

# 2014 ANNUAL REPORT OF THE KENNEBUNK SEWER DISTRICT

## Introduction

The Kennebunk Sewer District is a quasi-municipal entity that was incorporated by an act of the Maine State Legislature in 1955. Our mission is to provide reliable and cost effective sewer related services to our ratepayers while protecting public health and promoting environmental stewardship for the benefit of the community.

## Administration

### Customers

The District's jurisdiction covers all of the area in Kennebunk east of the Maine Turnpike (I-95) and a small portion of the town west of the Turnpike serving the industrial park and governmental institutions such as the Fire Department, the Elementary and Middle Schools, and the Dorothy Stevens Facility.

The map presented in Figure 1 shows the district boundaries with the developed land, undeveloped but buildable land, and the land that is not developable due to being in conservation, park, or wet lands.

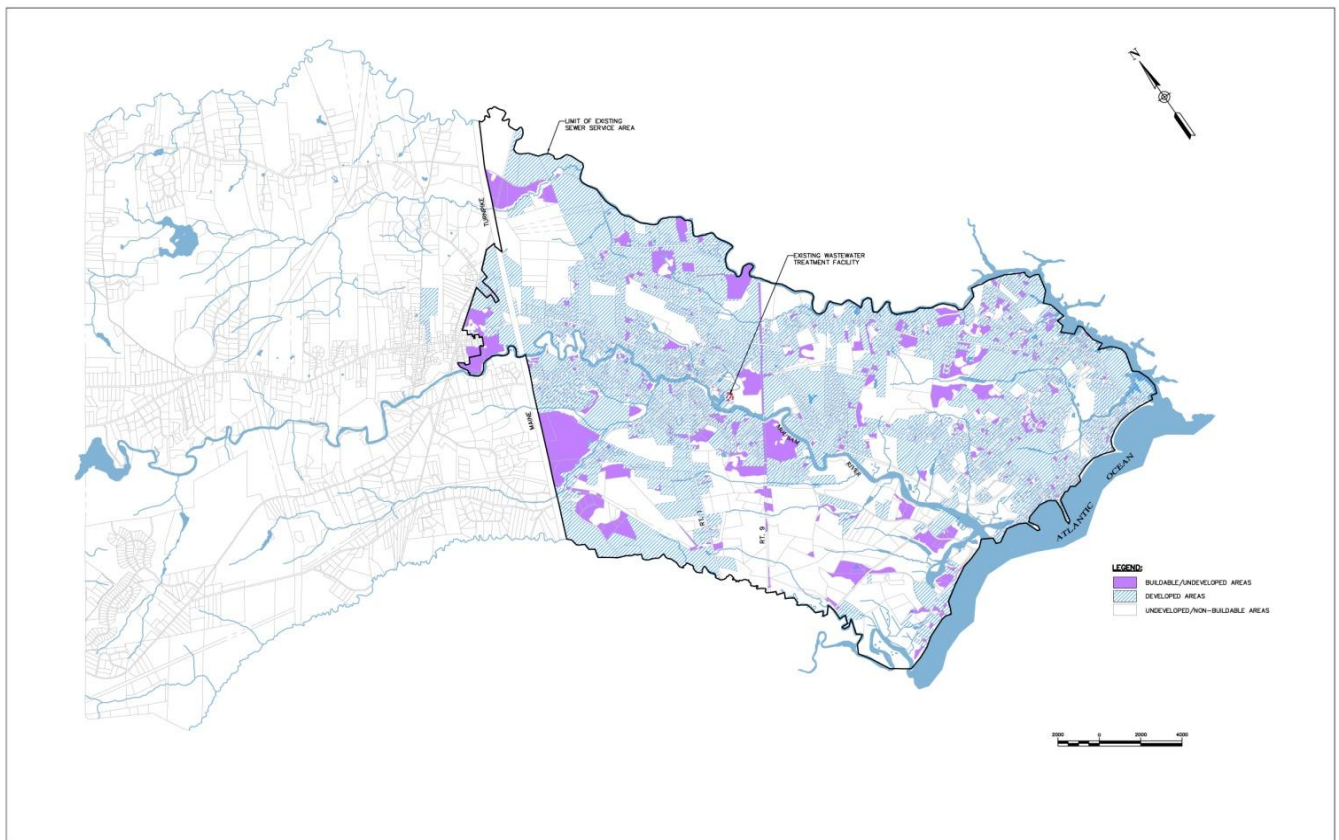


Figure 1

The District currently serves 3,164 of the 6,698 properties or 47% of the total properties in Kennebunk.

