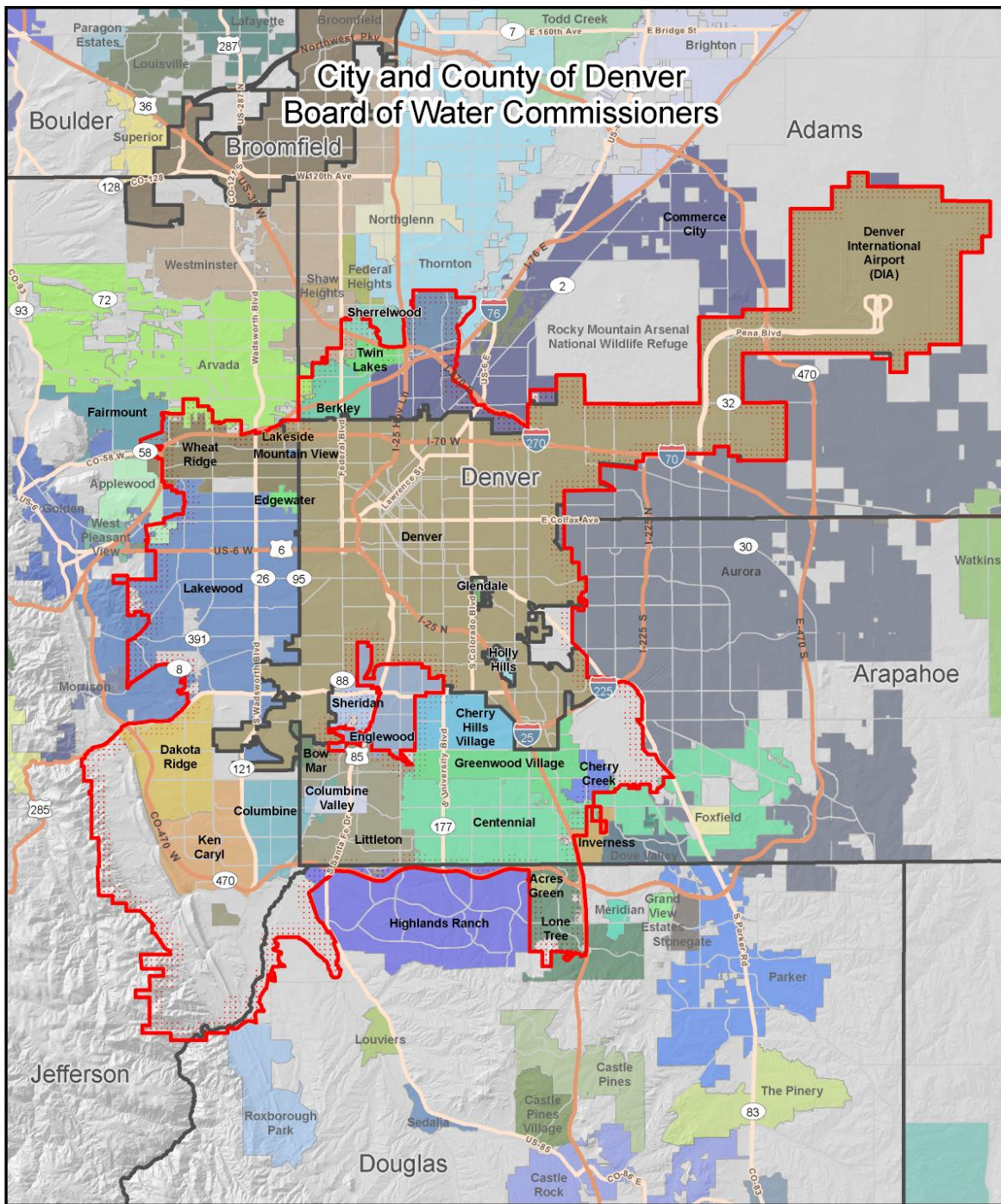


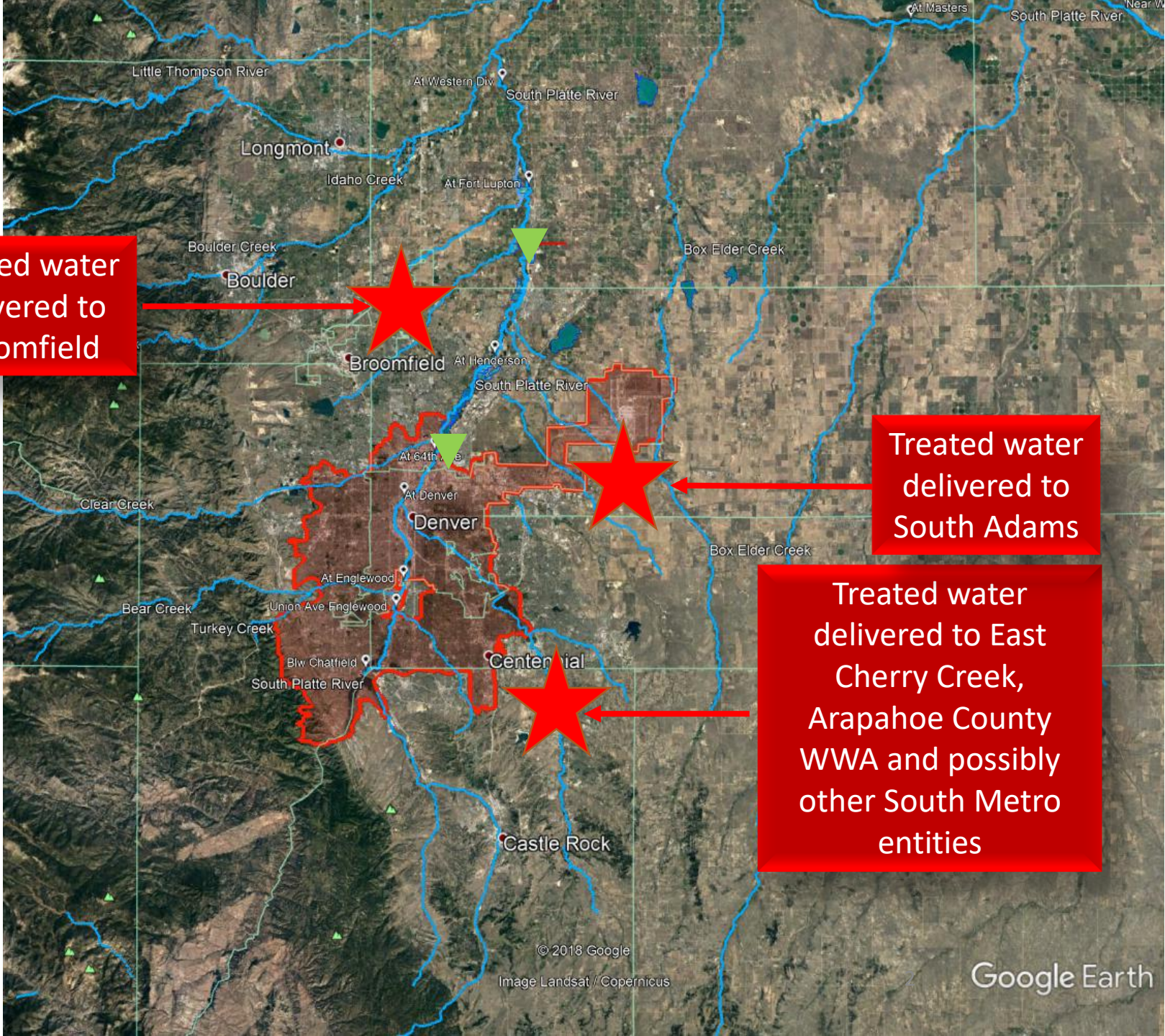
City and County of Denver Board of Water Commissioners



Treated water delivered to Broomfield

Treated water delivered to South Adams

Treated water delivered to East Cherry Creek, Arapahoe County WWA and possibly other South Metro entities



Estimated Loads From Denver OCCT

Low estimate of PO4 addition of 0.5 mg/l as PO4

	Effluent	Irrigation/ LIRF	Total
Additional P in Denver treated water, lbs/year	53,700	30,700	84,400
Additional P from return flow, lbs/year	2,400	4,600	7,000
Barr Lake TMDL Total P, lbs/year			12,700

Assumes average 95% removal efficiency at WWTPs
Assumes 15% Lawn Irrigation Return Flow

P increase is 55% of total allowable P load to Barr Lake

Estimated Loads From Denver OCCT

Medium estimate of PO4 addition of 1.0 mg/l as PO4

	Effluent	Irrigation/ LIRF	Total
Additional P in Denver treated water, lbs/year	107,400	61,300	168,700
Additional P from return flow, lbs/year	4,800	9,200	14,000
Barr Lake TMDL Total P, lbs/year			12,700

Assumes average 95% removal efficiency at WWTPs
Assumes 15% Lawn Irrigation Return Flow

P increase is 110% of total allowable P load to Barr Lake

Estimated Loads From Denver OCCT

High estimate of PO4 addition of 2.0 mg/l as PO4

	Effluent	Irrigation/ LIRF	Total
Additional P in Denver treated water, lbs/year	214,800	122,600	337,400
Additional P from return flow, lbs/year	9,700	18,400	28,100
Barr Lake TMDL Total P, lbs/year			12,700

Assumes average 95% removal efficiency at WWTPs
Assumes 15% Lawn Irrigation Return Flow

P increase is 221% of total allowable P load to Barr Lake

Suggested Points for Position Statement

1. Lead exposure is a very serious health concern and should be minimized in an overall effort to reduce elevated blood lead levels in vulnerable populations
2. CLRMA supports CDPHE and drinking water utilities in using appropriate methods to reduce the risk of lead exposure from tap water
3. Phosphorus is an essential nutrient that contributes to algae blooms and the risk of harmful Algae Blooms (HABs).
4. The use of phosphates by Denver Water for OCCT will significantly increase phosphorus loadings from wastewater treatment plants and lawn irrigation returns.
5. The Barr and Milton TMDLs, adopted by CDPHE and EPA, show that increased P will result in increased algae.
6. HABs are a major health concern and nutrients contributing to their formation should be avoided. HABs are an existing concern in CO (e.g.; recent Thornton and Blue Mesa Reservoir experiences)
7. Best available science has shown that there are several effective means to control corrosion and minimize lead exposure within distribution systems.
8. CLRMA strongly urges CDPHE to allow utilities the flexibility to use other methods other phosphates to control lead and copper in their systems.