

Table A1-3
Summary of Existing and Revised Future Flows and Loads

		Incremental Future			
		Final		Final	
Parameter	Existing	Draft	Revised	Draft	Revised
Flow, Mgal/d					
Average Dry Weather Flow (ADWF)	1.75	0.55	0.6	2.30	2.35
Average Annual Flow (AAF)	1.80	0.57	0.62	2.37	2.42
Average Day Maximum Monthly Flow (ADMMF)	1.98	0.63	0.68	2.61	2.66
Peak Day Flow (PDF)	3.60	1.14	1.24	4.74	4.84
Peak Hour Flow (PHF) (a)	5.40	1.71	1.86	7.11	7.26
Average Constituent Concentrations, mg/L (b)			]		
BOD	200	200	200	200	200
TSS (c)	200	200	200	200	200
TKN (d)	40	40	40	40	40
Average Annual Load (AAL), lb/d					
BOD	3,002	951	1,034	3,953	4,037
TSS (c)	3,002	951	1,034	3,953	4,037
TKN (d)	600	190	207	791	807
Average Day Maximum Monthly Load (ADMML), lb/d					
BOD	3,903	1,236	1,344	5,139	5,248
TSS (c)	3,903	1,236	1,344	5,139	5,248
TKN (d)	781	247	269	1,028	1,050

<sup>(</sup>a) Allowance at 3 x AAF. Confirm with future monitoring.

#### A1.4 Section 6 – Overview of Existing Wastewater Treatment Plant

There are no changes to this section.

#### A1.5 Section 7 – Plant Hydraulic Analysis

As shown in Table A1-3, the revisions to future development projections resulted in an increase of the future peak hour flow from 7.11 to 7.26 Mgal/d, which is a change of only 2 percent and does not impact any of the conclusions regarding the hydraulic capacity of the plant presented in the Final Draft Report.

## A1.6 Section 8 – Waste Discharge Requirements

There are no changes to this section.

<sup>(</sup>b) AAF combined with AAL.

<sup>(</sup>c) Based on 1.0 x BOD. Confirm with future monitoring.



Table A1-1
Revisions to Projected Growth within TDBCSD

Development	Final Draft Report Number	Revised Number	Change	
Residential, Homes				
Approved, But Not Yet Built	600	722 (116	122	
Undeveloped Lots (Discovery Bay Proper)	55	58 44	***	
Pantages	300 <sup>(a)</sup>	300 <sup>(a)</sup>		
Newport Point	70	70	***	
Villages (Hoffman)	80 🗢	80 🗢		
Golf Course	13	13 2		
5-Acre Lots	5	-5-	***	
Evans		19	19	
Total	1,123	1,264	141	
Office and Business Park, Acres		(5)		
Bixler Business Park	45	45		
Marsh Creek Office	45	45		
Total	90	90	***	
Commercial, Acres				
Highway 4	5	5		
Discovery Bay / Willow Lake	5	5		
Total	10	10		

<sup>(</sup>a) A portion of this property is outside of the current TDBCSD service area boundary.

Table A1-2
Revised Average Annual Flows from Projected Growth

Development Type	Units	Number		Sewage	Projected Flow, gpd		
		Final Draft	Revised	Generation Rate, gpd/unit	Final Draft	Revised	
Residential	Homes	1,123	1,264	335	376,205	423,440	
Commercial	Acres	10	10	1,600	16,000	16,000	
Business Park / Office	Acres	90	90	2,000	180,000	180,000	
Total					572,205 round to 570,000	619,440 round to 620,000	



## Section 3

# Future Land Use

In this section, existing and future land uses within the service area of the Town of Discovery Bay Community Services District Wastewater Treatment Plant (TDBCSD WWTP) are considered. The purpose for considering such land uses is to determine how much new development can be added so that potential increases in wastewater flows and loads can be estimated.

# 3.1 Land Use Map

A map showing existing and planned land uses within the TDBCSD service area is presented in Figure 3-1.

### 3.2 Projected Growth within the Service Area

Projected growth through buildout within the TDBCSD service area includes both residential and non-residential developments. The specific development areas and the projected growth amounts were obtained from the District Manager and are as shown in Table 3-1.

Table 3-1
Projected Growth within TDBCSD

Development	Number
Residential, Homes	
Approved, But Not Yet Built	600
Undeveloped Lots (Discovery Bay Proper)	55
Pantages	300 <sup>(a)</sup>
Newport Point	70
Villages (Hoffman)	80
Golf Course	13
5-Acre Lots	5
Total	1,123
Office and Business Park, Acres	
Bixler Business Park	45
Marsh Creek Office	45
Total	90
Commercial, Acres	
Highway 4	5
Discovery Bay / Willow Lake	5
Total	10

 <sup>(</sup>a) A portion of this property is outside of the current TDBCSD service area boundary.

Figure 3-1
Discovery Bay Area Community Service District Area Land Use Map