



LATERAL EROSION ENVELOPE

Protect your property and your investment by understanding how arroyos move.

What is a LEE?

A Lateral Erosion Envelope (LEE), also referred to as a LEE Line, is the area adjacent to unlined or natural arroyos or drainage ways that has the potential to be disturbed by erosion, scour (materials being swept away by flowing water) or lateral migration caused by storms up to and including a 100-year storm.

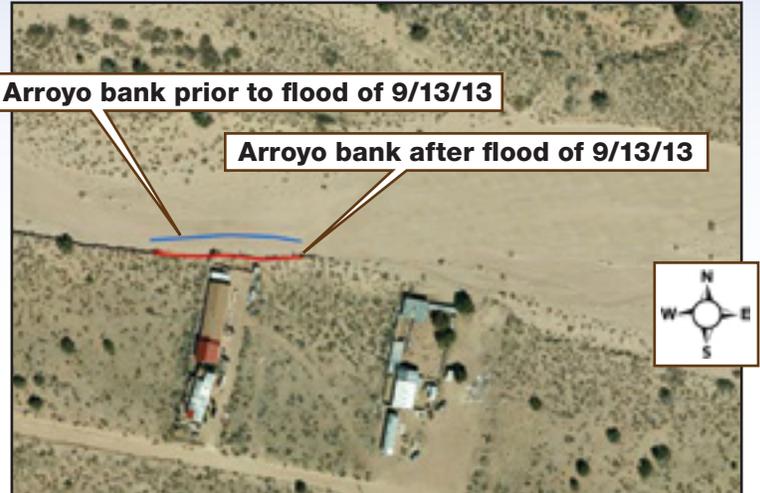
The soil in and around Rio Rancho, Corrales and Bernalillo is comprised of unconsolidated (loose), fine particles that can be easily swept away by flooding water. This water is carried by arroyos and unlined drainage ways, and can cause them to move laterally (side to side) as well as erode over time.



What is the Purpose of Establishing a LEE?

The purpose of establishing a LEE is to identify the area around an arroyo that poses a risk to a new or existing structure, such as a home, multi-family dwelling or commercial project, due to the movement of flowing water in the arroyo and erosion of its banks. By defining the area at risk, property owners can take steps to protect themselves from property damage.

The Southern Sandoval County Arroyo Flood Control Authority (SSCAFCA) establishes and updates LEE lines



ABOVE: The flood of September 13, 2013 eroded approximately 40 feet of bank on the south side of the arroyo within three hours. This aerial photograph of the area shows the encroachment of the arroyo onto the property of a home built inside a LEE. **BELOW:** Photo of the actual property damaged by the September 13th flood shows what can happen when property is built inside a LEE.



for the major arroyos and unlined drainage ways within its jurisdiction. Extensive information about this process is included in the Sediment Erosion Design Guide, which can be downloaded from the SCAFCA website at www.sscafca.org.

If your property has a natural arroyo or drainage way that does not have an established LEE line, you can request assistance from SCAFCA.

Why is LEE Important?

When developing a multi-family or commercial property in Rio Rancho, the project must go through a DRC (Development Review Committee) process. As part of the process, according to Ordinance 152.33 Flood-Related Erosion-Prone Areas:

“ Prior to development adjacent to a major channel, flood-related erosion prone areas as defined by LEE lines, shall be determined as provided for in the Sediment and Erosion Design Guide included, by reference, in the City Development Process Manual. A drainage report shall be developed and submitted for review for the proposed development. This report shall include alternatives discussions. Alternatives shall include at the least the “do nothing” alternative and the “relocation out of the LEE” alternative. Assuming the City Engineer determines neither of these alternatives is viable, then detailed discussion of erosion mitigation and resulting impacts shall be provided. Upon determination by the City Engineer that development within the LEE is allowed, then an application for permit to develop in a floodplain area is required to be filed with the city. ”



Arroyo movement can also expose large underground water and sewer pipelines and result in outages of vital services.

What a LEE is ... and What it Isn't

It's important to know that a LEE: 1) IS NOT a take from your property; and 2) DOES NOT affect your insurance rates.

