

SAD NO. 223

DRAINAGE MANAGEMENT PLAN

MAY 1991

- 1. Revised March 1992**
- 2. Revised July 1992**
- 3. Revised July 1994**

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PREPARED FOR:

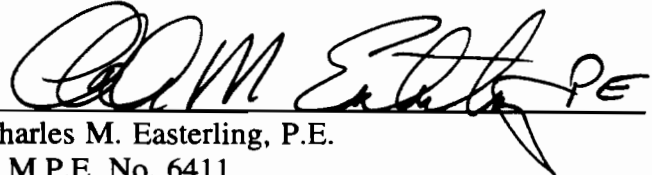
**PUBLIC WORKS DEPARTMENT
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PREPARED BY:

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I, Charles M. Easterling, do hereby certify that this report and the information herein was prepared by me or under my direction and that I am a duly registered Professional Engineer under the laws of the State of New Mexico.



A handwritten signature of Charles M. Easterling, followed by the letters "PE" indicating his status as a Professional Engineer.

Charles M. Easterling, P.E.
N.M.P.E. No. 6411

Date: 7-30-94

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SAD NO. 223

DRAINAGE MANAGEMENT PLAN

I. GENERAL

A. PURPOSE AND AUTHORIZATION

The preparation of this document was authorized by the Public Works Department, City of Albuquerque, under A/E Agreement No. 4193.01 dated January 11, 1991. Its purpose is to provide the hydrologic basis for the design of the streets and storm drainage systems and to provide a foundation for fair and equitable assessments of storm drainage benefits within Special Assessment District No. 223 (SAD No. 223).

B. DESCRIPTION OF SAD NO. 223

SAD No. 223 is located within the Seven Bar Sector Plan area (Reference 7) in northwest Albuquerque. It covers 37 parcels (approximately 540 acres) and eight property owners. The district was created to construct major streets, storm drains, water and sewer lines, and landscaping in that portion of Seven Bar Ranch east of Coors Bypass and south of NM 528 (Alameda Blvd.).

C. DESCRIPTION OF DRAINAGE SCHEME

There are currently no permanent public drainage facilities within SAD No. 223, except for a partially constructed storm drain in Coors Bypass near the Calabacillas Arroyo. Existing drainage patterns can be classified as natural or casual. A significant portion of the area was once Alameda Airport. Very little remains of the natural drainage patterns due to past development-related grading. The resultant drainage patterns described as casual were not specifically designed or planned but just "happened" as roads and runways were constructed.

The Seven Bar Sector Plan Area is divided into two distinct drainage basins: the area west of (above) Black Arroyo/Seven Bar Channel; and the area east of (below) the two channel system. (There are, however, approximately twenty-one acres east of the Black Arroyo which can drain westward into it.)

The area within SAD No. 223 east of the channels has been subdivided further into four sub-basins as shown on Basin Map, Plate A and described below:

1. The area near the **Calabacillas** and **Black Arroyos** which can drain directly to them (50.2 acres). No improvements are proposed impacting this directly connected area.

2. The area within SAD No. 223 which drains to the proposed **Cabezon Channel Outfall System** (approximately 360 acres).
3. The area within SAD No. 223 which drains to the **Corrales Main Canal Outfall System** (approximately 11.4 acres).
4. The area within SAD No. 223 which drains to the **Calabacillas Arroyo Outfall System** (approximately 94.8 acres).

Except for the area draining directly to the Calabacillas (1) and Black Arroyos which can discharge freely, developed discharges in each of the remaining three sub-basins are limited by downstream capacity. Each outfall-constrained sub-basin will require on-site development controls and storm drainage improvements. Each sub-basin system will be discussed in more detail in the following sections.

D. COMPUTATIONAL METHODS (Revised 3-92)

Background

The drainage criteria and software used for hydrologic and hydraulic analysis varies from system to system in the project. This is a result of revisions made to the drainage criteria during the design period of the project. All hydrologic analysis of the system were originally based on the January 1991, Section 22.2, Volume 2 DPM Drainage Criteria. All original hydrologic modeling was done using the "9-90" version of AMAFCA's AHYMO. During the design phase of the project an update was made to the City of Albuquerque Drainage Criteria and the AMAFCA AHYMO computer model. The revised drainage criteria dated August 1991 and the AHYMO Model dated September 1991 were approved in November of 1991 for use in flood studies in the Albuquerque area by the Federal Emergency Management Agency (FEMA). As a flood plain study was required for an area within the Cabezon Channel Outfall System, the August 1991 criteria and "9-91" Model were utilized in final analysis of this system. The analysis of all other systems in the district was based on the January 1991 criteria and the "9-90" Model.

System Modeling

Hydrologic modeling was performed for this project utilizing AMAFCA's AHYMO. AHYMO's Type 2, 24-hour rainfall distributions were used with a $D_1 = 0.05$ hours. Land treatment types were assigned based upon Seven Bar Sector Plan and uses or more recent zoning designations and the values of imperviousness shown in Section 22.2 of the DPM. Time of concentrations (T_c) were derived using the Upland Method as recommended in the DPM. Whenever T_c was less than 12.0 minutes, 12.0 minutes was assumed. Traditional upland watershed modeling (upstream to downstream) was performed. Hydrographs were computed for each parcel within the district as well as for each street/storm drain sub-reach. Model runs for 100-year, 24-hour, and 10-year,

24-hour storms were performed in order to verify street capacities and satisfy Drainage Ordinance Criteria.

First pass analyses and storm drain routings were performed using normal depth flows (pipe slopes). Modeling results were then provided to the design team. Once preliminary hydraulic design was completed using energy balance methods, pipe diameters and catch basin locations were updated and a verification model run was made. Whenever pressure flow existed, the average friction slope for that reach was substituted for the pipe slope in the model.

Catch basins were first located then modeled based upon their type, capacity, orientation, and resultant capture ability using the "Divide HYD" routine in AHYMO. Divided hydrographs were routed separately in street and pipe routings. In cases where the initial modeling runs indicated all or nearly all of the street flow would be intercepted by a catch basin, the "Divide HYD" routines were removed from the model and all street flow was added to the storm drain.

II. CABEZON CHANNEL OUTFALL SYSTEM (Revised 7-94)

A. OUTFALL SYSTEM CONSTRAINTS

The Cabezon Channel is a combined irrigation flood control channel with a 2750 acre watershed. The portion of the Cabezon Channel Watershed modeled by the SAD 223 Drainage Management Plan consists of approximately 526 acres which drains to the desilting pond located at the headwaters of the channel. The remaining 2225 acres is located north of Skyview Acres and west of the Corrales Main Canal. The area consists primarily of rural development with minimal drainage controls or improvements. The drainage from this area enters Cabezon Channel via the Corrales Main Canal. The impending development associated with the SAD 223 project combined with the uncertainty surrounding the Corrales Main Canal drainage prompted a study of Cabezon Channel's capacity. Reference the Cabezon Channel Capacity Analysis, Easterling & Associates, Inc. – June 1993. The capacity analysis made some idealistic assumptions about future flood control improvements within the Corrales Main Canal Watershed. Based on these assumptions, the analysis showed that the peak in the Corrales Main Canal will occur after the SAD 223 peak. The net effect is only the base irrigation flow of 50 cfs will add directly to the SAD 223 peak. The report satisfied AMAFCA's concerns as documented in a letter dated December 10, 1993 contained in Appendix A. Unfortunately, it was not practical to correlate the Cabezon capacity analysis with the SAD 223 Drainage Management Plan due to the specialized assumptions and techniques used to analyze the Corrales Main Canal Watershed. Therefore, the peak flow rates and peak timing may differ between the reports, but the overall results are the same.

The 100-year AHYMO "9-91" analysis of the Cabezon Channel Outfall System calculated a peak rate of 490 cfs at the junction of the Cabezon Channel and the Corrales High Ditch. This peak flow rate was based on the following conditions:

1. Fully developed condition within SAD 223 with approximately 50% on-site ponding.
2. The existing condition for the contributing portion of N.M. 528 and the adjacent area to the north.
3. Developed condition for the contributing area of Skyview Acres.
4. A 50 cfs flow rate from the Corrales High Ditch.

B. SYSTEM DESCRIPTION

Street/Storm Drain Portion

The proposed SAD No. 223 drainage improvements within the Cabezon watershed will discharge to the Cabezon system at the stilling basin located immediately upstream of the upper transition structure. A 60-inch RCP will convey flows from the intersection of Ellison Drive and NM 528 northward in Ellison to the vacated Corrales Main Canal alignment and then northwest to the stilling basin at the head of Cabezon Channel. The system extends westward in Ellison from NM 528 to Coors Bypass in 48-inch to 36-inch RCP. In this reach, the system was sized to keep one lane (of ultimate six lanes) dry in the 10-year storm, and collect ponded runoff from Tracts M, G-1, and G-2, and Cottonwood Drive north of Seven Bar Loop Road. The entire 100-year storm runoff is collected at NM 528, with **no** flows being allowed to cross NM 528 or westbound Ellison above ground. The system branches at Coors Bypass. A branch of 36-inch to 24-inch RCP stretches north in the Bypass to collect street flows and ponded flows from Tract B9-J, B-10 (Corrales Pointe Apartments) and B9-D.

Another branch of 30-inch to 24-inch RCP storm drain extends south to Seven Bar Loop Road where flows from Coors Bypass, Seven Bar Loop Road west of the Bypass are intercepted in order to satisfy "one lane dry" criteria. Ponded flows from portions of Tracts N-2A-1 and N-2A-2 are collected as well.

Refer to the Drainage Report for the Trails at Seven Bar South Subdivision May 3, 1993 prepared by Bohannon-Huston, Inc. for Drainage Analysis Associated with Tracts N-2A-1 and N-2A-2.

Flows from future Ellison west of Coors Bypass, ponded flows (future) from Tracts B-9G, B-9H, B-9E, B-9F, and B-9D are intercepted and, along with flows from the south Bypass leg and Cibola High School, are discharged into a 15.3 acre-feet regional detention pond located east of Cibola High School and west of Coors Bypass on Tract N2-B.

The discharge from this pond is connected to the east leg of the Ellison Road storm drain in a 24-inch RCP at a junction with the north leg of the Bypass line.

Discharge from the pond is limited to 11.6 cfs by an orifice plate at the outlet structure. Regional detention pond depth was fixed by clearance requirements at the 24-inch master plan sewer crossing of the pond outfall in the Coors Bypass and Ellison intersection, and the grade of the future storm drain in west Ellison.

