Table 4.6
Projected 2020 ADWF for the City of Willits and Brooktrails CSD

Area	2020 Population	Per Capita Flowrate (gpcpd)	2020 ADWF (mgd)
City of Willits	7,370	115	0.85
Brooktrails CSD	3,136	69	0.22
Total 2020 ADWF			**1.07**

Infiltration/Inflow into Wastewater Collection System

It was assumed that future AMII will not increase from existing AMII values for Willits and Brooktrails CSD (Tables 4.2 and 4.4). The reasoning for this is that all future collection systems will be constructed watertight. Also, it is likely that on-going I/I reduction in both collection systems will be continued, which could reduce overall I/I to the WWTP in the future. For the Brooktrails CSD the AMII equals 0.27mgd, and for Willits an AMII value of 0.84mgd was calculated (1.11mgd – 0.27mgd).

Average Wet Weather Flowrate (AWWF)

The projected 2020 AWWF for Willits and Brooktrails was determined by adding ADWF and AMII, and is summarized in Table 4.7.

Table 4.7
Projected 2020 AWWF for the City of Willits and Brooktrails CSD

Area	2020 ADWF (mgd)	2020 AMII (mgd)	2020 AWWF (mgd)	
City of Willits	0.85	0.84	1.74	78%
Brooktrails CSD	0.22	0.27	0.49	22%
Total 2020 AWWF			**2.23**	100%

Summary of Projected 2020 Wastewater Flowrates to WWTP

Table 4.8 lists the projected 2020 wastewater flowrate for the Willits WWTP used in this study for analysis purposes. The 2020 ADF and AMMF were determined by increasing the existing values (2000) by the ratio of 2020 to 2000 ADWF (1.35 = 1.07/0.79). As mentioned above, the AMII value was assumed to remain the same from 2000 to 2020. Following this same assumption, the APMF should also not significantly increase from 2000 to 2020, and was assumed to remain the same for this report.

Table 4.8
Summary of projected 2020 wastewater flowrates for Willits WWTP

Parameter	Flowrate (mgd)
Average annual daily flowrate (ADF)	1.76
Average dry weather flowrate (ADWF)	1.07
Average wet weather flowrate (AWWF)	2.23
Average minimum monthly flowrate (AMMF)	0.95
Average peak monthly flowrate (APMF)	2.67
Average monthly infiltration/inflow (AMII)	1.11