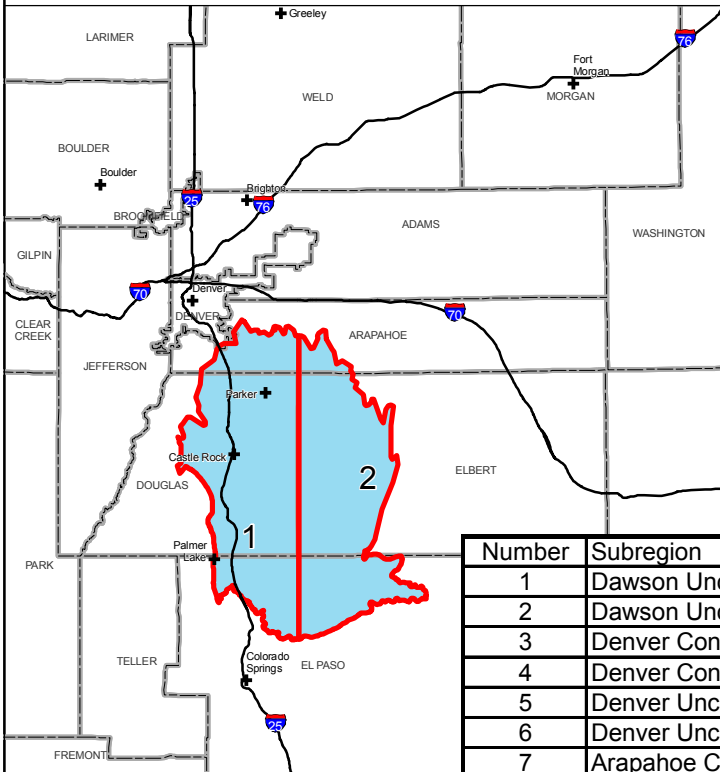


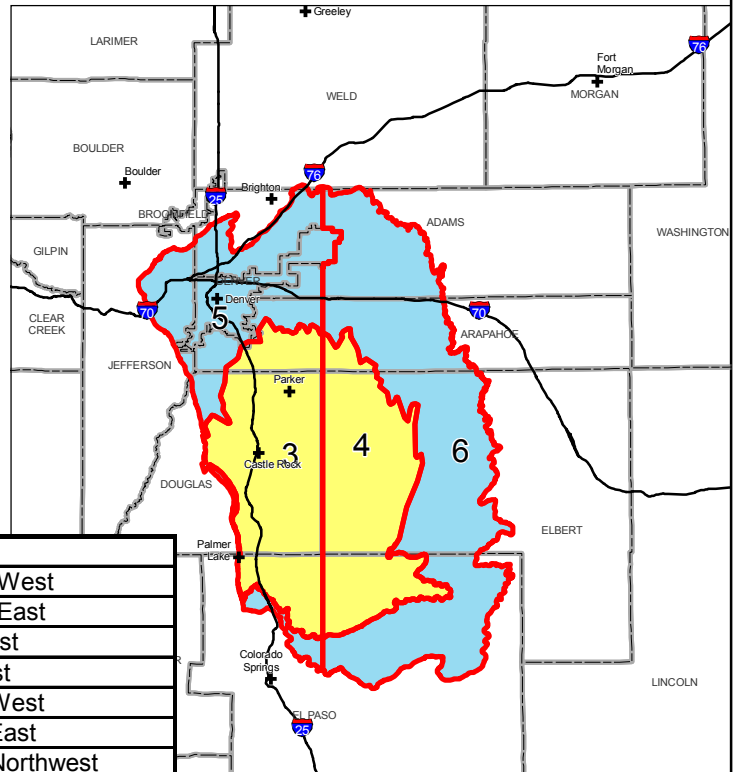
SB06-193 Underground Water Storage Study

