost per Year

Flow (MGD)	Public		Private		Total
	FC	TRC	FC	TRC	
Flow less than 0.05 MGD	\$44,014	\$22,718	\$172,957	\$67,135	\$306,823
Flow between 0.05 & 1.0 MGD	\$85,880	\$36,050	\$28,919	\$1,710	\$152,559
Flow between 1.0 & 20.0 MGD	\$26,821	\$8,293	\$172	\$108	\$35,394
Flow greater than 20.0 MGD	\$0	\$0	\$0	\$0	\$0
Total	\$156,714	\$67,061	\$202,047	\$68,954	\$494,776

Estimate of Cost

- ◆ Total Installation Cost = \$51,596,440
- ◆ Total Annual O&M Cost = \$42,916,723
- ◆ Total Annual Testing Cost = \$494,776
- ◆ Total Estimated Cost = \$95,007,939

Estimate of Cost

- ◆ Total Estimated Cost = \$95,007,939
- ◆ Used methodology for 2005 and 2009 rulemaking regulatory impact reports
- ◆ Review estimated costs for 2012 rulemaking RIR
- ◆ Question – How does the state implement the new regulatory framework in a comprehensive and responsible way?