Marlette Lake Dam Resilient Infrastructure Project

BCA 5 – Potentially Affected Water Users if there is a Dam Breach

The Marlette Water System provides 100 percent of the water for Virginia City, Gold Hill and Silver City, Nevada as well as approximately 25% of the water to Carson City. To determine the number of potentially affected water users if there was a dam breach, census data from 2010 and population estimates from the Nevada State Demographer were referenced. Census data from 2010 was referenced to establish an estimation of the population of the Virginia City as a ratio of the overall population of Storey County. The 2010 census data showed that that 21.3% of the Storey County population resided in Virginia City. Assuming a similar ratio still exists, this percentage was applied to the Nevada State Demographer's estimation of the population of Storey County in 2018 resulting in an estimated population of 860 in Virginia City. This number is conservative in that it excludes the populations in Gold Hill and Silver City.

To estimate the potentially affected water users in Carson City, 25% of the Nevada State Demographer's population estimate for 2018 in Carson City was calculated. This totaled 14,206 persons.

For purposes of the model input, the estimated population of Virginia City and 25% of the Carson City population was combined for a total of 14,206 potentially affected water users. 2010 Census data and 2018 Nevada State Demographer's data is attached for reference.



11.29.18



DP-1

Profile of General Population and Housing Characteristics: 2010

2010 Demographic Profile Data

NOTE: For more information on confidentiality protection, nonsampling error, and definitions, see http://www.census.gov/prod/cen2010/profiletd.pdf.

GEO: Storey County, Nevada

Subject	Number	Percent
SEX AND AGE Total population	4.010	100.0
Under 5 years	4,010	4.3
5 to 9 years	178	4.3
10 to 14 years	178	4.4
15 to 19 years	230	5.7
20 to 24 years	136	3.4
25 to 29 years	140	3.5
30 to 34 years	159	4.0
35 to 39 years	186	4.6
40 to 44 years	214	5.3
45 to 49 years	356	8.9
50 to 54 years	442	11.0
55 to 59 years	422	10.5
60 to 64 years	442	11.0
65 to 69 years	323	8.1
70 to 74 years	197	4.9
75 to 79 years	111	2.8
80 to 84 years	61	1.5
85 years and over	46	1.1
Median age (years)	50.5	
16 years and over		(X)
18 years and over	3,422	85.3 82.5
21 years and over	3,309 3,215	80.2
62 years and over	998	24.9
65 years and over	738	18.4
Male population		51.0
Under 5 years	2,044	
5 to 9 years	92 87	2.3
10 to 14 years	118	2.2 2.9
15 to 19 years		
20 to 24 years	125 73	3.1 1.8
25 to 29 years	64	1.6
30 to 34 years	81	2.0
35 to 39 years	92	2.3
40 to 44 years	93	2.3
45 to 49 years	182	4.5
50 to 54 years		
55 to 59 years	225	5.6
60 to 64 years	197	4.9
65 to 69 years	229 174	5.7 4.3
70 to 74 years		
75 to 79 years	110	2.7
80 to 84 years	63	1.6
85 years and over	23	0.6
Job years and over	16	0.4

U.S. Census Bureau



DP-1

Profile of General Population and Housing Characteristics: 2010

2010 Demographic Profile Data

NOTE: For more information on confidentiality protection, nonsampling error, and definitions, see http://www.census.gov/prod/cen2010/doc/dpsf.pdf.

Geography: Virginia City CDP, Nevada

Subject SEX AND AGE	Number	Percent
Total population	855	100.0
Under 5 years	27	3.2
5 to 9 years	36	4.2
10 to 14 years	47	5.5
15 to 19 years	44	5.1
20 to 24 years	26	3.0
25 to 29 years	23	2.7
30 to 34 years	33	3.9
35 to 39 years	31	3.6
40 to 44 years	56	6.5
45 to 49 years	57	6.7
50 to 54 years	102	11.9
55 to 59 years	105	12.3
60 to 64 years	104	12.2
65 to 69 years	82	9.6
70 to 74 years	42	4.9
75 to 79 years	17	2.0
80 to 84 years	16	1.9
85 years and over	7	0.8
Median age (years)	52.3	(X)
16 years and over	740	86.5
18 years and over	714	83.5
21 years and over	698	81.6
62 years and over	224	26.2
65 years and over	164	19.2
Male population	438	51.2
Under 5 years	15	1.8
5 to 9 years	14	1.6
10 to 14 years	34	4.0
15 to 19 years	27	3.2
20 to 24 years	14	1.6
25 to 29 years	9	1.1
30 to 34 years	19	2.2
35 to 39 years	13	1.5
40 to 44 years	23	2.7
45 to 49 years	23	2.7
50 to 54 years	51	6.0
55 to 59 years	55	6.4
60 to 64 years	54	6.3
65 to 69 years	44	5.1
70 to 74 years	25	2.9
75 to 79 years	10	1.2
80 to 84 years	6	0.7
85 years and over	2	0.2
	2	0.2