Channel Portion

Tracts O-1A-1 and O-1A-2 of Seven Bar Ranch (59.3 acres) do not drain to the storm drain system in Ellison Road, but rather drain to three 30-inch by 42-inch arch-pipe

CMP's under NM 528 which in turn drain to the stilling basin at the upstream, end of Cabezon Channel through a temporary concrete lined trapezoidal channel. SAD No. 223 proposes to construct a retaining wall along the south side of the existing channel to provide at least 2' of freeboard.

The design hydrology and hydraulics and a schematic of the Cabezon Channel Outfall system are enclosed (Tables 1 through 4 and Sheets 1 through 4).

IV. CALABACILLAS ARROYO OUTFALL SYSTEM (Revised 7-94)

A. REPORT REFERENCE

This portion of the SAD 223 Drainage Management Plan is discussed in the Drainage Report for Cottonwood Mall and SAD 223 Part 2 prepared by Bohannon-Huston, Inc., April 1992 and approved by the City of Albuquerque in June of 1992. A copy of the approval letter is contained in Appendix A.

V. INTERIM CONDITIONS (7-94)

A. GENERAL DESCRIPTION

The storm drainage system proposed for SAD 223 was designed for fully developed contributing areas. With the exception of the Mall Site and streets, the balance of the contributing area is expected to develop in the near future. The SAD 223 improvement plans include temporary facilities to control runoff sediment and peak flow rates from the undeveloped tracts of land during the interim period. Temporary Easements have been (or are being) acquired to allow for construction and operation of the temporary facilities.

B. TEMPORARY FACILITIES

The temporary drainage facilities consist of desilting/detention ponds and minor diversion dikes and channels to convey flows to them.

Sediment Control

The temporary ponds have been designed to remove the majority of the sediment from flows generated on the undeveloped areas before they are discharged to the storm drain system. A supplementary report titled "Sediment Analysis for the SAD 223 Cabezon Channel Outfall System" (Reference 6) reports the results of an analysis performed to predict the effect sediment will have on the Cabezon Channel Outfall System in the 100-year storm. The analysis demonstrates that sediment will not be a problem in the storm drain system.

Peak Flow Rates

The temporary ponds have been designed to reduce peak flow rates to less than the established allowable flow rates from the individual tracts in the fully developed condition. Hydrologic analysis of the undeveloped areas and respective desilting/detention basins discharging to the Cabezon Channel Outfall System was performed with AMAFCA's AHYMO "9-91." Peak flow rates and volumes for the 100-year storm are summarized on Sheet 6 of this report.

Maintenance

The desilting/detention ponds were designed under the assumption that sediment accumulation will be removed annually and after major storms. The sediment storage volume provided in the temporary ponds is equal to the average annual sediment yield plus the sediment yield from the 100 year storm. If sediment removal is performed as previously described, the ponds will always have volume available to function properly in the 100 year storm. The elevation corresponding to the top of the average annual sediment storage volume has been noted on the construction drawings for use by City Maintenance forces.

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CABEZON CHANNEL OUTFALL SYSTEM
(REVISED JULY 1994)

100 YEAR

TABLE 1

	I.D. NUMBER	AREA (acres)	PEAK DISCHARGE (cfs)	RUNOFF (ac-ft)	TIME TO PEAK (hours)	CFS PER (acre)	% IMP.	NOTATION
COMPUTE NM HYD	101	15.00	54.19	2.37	1.50	3.61	70.00	TRACT B-9H (WEST)
ROUTE RESERVOIR	501	15.00	10.12	2.37	2.05	0.67		TRACT B-9H (WEST) POND
COMPUTE NM HYD	103	1.32	5.14	0.23	1.50	3.90	82.00	CIBOLA LOOP ROAD
COMPUTE NM HYD	105	0.50	1.95	0.09	1.50	3.92	82.00	CIBOLA LOOP ROAD
COMPUTE NM HYD	108	30.60	110.53	4.84	1.50	3.61	70.00	TRACT B-9G (SOUTH)
ROUTE RESERVOIR	502	30.60	20.64	4.84	2.05	0.68		TRACT B-9G (SOUTH) POND
COMPUTE NM HYD	111	0.50	1.69	0.07	1.50	3.37	58.00	ELLISON DRIVE (north side)
ADD HYD	112	47.92	32.53	7.30	2.00	0.68		ANALYSIS POINT #1
COMPUTE NM HYD	114	2.34	7.81	0.33	1.50	3.34	58.00	ELLISON DRIVE (north side)
ADD HYD	115	50.25	34.10	7.61	1.97	0.68		ANALYSIS POINT #2
COMPUTE NM HYD	116	7.00	25.30	1.11	1.50	3.61	70.00	TRACT B-9H (EAST)
ROUTE RESERVOIR	503	7.00	4.72	1.11	2.05	0.68		TRACT B-9H (EAST) POND
COMPUTE NM HYD	118	1.93	7.49	0.34	1.50	3.89	82.00	CIBOLA LOOP ROAD
COMPUTE NM HYD	120	12.90	43.66	1.85	1.50	3.38	60.00	TRACT B-9F
ROUTE RESERVOIR	504	12.90	8.52	1.85	2.05	0.66		TRACT B-9F POND
COMPUTE NM HYD	122	0.43	1.68	0.08	1.50	3.92	82.00	CIBOLA LOOP ROAD
COMPUTE NM HYD	124	16.90	57.19	2.43	1.50	3.38	60.00	TRACT B-9E
ROUTE RESERVOIR	505	16.90	10.72	2.43	2.05	0.63		TRACT B-9E POND
ADD HYD	125	39.16	25.83	5.58	1.97	0.66		ANALYSIS POINT #3
ADD HYD	127	89.41	59.92	13.19	1.97	0.67		ANALYSIS POINT #4
COMPUTE NM HYD	129	3.40	11.37	0.48	1.50	3.34	58.00	ELLISON DRIVE
ROUTE	132	92.81	62.69	13.66	1.87	0.68		ANALYSIS POINT #5
COMPUTE NM HYD	133	45.67	94.91	4.88	1.55	2.08	40.00	CIBOLA HIGH SCHOOL
COMPUTE NM HYD	135	1.02	3.27	0.14	1.50	3.21	58.00	TRACT N-2A-2 (EAST)
COMPUTE NM HYD	136	2.38	9.26	0.42	1.50	3.89	82.00	SEVEN BAR LOOP ROAD
COMPUTE NM HYD	139	2.00	7.42	0.32	1.50	3.71	70.00	TRACT N-2A-1 (NORTH)
ROUTE RESERVOIR	507	2.00	4.61	0.32	1.60	2.31		TRACT N-2A-1 (NORTH) POND
COMPUTE NM HYD	141.1	0.69	2.34	0.10	1.50	3.57	58.00	COORS BYPASS
COMPUTE NM HYD	141.2	0.92	3.08	0.13	1.50	3.35	58.00	COORS BYPASS
COMPUTE NM HYD	141.4	0.33	1.12	0.05	1.50	3.38	58.00	COORS BYPASS
ADD HYD	143	7.36	21.49	1.12	1.50	2.92		ANALYSIS POINT #6

CABEZON CHANNEL OUTFALL SYSTEM (cont.)
(REVISED JULY 1994)

100 YEAR

TABLE 1

	I.D. NUMBER	AREA (acres)	PEAK DISCHARGE (cfs)	RUNOFF (ac-ft)	TIME TO PEAK (hours)	CFS PER (acre)	% IMP.	NOTATION
COMPUTE NM HYD	145.2	1.15	3.86	0.16	1.50	3.35	58.00	COORS BYPASS
ADD HYD	145.3	8.51	25.11	1.28	1.53	2.95		ANALYSIS POINT #6.1
COMPUTE NM HYD	146	1.28	4.29	0.18	1.50	3.35	58.00	COORS BYPASS
COMPUTE NM HYD	147	2.56	8.56	0.36	1.50	3.35	58.00	COORS BYPASS
COMPUTE NM HYD	148.1	0.32	1.08	0.05	1.50	3.35	58.00	COORS BYPASS
ADD HYD	148.2	4.16	13.93	0.59	1.50	3.35		ANALYSIS POINT #7
COMPUTE NM HYD	150	37.60	127.22	5.40	1.50	3.38	60.00	TRACT B-9J
ROUTE RESERVOIR	508	37.60	23.83	5.40	2.05	0.63		TRACT B-9J POND
COMPUTE NM HYD	152	0.45	1.51	0.06	1.50	3.37	58.00	COORS BYPASS
COMPUTE NM HYD	154	0.90	3.00	0.13	1.50	3.35	58.00	COORS BYPASS
ADD HYD	156	1.34	4.49	0.18	1.50	3.35		ANALYSIS POINT #8
COMPUTE NM HYD	158	0.65	2.20	0.09	1.50	3.36	58.00	COORS BYPASS
COMPUTE NM HYD	161	0.65	2.20	0.09	1.50	3.36	58.00	COORS BYPASS
ADD HYD	165	40.25	25.84	5.56	1.90	0.64		ANALYSIS POINT #9
COMPUTE NM HYD	167	0.84	2.83	0.12	1.50	3.35	58.00	COORS BYPASS
COMPUTE NM HYD	170	0.84	2.83	0.12	1.50	3.35	58.00	COORS BYPASS
COMPUTE NM HYD	174	8.30	28.09	1.19	1.50	3.39	60.00	TRACT B-10
ROUTE RESERVOIR	509	8.30	8.05	1.19	1.85	0.97		TRACT B-10 POND
COMPUTE NM HYD	175	7.40	23.36	0.95	1.50	3.16	50.00	TRACT B-9D
ROUTE RESERVOIR	510	7.40	4.38	0.95	2.00	0.59		TRACT B-9D
ADD HYD	178	57.64	39.85	7.83	1.80	0.69		ANALYSIS POINT #10
COMPUTE NM HYD	180	0.95	3.19	0.13	1.50	3.35	58.00	COORS BYPASS
COMPUTE NM HYD	424	0.37	1.25	0.05	1.50	3.38	58.00	COORS BYPASS
COMPUTE NM HYD	426	0.87	2.91	0.12	1.50	3.35	58.00	ELLISON DRIVE
COMPUTE NM HYD	182	0.95	3.19	0.13	1.50	3.35	58.00	COORS BYPASS
COMPUTE NM HYD	432	0.37	1.25	0.05	1.50	3.38	58.00	COORS BYPASS
COMPUTE NM HYD	434	1.34	4.49	0.19	1.50	3.35	58.00	ELLISON DRIVE
ROUTE	187	60.28	43.76	8.20	1.67	0.73		ANALYSIS POINT #11
COMPUTE NM HYD	188	2.46	9.72	0.44	1.50	3.96	85.00	TRACT N-2B PARK & RIDE AREA
COMPUTE NM HYD	189	4.41	12.55	0.37	1.50	2.85	0.00	TRACT N-2B POND AREA
ROUTE RESERVOIR	511	170.52	11.61	15.75	5.13	0.07		TRACT N-2B POND
ROUTE	195	172.73	11.64	16.02	5.20	0.07		ANALYSIS POINT #12
ADD HYD	196	233.01	53.69	24.21	1.70	0.23		ANALYSIS POINT #13