Denver Basin Bedrock Aquifer Subregions

Dawson Aquifer

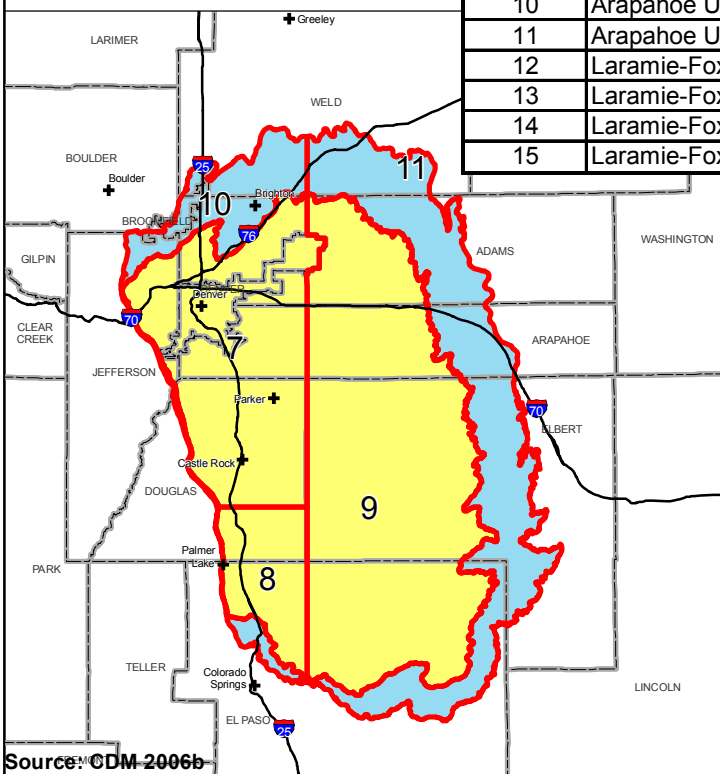


Denver Aquifer

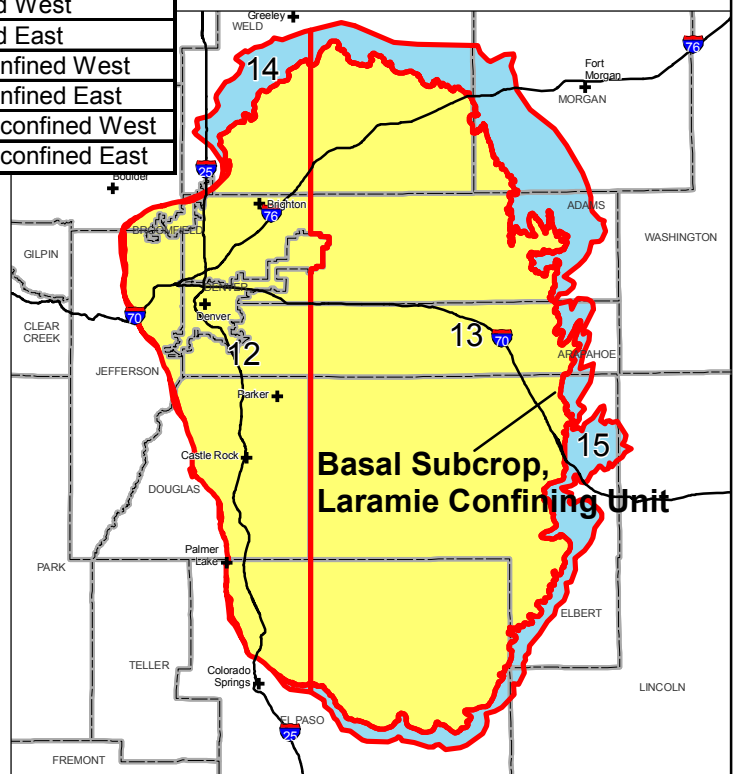


Number	Subregion
1	Dawson Unconfined West
2	Dawson Unconfined East
3	Denver Confined West
4	Denver Confined East
5	Denver Unconfined West
6	Denver Unconfined East
7	Arapahoe Confined Northwest
8	Arapahoe Confined Southwest
9	Arapahoe Confined East
10	Arapahoe Unconfined West
11	Arapahoe Unconfined East
12	Laramie-Fox Hills Confined West
13	Laramie-Fox Hills Confined East
14	Laramie-Fox Hills Unconfined West
15	Laramie-Fox Hills Unconfined East