There were 21 single family home equivalents added to the district in 2014. The graph in Figure 2 below shows the growth in customers since 2005.

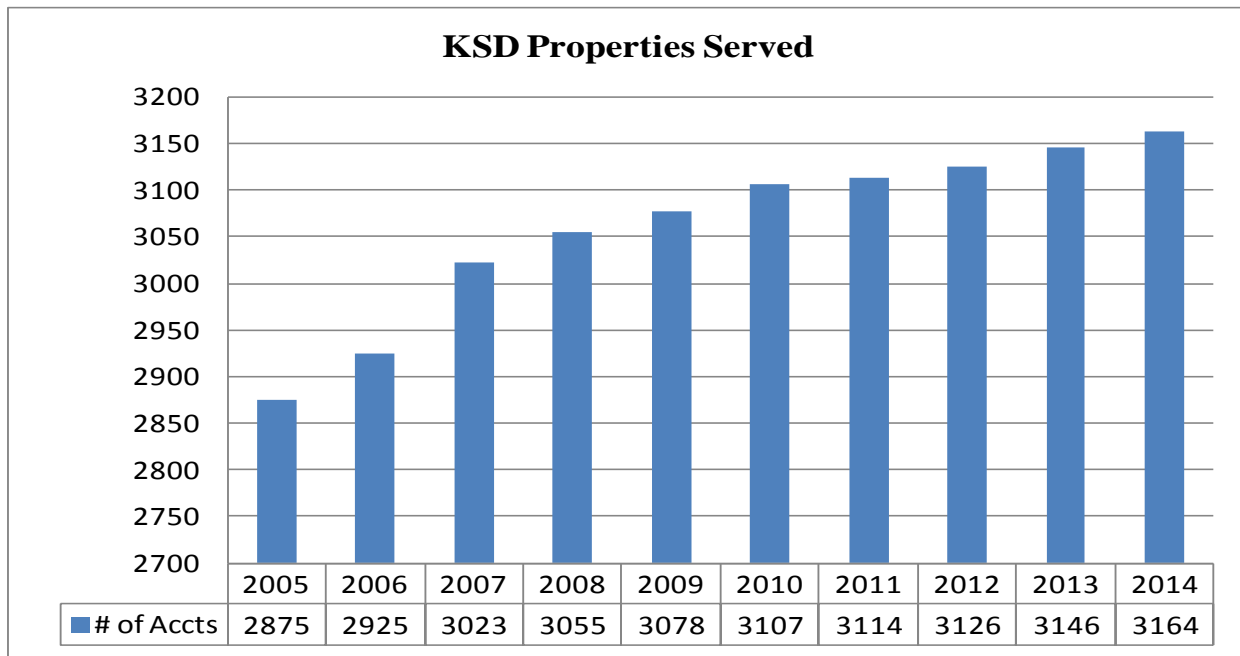


Figure 2

## Personnel

The District has 11 full time and 1 part time employees that work for the district. Personnel are responsible for the operation of the 1.31 Million Gallon per day treatment facility, 28 pumping stations, and 40 miles of sewer. All of our operational personnel are licensed operators in wastewater operations and portions of the staff are certified in laboratory and collection systems.

## Charter Amendments

The District hired Kirsten Hebert from Maine Rural Water Association (MWRA) to assist the district in modifying the District charter. The charter change will raise the current debt limit of 16.0 million to 30.0 million and will modify the charter to meet the new Maine standard language for sewer districts. In 2014, the proposed charter was submitted as a bill to the legislature for approval and adoption. We are anticipating a new charter signed by the Governor in the middle of 2015. A referendum to ratify the charter change is planned for 2015.