CABEZON CHANNEL OUTFALL SYSTEM (cont.)
(REVISED JULY 1994)

100 YEAR

TABLE 1

	I.D. NUMBER	AREA (acres)	PEAK DISCHARGE (cfs)	RUNOFF (ac-ft)	TIME TO PEAK (hours)	CFS PER (acre)	% IMP.	NOTATION
COMPUTE NM HYD	198	1.18	3.97	0.17	1.50	3.35	58.00	ELLISON DRIVE
COMPUTE NM HYD	201	1.37	4.58	0.19	1.50	3.35	58.00	ELLISON DRIVE
COMPUTE NM HYD	203	0.90	3.01	0.13	1.50	3.35	58.00	ELLISON DRIVE
COMPUTE NM HYD	206	42.82	164.38	7.40	1.50	3.84	80.00	TRACT M
ROUTE RESERVOIR	513	42.82	30.67	7.40	2.05	0.72		TRACT M POND
COMPUTE NM HYD	207	2.44	10.07	0.47	1.50	4.12	92.00	COTTONWOOD DRIVE
COMPUTE NM HYD	209	0.29	1.23	0.06	1.50	4.16	92.00	COTTONWOOD DRIVE
COMPUTE NM HYD	211	0.75	3.09	0.14	1.50	4.13	92.00	COTTONWOOD DRIVE
ADD HYD	212	3.49	14.30	0.64	1.50	4.10		ANALYSIS POINT #13.1
ADD HYD	214	46.30	34.38	7.74	1.90	0.74		ANALYSIS POINT #13.2
ADD HYD	216	282.76	92.87	32.37	1.70	0.33		ANALYSIS POINT #14
COMPUTE NM HYD	218	0.92	3.10	0.13	1.50	3.35	58.00	ELLISON DRIVE
COMPUTE NM HYD	221	0.64	2.14	0.09	1.50	3.36	58.00	ELLISON DRIVE
COMPUTE NM HYD	224	9.29	35.70	1.61	1.50	3.84	80.00	TRACT G-1A
ROUTE RESERVOIR	514	9.29	6.67	1.61	2.05	0.72		TRACT G-1A POND
COMPUTE NM HYD	227	1.34	4.49	0.19	1.50	3.35	58.00	ELLISON DRIVE
COMPUTE NM HYD	230	0.42	1.41	0.06	1.50	3.37	58.00	ELLISON DRIVE
COMPUTE NM HYD	232	1.76	5.89	0.25	1.50	3.35	58.00	ELLISON DRIVE
COMPUTE NM HYD	234	9.98	38.33	1.73	1.50	3.84	80.00	TRACT G-2A
ROUTE RESERVOIR	515	9.98	7.15	1.73	2.05	0.72		TRACT G-2A POND
ADD HYD	235	307.12	113.32	36.19	1.60	0.37		ANALYSIS POINT #15
COMPUTE NM HYD	236.2	1.24	5.17	0.24	1.50	4.14	88.50	S.R. 528
ROUTE	236	308.37	116.68	36.41	1.60	0.38		ANALYSIS POINT #15.1
COMPUTE NM HYD	237.1	2.18	8.26	0.35	1.50	3.80	3.80	S.R. 528
COMPUTE NM HYD	237.3	0.58	1.97	0.08	1.50	3.42	48.00	S.R. 528
COMPUTE NM HYD	237.6	1.22	4.73	0.20	1.50	3.89	71.00	TRACT C-5A
ADD HYD	237.8	312.34	125.32	37.01	1.60	0.40		ANALYSIS POINT #15.2
COMPUTE NM HYD	238	59.30	197.23	9.82	1.50	3.33	75.00	TRACTS 0-1A-1 & 0-2A-1
COMPUTE NM HYD	238.1	4.42	16.47	0.73	1.50	3.73	75.00	S.R. 528
ROUTE RESERVOIR	516	59.30	40.79	9.82	2.10	0.69		TRACTS 0-1A-1 & 0-2A-1 POND
COMPUTE NM HYD	310	56.94	113.62	4.86	1.55	2.00	25.00	TRACTS C-1, AND ABOVE
COMPUTE NM HYD	320.1	3.16	8.43	0.30	1.50	2.67	25.00	TRACT C-2/S.R. 528
ADD HYD	310.3	123.84	152.57	15.17	1.60	1.23		ANALYSIS POINT #16
COMPUTE NM HYD	320	12.97	26.39	0.94	1.50	2.03	19.00	TRACT C-3
COMPUTE NM HYD	330	74.11	177.80	7.22	1.55	2.40	26.00	SKYVIEW ACRES
COMPUTE NM HYD	370	2.74	10.53	0.47	1.50	3.84	80.00	TRACT C-4
ROUTE RESERVOIR	517	526.78	438.07	60.45	1.63	0.83		ANALYSIS POINT #17
COMPUTE NM HYD	380	0.78	3.36	0.16	1.50	4.31	100.00	CALLE CUERVO ROAD
ADD HYD	247	2734.59	490.02	143.21	1.63	0.18		ANALYSIS POINT #18

CABEZON CHANNEL OUTFALL SYSTEM
(REVISED JULY 1994)

10 YEAR

TABLE 2

	I.D. NUMBER	AREA (acres)	PEAK DISCHARGE (cfs)	RUNOFF (ac-ft)	TIME TO PEAK (hours)	CFS PER (acre)	% IMP.	NOTATION
COMPUTE NM HYD	101	15.00	33.20	1.43	1.50	2.21	70.00	TRACT B-9H (WEST)
ROUTE RESERVOIR	501	15.00	6.45	1.43	2.05	0.43		TRACT B-9H (WEST) POND
COMPUTE NM HYD	103	1.32	3.26	0.14	1.50	2.46	82.00	CIBOLA LOOP ROAD
COMPUTE NM HYD	105	0.50	1.23	0.05	1.50	2.47	82.00	CIBOLA LOOP ROAD
COMPUTE NM HYD	108	30.60	67.71	2.92	1.50	2.21	70.00	TRACT B-9G (SOUTH)
ROUTE RESERVOIR	502	30.60	13.16	2.92	2.05	0.43		TRACT B-9G (SOUTH) POND
COMPUTE NM HYD	111	0.50	0.99	0.04	1.50	1.97	58.00	ELLISON DRIVE (north side)
ADD HYD	112	47.92	20.68	4.39	2.03	0.43		ANALYSIS POINT #1
COMPUTE NM HYD	114	2.34	4.57	0.19	1.50	1.96	58.00	ELLISON DRIVE (north side)
ADD HYD	115	50.25	21.55	4.57	2.03	0.43		ANALYSIS POINT #2
COMPUTE NM HYD	116	7.00	15.50	0.67	1.50	2.21	70.00	TRACT B-9H (EAST)
ROUTE RESERVOIR	503	7.00	3.02	0.67	2.05	0.43		TRACT B-9H (EAST) POND
COMPUTE NM HYD	118	1.93	4.75	0.21	1.50	2.46	82.00	CIBOLA LOOP ROAD
COMPUTE NM HYD	120	12.90	25.83	1.09	1.50	2.00	60.00	TRACT B-9F
ROUTE RESERVOIR	504	12.90	5.28	1.09	2.05	0.41		TRACT B-9F POND
COMPUTE NM HYD	122	0.43	1.07	0.05	1.50	2.48	82.00	CIBOLA LOOP ROAD
COMPUTE NM HYD	124	16.90	33.84	1.43	1.50	2.00	60.00	TRACT B-9E
ROUTE RESERVOIR	505	16.90	6.60	1.43	2.05	0.39		TRACT B-9E POND
ADD HYD	125	39.16	16.04	3.30	2.00	0.41		ANALYSIS POINT #3
ADD HYD	127	89.41	37.59	7.87	2.00	0.42		ANALYSIS POINT #4
COMPUTE NM HYD	129	3.40	6.67	0.28	1.50	1.96	58.00	ELLISON DRIVE
ROUTE	132	92.81	39.05	8.14	2.00	0.42		ANALYSIS POINT #5
COMPUTE NM HYD	133	45.67	50.12	2.64	1.55	1.09	40.00	CIBOLA HIGH SCHOOL
COMPUTE NM HYD	135	1.02	1.90	0.08	1.50	1.07	58.00	TRACT N-2A-2 (EAST)
COMPUTE NM HYD	136	2.38	5.88	0.26	1.50	2.47	82.00	SEVEN BAR LOOP ROAD
COMPUTE NM HYD	139	2.00	4.58	0.19	1.50	2.29	70.00	TRACT N-2A-1 (NORTH)
ROUTE RESERVOIR	507	2.00	2.36	0.19	1.65	1.18		TRACT N-2A-1 (NORTH) POND
COMPUTE NM HYD	141.1	0.69	1.37	0.05	1.50	1.96		COORS BYPASS
COMPUTE NM HYD	141.2	0.92	1.81	0.08	1.50	1.96		COORS BYPASS
COMPUTE NM HYD	141.4	0.33	0.66	0.03	1.50	1.97		COORS BYPASS
ADD HYD	143	7.36	13.01	0.67	1.50	1.77		ANALYSIS POINT #6

CABEZON CHANNEL OUTFALL SYSTEM (cont.)
(REVISED JULY 1994)

