

## Combined Sewer Overflow Level of Control by Year: Phase I Long Term Control Plan 1990-2016

Year	Total Inches of Rainfall	Number of Rain Events Causing CSOs	Total Number of CSO Events	% Reduced from Model	Total Discharge Volume (million gal.)	% Reduced from Model
1990	50.19	53	568	3%	525	17%
1991	36.99	52	543	7%	533	16%
1992	26.06	37	403	31%	386	39%
1993	34.72	46	376	36%	384	40%
1994	34.13	49	364	38%	403	37%
1995	32.26	49	374	36%	416	34%
1996	46.40	41	341	42%	344	46%
1997	34.46	38	322	45%	318	50%
1998	33.54	44	346	41%	329	48%
1999	47.12	33	280	52%	286	55%
2000	39.05	37	217	63%	231	64%
2001	24.64	20	91	84%	89	86%
2002	41.62	43	164	72%	161	75%
2003	43.26	49	181	69%	204	68%
2004	36.07	42	170	71%	193	70%
2005	59.78	49	292	50%	303	52%
2006	49.10	58	276	53%	282	56%
2007	44.21	25	117	80%	150	76%
2008	49.17	65	268	54%	378	40%
2009	45.04	64	244	58%	347	45%
2010	44.53	74	265	55%	389	39%
2011	44.04	34	84	86%	146	77%
2012	42.25	30	92	84%	70	89%
2013	39.28	22	65	89%	32	95%
2014	43.92	36	98	83%	88	86%
2015	35.53	21	49	92%	40	94%

In 1990, Bangor's sewer system was modeled using a program called SWMM to simulate how many times combined sewer overflow (CSO) events would occur and how much volume would be discharged during those events during a typical year. This established the baseline model predictions prior to doing work under the Phase I Long Term Control Plan (LTCP) so that progress could be measured each year. Bangor also continued to use this model to quantify its yearly CSO events and volumes until 2011 when flow meters were installed at all CSO discharge locations, which allows the City to collect realtime data on CSO events and compute more accurate volumes.

### 1990 Model Predictions:

Annual  
Number of  
Events:

583 events

Annual  
Discharge  
Volume:

635 million gal.