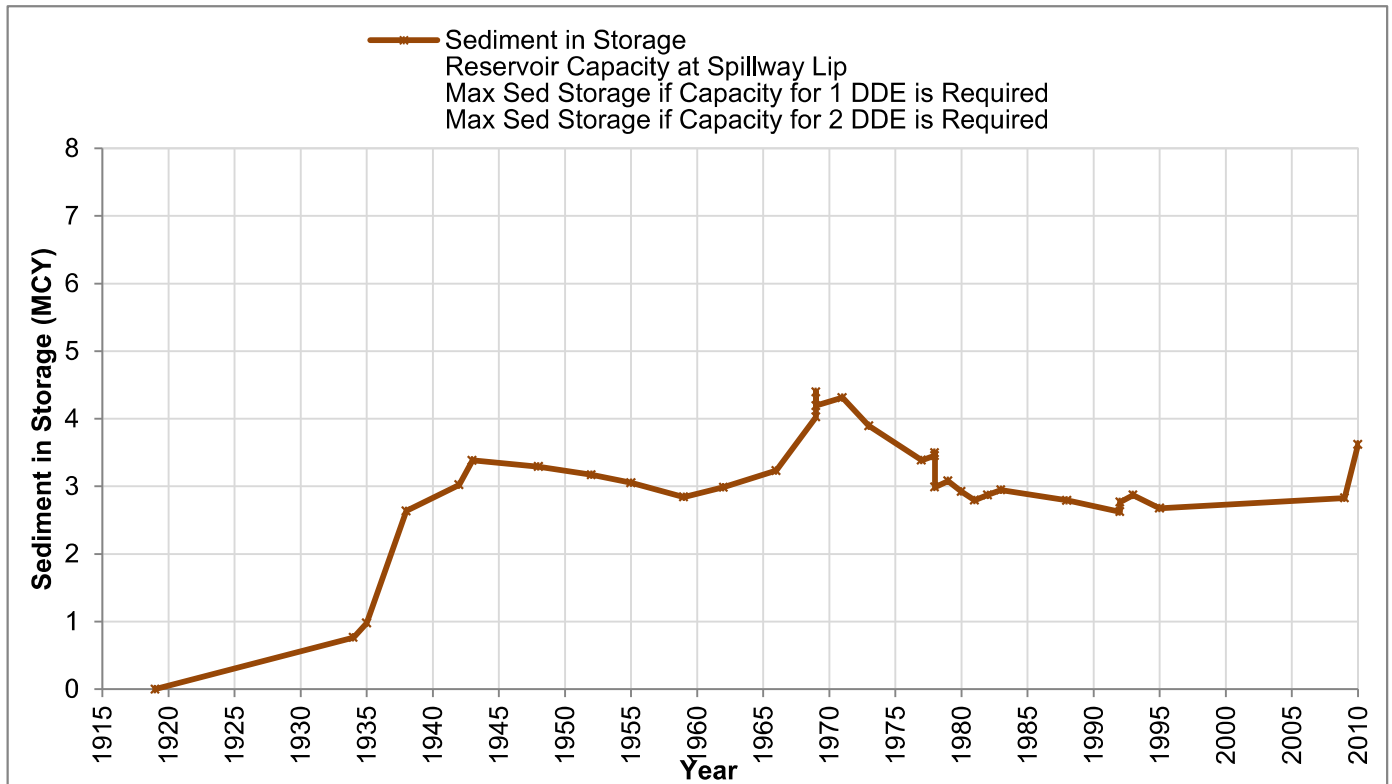


8.2.1.5 SEDIMENT DEPOSITION AND REMOVAL HISTORY

Figure 8-27 shows the approximate sediment storage in Devil’s Gate Reservoir. It is the Flood Control District’s policy to retain enough storage capacity within a reservoir for two DDEs, which are calculated and determined for each specific reservoir. The graph shows that the Flood Control District has reduced the quantity of sediment in storage at Devil’s Gate Reservoir on numerous occasions, even before reaching the threshold capacity.