## District Operations

### Treatment Plant Capacity Limitations

In 2006, ammonia limits were added to the KSD discharge license issued by the Maine Department of Environmental Protection. Initially, a seasonal ammonia limit was established at 12 mg/l. That limit was reduced during the 2011 discharge license renewal to 7 mg/l. The reason for limiting ammonia, a form of nitrogen, is to prevent nutrient enrichment of the Mousam River. Nitrogen and its compounds can cause algae blooms that deplete the dissolved oxygen levels in the water. The existing KSD biological treatment process built in 1986 was designed to secondary treatment standards but not for nutrient removal. Nutrient removal is a more advanced treatment process. Physical and chemical modifications have been made to the plant since 2006 that have

allowed the plant to meet the ammonia discharge limits. However, the biological treatment process is only capable of treating a maximum of 1093 pounds of incoming pollutants (BOD) per day and still be able to meet the ammonia limit. The graph in Figure 3 shows average and maximum average pollutant loadings in pounds per day for the seasonal ammonia limit.

Meeting the new discharge limits significantly reduces the capacity of the plant. The district is conducting a Facility Plan to determine how to expand and modify the plant to recover the diminished capacity resulting from the ammonia removal limitations.

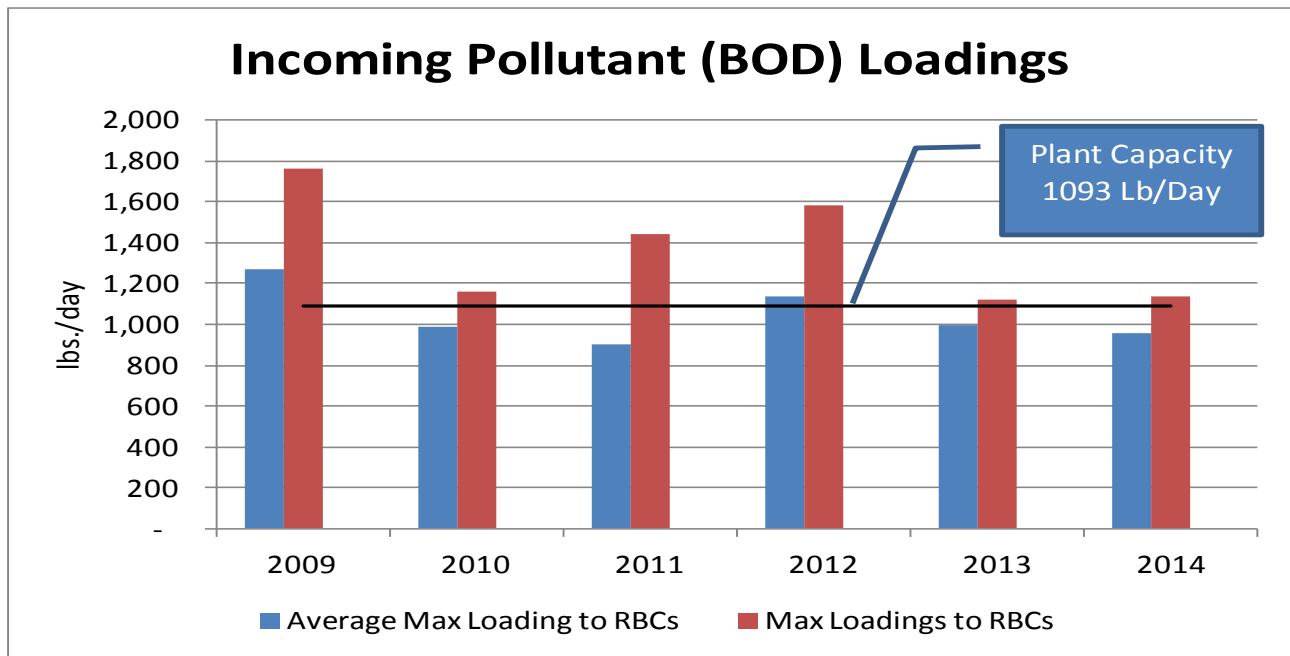


Figure 3

### Flow and Biosolids

The Wastewater Treatment Facility (WWTF) treated 266 million gallons of wastewater in 2014 at an average daily flow of 0.729 million gallons per day. The graph in Figure 4 shows the annual average daily flow rates divided into inflow and infiltration and customer contribution components versus the annual precipitation in inches. The graph shows the effect of ground water infiltration and inflow into the sewer system depicted by the light blue portions of the bars. The district is working to remove this extraneous water through a program to eliminate illegal sump pumps, disconnecting drains, and replacing older leaking sewer lines.

