

**The City of Los Angeles** operates and maintains the **largest wastewater collection system** in the United States. This includes more than **6,600 miles** of public sewers serving a residential population of about four million people in a 550- square mile service area. There are also some 11,000 miles of private lateral sewers or laterals throughout the City.

Laterals are small sewer pipes that carry wastewater from your home to the public sewer in your street. Your lateral consists of two parts: **UPPER lateral** that runs from your home to your property line; and **LOWER lateral** that runs from your property line to the street sewer.

**Property owners own and are responsible** for the proper operation and maintenance of both their upper and lower laterals.

### Why is it important to maintain laterals?

You received this brochure because your property is located within a **root hot spot**. This makes your lateral more susceptible to root intrusion, especially if it is over 10 years old. Roots can damage your lateral and cause it to collapse over time. Properly maintaining your lateral will increase its useful life, help prevent sewage from backing up into your home and minimize sewer overflow in your streets. Proper maintenance will help you avoid early and costly bills to repair or replace your lateral.

Tree roots in laterals can block and damage them. Roots can enter laterals through cracks or loose joints. Over half of tree roots in the City's sewer system enter through defective private laterals.

The City maintains public sewers by: (1) routinely removing and clearing roots using mechanical equipment and applying chemical treatment; (2) systematically inspecting street sewers using Closed Circuit Television (CCTV)

technology to identify structural defects; and (3) planning and implementing capital improvement projects to repair, rehabilitate or replace structurally deficient sewers.

**It is important that property owners inspect, maintain, repair and/or replace private laterals to help reduce sewer overflow and protect both private and public sewers from further damage.**

### What Causes Roots to Grow in Pipes?

Roots are attracted to water vapor that escapes through cracks or loose joints in sewer pipes. This means roots will move towards and penetrate through cracks, loose joints or any openings in sewer pipes. This happens even in the winter when trees appear to be dormant.

Once inside, roots will continue to grow and fill the pipe to create a root mass that can become matted with grease, paper and other solid matter. This is what eventually causes a clogged sewer.



*Photo shows tree roots that have grown into a sanitary sewer line and clogged and broke the pipe.*

As roots continue to grow within a pipe, they begin to expand and exert pressure at their point of entry. This can result in a pipe rupture. A ruptured sewer pipe can be costly to fix or replace.

Signs that a sewer is blocked include slow flowing drains, gurgling sounds from a toilet bowl and wet areas around washing machine floor drains. A pipe that is not cleared will become completely blocked and may rupture.

### Pipes Susceptible to Root Damage

Certain pipe material is more vulnerable to root intrusion than others. Vitrified clay pipes, for example, are more susceptible to root penetration and damage when compared with Schedule 40 ABS and PVC DWV pipes that have fewer and more tightly fitted joints.