Figure 8-27 Graph of Historical Sediment Storage at Devil’s Gate Reservoir



Sediment has been removed 32 times in the 92-year life of the reservoir as shown in Table 8-12. Table 8-12 shows that both excavation and sluicing have been used to remove sediment from Devils Gate Reservoir in the past. The majority of the sediment (73 percent) has been removed through excavation.

Table 8-12 Devils Gate Reservoir historical sediment accumulation and removal

Survey Date	Reservoir Capacity @ Elevation 1,054 ft (MCY)	Quantity Sluiced (MCY)	Quantity Excavated (MCY)	Sediment Accumulated Between Surveys (MCY)	Sediment in Storage (MCY)
October 1919	7.42	-	-	-	-
September 1934	6.66	-	0.08	0.84	0.76
June 1935	6.45	-	-	0.21	0.98
June 1938	4.79	-	-	1.66	2.64
January 1942	4.40	1.04	0.04	1.46	3.02
December 1943	4.04	0.10	0.03	0.50	3.38
Fall 1948	4.13	0.12	0.07	0.10	3.29
July 1952	4.25	0.41	0.14	0.43	3.17
September 1955	4.37	-	0.12	-	3.05
December 1959	4.58	-	0.28	0.07	2.84
May 1962	4.44	-	0.70	0.84	2.99
September 1966	4.19	0.08	0.60	0.92	3.23
February 1969	3.40	-	0.03	0.83	4.03
March 1969	3.02	-	-	0.37	4.40
November 1969	3.23	0.19	0.01	-	4.19
December 1971	3.11	-	0.23	0.35	4.31
October 1973	3.53	-	0.47	0.06	3.90
March 1977	4.04	-	0.75	0.24	3.39
March 1978	3.97	-	0.24	0.31	3.45
July 1978	3.93	-	-	0.04	3.50
December 1978	4.43	-	0.51	-	2.99
February 1979	4.34	0.25	0.12	0.47	3.08
March 1980	4.50	-	0.45	0.30	2.92
July 1981	4.63	-	0.32	0.19	2.79
September 1982	4.55	-	0.10	0.18	2.87
April 1983	4.48	-	0.05	0.13	2.95
June 1988	4.63	-	0.20	0.05	2.79
February 1992	4.80	-	0.17	-	2.62
July 1992	4.66	-	-	0.14	2.77
April 1993	4.68	-	-	0.10	2.87
November 1995	4.94	-	0.19	-	2.68
April 2009	4.79	-	0.02	0.18	2.83
April 2010	3.99	-	-	0.79	3.62
March 2011	3.72	-	-	0.27	3.89

8.2.2 PLANNING QUANTITY AND ASSUMED SEDIMENT CHARACTERISTICS

As described in Section 5, the 20-year planning quantity for sediment deposition into Devil’s Gate Reservoirs is 4.3 MCY. The Flood Control District is also planning to remove the sediment currently in the reservoir, which amounts to approximately 4 MCY. Therefore, a total of approximately 8.3 MCY of sediment are planned for removal over the next 20 years.

8.2.3 DISCUSSION

During the Station Fire of 2009, almost all the undeveloped portion of the watershed tributary to Devil's Gate Reservoir was burned, making increased sediment accumulation at the reservoir inevitable during subsequent storm events. As a result, the reservoir’s capacity was reduced significantly. As of June 2012, the reservoir did not have capacity to contain another major debris event safely and the outlet works have a risk of becoming clogged and inoperable. In order to maintain the proper functionality of the reservoir, the sediment accumulated in it has to be removed.

As of the June 2012, the Flood Control District was actively planning the Devil’s Gate Reservoir Sediment Removal and Management Project and preparing an Environmental Impact Report (EIR) for the project. The Notice of Preparation for the Devil’s Gate Reservoir Sediment Removal and Management Project EIR was issued in September 2011. The EIR will thoroughly discuss all feasible alternatives to remove, transport, and place sediment for Devil’s Gate Reservoir. Please refer to www.LASedimentMangement.com for updates on the EIR.