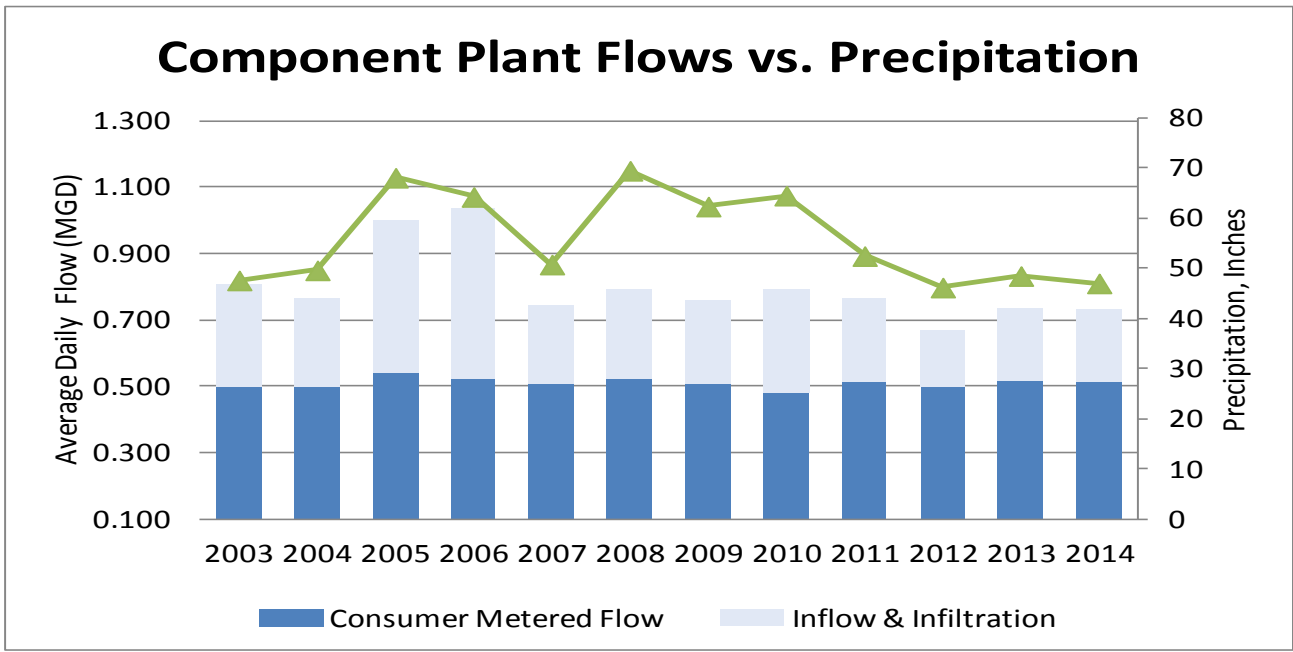


Figure 4

In 2014, the plant produced approximately 969 tons of biosolids. This is slightly less than the previous year but close to the 10 year average of 955 tons for annual biosolids production. The graph in Figure 5 shows our historical annual biosolids tonnages.

