

# Case study: An analysis of LSLs in small community water systems in Illinois

Tom Neltner  
Chemicals Policy Director  
Environmental Defense Fund



# Illinois service line materials inventory

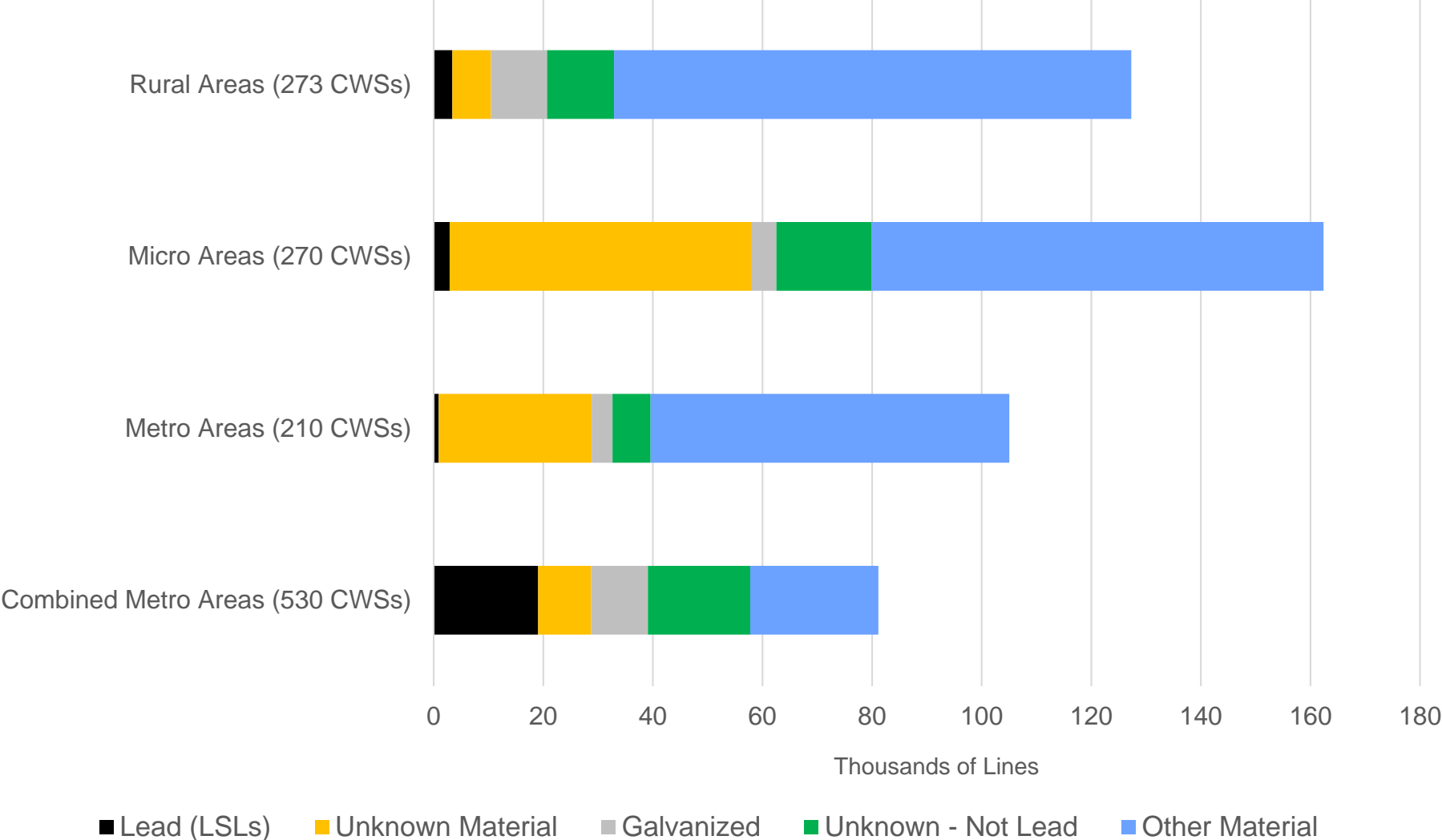
- January 2017 law mandated that community water systems (CWSs) report annually its inventory of service line materials to Illinois Environmental Protection Agency (IEPA).
- First year of annual reporting was in 2018.
- IEPA makes reports available in real time on its [website](#).
- In second year of reporting, IEPA allowed “unknown – not lead” and “unknown material” to be reported separately. All 1731 CWSs reported.
- 225 CWSs began operations after 1986 when new LSLs were prohibited.
- Association of State Drinking Water Administrators (ASDWA) issued [white paper to states](#) on developing LSL inventories that highlighted Illinois as a good example.

# Reported service line material for different size CWSs in Illinois

	# of CWSs*	Total lines	LSLs (% of total)	Lines of unknown material (% of total)	Ratio of unknown lines to LSLs
<b>Chicago Water</b>	1	520,673	392,614 (75%)	120,760 (23%)	1 : 3.3
<b>Large CWSs (&gt; 50K served)*</b>	30	912,152	130,223 (14%)	333,851 (37%)	2.6 : 1
<b>Medium CWSs (10 to 50K served)</b>	192	1,441,689	129,669 (9%)	346,604 (24%)	2.7 : 1
<b>Small CWSs (&lt; 10 K served)</b>	1,283	836,683	26,292 (3%)	250,075 (30%)	10 : 1
<b>Total</b>	1,506	3,711,197	678,798 (18%)	1,051,290 (28%)	1.6 : 1

\* Excluding Chicago Water and CWS that began operation after 1986 when the new LSLs were banned nationally.

# Number of service lines by type of material for Illinois small CWSs in 2019



# The numbers behind the chart

Illinois Small CWS Reporting in 2019	Total Service Lines	Lead (LSLs) (% of total)	Unknown Material (% of total)	Ratio of unknown lines to LSLs	Galvanized (% of total)	Unknown - Not Lead (% of total)	Other Material (% of total)
Rural Areas (273 CWSs)	190,745	3,393 (2%)	70,490 (37%)	21 : 1	10,254 (5%)	12,214 (6%)	94,394 (49%)
Micro Areas (270 CWSs)	162,384	2,908 (2%)	55,008 (34%)	19 : 1	4,635 (3%)	17,389 (11%)	82,444 (51%)
Metro Areas (210 CWSs)	105,036	926 (1%)	27,907 (27%)	30 : 1	3,801 (4%)	6,946 (7%)	65,456 (62%)
Combined Metro Areas (530 CWSs)	378,518	19,065 (5%)	96,670 (26%)	5 : 1	10,361 (3%)	18,672 (5%)	233,750 (62%)
Total for all Small CWSs (1283 CWSs)	836,683	26,292 (3%)	250,075 (30%)	9.5 : 1	29,051 (3%)	55,221 (7%)	476,044 (57%)

Small CWSs in combined metro areas have a better ratio (5:1) of unknown lines to LSLs than their counterparts in other areas. Of the six combined metro areas, Chicago Metro stood out with a ratio of 3:1 compared to more than 18 in the other areas.



**Tom Neltner**  
**Chemicals Policy Director**  
**[tneltner@edf.org](mailto:tneltner@edf.org)**  
**202-572-3263**