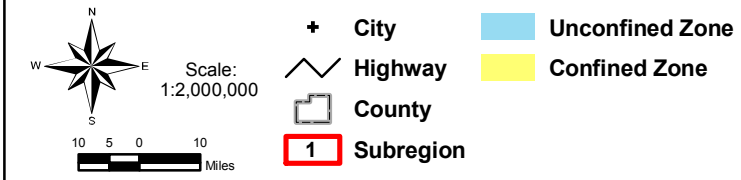
Arapahoe Aquifer



Laramie-Fox Hills Aquifer



Source: CDM 2006b



Colorado Water Conservation Board



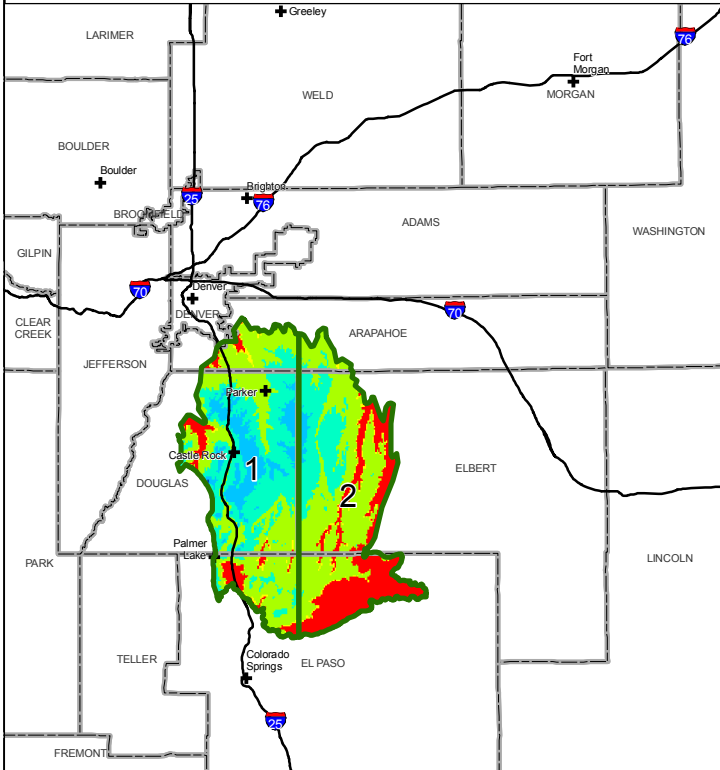
Prepared by: **CDM**

Figure 24

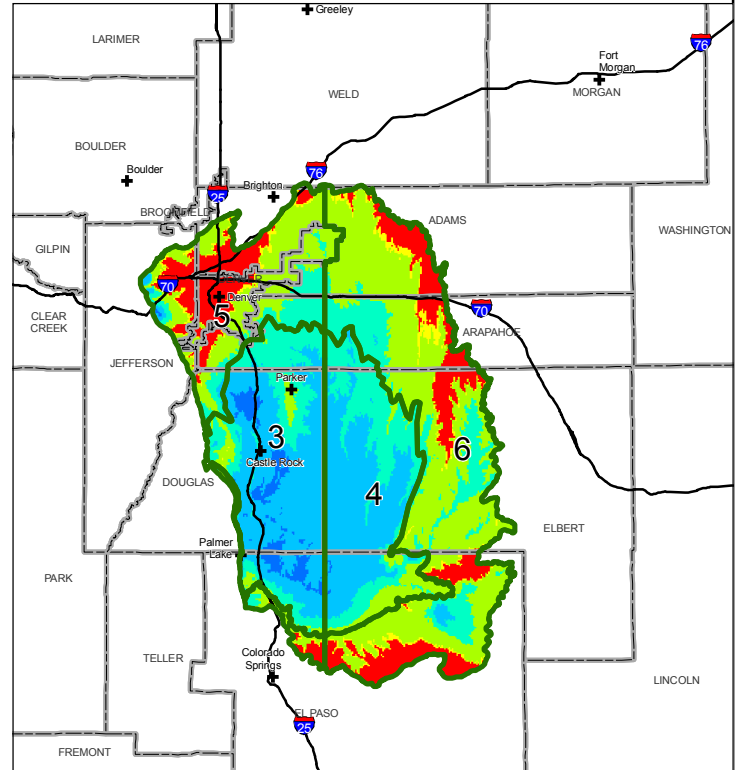
SB06-193 Underground Water Storage Study