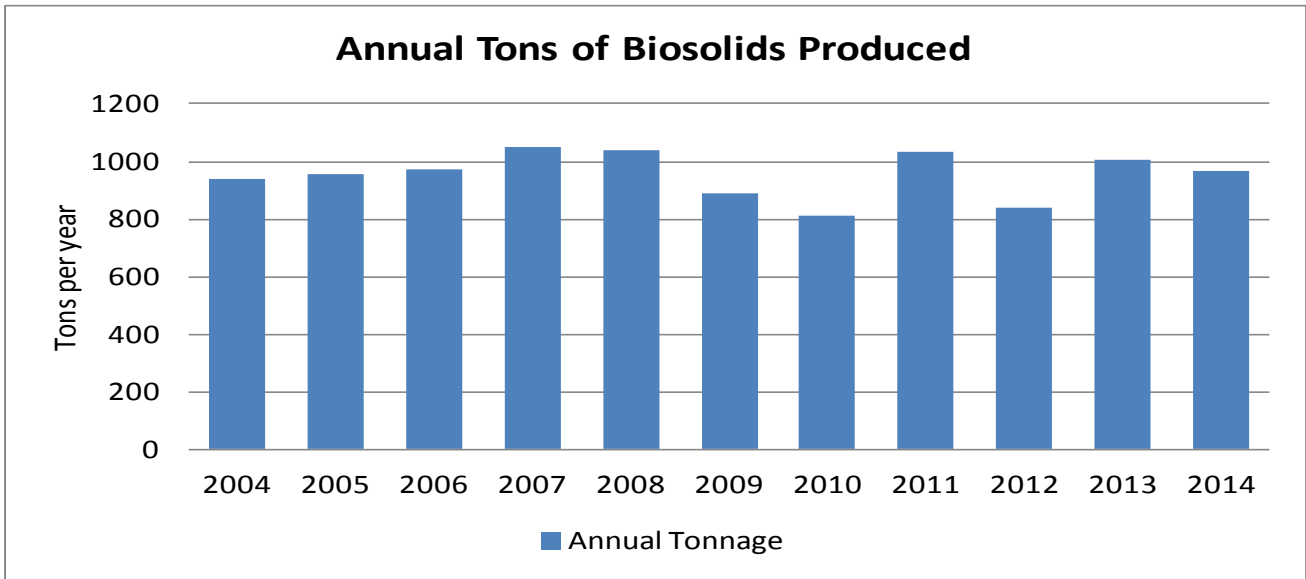


Figure 5

# Financial

## Revenues and Expenses

The District's operations budget for 2014 was \$2,361,662. The actual amount spent was \$2,248,533 which is 96% of the budgeted amount. Projected revenue for 2014 was \$2,357,572 and the actual billed revenues were \$2,374,426. A breakdown of budget to actual is present below in Table 1.

**KSD Revenues and Expenses for 2014**

Item	Budgeted	Actual	Percentage
Revenues from Sewer User Fees	\$ 2,339,033	\$ 2,414,509	103%
EBIF and Impact Fees	\$ 85,000	\$ 56,939	67%
Operating Expenses	\$ 2,339,033	\$ 2,260,569	97%
Capital Improvement Plan	\$ 576,400	\$ 424,310	74%

Table 1

## Liens

The District placed liens on 54 properties with total outstanding sewer user fees of \$30,022. There are 11 properties in a state of foreclosure with outstanding accounts amounting to \$6,939.

## Equity Buy In Fees and Impact Fees

In 2013, 21 equivalent dwelling units (EDU's) were connected to the district system. An EDU equates all connections to the district system to what a single family home would contribute in terms of flow and strength of the waste. The Equity Buy In Fees pay for the portion of capacity that the new connection uses in the system.