10 YEAR

TABLE 2

	I.D. NUMBER	AREA (acres)	PEAK DISCHARGE (cfs)	RUNOFF (ac-ft)	TIME TO PEAK (hours)	CFS PER (acre)	% IMP.	NOTATION
COMPUTE NM HYD	145.2	1.15	2.27	0.10	1.50	1.97	58.00	COORS BYPASS
ADD HYD	145.3	8.51	15.16	0.76	1.53	1.78		ANALYSIS POINT #6.1
COMPUTE NM HYD	146	1.28	2.52	0.11	1.50	1.97	58.00	COORS BYPASS
COMPUTE NM HYD	147	2.56	5.02	0.21	1.50	1.97	58.00	COORS BYPASS
COMPUTE NM HYD	148.1	0.32	0.64	0.03	1.50	1.99	58.00	COORS BYPASS
ADD HYD	148.2	4.16	8.18	0.34	1.50	1.96		ANALYSIS POINT #7
COMPUTE NM HYD	150	37.60	75.27	3.18	1.50	2.00	60.00	TRACT B-9J
ROUTE RESERVOIR	508	37.60	14.75	3.18	2.05	0.39		TRACT B-9J POND
COMPUTE NM HYD	152	0.45	0.88	0.04	1.50	1.97	58.00	COORS BYPASS
COMPUTE NM HYD	154	0.90	1.76	0.07	1.50	1.96	58.00	COORS BYPASS
ADD HYD	156	1.34	2.63	0.11	1.50	1.95		ANALYSIS POINT #8
COMPUTE NM HYD	158	0.65	1.28	0.05	1.50	1.97	58.00	COORS BYPASS
COMPUTE NM HYD	161	0.65	1.29	0.05	1.50	1.97	58.00	COORS BYPASS
ADD HYD	165	40.25	15.90	3.25	1.97	0.39		ANALYSIS POINT #9
COMPUTE NM HYD	167	0.84	1.66	0.07	1.50	1.96	58.00	COORS BYPASS
COMPUTE NM HYD	170	0.84	1.66	0.07	1.50	1.96	58.00	COORS BYPASS
COMPUTE NM HYD	174	8.30	16.62	0.70	1.50	2.00	60.00	TRACT B-10
ROUTE RESERVOIR	509	8.30	3.51	0.70	2.00	0.42		TRACT B-10 POND
COMPUTE NM HYD	175	7.40	13.26	0.54	1.50	1.79	50.00	TRACT B-9D
ROUTE RESERVOIR	510	7.40	2.61	0.54	2.05	0.35		TRACT B-9D
ADD HYD	178	57.64	22.78	4.57	1.97	0.39		ANALYSIS POINT #10
COMPUTE NM HYD	180	0.95	1.87	0.08	1.50	1.96	58.00	COORS BYPASS
COMPUTE NM HYD	424	0.37	0.73	0.03	1.50	1.97	58.00	COORS BYPASS
COMPUTE NM HYD	426	0.87	1.71	0.07	1.50	1.96	58.00	ELLISON DRIVE
COMPUTE NM HYD	182	0.95	1.87	0.08	1.50	1.96	58.00	COORS BYPASS
COMPUTE NM HYD	432	0.37	0.73	0.03	1.50	1.97	58.00	COORS BYPASS
COMPUTE NM HYD	434	1.34	2.64	0.11	1.50	1.96	58.00	ELLISON DRIVE
ROUTE	187	60.28	24.08	4.77	1.90	0.40		ANALYSIS POINT #11
COMPUTE NM HYD	188	2.46	6.22	0.28	1.50	2.52	85.00	TRACT N-2B PARK & RIDE AREA
COMPUTE NM HYD	189	4.41	6.53	0.16	1.50	1.48	0.00	TRACT N-2B POND AREA
ROUTE RESERVOIR	511	170.52	9.11	10.01	4.53	0.05		TRACT N-2B POND
ROUTE	195	172.73	9.11	10.18	4.60	0.05		ANALYSIS POINT #12
ADD HYD	196	233.01	31.94	14.95	2.00	0.14		ANALYSIS POINT #13

CABEZON CHANNEL OUTFALL SYSTEM (cont.)
(REVISED JULY 1994)

10 YEAR

TABLE 2

	I.D. NUMBER	AREA (acres)	PEAK DISCHARGE (cfs)	RUNOFF (ac-ft)	TIME TO PEAK (hours)	CFS PER (acre)	% IMP.	
COMPUTE NM HYD	198	1.18	2.33	0.10	1.50	1.96	58.00	ELLISON DRIVE
COMPUTE NM HYD	201	1.37	2.69	0.11	1.50	1.96	58.00	ELLISON DRIVE
COMPUTE NM HYD	203	0.90	1.76	0.07	1.50	1.96	58.00	ELLISON DRIVE
COMPUTE NM HYD	206	42.82	103.64	4.56	1.50	2.41	80.00	TRACT M
ROUTE RESERVOIR	513	42.82	20.00	4.56	2.05	0.47		TRACT M POND
COMPUTE NM HYD	207	2.44	6.55	0.29	1.50	2.67	92.00	COTTONWOOD DRIVE
COMPUTE NM HYD	209	0.29	0.80	0.04	1.50	2.69	92.00	COTTONWOOD DRIVE
COMPUTE NM HYD	211	0.75	2.11	0.09	1.50	2.68	92.00	COTTONWOOD DRIVE
ADD HYD	212	3.49	9.29	0.40	1.50	2.66		ANALYSIS POINT #13.1
ADD HYD	214	46.30	22.30	4.76	1.93	0.48		ANALYSIS POINT #13.2
ADD HYD	216	282.76	55.76	19.96	1.97	0.20		ANALYSIS POINT #14
COMPUTE NM HYD	218	0.92	1.82	0.08	1.50	1.96	58.00	ELLISON DRIVE
COMPUTE NM HYD	221	0.64	1.26	0.05	1.50	1.97	58.00	ELLISON DRIVE
COMPUTE NM HYD	224	9.29	22.53	0.99	1.50	2.42	80.00	TRACT G-1A
ROUTE RESERVOIR	514	9.29	4.36	0.99	2.05	0.47		TRACT G-1A POND
COMPUTE NM HYD	227	1.34	2.63	0.11	1.50	1.96	58.00	ELLISON DRIVE
COMPUTE NM HYD	230	0.42	0.83	0.03	1.50	1.97	58.00	ELLISON DRIVE
COMPUTE NM HYD	232	1.76	3.46	0.15	1.50	1.96	58.00	ELLISON DRIVE
COMPUTE NM HYD	234	9.98	24.19	1.06	1.50	2.42	80.00	TRACT G-2A
ROUTE RESERVOIR	515	9.98	4.68	1.06	2.05	0.47		TRACT G-2A POND
ADD HYD	235	307.12	67.96	22.29	1.60	0.22		ANALYSIS POINT #15
COMPUTE NM HYD	236.2	1.24	3.36	0.15	1.50	2.69	88.5	S.R. 528
ROUTE	236	308.37	70.25	22.43	1.60	0.23		ANALYSIS POINT #15.1
COMPUTE NM HYD	237.1	2.18	5.16	0.21	1.50	2.36	65.00	S.R. 528
COMPUTE NM HYD	237.3	0.58	1.15	0.04	1.50	2.00	48.00	S.R. 528
COMPUTE NM HYD	237.6	1.22	2.99	0.12	1.50	2.45	71.00	TRACT C-5A
ADD HYD	237.8	312.34	75.62	22.78	1.60	0.24		ANALYSIS POINT #15.2
COMPUTE NM HYD	238	59.30	121.84	5.98	1.55	2.05	75.00	TRACTS 0-1A-1 & 0-2A-1
COMPUTE NM HYD	238.1	4.42	10.24	0.45	1.50	2.32	75.00	S.R. 528
ROUTE RESERVOIR	516	59.30	26.07	5.98	2.10	0.44		TRACTS 1-1A-A & 0-2A-1 POND
COMPUTE NM HYD	310	56.94	52.27	2.37	1.55	0.92	25.00	TRACT C-1 & ABOVE
COMPUTE NM HYD	320.1	3.16	4.21	0.15	1.50	1.33	25.00	TRACT C-2/S.R. 528
COMPUTE NM HYD	320	12.97	10.93	0.43	1.50	0.84	19.00	TRACT C-3
COMPUTE NM HYD	330	74.11	89.07	3.67	1.55	1.20	26.00	SKYVIEW ACRES
COMPUTE NM HYD	370	2.74	6.65	0.29	1.50	2.43	80.00	TRACT C-4
ROUTE RESERVOIR	517	526.28	235.72	35.65	1.60	0.45		ANALYSIS POINT #7
COMPUTE NM HYD	380	0.78	2.23	0.10	1.50	2.86		CALLE CUERVO ROAD
ADD HYD	247	2784.59	287.21	118.31	1.60	0.11	100.00	ANALYSIS POINT #8

CORRALES MAIN CANAL OUTFALL SYSTEM

10 YEAR

TABLE 8

	I.D. NUMBER	AREA (acres)	PEAK DISCHARGE (cfs)	RUNOFF (ac-ft)	TIME TO PEAK (hours)	CFS PER (acre)	% IMP.	NOTATION
COMPUTE NM HYD	101	2.82	7.49	0.33	0.5	2.66	92.00	SEVEN BAR LOOP ROAD
COMPUTE NM HYD	102	1.72	3.04	0.12	0.5	1.77	52.00	MONTGOMERY WARD ALTO CENTER
COMPUTE NM HYD	105	9.51	22.75	0.98	0.5	2.39	80.00	QUESTA DEL RIO
COMPUTE NM HYD	107	1.45	3.57	0.15	0.5	2.47	74.00	CORRALES ROAD (west side)
PRINT HYD	108	15.50	36.81	1.54	0.5	2.38		TOTAL FLOW GOING UNDER CORRALES ROAD
COMPUTE NM HYD	110	3.43	8.59	0.37	0.5	2.51	85.00	BASIN 4-C
PRINT HYD	501	3.43	1.6	0.37	1.1	0.47		BASIN 4-C POND
COMPUTE NM HYD	111	5.04	13.75	0.60	0.5	2.73	95.00	BASIN 4-F + ALPHA BETA ROOF
COMPUTE NM HYD	114	6.42	17.52	0.77	0.5	2.73	95.00	BASIN 4-H
PRINT HYD	502	6.42	17.5	0.77	0.5	2.73		BASIN 4-H POND
COMPUTE NM HYD	117	3.43	8.59	0.37	0.5	2.51	85.00	BASIN 4-B
PRINT HYD	503	3.43	1.6	0.37	1.1	0.47		BASIN 4-B POND
COMPUTE NM HYD	118	0.65	1.78	0.08	0.5	2.74	95.00	BASIN 4-E
COMPUTE NM HYD	121	8.03	21.91	0.96	0.5	2.73	95.00	BASIN 4-G
PRINT HYD	504	12.11	0.97	1.15	2.367	0.08		BASIN 4-G POND
COMPUTE NM HYD	128	0.63	1.55	0.06	0.5	2.47	74.00	EAST HALF OF CORRALES ROAD
PRINT HYD	129	43.12	67.81	4.43	0.5	1.57		TOTAL FLOW GOING INTO EXISTING POND
PRINT HYD	505	43.12	1.44	2.26	8.933	0.03		TOTAL FLOW DISCHARGING INTO CORRALES MAIN