Denver Basin Bedrock Aquifer Depth to Potentiometric Surface

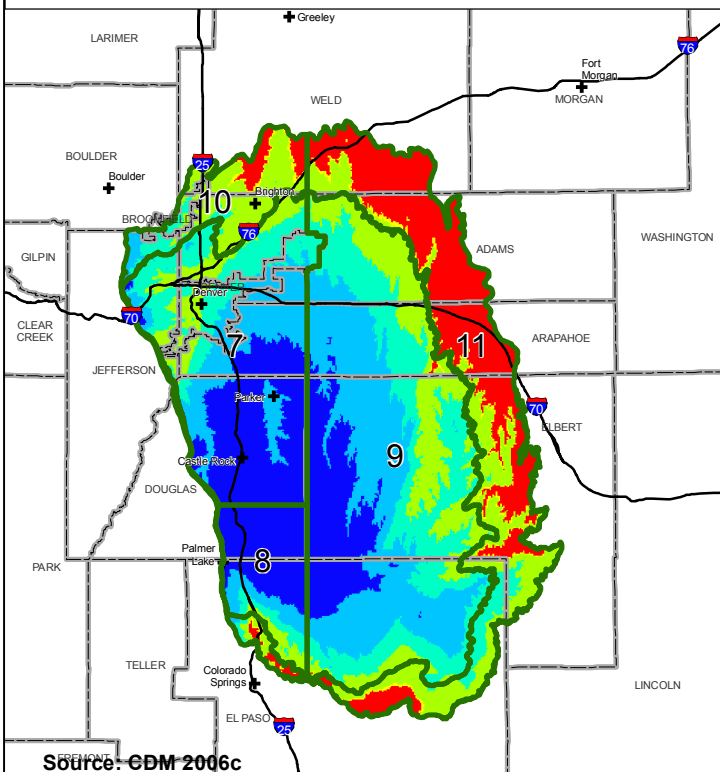
Dawson Aquifer



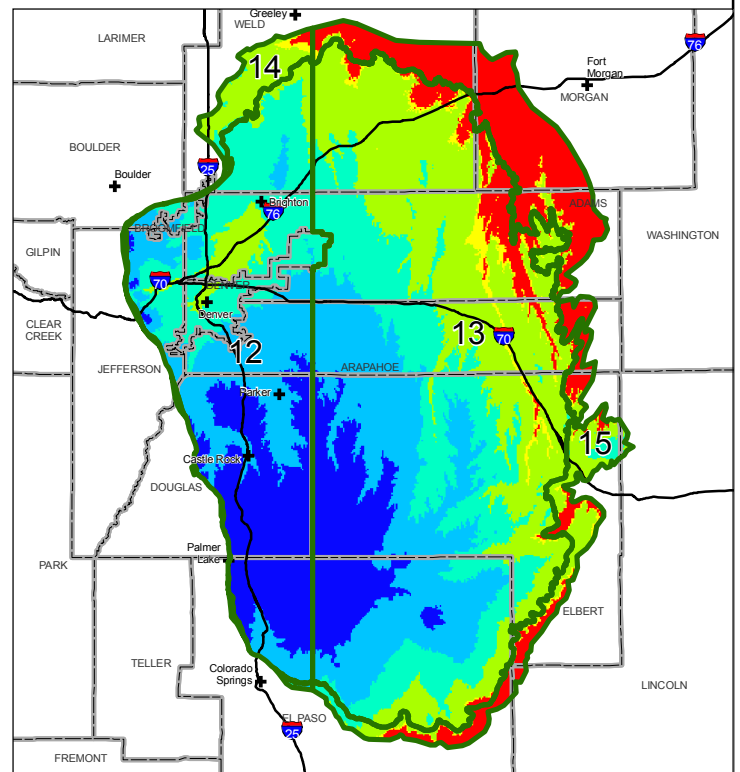
Denver Aquifer



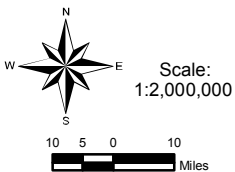
Arapahoe Aquifer



Laramie-Fox Hills Aquifer



Source: CDM 2006c



+	City	Depth to Water (ft)	250 - 500
—	Highway	0 - 10	500 - 1,000
□	County	10 - 30	> 1,000
□	Subregion	30 - 250	

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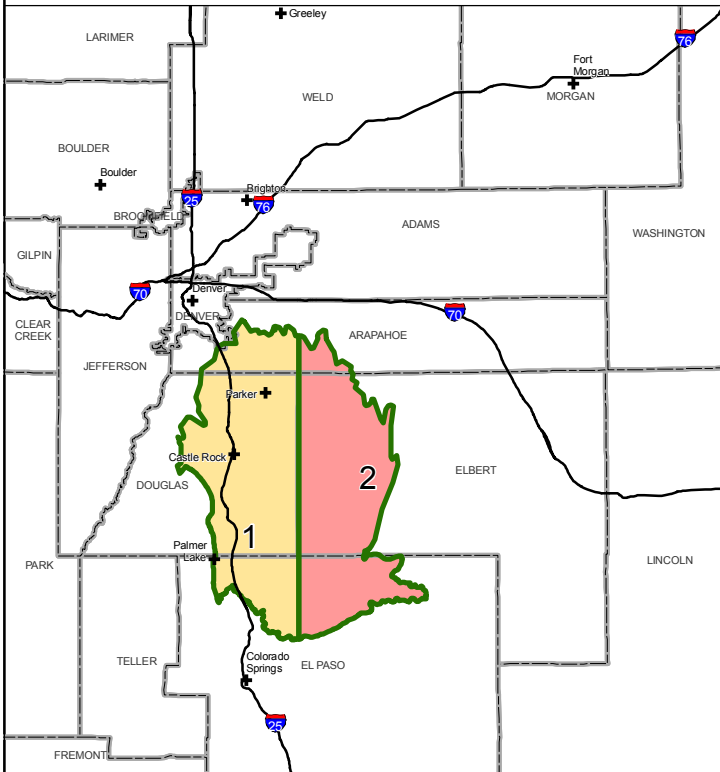
Prepared by: CDM