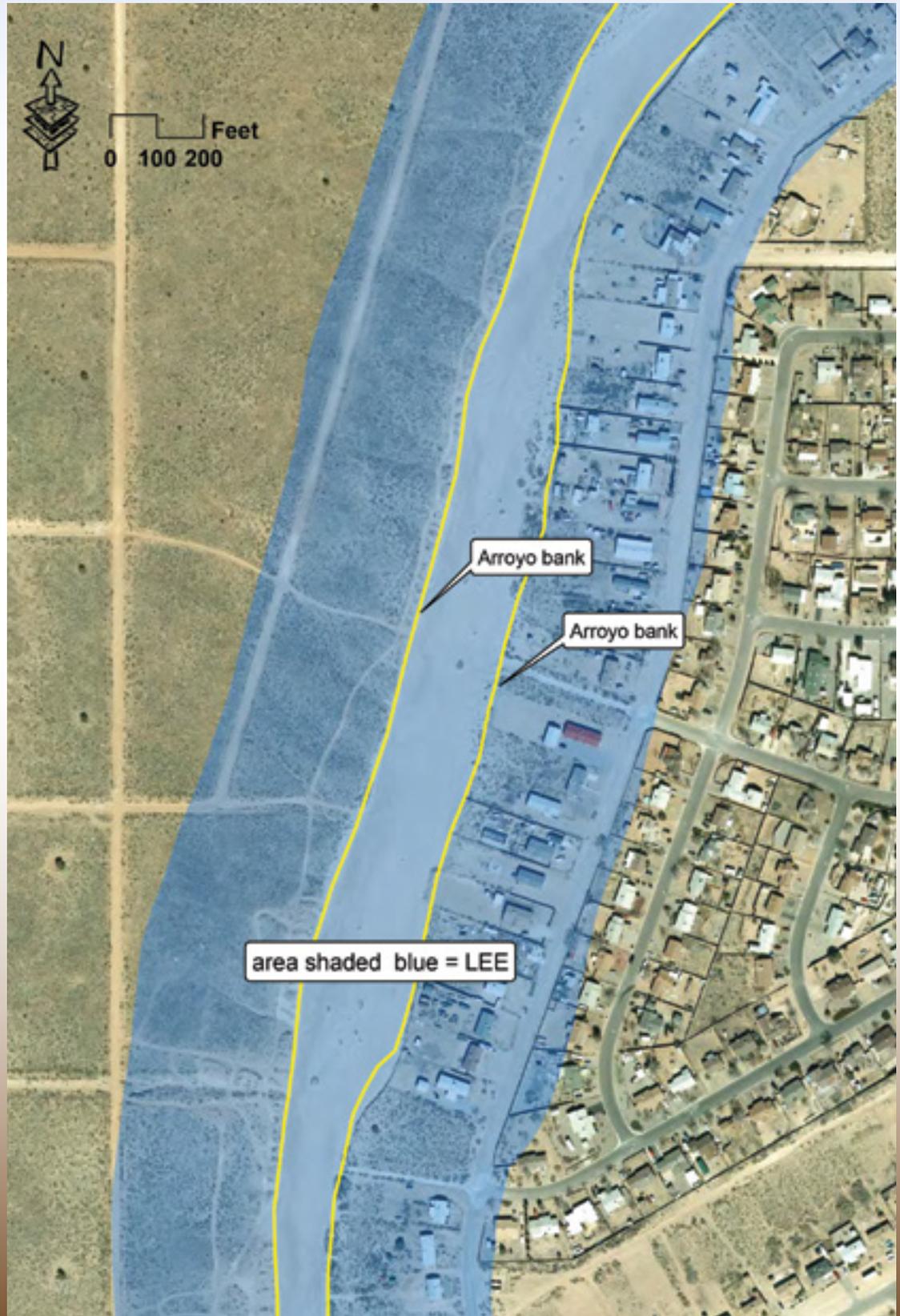
THE LATERAL EROSION ENVELOPE doesn't predict the future course of the arroyo or channel on your property, nor does it guarantee that the arroyo will remain within its limits. The LEE identifies an area near major arroyos that is at higher risk from damage caused by erosion.

Remember, it's not *if* the arroyos or drainage ways will move, but *when* and *how much* they will move. Our natural arroyo systems will continue to meander and our soils will continue to erode.

By determining if your property is located within a LEE or near a LEE line, you can protect your property and any investment you plan to make in structures or facilities.

Follow This Easy Process:

- 1) Contact the City of Rio Rancho or SSCAFCA if you are planning to build within their jurisdictions.
- 2) The City and/or SSCAFCA will let you know if your property includes a LEE.
- 3) If your property is impacted by a LEE, SSCAFCA can provide assistance to determine if your planned building(s) will be affected, and if so, what steps you can take to protect them.



More Information on LEE

The Southern Sandoval County Arroyo Flood Control Authority has additional information on LEE in the Policies and Procedures section of our website (www.sscafca.org):

- Downloadable Sediment and Erosion Design Guide
- Downloadable Sediment and Erosion Design Guide – Executive PowerPoint Presentation
- PowerPoint slides from our 2008 Sediment and Erosion Design Guide Training Course



If you have more questions please contact one of our technical staff at:

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