

D. Proposed Condition Hydrology Results

Proposed condition flow rates for future fully developed conditions from the hydrology models incorporating the above facilities are reported in Table 6. All of the interim detention ponds have been eliminated. A comparison with the hydrology results from the **1996 AMAFCA Hydrology Report** for future fully developed conditions without storm drainage or channel improvements for selected points on the main arroyos is made in Tables 7a and 7b. Except where specifically labeled as “worst case” all flow rates reported assume avulsion control.

TABLE 6a						
FUTURE CONDITIONS HYDROLOGY SUMMARY (BULKED FLOW RATES)						
	AREA (Sq mi)	AP #	VOL- 10-YR (ac-ft)	Qp 10-YR (cfs)	VOL- 100-YR (ac-ft)	Qp 100-YR (cfs)
NORTH DOMINGO BACA ARROYO						
Holbrook	3.166	919.99	129.0	305	231.1	616
Ventura	3.446	921.99	142.4	609	255.7	1171
Barstow	3.562	926.99	149.2	758	267.5	1813
Wyoming	3.870	930.99	167.4	1096	298.8	1984
Inflow to LNDB Dam	4.259	930.86	189.5	1313	337.0	2442
Out flow from LNDB Dam	4.259	930.87	189.5	170	337.0	200
I-25	4.526	943.99	205.7	400	364.7	731
LA CUEVA ARROYO¹						
Ventura	3.766	110.90	130.0	1359	265.8	3048
Barstow	4.017	111.99	140.5	1374	284.5	3094
Wyoming	4.189	112.90	150.3	1383	301.0	3128
Louisiana	5.462	113.90	194.5	1632	390.1	3908
I-25	5.582	115.9	202.1	1640	402.6	3923
North Diversion Channel	6.871	128.90	270.8	2901	519.8	5551

¹La Cueva and El Camino Arroyo Flow Rates reflect diversion of El Camino to the La Cueva west of Wyoming.

LACUEVA 100-YR FUTURE

-(s16.67h8.5v0T-618D

AHYMO SUMMARY TABLE (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
INPUT FILE = a:lcwyo100.fut