### What to consider when planting or maintaining trees:

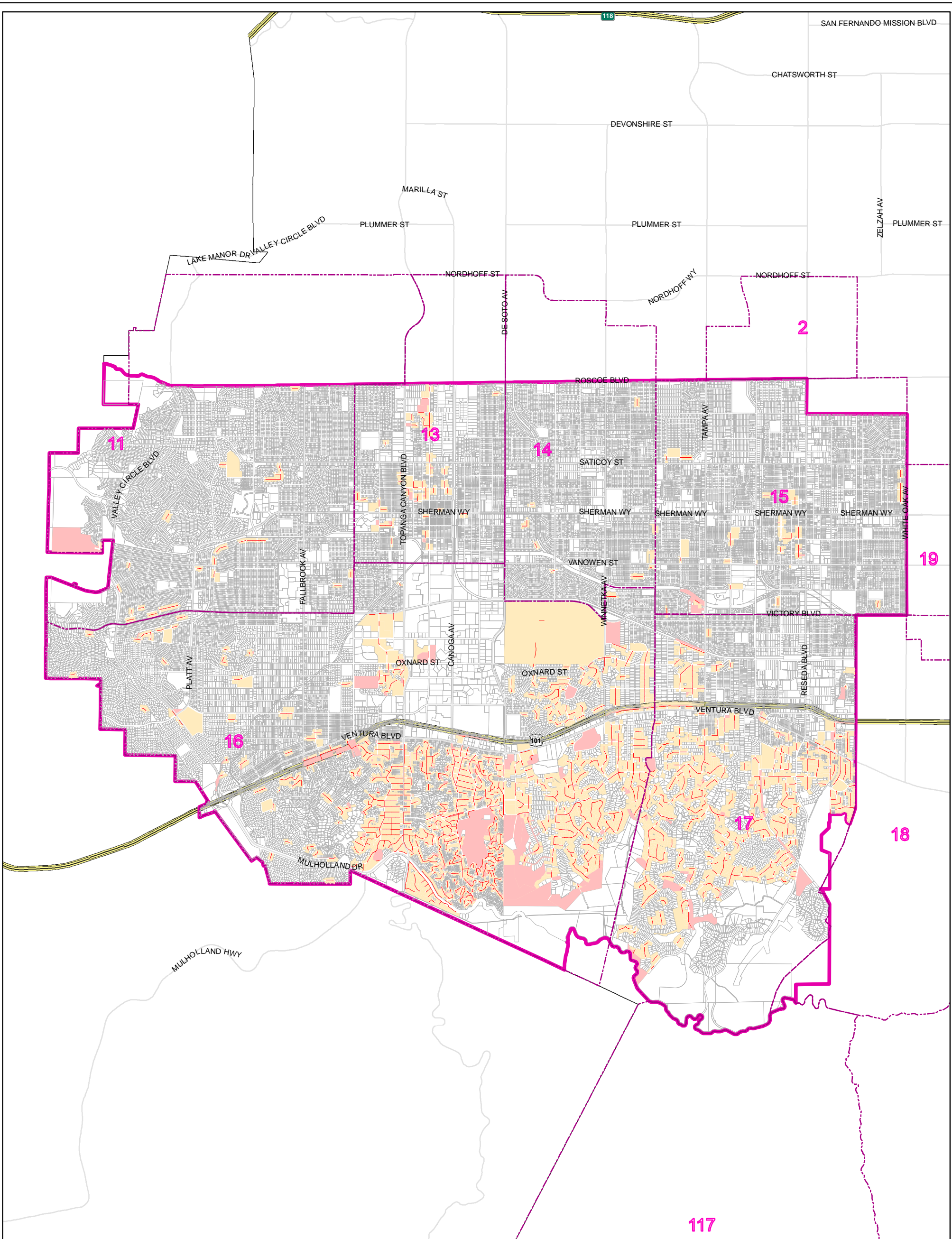
As a homeowner, you need to know where your lateral is and how it runs across your property into the street sewer so that you can avoid planting or maintaining trees that may grow into or harm your lateral. Also, there are certain tree species that are more likely to grow extended roots and potentially damage your pipes. Do some basic research when selecting a tree to plant on your property and seriously consider where you will plant that tree in relation to your lateral.

### What Can Be Done to Remove Tree Roots in Sewer Pipes?

The most common method to remove roots from sewer pipes is to use augers and saws augmented with commercial herbicides that kill roots. Do not, however, use copper sulfate and sodium hydroxide because although these chemicals kill roots, they do not prevent re-growth. They also damage the environment when they flow into our oceans and other receiving waters.

A more up-to-date method used to clear pipes is to pump a mixture of water, an herbicide and a foaming agent through the pipe.

Do consult a licensed plumber or sewer contractor before deciding which remedy to use. Consult the Yellow Pages under the heading "Sewer" or "Plumbing" for information on companies that perform CCTV pipe inspection and root control. It is always a good idea to get two or three quotes for any substantial work.



**Legend**

	City of Los Angeles		Root Hot Spot Reaches (Sewers W/Root Intrusion Problems)
	Council District 3	<b>CD 3 Parcel total: 67,259</b>	
	Neighborhood Council		Parcels Tributary to Hot Spot Reaches (10,200)
	Freeway		Non-Tributary Parcels (57,059)
	Major Street		Selected but undeliverable (no address): 508

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 City of Los Angeles

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## Council District 3 Root Hot Spot Locations