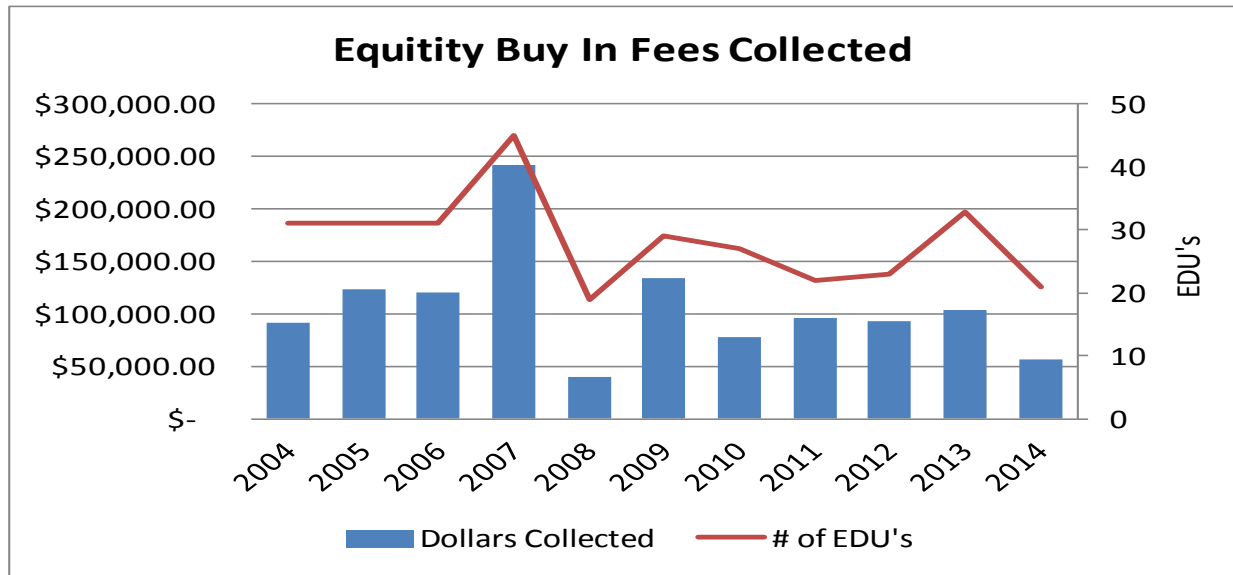


Figure 6

## Capital Improvement Projects

In 2014, the Capital Improvement Plan budget was \$576,400. The actual expenses for 2014 were \$424,310. The major projects for 2014 were:

- SCADA and electrical upgrades to the Lakebrook Pumping Station
- Facility Plan for plant expansion
- Sewer Replacement on Nason’s Court
- Roof replacements at pump stations and small out buildings at the treatment facility

The graph in Figure 7 below depicts how funds were spent in 2014.

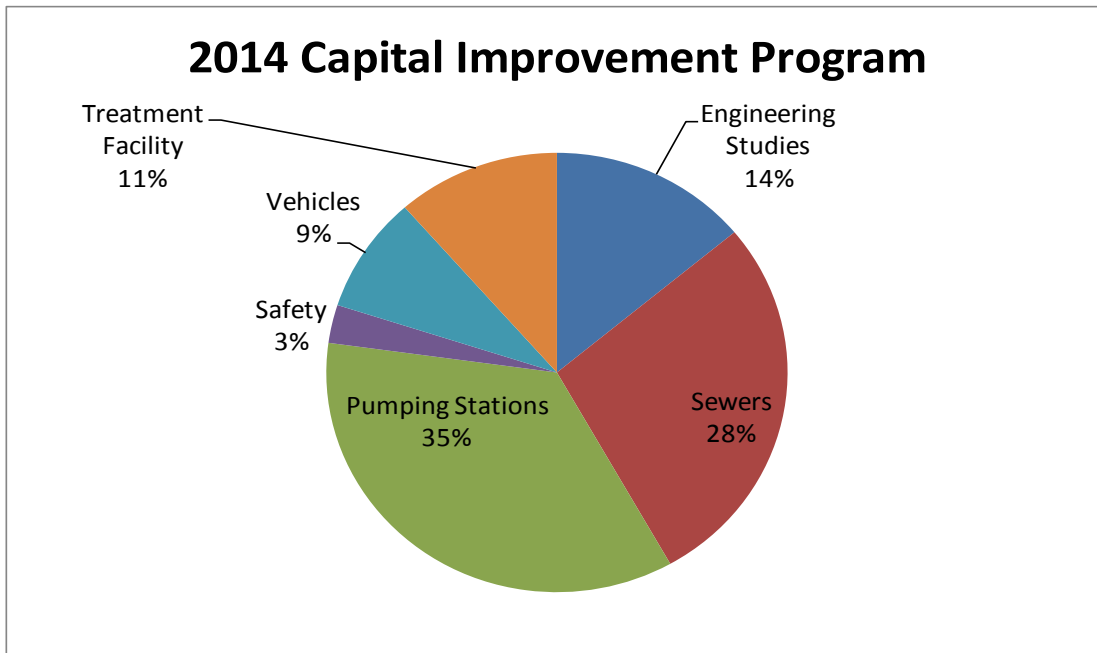


Figure 7

## District Information

For more information on the District, please visit our website at [www.ksdistrict.org](http://www.ksdistrict.org). The Board normally meets at 7:00 p.m. on the first Tuesday of each month at the District offices located at 71 Water Street in Kennebunk. The District Office hours are between 7:00 a.m. and 4:00 p.m. Monday through Thursday and 7:00 a.m. to 2:00 p.m. on Friday.

Respectfully submitted,

### Board of Trustees of the Kennebunk Sewer District

John Price, Chair  
Mark Allenwood, Vice Chair  
Wayne Brockway, Treasurer  
Nick Branchina, Clerk  
James Oppert