Household water insecurity – the lack of safe, reliable, and sufficient water for a thriving life – is a global threat to human health and development. Yet many people refuse to believe the problem exists in the United States, one of the world’s wealthiest countries. But it does. Drawing on spatial and sociodemographic analysis of census microdata, this talk is the first of its kind to explore the social geography of incomplete household plumbing in America. Our findings reveal the racialized nature of plumbing poverty, which is disproportionately experienced by communities of colour in ways that cluster and vary through space. We propose a framework to plumb poverty in three related ways: first, as a material and infrastructural condition produced by social relations that vary through space; second, as a methodology that operationalizes the spatial exploration of social inequality; and third, as a mission to (re)plumb the social and infrastructural fabric of communities in more just and equitable ways.