CALABACILLAS ARROYO OUTFALL SYSTEM

100 YEAR

TABLE 10

	I.D. NUMBER	AREA (acres)	PEAK DISCHARGE (cfs)	RUNOFF (ac-ft)	TIME TO PEAK (hours)	CFS PER (acre)	% IMP.	NOTATION
COMPUTE NM HYD	101	1.16	4.76	0.22	0.50	4.12	92.00	SEVEN BAR LOOP ROAD
PRINT HYD	102	1.16	4.72	0.21	0.50	4.08		ANALYSIS POINT #1 (MH #1)
COMPUTE NM HYD	104	1.26	5.18	0.24	0.50	4.12	92.00	SEVEN BAR LOOP ROAD
COMPUTE NM HYD	108	0.13	0.53	0.02	0.50	4.18	92.00	SEVEN BAR LOOP ROAD
COMPUTE NM HYD	111	0.13	0.57	0.03	0.50	4.18	92.00	SEVEN BAR LOOP ROAD
COMPUTE NM HYD	115	0.27	1.12	0.05	0.50	4.15	92.00	SEVEN BAR LOOP ROAD
COMPUTE NM HYD	119	0.16	0.66	0.03	0.50	4.17	92.00	SEVEN BAR LOOP ROAD
PRINT HYD	121	3.10	12.57	0.56	0.50	4.05		ANALYSIS POINT #2 (MH #2)
COMPUTE NM HYD	123	6.41	24.41	1.09	0.50	3.81	79.90	BASIN A-1-A
PRINT HYD	501	6.41	12.11	1.09	0.65	1.89		POND ON W.SIDE OF COTTONWOOD DR. ENTRANCE
COMPUTE NM HYD	125	2.04	7.10	0.30	0.50	3.48	66.20	BASIN A-1-B
COMPUTE NM HYD	126	2.30	9.39	0.43	0.50	4.09	91.10	BASIN A-1-C
PRINT HYD	502	10.74	12.32	1.77	1.10	1.15		PARKING LOT POND
PRINT HYD	129	13.84	22.42	2.33	0.53	1.62		ANALYSIS POINT #3 (MH #3)
COMPUTE NM HYD	131	0.17	0.61	0.03	0.50	3.53	65.20	BASIN A-2-B
COMPUTE NM HYD	133	0.86	3.71	0.17	0.50	4.31	100.00	BASIN A-2-A-1
PRINT HYD	135	1.03	4.28	0.19	0.50	4.14		ANALYSIS POINT #4 (MH #4A)
COMPUTE NM HYD	137	1.48	5.83	0.26	0.50	3.92	84.10	BASIN A-2-C
PRINT HYD	503	1.48	1.19	0.26	1.05	0.80		PARKING LOT POND
COMPUTE NM HYD	140	2.14	8.92	0.41	0.50	4.17	94.40	BASIN A-2-D
PRINT HYD	504	2.14	2.04	0.41	1.05	0.95		PARKING LOT POND
COMPUTE NM HYD	142	0.45	1.97	0.09	0.50	4.32	100.00	BASIN A-2-A-2
COMPUTE NM HYD	145	0.22	0.97	0.04	0.50	4.33	100.00	BASIN A-2-A-3
COMPUTE NM HYD	146	0.49	2.13	0.10	0.50	4.32	100.00	BASIN A-2-A-4
PRINT HYD	149	5.83	10.71	1.06	0.53	1.84		ANALYSIS POINT #5 (MH #4B)
PRINT HYD	150	5.83	10.78	1.06	0.53	1.85		ANALYSIS POINT #6 (MH #4C)
COMPUTE NM HYD	152	1.37	5.81	0.27	0.50	4.24	97.20	BASIN A-2-E
PRINT HYD	505	1.37	1.20	0.27	1.05	0.88		PARKING LOT POND
COMPUTE NM HYD	155	0.42	1.65	0.07	0.50	3.90	82.10	BASIN A-2-F
COMPUTE NM HYD	158	0.35	1.13	0.05	0.50	3.29	56.80	BASIN A-2-G
PRINT HYD	161	21.81	36.33	3.76	0.53	1.67		ANALYSIS POINT #7 (MH #4)
COMPUTE NM HYD	163	0.49	2.13	0.10	0.50	4.32	100.00	BASIN A-3-A

CALABACILLAS ARROYO OUTFALL SYSTEM (CONT.)

100 YEAR

TABLE 10

	I.D. NUMBER	AREA (acres)	PEAK DISCHARGE (cfs)	RUNOFF (ac-ft)	TIME TO PEAK (hours)	CFS PER (acre)	% IMP.	NOTATION
COMPUTE NM HYD	165	1.09	4.71	0.22	0.50	4.31	100.00	BASIN A-3-B
COMPUTE NM HYD	168	0.85	3.68	0.17	0.50	4.31	100.00	BASIN A-3-C
PRINT HYD	170	2.44	10.43	0.47	0.50	4.27		ANALYSIS POINT #8 (MH #5A)
PRINT HYD	172	24.26	46.11	4.24	0.53	1.90		ANALYSIS POINT #9 (MH #5)
COMPUTE NM HYD	174	2.47	9.39	0.42	0.50	3.80	79.40	BASIN A-4-A
PRINT HYD	506	2.47	3.90	0.42	0.75	1.58		POND ON E. SIDE OF COTTONWOOD DR. ENTRANCE
COMPUTE NM HYD	176	0.67	2.76	0.13	0.50	4.12	91.70	BASIN A-4-C
COMPUTE NM HYD	178	2.06	8.49	0.39	0.50	4.13	92.60	BASIN A-4-B
COMPUTE NM HYD	181	2.35	9.51	0.43	0.50	4.05	89.40	BASIN A-4-E
COMPUTE NM HYD	182	2.52	10.67	0.49	0.50	4.24	97.40	BASIN A-4-D
PRINT HYD	185	7.60	31.32	1.40	0.50	4.12		ANALYSIS POINT #10 (MH #6B)
PRINT HYD	187	10.06	34.48	1.80	0.50	3.43		ANALYSIS POINT #11 (MH #6A)
PRINT HYD	189	34.32	78.56	6.03	0.53	2.29		ANALYSIS POINT #12 (MH #6)
COMPUTE NM HYD	191	2.23	8.96	0.40	0.50	4.01	87.80	BASIN A-4-F
COMPUTE NM HYD	194	1.68	7.01	0.32	0.50	4.18	94.80	BASIN A-6
PRINT HYD	507	1.68	1.45	0.32	1.05	0.86		PARKING LOT POND
COMPUTE NM HYD	197	0.07	0.31	0.01	0.50	4.40	100.00	BASIN A-5-D
COMPUTE NM HYD	198	0.63	2.73	0.13	0.50	4.31	100.00	BASIN A-5-A
COMPUTE NM HYD	201	0.99	4.25	0.20	0.50	4.31	100.00	BASIN A-5-B
COMPUTE NM HYD	204	0.56	2.39	0.11	0.50	4.31	100.00	BASIN A-5-C
PRINT HYD	206	2.25	9.56	0.43	0.50	4.26		ANALYSIS POINT #13 (MH #7A)
PRINT HYD	208	40.47	96.33	7.16	0.53	2.38		ANALYSIS POINT #14 (MH #7)
COMPUTE NM HYD	210	0.36	1.16	0.05	0.50	3.18	52.50	BASIN A-7
COMPUTE NM HYD	213	0.96	4.12	0.19	0.50	4.31	100.00	BASIN A-8-C
COMPUTE NM HYD	215	0.57	2.44	0.11	0.50	4.31	100.00	BASIN A-8-B
COMPUTE NM HYD	216	0.16	0.69	0.03	0.50	4.35	100.00	BASIN A-8-D
COMPUTE NM HYD	220	0.56	2.39	0.11	0.50	4.31	100.00	BASIN A-8-A
PRINT HYD	222	2.23	9.46	0.43	0.50	4.23		ANALYSIS POINT #15 (MH #8A)
PRINT HYD	224	43.07	105.61	7.64	0.53	2.45		ANALYSIS POINT #16 (MH #8)
COMPUTE NM HYD	226	1.22	4.31	0.19	0.50	3.54	68.20	BASIN C-1-A
COMPUTE NM HYD	227	3.22	12.25	0.54	0.50	3.80	79.50	BASIN C-1-C
PRINT HYD	508	4.44	9.15	0.73	0.65	2.06		POND AT CORRALES ROAD ENTRANCE (#5)

CALABACILLAS ARROYO OUTFALL SYSTEM (CONT.)

