

Ripple Effect #34 - LIDAR

We don't often think electronics and water in the same thought. Pipes and water, yes—but not water and a sophisticated combination of laser, global positioning and digital imaging technologies.

But that's exactly what Light Detection and Ranging—LIDAR—is. And LIDAR has more to do with water, especially in a place like the Red River Basin, than you first think.

LIDAR technology integrates airborne laser technology with global position system (GPS) technology in order to map the earth both horizontally and vertically—with an astounding degree of accuracy. In fact, most LIDAR mapping gets horizontal distances to 3 feet or less and land elevations accurate to 6 inches or less.

The size of the data set for LIDAR mapping the full Red River Basin is 6 terabytes of data! But such storage systems are very possible.

And just think what it would mean to the quality of life and water management in the Red River Basin to know the exact height of every few feet of land in the entire basin!

This Ripple Effect is brought to you by the Red River Basin Commission.