

Sacramento Regional County Sanitation District

Interceptor Sequencing Study

Technical Memorandum 7
ESD Absorption Rate Analysis

February 2010

Sacramento Regional County Sanitation District

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**TECHNICAL MEMORANDUM
NO. 7**

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ESD ABSORPTION RATE ANALYSIS

1.0 INTRODUCTION

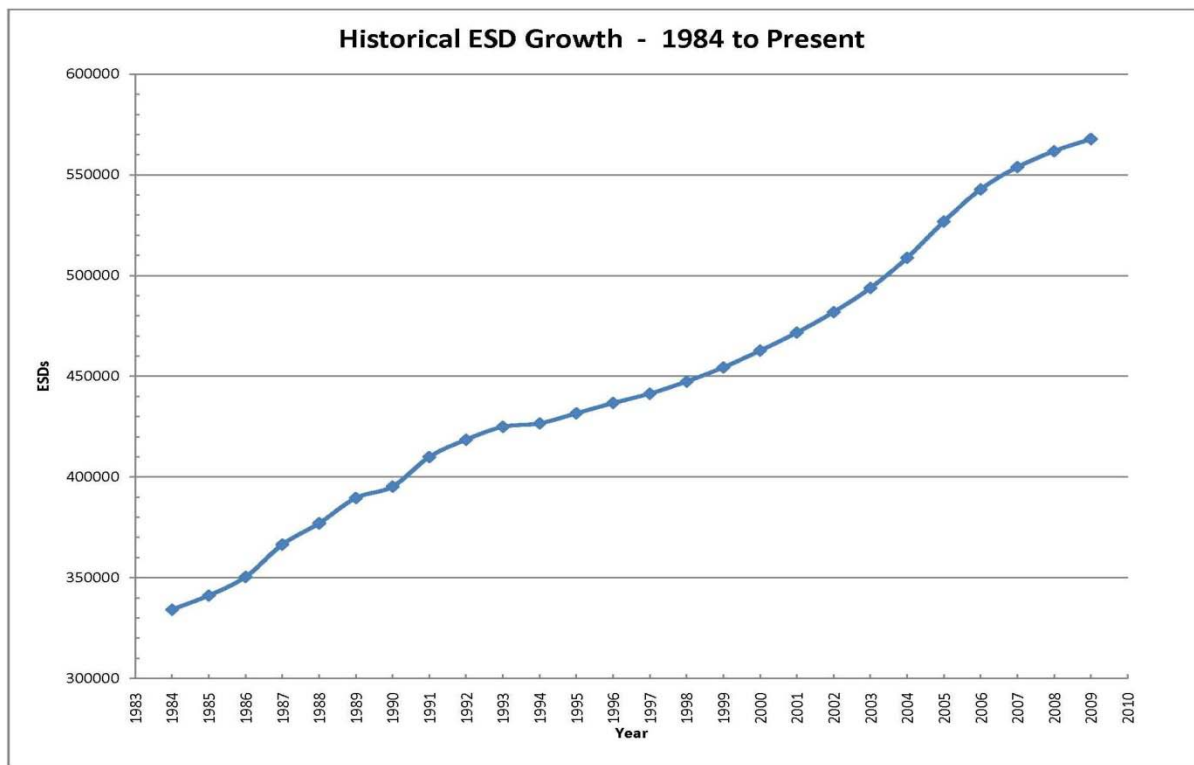
The Sacramento Regional County Sanitation District is carrying out a high-level study to determine alternatives that would provide build-out for regional sewer service for undeveloped areas within the Districts existing service area.

This technical memorandum (TM) addresses the historical and projected growth rates of this planning effort and provides a timing window for when build-out of the existing service area might occur.

2.0 BACKGROUND INFORMATION

Historical growth rate data has been gathered on a year by year basis from 1984 to 2009. Historical data was provided by the Sewer Districts Agency (SDA) Chief Financial Officer (CFO). A summary of the data is shown in Figure 7.1. It should be noted that the SDA CFO uses a growth rate of 9000 ESD/YR for capital funding projections, which also correlates to the historical average ESD growth per year.

Figure 7.1 Historical ESD Growth



The limits of build-out were based on the total developable areas (including re-development assumptions) that still exist within SRCSD’s Sphere of Influence (SOI) as determined by the SRCSD/SASD Capacity Management (CM) Section. CM provided build-out ESD information for the Interceptor Sequencing Study’s “Conservative” and “Realistic” build-out flow scenarios as shown in Table 7.1.

Table 7.1 Realistic and Conservative Build-Out ESD Totals

Realistic and Conservative Buildout ESD Information		
	Realistic Buildout	Conservative Buildout
SASD	937,381	1,166,490
	Realistic Buildout	Conservative Buildout
North Sacramento	33,794	38,699
South Sacramento	126,939	150,905
West Sacramento	49,751	68,216
Folsom	32,318	37,901
Total ESD	1,180,183	1,462,210

- Note: 1) ESD information is based on consolidated land use.
 2) Realistic Buildout considers the 50th percentile of each land use’s ESD density range.
 3) Conservative Buildout considers the 85th percentile of each land use’s ESD density range.