100 YEAR

TABLE 10

	I.D. NUMBER	AREA (acres)	PEAK DISCHARGE (cfs)	RUNOFF (ac-ft)	TIME TO PEAK (hours)	CFS PER (acre)	% IMP.	NOTATION
COMPUTE NM HYD	230	0.28	0.52	0.01	0.50	1.89	0.00	BASIN C-3
COMPUTE NM HYD	233	1.91	7.14	0.31	0.50	3.74	76.80	BASIN C-2
PRINT HYD	234	6.63	16.46	1.03	0.50	2.48		ANALYSIS POINT #17 (MH #9A)
PRINT HYD	235	6.63	16.22	1.03	0.50	2.45		ANALYSIS POINT #18 (MH #9B)
PRINT HYD	236	6.63	16.25	1.03	0.53	2.45		ANALYSIS POINT #19 (MH #9C)
PRINT HYD	238	49.70	119.71	8.67	0.53	2.41		ANALYSIS POINT #20 (MH #9)
COMPUTE NM HYD	240	2.26	9.42	0.43	0.50	4.17	94.30	BASIN A-9-A
PRINT HYD	242	51.96	126.03	9.08	0.57	2.43		ANALYSIS POINT #21 (MH #10)
PRINT HYD	243	51.96	126.06	9.08	0.57	2.43		ANALYSIS POINT #22 (MH #11)
COMPUTE NM HYD	245	6.61	26.73	1.21	0.50	4.04	89.40	BASIN A-9-B
COMPUTE NM HYD	246	0.65	1.21	0.03	0.50	1.87	0.00	BASIN B-7
PRINT HYD	509	7.26	1.82	1.24	1.25	0.25		PARKING LOT POND
PRINT HYD	248	59.21	126.71	10.31	0.57	2.14		ANALYSIS POINT #23 (MH #12)
COMPUTE NM HYD	300	2.98	11.87	0.54	0.50	3.99	87.10	BASIN B-1-A
PRINT HYD	510	2.98	5.66	0.54	0.70	1.90		PARKING LOT POND
PRINT HYD	301	2.98	5.66	0.52	0.70	1.90		ANALYSIS POINT #24 (MH #13)
COMPUTE NM HYD	303	6.94	28.57	1.30	0.50	4.12	92.40	BASIN B-1-B
PRINT HYD	511	6.94	13.63	1.30	0.70	1.96		PARKING LOT POND
COMPUTE NM HYD	306	2.14	7.47	0.32	0.50	3.48	66.10	BASIN B-1-C
PRINT HYD	307	12.06	23.23	2.09	0.63	1.93		ANALYSIS POINT #25 (MH #14)
COMPUTE NM HYD	309	2.98	11.36	0.51	0.50	3.82	80.20	BASIN B-1-D
PRINT HYD	512	2.98	3.89	0.51	0.80	1.31		PARKING LOT POND
PRINT HYD	310	15.03	26.77	2.58	0.63	1.78		ANALYSIS POINT #26 (MH #15)
COMPUTE NM HYD	312	1.04	3.78	0.17	0.50	3.66	73.10	BASIN B-3-A
COMPUTE NM HYD	316	1.29	4.47	0.19	0.50	3.46	65.10	BASIN B-3-B
COMPUTE NM HYD	319	0.31	1.18	0.05	0.50	3.82	78.60	BASIN B-3-C
PRINT HYD	321	17.67	32.92	2.98	0.60	1.86		ANALYSIS POINT #27 (MH #16)
COMPUTE NM HYD	323	2.99	11.86	0.53	0.50	3.97	86.30	BASIN B-5-A
PRINT HYD	513	2.99	4.07	0.53	0.80	1.36		PARKING LOT POND
COMPUTE NM HYD	327	0.86	3.71	0.17	0.50	4.31	100.00	BASIN B-2-A
COMPUTE NM HYD	329	0.44	1.89	0.09	0.50	4.32	100.00	BASIN B-2-B
COMPUTE NM HYD	333	0.95	4.11	0.19	0.50	4.31	100.00	BASIN B-2-C

CALABACILLAS ARROYO OUTFALL SYSTEM (CONT.)

100 YEAR

TABLE 10

	I.D. NUMBER	AREA (acres)	PEAK DISCHARGE (cfs)	RUNOFF (ac-ft)	TIME TO PEAK (hours)	CFS PER (acre)	% IMP.	NOTATION
PRINT HYD	335	2.25	9.51	0.44	0.50	4.22		ANALYSIS POINT #28 (MH #17A)
PRINT HYD	336	2.25	9.37	0.44	0.53	4.16		ANALYSIS POINT #29 (MH #17B)
COMPUTE NM HYD	338	0.33	1.12	0.05	0.50	3.36	59.50	BASIN B-2-D
PRINT HYD	340	2.59	10.48	0.48	0.53	4.05		ANALYSIS POINT #30 (MH #17C)
COMPUTE NM HYD	342	1.18	5.08	0.23	0.50	4.31	100.00	BASIN B-2-E
PRINT HYD	345	3.76	15.33	0.71	0.53	4.07		JUNCTION TOTAL
COMPUTE NM HYD	348	1.46	6.27	0.29	0.50	4.30	100.00	BASIN B-4-A
COMPUTE NM HYD	350	0.12	0.53	0.02	0.50	4.36	100.00	BASIN B-4-B
PRINT HYD	352	1.58	6.66	0.31	0.50	4.22		ANALYSIS POINT #31 (MH #17E)
COMPUTE NM HYD	355	1.23	4.90	0.22	0.50	3.99	86.70	BASIN B-4-C
PRINT HYD	357	27.23	60.93	4.72	0.53	2.24		ANALYSIS POINT #32 (MH #17)
COMPUTE NM HYD	359	2.16	8.27	0.37	0.50	3.83	80.40	BASIN B-5-B
PRINT HYD	514	2.16	2.83	0.37	0.80	1.31		PARKING LOT POND
PRINT HYD	361	29.39	62.47	5.08	0.57	2.13		ANALYSIS POINT #33 (MH #18)
COMPUTE NM HYD	363	0.96	4.12	0.19	0.50	4.31	100.00	BASIN B-6
PRINT HYD	364	0.96	3.99	0.19	0.50	4.17		ANALYSIS POINT #34 (MH #19A)
COMPUTE NM HYD	367	0.92	3.24	0.14	0.50	3.52	67.30	BASIN B-5-C
PRINT HYD	515	0.92	0.65	0.14	1.05	0.70		PARKING LOT POND
PRINT HYD	369	31.27	66.63	5.40	0.57	2.13		ANALYSIS POINT #35 (MH #19)
PRINT HYD	370	31.27	66.90	5.40	0.57	2.14		ANALYSIS POINT #36 (MH #20)
PRINT HYD	373	90.48	187.62	15.64	0.57	2.07		ANALYSIS POINT #37 (MH #21)
COMPUTE NM HYD	375	3.02	11.21	0.49	0.50	3.71	75.80	BASIN C-4
COMPUTE NM HYD	377	0.66	2.48	0.11	0.50	3.75	76.60	BASIN C-1-B
PRINT HYD	378	3.68	13.62	0.59	0.50	3.70		ANALYSIS POINT #38 (MH #22A)
PRINT HYD	516	3.68	2.40	0.58	1.10	0.65		PARKING LOT POND
PRINT HYD	381	94.16	187.95	16.27	0.60	2.00		ANALYSIS POINT #39 (MH #22) TOTAL FLOW
COMPUTE NM HYD	400	14.30	47.56	2.00	0.50	3.33	60.00	TRACT N-2A-1 (east)
PRINT HYD	517	14.30	8.77	2.00	1.05	0.61		TRACT N-2A-1 POND
COMPUTE NM HYD	402	1.01	3.33	0.14	0.50	3.29	58.00	COORS BYPASS
COMPUTE NM HYD	404	0.90	2.95	0.12	0.50	3.29	58.00	COORS BYPASS
PRINT HYD	406	1.91	6.24	0.25	0.50	3.27		ANALYSIS POINT #40 (MH #24A)
PRINT HYD	408	16.20	10.91	2.19	0.60	0.67		ANALYSIS POINT #41 (MH #24)

CALABACILLAS ARROYO OUTFALL SYSTEM (CONT.)

100 YEAR

TABLE 10

	I.D. NUMBER	AREA (acres)	PEAK DISCHARGE (cfs)	RUNOFF (ac-ft)	TIME TO PEAK (hours)	CFS PER (acre)	% IMP.	NOTATION
COMPUTE NM HYD	410	7.44	28.38	1.26	0.50	3.81	80.00	TRACT N-1B-2
PRINT HYD	518	7.44	13.67	1.26	0.70	1.84		TRACT N-1B-2 POND
PRINT HYD	412	23.65	24.41	3.41	0.70	1.03		ANALYSIS POINT #42 (MH #25)
COMPUTE NM HYD	414	0.99	3.27	0.14	0.50	3.29	58.00	COORS BYPASS
COMPUTE NM HYD	416	1.07	3.50	0.15	0.50	3.29	58.00	COORS BYPASS
PRINT HYD	419	25.71	28.61	3.69	0.60	1.11		ANALYSIS POINT #43 (MH #26)
COMPUTE NM HYD	421	0.54	1.80	0.07	0.50	3.30	58.00	COORS BYPASS
COMPUTE NM HYD	424	1.86	6.55	0.28	0.50	3.53	68.00	EAGLE RANCH ROAD
COMPUTE NM HYD	425	0.74	2.45	0.10	0.50	3.29	58.00	COORS BYPASS
COMPUTE NM HYD	429	4.30	16.41	0.73	0.50	3.82	80.00	PITRE BUICK TRACT
PRINT HYD	519	4.30	7.75	0.73	0.70	1.80		PITRE BUICK POND
PRINT HYD	431	33.15	42.91	4.84	0.57	1.29		ANALYSIS POINT #44 (MH #27)
COMPUTE NM HYD	433	0.72	2.36	0.10	0.50	3.29	58.00	COORS BYPASS
PRINT HYD	435	33.87	44.96	4.93	0.57	1.33		ANALYSIS POINT #45 (MH #28)
COMPUTE NM HYD	437	4.55	17.36	0.77	0.50	3.82	80.00	TRACT N-1A-2
PRINT HYD	520	4.55	7.94	0.77	0.70	1.75		TRACT N-1A-2 POND
PRINT HYD	439	38.42	50.88	5.68	0.63	1.32		ANALYSIS POINT #46 (MH #29)
COMPUTE NM HYD	441	1.24	4.07	0.17	0.50	3.29	58.00	COORS BYPASS
COMPUTE NM HYD	442	1.89	7.22	0.32	0.50	3.82	80.00	RELIABLE MITSUBISHI TRACT
PRINT HYD	521	1.89	3.24	0.32	0.70	1.71		MITSUBISHI POND
PRINT HYD	446	41.54	56.39	6.16	0.63	1.36		ANALYSIS POINT #47 (MH #30)
COMPUTE NM HYD	448	1.58	5.18	0.22	0.50	3.28	58.00	COORS BYPASS
PRINT HYD	449	43.12	60.36	6.36	0.57	1.40		ANALYSIS POINT #48 (MH #31)
COMPUTE NM HYD	451	1.30	4.26	0.18	0.50	3.29	58.00	COORS BYPASS
COMPUTE NM HYD	452	2.30	8.78	0.39	0.50	3.82	80.00	NORTH HALF OF RELIABLE CHEVROLET
COMPUTE NM HYD	454	1.20	4.59	0.20	0.50	3.82	80.00	CENTER PORTION OF RELIABLE CHEVROLET
PRINT HYD	458	47.92	74.83	7.11	0.57	1.56		ANALYSIS POINT #49 (MH #32)
PRINT HYD	460	142.09	259.63	23.33	0.60	1.83		ANALYSIS POINT #50 (MH #23) TOTAL FLOW
COMPUTE NM HYD	462	2.30	8.78	0.39	0.50	3.82	80.00	SOUTH PORTION OF RELIABLE CHEVROLET
PRINT HYD	464	144.38	265.86	23.70	0.60	1.84		ANALYSIS POINT #51 (MH #33)
PRINT HYD	465	144.38	266.01	23.70	0.60	1.84		ANALYSIS POINT #52 (MH #34)
PRINT HYD	466	144.38	266.13	23.70	0.60	1.84		ANALYSIS POINT #53 (CALABACILLAS ARROYO)

