

Table 2-8
Estimated Dairy Waste Generation and Mineral Loading
in the Chino Basin

Year	Total Acreage	Area in Feedlots	Number of Milking Cows	Number of Non-Milking Cows	Total Mass of Manure Disposed in Basin	Mass of TDS from Manure to Groundwater	Mass of Nitrate from Manure Entering Soil	Theoretical Manure Disposal Area	Manure Application Rate
	(acres)	(acres)	(Equ. Milking Cows)	(tons)	(tons)	(tons)	(acres)	(tons/acre)	
1949	55	47	1,079	324	4,217	329	53	86,988	0.05
1950	457	389	8,969	2,697	35,071	2,736	440	85,187	0.4
1951	860	731	16,860	5,071	65,925	5,142	828	83,386	1
1952	1,262	1,073	24,751	7,444	96,779	7,549	1,215	81,585	1
1953	1,665	1,415	32,642	9,817	127,632	9,955	1,603	79,784	2
1954	2,067	1,757	40,533	12,190	158,486	12,362	1,990	77,982	2
1955	2,469	2,099	48,424	14,563	189,340	14,769	2,377	76,181	2
1956	2,872	2,441	56,315	16,936	220,194	17,175	2,765	74,380	3
1957	3,274	2,783	64,205	19,309	251,048	19,582	3,152	72,579	3
1958	3,511	2,984	68,856	20,708	269,233	21,000	3,381	71,210	4
1959	3,748	3,186	73,507	22,107	287,419	22,419	3,609	69,840	4
1960	3,986	3,388	78,158	23,505	305,605	23,837	3,837	68,471	4
1961	4,223	3,589	82,809	24,904	323,790	25,256	4,066	67,102	5
1962	4,460	3,791	87,460	26,303	341,976	26,674	4,294	65,733	5
1963	4,697	3,992	92,111	27,702	360,162	28,093	4,522	64,364	6
1964	4,918	4,181	96,450	29,007	377,127	29,416	4,735	62,848	6
1965	5,140	4,369	100,789	30,311	394,092	30,739	4,948	61,331	6
1966	5,361	4,557	105,128	31,616	411,058	32,063	5,161	59,815	7
1967	5,582	4,745	109,467	32,921	428,023	33,386	5,374	58,299	7
1968	5,803	4,933	113,806	34,226	444,988	34,709	5,587	56,783	8
1969	6,025	5,121	118,145	35,531	461,953	36,032	5,800	55,267	8
1970	6,246	5,309	122,483	36,836	478,919	37,356	6,014	53,750	9
1971	6,467	5,497	126,822	38,141	495,884	38,679	6,227	52,234	9
1972	6,688	5,685	131,161	39,445	512,849	40,002	6,440	50,718	10
1973	6,910	5,873	135,500	40,750	529,815	41,326	6,653	49,202	11
1974	7,131	6,061	143,657	42,793	546,780	42,654	6,866	47,685	11
1975	7,352	6,249	152,052	44,836	563,745	44,000	7,079	46,169	11
1976	7,573	6,437	160,447	46,879	580,710	45,324	7,292	44,653	11
1977	7,794	6,625	168,842	48,922	597,675	46,648	7,505	43,137	11
1978	8,015	6,813	177,237	50,965	614,640	47,972	7,718	41,621	11
1979	8,236	7,001	185,632	53,008	631,605	49,296	7,931	40,105	11
1980	8,457	7,189	194,027	55,051	648,570	50,620	8,144	38,589	11
1981	8,678	7,377	202,422	57,094	665,535	51,944	8,357	37,073	11
1982	8,899	7,565	210,817	59,137	682,500	53,268	8,570	35,557	11
1983	9,120	7,753	219,212	61,180	699,465	54,592	8,783	34,041	11
1984	9,341	7,941	227,607	63,223	716,430	55,916	8,996	32,525	11
1985	9,562	8,129	235,999	65,266	733,395	57,240	9,209	31,009	11
1986	9,783	8,317	244,394	67,309	750,360	58,564	9,422	29,493	11
1987	10,004	8,505	252,789	69,352	767,325	59,888	9,635	27,977	11
1988	10,225	8,693	261,184	71,395	784,290	61,212	9,848	26,461	11
1989	10,446	8,881	269,579	73,438	801,255	62,536	10,061	24,945	11
1990	10,667	9,069	277,974	75,481	818,220	63,860	10,274	23,429	11
1991	10,888	9,257	286,369	77,524	835,185	65,184	10,487	21,913	11
1992	11,109	9,445	294,764	79,567	852,150	66,508	10,700	20,397	11
1993	11,330	9,633	303,159	81,610	869,115	67,832	10,913	18,881	11
1994	11,551	9,821	311,554	83,653	886,080	69,156	11,126	17,365	11
1995	11,772	10,009	319,949	85,696	903,045	70,480	11,339	15,849	11
1996	11,993	10,197	328,344	87,739	920,010	71,804	11,552	14,333	11
1997	12,214	10,385	336,739	89,782	936,975	73,128	11,765	12,817	11
Totals					18,678,084	1,456,891	234,530	na	na
Average	6,106	5,190	129,562	36,939	381,185	29,732	4,786	49,864	10

Sources: Final Task 6 Memorandum, Development of a Three-Dimensional Groundwater Model, Montgomery Watson, 1994; RWQCB 1997 Cow count.9 (personal conversation with Robert Holub of RWQCB, 1998)