Figure 25

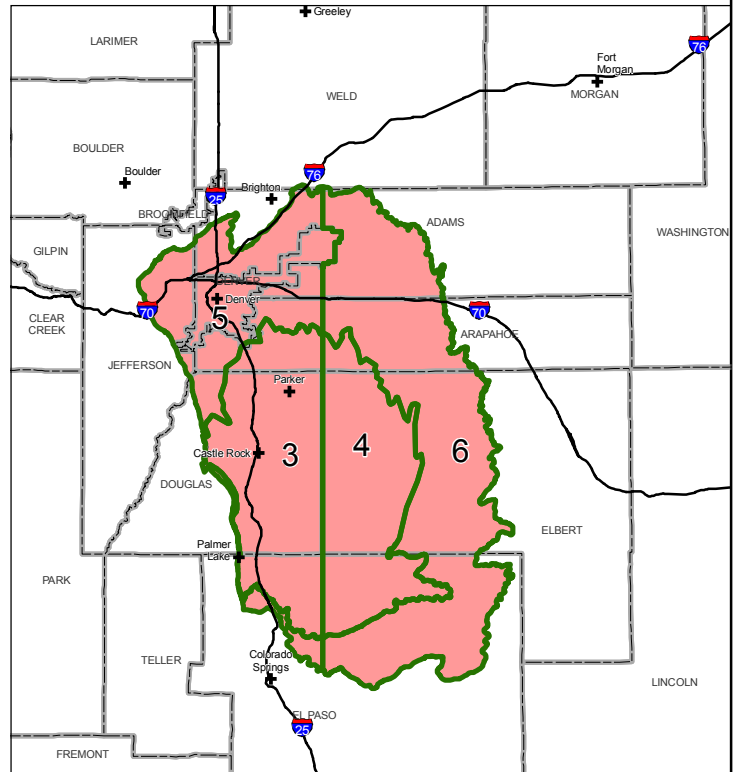
SB06-193 Underground Water Storage Study