CALABACILLAS ARROYO OUTFALL SYSTEM

10 YEAR

TABLE 11

	I.D. NUMBER	AREA (acres)	PEAK DISCHARGE (cfs)	RUNOFF (ac-ft)	TIME TO PEAK (hours)	CFS PER (acre)	% IMP.	NOTATION
COMPUTE NM HYD	101	1.16	3.08	0.14	0.50	2.67	92.00	SEVEN BAR LOOP ROAD
PRINT HYD	102	1.16	3.05	0.13	0.50	2.64		ANALYSIS POINT #1 (MH #1)
COMPUTE NM HYD	104	1.26	3.36	0.15	0.50	2.67	92.00	SEVEN BAR LOOP ROAD
COMPUTE NM HYD	108	0.13	0.34	0.01	0.50	2.70	92.00	SEVEN BAR LOOP ROAD
COMPUTE NM HYD	111	0.13	0.37	0.02	0.50	2.70	92.00	SEVEN BAR LOOP ROAD
COMPUTE NM HYD	115	0.27	0.72	0.03	0.50	2.69	92.00	SEVEN BAR LOOP ROAD
COMPUTE NM HYD	119	0.16	0.43	0.02	0.50	2.70	92.00	SEVEN BAR LOOP ROAD
PRINT HYD	121	3.10	8.12	0.35	0.50	2.62		ANALYSIS POINT #2 (MH #2)
COMPUTE NM HYD	123	6.41	15.3	0.66	0.50	2.39	79.90	BASIN A-1-A
PRINT HYD	501	6.41	9.77	0.66	0.60	1.53		POND ON W.SIDE OF COTTONWOOD DR. ENTRANCE
COMPUTE NM HYD	125	2.04	4.25	0.18	0.50	2.09	66.20	BASIN A-1-B
COMPUTE NM HYD	126	2.30	6.07	0.27	0.50	2.64	91.10	BASIN A-1-C
PRINT HYD	502	10.74	10.35	1.07	0.87	0.96		PARKING LOT POND
PRINT HYD	129	13.64	17.13	1.42	0.53	1.24		ANALYSIS POINT #3 (MH #3)
COMPUTE NM HYD	131	0.17	0.36	0.02	0.50	2.10	65.20	BASIN A-2-B
COMPUTE NM HYD	133	0.86	2.45	0.11	0.50	2.85	100.00	BASIN A-2-A-1
PRINT HYD	135	1.03	2.79	0.12	0.50	2.70		ANALYSIS POINT #4 (MH #4)
COMPUTE NM HYD	137	1.48	3.7	0.16	0.50	2.49	84.10	BASIN A-2-C
PRINT HYD	503	1.48	0.74	0.16	1.05	0.50		PARKING LOT POND
COMPUTE NM HYD	140	2.14	5.81	0.25	0.50	2.72	94.40	BASIN A-2-D
PRINT HYD	504	2.14	1.3	0.25	1.05	0.61		PARKING LOT POND
COMPUTE NM HYD	142	0.45	1.3	0.06	0.50	2.85	100.00	BASIN A-2-A-2
COMPUTE NM HYD	145	0.22	0.64	0.03	0.50	2.86	100.00	BASIN A-2-A-3
COMPUTE NM HYD	146	0.49	1.41	0.06	0.50	2.85	100.00	BASIN A-2-A-4
PRINT HYD	149	5.83	6.97	0.66	0.53	1.20		ANALYSIS POINT #5 (MH #4B)
PRINT HYD	150	5.83	7.02	0.66	0.53	1.20		ANALYSIS POINT #6 (MH #4C)
COMPUTE NM HYD	152	1.37	3.81	0.17	0.50	2.78	97.20	BASIN A-2-E
PRINT HYD	505	1.37	0.77	0.17	1.05	0.56		PARKING LOT POND
COMPUTE NM HYD	155	0.42	1.04	0.04	0.50	2.45	82.10	BASIN A-2-F
COMPUTE NM HYD	158	0.35	0.65	0.03	0.50	1.89	56.80	BASIN A-2-G
PRINT HYD	161	21.81	26.04	2.31	0.53	1.19		ANALYSIS POINT #7 (MH #4)
COMPUTE NM HYD	163	0.49	1.41	0.06	0.50	2.85	100.00	BASIN A-3-A

CALABACILLAS ARROYO OUTFALL SYSTEM (CONT.)

10 YEAR

TABLE 11

	I.D. NUMBER	AREA (acres)	PEAK DISCHARGE (cfs)	RUNOFF (ac-ft)	TIME TO PEAK (hours)	CFS PER (acre)	% IMP.	NOTATION
COMPUTE NM HYD	165	1.09	3.11	0.14	0.50	2.84	100.00	BASIN A-3-B
COMPUTE NM HYD	168	0.85	2.43	0.11	0.50	2.85	100.00	BASIN A-3-C
PRINT HYD	170	2.44	6.88	0.30	0.50	2.82		ANALYSIS POINT #8 (MH #5A)
PRINT HYD	172	24.26	32.61	2.61	0.53	1.35		ANALYSIS POINT #9 (MH #5)
COMPUTE NM HYD	174	2.47	5.87	0.25	0.50	2.38	79.40	BASIN A-4-A
PRINT HYD	506	2.47	3.71	0.25	0.60	1.50		POND ON E. SIDE OF COTTONWOOD DR. ENTRANCE
COMPUTE NM HYD	176	0.67	1.79	0.08	0.50	2.66	91.70	BASIN A-4-C
COMPUTE NM HYD	178	2.06	5.51	0.24	0.50	2.68	92.60	BASIN A-4-B
COMPUTE NM HYD	181	2.35	6.12	0.27	0.50	2.61	89.40	BASIN A-4-E
COMPUTE NM HYD	182	2.52	7	0.31	0.50	2.78	97.40	BASIN A-4-D
PRINT HYD	185	7.60	20.35	0.87	0.50	2.68		ANALYSIS POINT #10 (MH #6B)
PRINT HYD	187	10.06	23.11	1.11	0.50	2.30		ANALYSIS POINT #11 (MH #6A)
PRINT HYD	189	34.32	54.66	3.72	0.53	1.59		ANALYSIS POINT #12 (MH #6)
COMPUTE NM HYD	191	2.23	5.74	0.25	0.50	2.57	87.80	BASIN A-4-F
COMPUTE NM HYD	194	1.68	4.57	0.20	0.50	2.73	94.80	BASIN A-6
PRINT HYD	507	1.68	0.92	0.20	1.05	0.55		PARKING LOT POND
COMPUTE NM HYD	197	0.07	0.21	0.01	0.50	2.91	100.00	BASIN A-5-D
COMPUTE NM HYD	198	0.63	1.8	0.08	0.50	2.85	100.00	BASIN A-5-A
COMPUTE NM HYD	201	0.99	2.81	0.12	0.50	2.84	100.00	BASIN A-5-B
COMPUTE NM HYD	204	0.56	1.58	0.07	0.50	2.85	100.00	BASIN A-5-C
PRINT HYD	206	2.25	6.3	0.27	0.50	2.81		ANALYSIS POINT #13 (MH #7A)
PRINT HYD	208	40.47	65.98	4.43	0.53	1.63		ANALYSIS POINT #14 (MH #7)
COMPUTE NM HYD	210	0.36	0.65	0.03	0.50	1.79	52.50	BASIN A-7
COMPUTE NM HYD	213	0.96	2.72	0.12	0.50	2.84	100.00	BASIN A-8-C
COMPUTE NM HYD	215	0.57	1.61	0.07	0.50	2.85	100.00	BASIN A-8-B
COMPUTE NM HYD	216	0.16	0.45	0.02	0.50	2.87	100.00	BASIN A-8-D
COMPUTE NM HYD	220	0.56	1.58	0.07	0.50	2.85	100.00	BASIN A-8-A
PRINT HYD	222	2.23	6.22	0.27	0.50	2.78		ANALYSIS POINT #15 (MH #8A)
PRINT HYD	224	43.07	71.78	4.72	0.53	1.67		ANALYSIS POINT #16 (MH #8)
COMPUTE NM HYD	226	1.22	2.6	0.11	0.50	2.13	68.20	BASIN C-1-A
COMPUTE NM HYD	227	3.22	7.67	0.33	0.50	2.38	79.50	BASIN C-1-C
PRINT HYD	508	4.44	8.54	0.44	0.55	1.92		POND AT CORRALES ROAD ENTRANCE (#5)