RUN DATE (MON/DAY/YR) = 06/30/1998
USER NO. = RSTECHNM.SFE

COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	PAGE = 1	NOTATION
START											TIME= .00
RAINFALL TYPE= 2											RAIN24= 4.050
COMPUTE NM HYD	101.00	-	1	.60700	953.84	45.841	1.41600	1.650	2.455		PER IMP= .00
ROUTE MCUNGE	101.80	1	2	.60700	912.90	45.469	1.40451	1.850	2.350		CCODE = .1
RAINFALL TYPE= 2											RAIN24= 4.200
COMPUTE NM HYD	100.00	-	1	1.21400	1201.70	87.881	1.35730	1.850	1.547		PER IMP= .00
ROUTE MCUNGE	100.80	1	3	1.21400	1177.21	87.700	1.35451	2.100	1.515		CCODE = .1
ADD HYD	101.88	3 & 2	5	1.82100	1882.13	133.168	1.37117	1.950	1.615		
RAINFALL TYPE= 2											RAIN24= 3.650
COMPUTE NM HYD	102.00	-	1	.87500	1033.60	54.313	1.16386	1.700	1.846		PER IMP= .00
ADD HYD	102.90	1 & 5	5	2.69600	2554.30	187.482	1.30389	1.900	1.480		
*S LA CUEVA TRIBUTARY ARROYO @ TRAMWAY BLVD. (102.9)											
ROUTE MCUNGE	102.80	5	2	2.69600	2515.07	187.100	1.30123	2.050	1.458		CCODE = .1
RAINFALL TYPE= 2											RAIN24= 3.370
COMPUTE NM HYD	107.20	-	1	.17200	325.87	13.591	1.48157	1.550	2.960		PER IMP= 17.00
ADD HYD	107.29	1 & 2	4	2.86800	2575.01	200.690	1.31205	2.050	1.403		
*S NORTH LA CUEVA AT GLENDALE AND BROWNING (107.29)											
RAINFALL TYPE= 2											RAIN24= 3.500
COMPUTE NM HYD	102.10	-	1	.09300	149.17	4.457	.89867	1.500	2.506		PER IMP= .00
*S LA CUEVA TRIBUTARY @ TRAMWAY BLVD.											
ROUTE MCUNGE	102.18	1	2	.09300	136.20	4.395	.88600	1.700	2.288		CCODE = .1
RAINFALL TYPE= 2											RAIN24= 3.380
COMPUTE NM HYD	107.10	-	1	.18080	399.38	14.303	1.48327	1.500	3.452		PER IMP= 17.00
ADD HYD	107.19	1 & 2	5	.27380	399.38	18.697	1.28040	1.500	2.279		
*S NORTH LA CUEVA (TRIB) AT FLORENCE AND BROWNING (107.19)											
ADD HYD	107.90	5 & 4	3	3.14180	2666.73	219.388	1.30929	2.000	1.326		
RAINFALL TYPE= 2											RAIN24= 3.400
COMPUTE NM HYD	106.00	-	1	.04360	95.85	3.448	1.48281	1.500	3.435		PER IMP= 17.00
ROUTE MCUNGE	106.80	1	2	.04360	86.06	3.396	1.46043	1.700	3.084		CCODE = .1
RAINFALL TYPE= 2											RAIN24= 3.340
COMPUTE NM HYD	106.10	-	1	.11160	238.47	8.685	1.45925	1.500	3.339		PER IMP= 17.00
ADD HYD	106.19	1 & 2	6	.15520	257.25	12.081	1.45958	1.550	2.590		
*S LA CUEVA TRIBUTARY ARROYO @ BROWNING (106.19)											
ROUTE MCUNGE	107.99	3 & 6	5	3.29700	2733.21	231.469	1.31636	2.000	1.295		
ROUTE MCUNGE	107.80	5	2	3.29700	2713.95	231.319	1.31551	2.100	1.286		CCODE = .1
RAINFALL TYPE= 2											RAIN24= 3.230
COMPUTE NM HYD	109.00	-	1	.10060	216.30	7.552	1.40751	1.500	3.359		PER IMP= 17.00
ADD HYD	109.90	1 & 2	5	3.39760	2736.13	238.871	1.31823	2.100	1.258		
RAINFALL TYPE= 2											RAIN24= 3.250
COMPUTE NM HYD	108.00	-	7	.20550	404.63	15.573	1.42091	1.550	3.077		PER IMP= 17.00
ADD HYD	109.99	5 & 7	5	3.60310	2789.17	254.444	1.32409	2.100	1.210		
*S LA CUEVA ARROYO @ EUBANK (MAIN) (109.99)											
ROUTE MCUNGE	109.88	5	2	3.60310	2763.62	254.113	1.32237	2.200	1.198		CCODE = .1
RAINFALL TYPE= 2											RAIN24= 3.130
COMPUTE NM HYD	110.00	-	1	.16340	275.61	11.738	1.34689	1.550	2.636		PER IMP= 17.00
ADD HYD	110.90	1 & 2	5	3.76650	2796.05	265.851	1.32343	2.200	1.160		
*S LA CUEVA ARROYO @ VENTURA (MAIN) (110.90)- FINAL											
*S ROUTE TO BARSTOW											
ROUTE MCUNGE	110.88	5	2	3.76650	2792.08	263.889	1.31366	2.219	1.158		CCODE = .1
RAINFALL TYPE= 2											RAIN24= 3.020
COMPUTE NM HYD	111.00	-	1	.05330	108.83	3.739	1.31526	1.500	3.190		PER IMP= 17.00
COMPUTE NM HYD	111.40	-	4	.01410	28.80	.989	1.31527	1.500	3.192		PER IMP= 17.00
*S COMBINE HYD.'S	111.0	AND 111.4	AS 111.49								
ADD HYD	111.49	1 & 4	4	.06740	137.63	4.728	1.31525	1.500	3.191		
*S ROUTE TO LA CUEVA CHANEL @ OAKLAND											
*S PIPE ROUTING											
ROUTE	111.48	4	5	.06740	133.79	4.728	1.31527	1.550	3.102		RAIN24= 3.050
RAINFALL TYPE= 2											PER IMP= 26.00
COMPUTE NM HYD	111.10	-	1	.09690	195.97	7.699	1.48968	1.500	3.160		RAIN24= 3.050
RAINFALL TYPE= 2											PER IMP= 50.00
COMPUTE NM HYD	111.30	-	6	.04200	107.90	4.348	1.94094	1.500	4.014		
ADD HYD	111.39	1 & 6	1	.13890	303.87	12.046	1.62612	1.500	3.418		
*S COMBINE HYD.'S	111.48	AND 111.39	AS 111.88								
ADD HYD	111.88	1 & 5	1	.20630	436.39	16.774	1.52456	1.500	3.305		
*S LA CUEVA CHANNEL AT BARSTOW (111.89)-NOT FINAL											
ADD HYD	111.89	1 & 2	5	3.97280	2827.78	280.143	1.32216	2.194	1.112		
*S DIVERSION FROM NDB ABOVE CARRINGTON											
COMPUTE NM HYD	924.10	-	6	.02500	64.23	2.588	1.94094	1.500	4.015		PER IMP= 50.00
COMPUTE NM HYD	924.20	-	7	.01900	48.82	1.967	1.94094	1.500	4.015		PER IMP= 50.00
*S COMBINE HYD.'S	924.10	AND 924.20	AS 924.22								