Denver Basin Bedrock Aquifer Available Storage Capacity

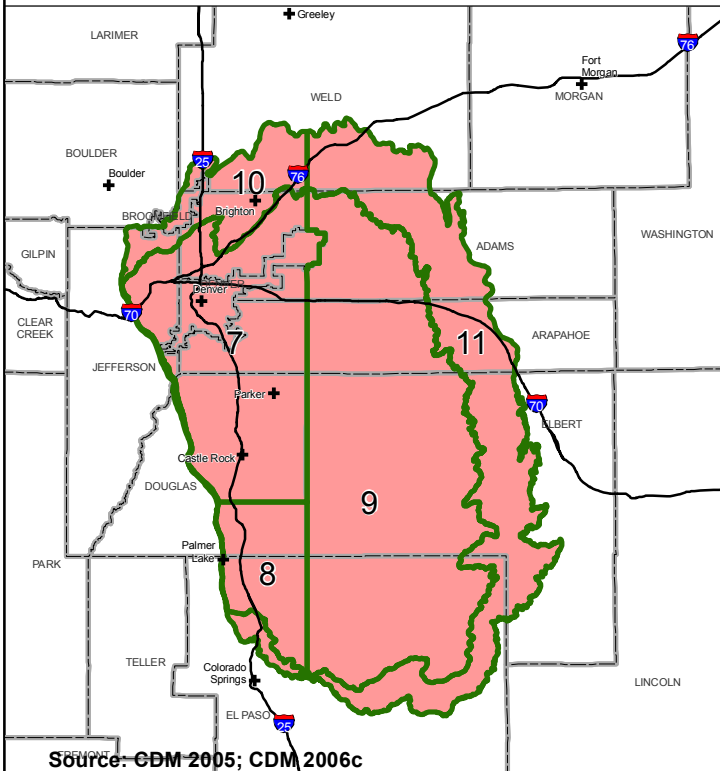
Dawson Aquifer



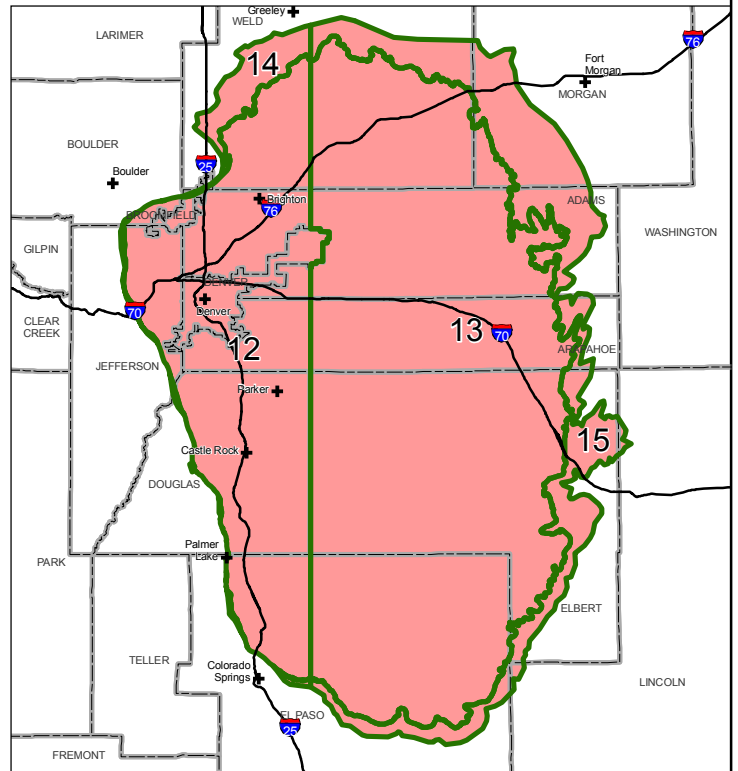
Denver Aquifer



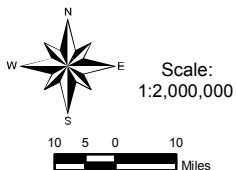
Arapahoe Aquifer



Laramie-Fox Hills Aquifer



Source: CDM 2005; CDM 2006c



- + City
 - ~ Highway
 - County
 - 1 Subregion
- | Ac-ft/Ac | Color |
|----------|-------------|
| 0 - 2 | Red |
| 2 - 4 | Yellow |
| 4 - 6 | Light Green |
| 6 - 8 | Light Blue |
| >8 | Dark Blue |

Colorado Water Conservation Board



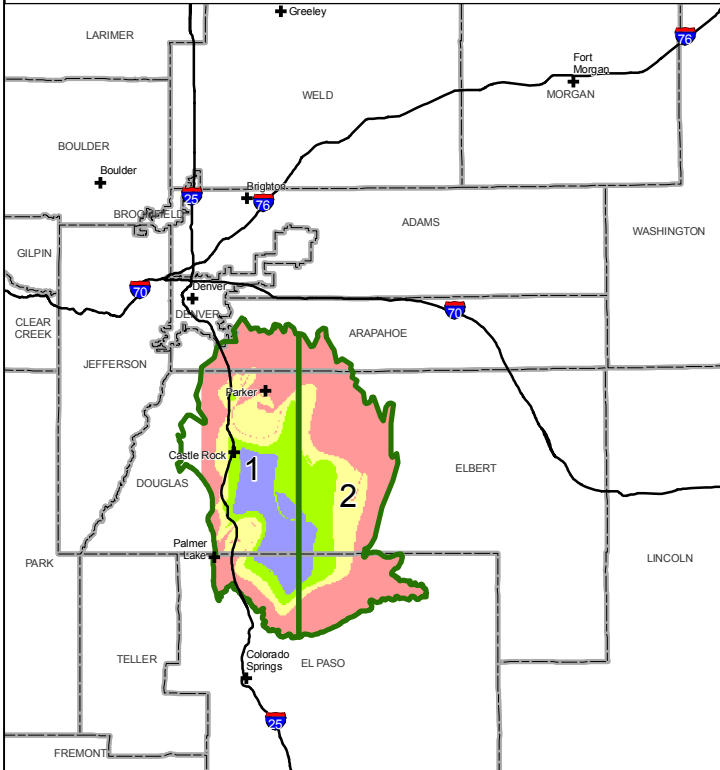
Prepared by: CDM

Figure 26

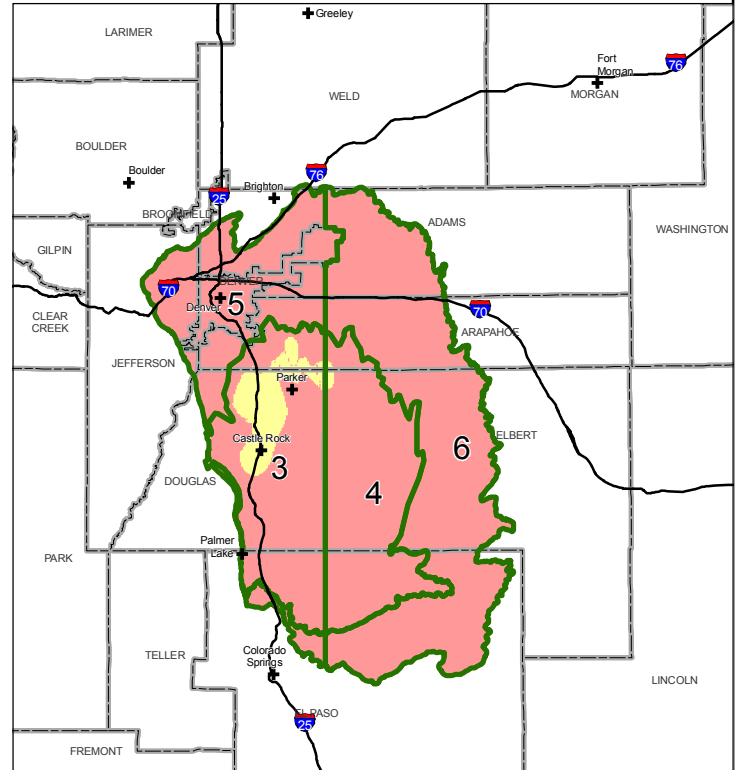
SB06-193 Underground Water Storage Study