	I.D. NUMBER	AREA (acres)	PEAK DISCHARGE (cfs)	RUNOFF (ac-ft)	TIME TO PEAK (hours)	CFS PER (acre)	% IMP.	NOTATION
COMPUTE NM HYD	230	0.28	0.17	0.00	0.50	0.61	0.00	BASIN C-3
COMPUTE NM HYD	233	1.91	4.43	0.19	0.50	2.32	76.80	BASIN C-2
PRINT HYD	234	6.63	12.88	0.62	0.53	1.94		ANALYSIS POINT #17 (MH #9A)
PRINT HYD	235	6.63	13.02	0.62	0.53	1.96		ANALYSIS POINT #18 (MH #9B)
PRINT HYD	236	6.63	13.03	0.62	0.53	1.97		ANALYSIS POINT #19 (MH #9C)
PRINT HYD	238	49.70	84.03	5.34	0.57	1.69		ANALYSIS POINT #20 (MH #9)
COMPUTE NM HYD	240	2.26	6.14	0.27	0.50	2.72	94.30	BASIN A-9-A
PRINT HYD	242	51.96	88.25	5.60	0.57	1.70		ANALYSIS POINT #21 (MH #10)
PRINT HYD	243	51.96	87.88	5.59	0.57	1.69		ANALYSIS POINT #22 (MH #11)
COMPUTE NM HYD	245	6.61	17.21	0.75	0.50	2.60	89.40	BASIN A-9-B
COMPUTE NM HYD	246	0.65	0.39	0.01	0.50	0.60	0.00	BASIN B-7
PRINT HYD	509	7.26	1.37	0.76	1.20	0.19		PARKING LOT POND
PRINT HYD	248	59.21	87.78	6.36	0.57	1.48		ANALYSIS POINT #23 (MH #12)
COMPUTE NM HYD	300	2.98	7.59	0.33	0.50	2.55	87.10	BASIN B-1-A
PRINT HYD	510	2.98	3.54	0.33	0.70	1.19		PARKING LOT POND
PRINT HYD	301	2.98	3.54	0.32	0.70	1.19		ANALYSIS POINT #24 (MH #13)
COMPUTE NM HYD	303	6.94	18.53	0.81	0.50	2.67	92.40	BASIN B-1-B
PRINT HYD	511	6.94	8.65	0.81	0.70	1.25		PARKING LOT POND
COMPUTE NM HYD	306	2.14	4.47	0.19	0.50	2.08	66.10	BASIN B-1-C
PRINT HYD	307	12.06	14.42	1.29	0.63	1.20		ANALYSIS POINT #25 (MH #14)
COMPUTE NM HYD	309	2.98	7.13	0.31	0.50	2.40	80.20	BASIN B-1-D
PRINT HYD	512	2.98	2.39	0.31	0.80	0.80		PARKING LOT POND
PRINT HYD	310	15.03	16.6	1.59	0.67	1.10		ANALYSIS POINT #26 (MH #15)
COMPUTE NM HYD	312	1.04	2.32	0.10	0.50	2.24	73.10	BASIN B-3-A
COMPUTE NM HYD	316	1.29	2.66	0.11	0.50	2.06	65.10	BASIN B-3-B
COMPUTE NM HYD	319	0.31	0.74	0.03	0.50	2.38	78.60	BASIN B-3-C
PRINT HYD	321	17.67	20.16	1.82	0.60	1.14		ANALYSIS POINT #27 (MH #16)
COMPUTE NM HYD	323	2.99	7.57	0.33	0.50	2.54	86.30	BASIN B-5-A
PRINT HYD	513	2.99	2.54	0.33	0.80	0.85		PARKING LOT POND
COMPUTE NM HYD	327	0.86	2.45	0.11	0.50	2.85	100.00	BASIN B-2-A
COMPUTE NM HYD	329	0.44	1.25	0.05	0.50	2.85	100.00	BASIN B-2-B
COMPUTE NM HYD	333	0.95	2.72	0.12	0.50	2.84	100.00	BASIN B-2-C

CALABACILLAS ARROYO OUTFALL SYSTEM (CONT.)

10 YEAR

TABLE 11

	I.D. NUMBER	AREA (acres)	PEAK DISCHARGE (cfs)	RUNOFF (ac-ft)	TIME TO PEAK (hours)	CFS PER (acre)	% IMP.	NOTATION
PRINT HYD	335	2.25	6.26	0.27	0.50	2.78		ANALYSIS POINT #28 (MH #17A)
PRINT HYD	336	2.25	6.21	0.27	0.53	2.76		ANALYSIS POINT #29 (MH #17B)
COMPUTE NM HYD	338	0.33	0.65	0.03	0.50	1.95	59.50	BASIN B-2-D
PRINT HYD	340	2.59	6.87	0.30	0.53	2.66		ANALYSIS POINT #30 (MH #17C)
COMPUTE NM HYD	342	1.18	3.35	0.15	0.50	2.84	100.00	BASIN B-2-E
PRINT HYD	345	3.76	10.09	0.44	0.53	2.68		JUNCTION TOTAL
COMPUTE NM HYD	348	1.46	4.14	0.18	0.50	2.84	100.00	BASIN B-4-A
COMPUTE NM HYD	350	0.12	0.35	0.02	0.50	2.88	100.00	BASIN B-4-B
PRINT HYD	352	1.58	4.39	0.19	0.50	2.78		ANALYSIS POINT #31 (MH #17E)
COMPUTE NM HYD	355	1.23	3.13	0.14	0.50	2.55	86.70	BASIN B-4-C
PRINT HYD	357	27.23	38.26	2.91	0.53	1.41		ANALYSIS POINT #32 (MH #17)
COMPUTE NM HYD	359	2.16	5.19	0.22	0.50	2.40	80.40	BASIN B-5-B
PRINT HYD	514	2.16	1.74	0.22	0.80	0.81		PARKING LOT POND
PRINT HYD	361	29.39	39.3	3.12	0.57	1.34		ANALYSIS POINT #33 (MH #18)
COMPUTE NM HYD	363	0.96	2.72	0.12	0.50	2.84	100.00	BASIN B-6
PRINT HYD	364	0.96	2.61	0.12	0.50	2.73		ANALYSIS POINT #34 (MH #19A)
COMPUTE NM HYD	367	0.92	1.95	0.08	0.50	2.11	67.30	BASIN B-5-C
PRINT HYD	515	0.92	0.39	0.08	1.05	0.42		PARKING LOT POND
PRINT HYD	369	31.27	42.13	3.32	0.57	1.35		ANALYSIS POINT #35 (MH #19)
PRINT HYD	370	31.27	42.36	3.32	0.57	1.36		ANALYSIS POINT #36 (MH #20)
PRINT HYD	373	90.48	126.81	9.62	0.60	1.40		ANALYSIS POINT #37 (MH #21)
COMPUTE NM HYD	375	3.02	6.94	0.30	0.50	2.30	75.80	BASIN C-4
COMPUTE NM HYD	377	0.66	1.54	0.07	0.50	2.33	76.60	BASIN C-1-B
PRINT HYD	378	3.68	8.44	0.35	0.50	2.30		ANALYSIS POINT #38 (MH #22A)
PRINT HYD	516	3.68	2.19	0.35	0.97	0.59		PARKING LOT POND
PRINT HYD	381	94.16	127.32	10.02	0.60	1.35		ANALYSIS POINT #39 (MH #22) TOTAL FLOW
COMPUTE NM HYD	400	14.30	27.79	1.16	0.50	1.94	60.00	TRACT N-2A-1 (east)
PRINT HYD	517	14.30	5.33	1.16	1.05	0.37		TRACT N-2A-1 POND
COMPUTE NM HYD	402	1.01	1.93	0.08	0.50	1.91	58.00	COORS BYPASS
COMPUTE NM HYD	404	0.90	1.71	0.07	0.50	1.91	58.00	COORS BYPASS
PRINT HYD	406	1.91	3.61	0.15	0.50	1.89		ANALYSIS POINT #40 (MH #24A)
PRINT HYD	408	16.20	6.36	1.27	0.60	0.39		ANALYSIS POINT #41 (MH #24)

CALABACILLAS ARROYO OUTFALL SYSTEM (CONT.)

10 YEAR

TABLE 11

	I.D. NUMBER	AREA (acres)	PEAK DISCHARGE (cfs)	RUNOFF (ac-ft)	TIME TO PEAK (hours)	CFS PER (acre)	% IMP.	NOTATION
COMPUTE NM HYD	410	7.44	17.8	0.77	0.50	2.39	80.00	TRACT N-1B-2
PRINT HYD	518	7.44	8.99	0.77	0.65	1.21		TRACT N-1B-2 POND
PRINT HYD	412	23.65	15.19	2.01	0.63	0.64		ANALYSIS POINT #42 (MH #25)
COMPUTE NM HYD	414	0.99	1.89	0.08	0.50	1.91	58.00	COORS BYPASS
COMPUTE NM HYD	416	1.07	2.03	0.08	0.50	1.91	58.00	COORS BYPASS
PRINT HYD	419	25.71	17.63	2.17	0.60	0.69		ANALYSIS POINT #43 (MH #26)
COMPUTE NM HYD	421	0.54	1.04	0.04	0.50	1.91	58.00	COORS BYPASS
COMPUTE NM HYD	424	1.86	3.95	0.17	0.50	2.13	68.00	EAGLE RANCH ROAD
COMPUTE NM HYD	425	0.74	1.42	0.06	0.50	1.91	58.00	COORS BYPASS
COMPUTE NM HYD	429	4.30	10.29	0.44	0.50	2.39	80.00	PITRE BUICK TRACT
PRINT HYD	519	4.30	3.94	0.44	0.75	0.92		PITRE POND
PRINT HYD	431	33.15	25.75	2.86	0.57	0.78		ANALYSIS POINT #44 (MH #27)
COMPUTE NM HYD	433	0.72	1.37	0.06	0.50	1.91	58.00	COORS BYPASS
PRINT HYD	435	33.87	26.92	2.91	0.57	0.80		ANALYSIS POINT #45 (MH #28)
COMPUTE NM HYD	437	4.55	10.89	0.47	0.50	2.39	80.00	TRACT N-1A-2
PRINT HYD	520	4.55	3.85	0.47	0.80	0.85		TRACT N-1A-2 POND
PRINT HYD	439	38.42	29.99	3.37	0.60	0.78		ANALYSIS POINT #46 (MH #29)
COMPUTE NM HYD	441	1.24	2.35	0.10	0.50	1.90	58.00	COORS BYPASS
COMPUTE NM HYD	442	1.89	4.53	0.20	0.50	2.40	80.00	RELIABLE MITSUBISHI TRACT
PRINT HYD	521	1.89	1.99	0.20	0.70	1.05		MITSUBISHI POND
PRINT HYD	446	41.54	33.48	3.65	0.60	0.81		ANALYSIS POINT #47 (MH #30)
COMPUTE NM HYD	448	1.58	3	0.13	0.50	1.90	58.00	COORS BYPASS
PRINT HYD	449	43.12	35.69	3.77	0.60	0.83		ANALYSIS POINT #48 (MH #31)
COMPUTE NM HYD	451	1.30	2.47	0.10	0.50	1.90	58.00	COORS BYPASS
COMPUTE NM HYD	452	2.30	5.51	0.24	0.50	2.39	80.00	NORTH HALF OF RELIABLE CHEVROLET
COMPUTE NM HYD	454	1.20	2.88	0.12	0.50	2.40	80.00	CENTER PORTION OF RELIABLE CHEVROLET
PRINT HYD	458	47.92	44.41	4.22	0.57	0.93		ANALYSIS POINT #49 (MH #32)
PRINT HYD	460	142.09	169.55	14.19	0.60	1.19		ANALYSIS POINT #50 (MH #23) TOTAL FLOW
COMPUTE NM HYD	462	2.30	5.51	0.24	0.50	2.39	80.00	SOUTH PORTION OF RELIABLE CHEVROLET
PRINT HYD	464	144.38	172.01	14.41	0.60	1.19		ANALYSIS POINT #51 (MH #33)
PRINT HYD	465	144.38	171.8	14.41	0.60	1.19		ANALYSIS POINT #52 (MH #34)
PRINT HYD	466	144.38	171.75	14.41	0.63	1.19		ANALYSIS POINT #53 CALABACILLAS ARROYO