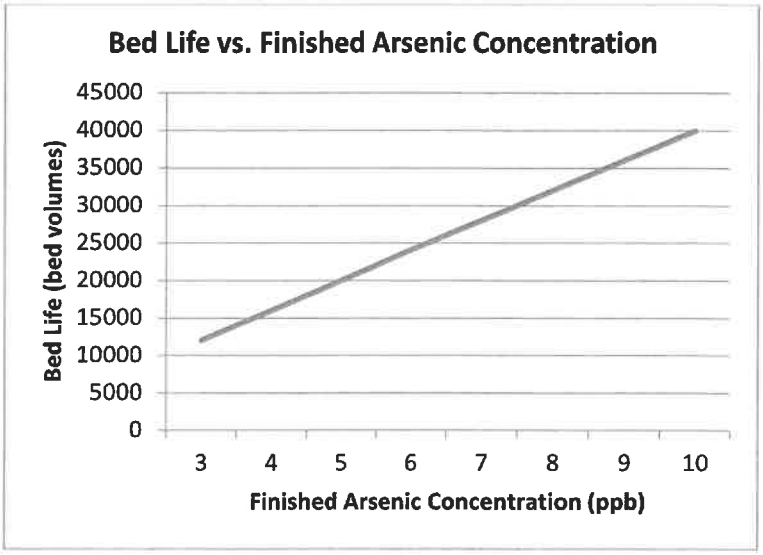
5-6 ppb MCL, and about three times as often for 3-4 ppb MCL. Figure 1 below shows the generalized relationship between bed life and finished arsenic concentration used in developing these cost estimates.

Figure 1



When considering the same 21 systems that were examined in determining the median longevity of the arsenic adsorption media, DWGB found that while pH and silica content affected longevity, as did the influent concentration of arsenic to a lesser extent, the target arsenic concentration of the finished water was the main factor affecting longevity.

Operating and maintenance costs for arsenic treatment were estimated based on the average daily flows for each system. Data from the 21 systems showed an operating cost of $3.6/1,000 gallons. Based on proportionally reduced bed longevity to comply with lower possible MCLs, the estimated total cost for all 342 potentially affected systems was estimated as shown in Table 2.

Table 2. Estimated Current and Increases in PWS Costs to Comply with Reduced Arsenic MCL

MCL (ppb)	Number of Systems Treating	Annual Maintenance Cost ($M)	Capital Cost ($M)	Annualized Capital Cost ($M)	Total Annual Cost ($M)
10*	195	1.49	-	-	-
6	89	3.43	0.61	.06	3.49
5	123	3.88	0.95	.10	3.98
4	188	6.83	1.61	.16	6.99
3	255	7.72	2.41	.24	7.96

*Numbers listed for 10 ppb are systems currently treating and estimated current costs. All others are *increases over current* numbers, except that "systems treating" includes both systems that would add treatment and those that would modify existing treatment as a result of the MCL dropping from 10 to the listed number.