Denver Basin Bedrock Aquifer Transmissivity

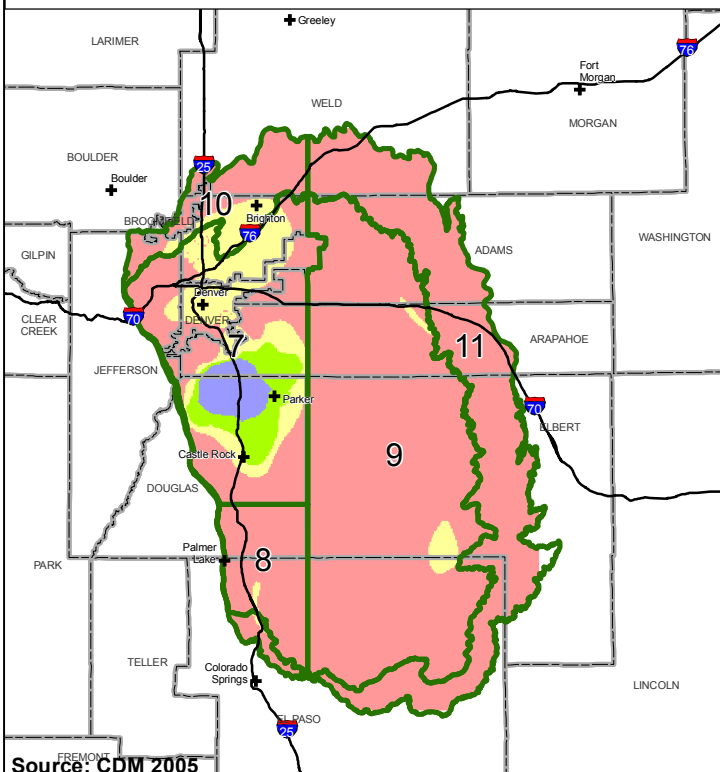
Dawson Aquifer



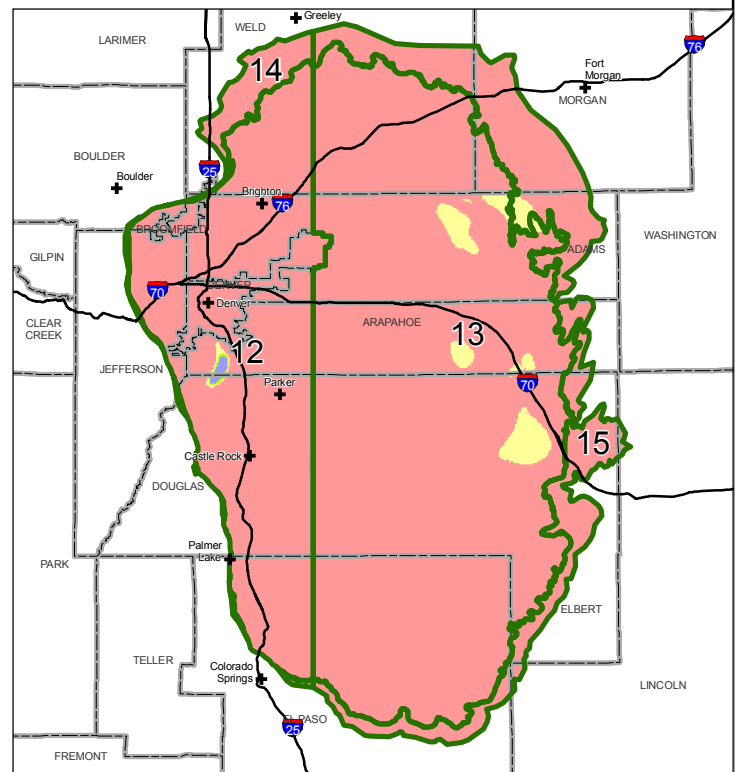
Denver Aquifer



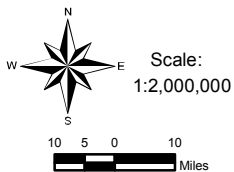
Arapahoe Aquifer



Laramie-Fox Hills Aquifer



Source: CDM 2005



- City
- Highway
- County
- Subregion

Transmissivity (ft²/day)