3.0 ASSUMPTIONS

For this TM, projected growth rates from the year 2010 to build-out were categorized into 3 types of rates: slow, moderate, and aggressive. This range provides a way to evaluate different growth scenarios that may occur. The growth rates are shown in Table 7.2.

Table 7.2 Projected Growth Rates

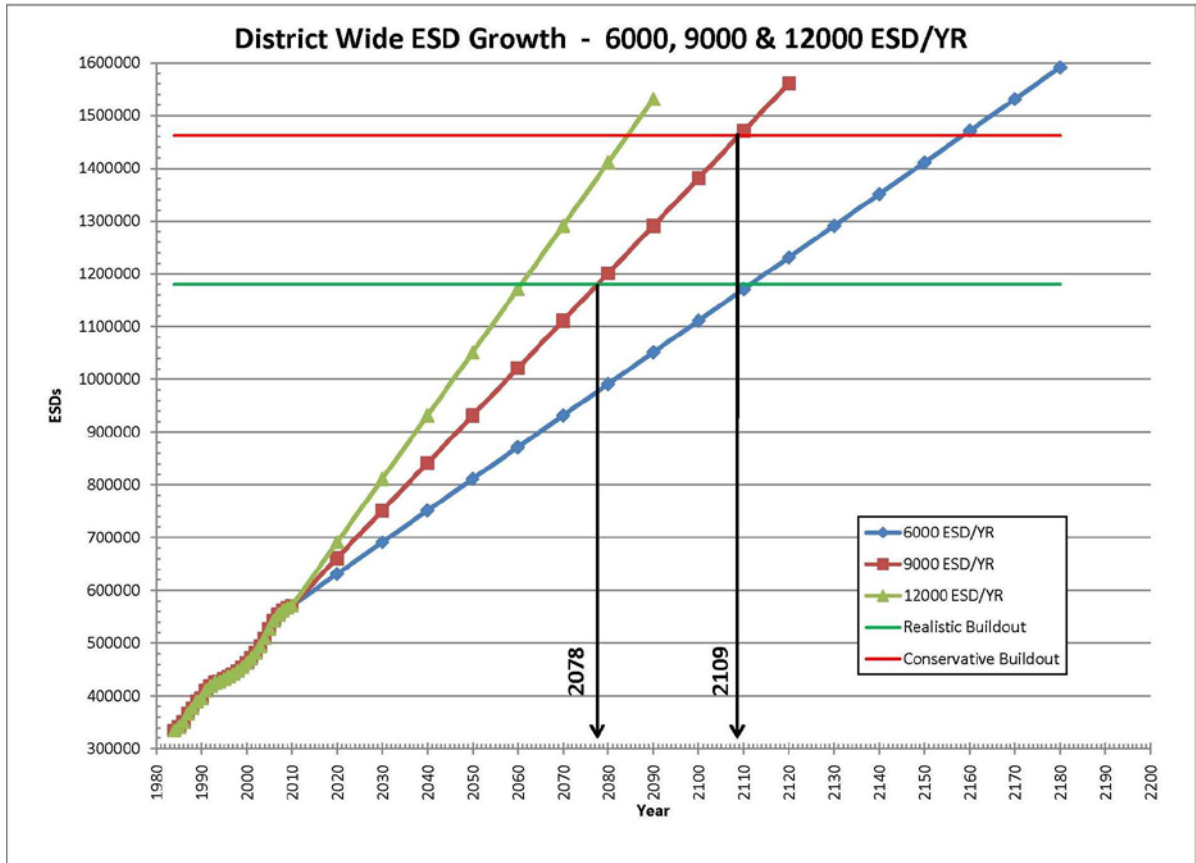
Projected Growth Rates	
Slow	6000 ESD/YR
Moderate*	9000 ESD/YR
Aggressive	12000 ESD/YR

*Rate used for capital funding projections

4.0 ANALYSIS

Using the historical data, the conservative and realistic build-out ESD's, and the assumed projected growth rates, a chart was created to show a window in time when build-out would likely occur for the District. See Figure 7.2.

Figure 7.2 ESD Growth Projection & Corresponding Year Build-Out Occurs



5.0 CONCLUSIONS

The information in this TM provides a good estimation of when build-out might occur. With a moderate growth, it appears that in the year 2100, the District may be at or near a build-out scenario.

Although many of the factors affecting growth and build-out for the District are known and can be analyzed, many are yet to be determined. Political, technological, environmental, and water conservation, are just a few of the unknown factors that could affect the results of this analysis. This TM should just be used as a snapshot in time, and should be continually updated as new information is provided.