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U.S. Census Bureau



DP-1

Profile of General Population and Housing Characteristics: 2010

2010 Demographic Profile Data

NOTE: For more information on confidentiality protection, nonsampling error, and definitions, see http://www.census.gov/prod/cen2010/doc/dpsf.pdf.

Geography: Carson City, Nevada

Subject	Number	Percent
SEX AND AGE Total population	55 O74	100.0
Under 5 years	55,274	100.0 5.8
5 to 9 years	3,223	5.8
10 to 14 years	3,187	6.0
15 to 19 years	3,302	6.3
20 to 24 years	3,455	6.0
25 to 29 years	3,323	6.1
30 to 34 years	3,388	5.9
35 to 39 years	3,239	5.9
40 to 44 years	3,255	6.8
45 to 49 years	3,736	
50 to 54 years	4,232	7.7
55 to 59 years	4,196	7.6
60 to 64 years	3,905	7.1
65 to 69 years	3,700	6.7
70 to 74 years	2,774	5.0
75 to 79 years	2,050	3.7
80 to 84 years	1,680	3.0
85 years and over	1,341	2.4
Median age (years)	1,288	2.3
16 years and over	41.7	(X)
18 years and over	44,830	81.1
,	43,459	78.6
21 years and over	41,430	75.0
62 years and over	11,310	20.5
65 years and over	9,133	16.5
Male population	28,688	51.9
Under 5 years	1,677	3.0
5 to 9 years	1,621	2.9
10 to 14 years	1,673	3.0
15 to 19 years	1,781	3.2
20 to 24 years	1,797	3.3
25 to 29 years	1,993	3.6
30 to 34 years	1,835	3.3
35 to 39 years	1,763	3.2
40 to 44 years	2,108	3.8
45 to 49 years	2,273	4.1
50 to 54 years	2,229	4.0
55 to 59 years	1,985	3.6
60 to 64 years	1,850	3.3
65 to 69 years	1,377	2.5
70 to 74 years	982	1.8
75 to 79 years	757	1.4
80 to 84 years	552	1.0
85 years and over	435	0.8

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Population Projections for Nevada's Counties 2015 to 2019 Nevada State Demographer's Office Based On 2014 Estimate

	Carson City		
	Total		Percentage
	Population	Year	Change
2014	53,969		
2015	54,694	725	1.3%
2016	55,168	475	0.9%
2017	55,945	777	1.4%
2018	56,823	878	1.6%
2019	57,661	838	1.5%

Churchill		
	Change	
Total	Previous	Percentage
Population	Year	Change
25,103		
25,517	414	1.6%
25,770	253	1.0%
26,048	278	1.1%
26,345	297	1.1%
26,651	306	1.2%

	Clark	
	Change	
Total	Previous	Percentage
Population	Year	Change
2,069,450		
2,088,149	18,699	0.9%
2,107,031	18,882	0.9%
2,126,099	19,068	0.9%
2,145,354	19,255	0.9%
2,164,799	19,445	0.9%

Population Projections for Nevada's Counties 2015 to 2019 Nevada State Demographer's Office Based On 2014 Estimate

	Nye		
		Change	
	Total	Previous	Percentage
	Population	Year	Change
2014	45,456		
2015	45,619	164	0.4%
2016	45,798	179	0.4%
2017	46,004	206	0.4%
2018	46,225	222	0.5%
2019	46,436	211	0.5%

Pershing		
	Change	
Total	Previous	Percentage
Population	Year	Change
6,714		
6,770	55	0.8%
6,807	37	0.6%
6,830	24	0.3%
6,853	23	0.3%
6,880	27	0.4%

Storey		
T. (.)	Change	D
Total	Previous	3
Population	Year	Change
3,974		
3,981	7	0.2%
3,995	14	0.4%
4,009	14	0.4%
4,033	23	0.6%
4,060	27	0.7%