- 0 - 300
- 301 - 600
- 601 - 900
- > 900

Colorado Water Conservation Board



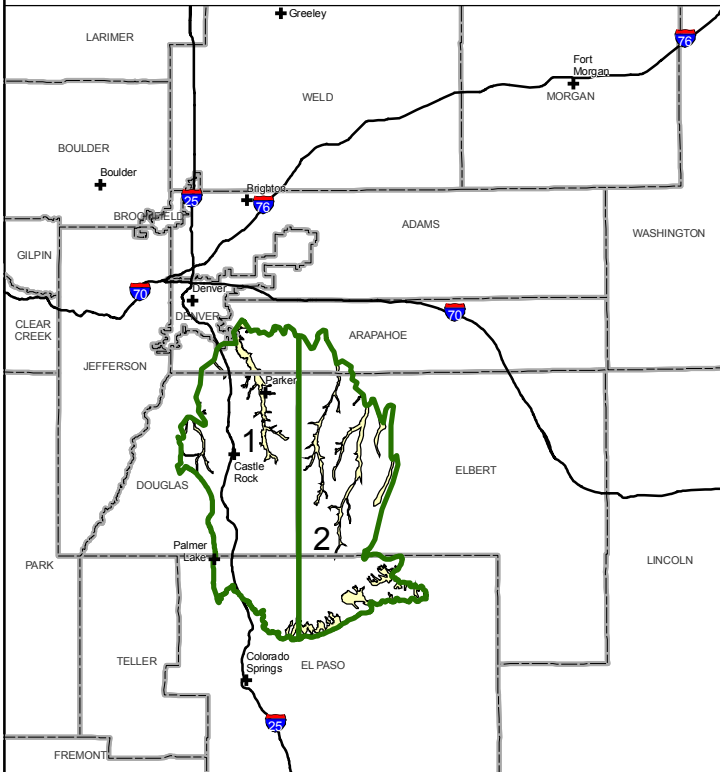
Prepared by: **CDM**

Figure 27

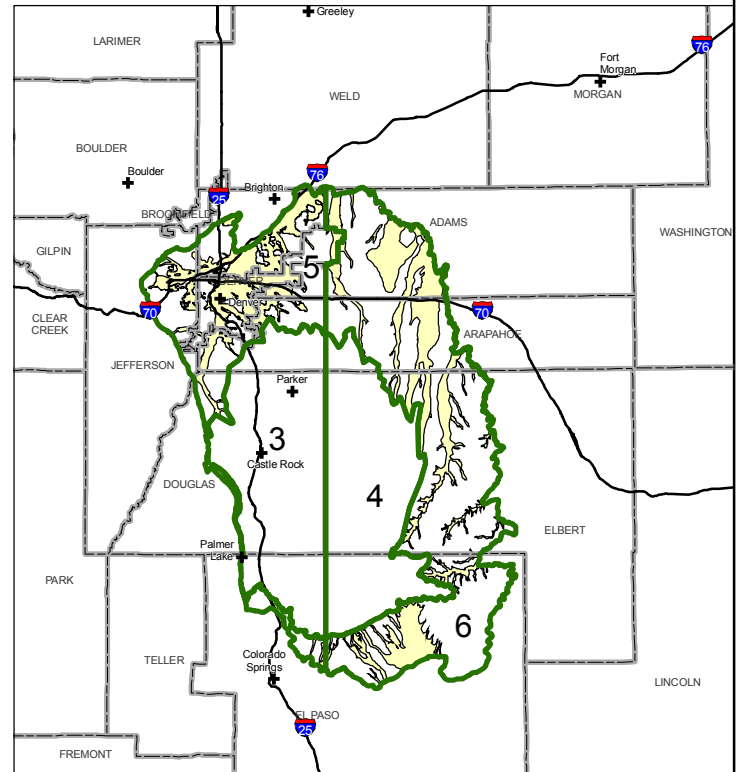
SB06-193 Underground Water Storage Study

Denver Basin Bedrock Aquifer Proximity to Alluvial Aquifers

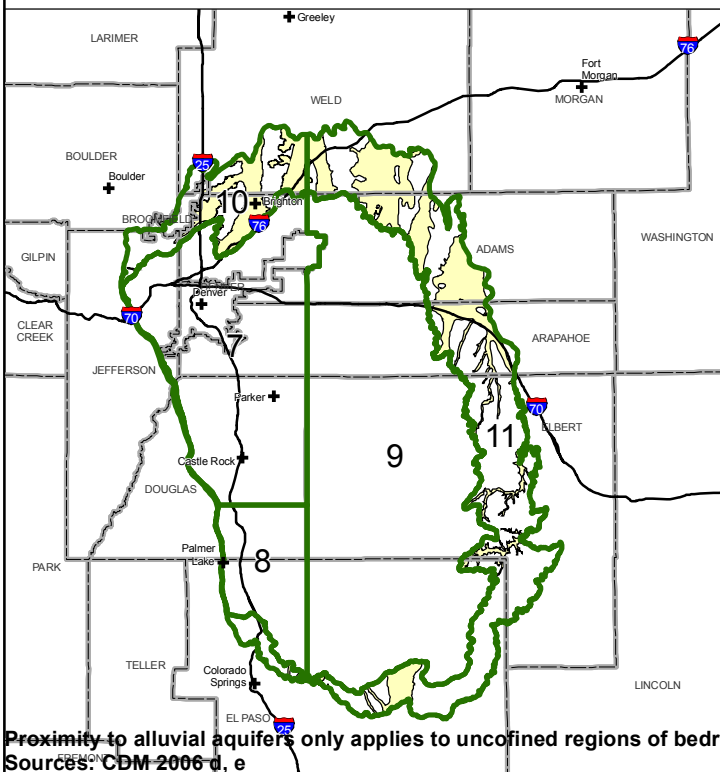
Dawson Aquifer



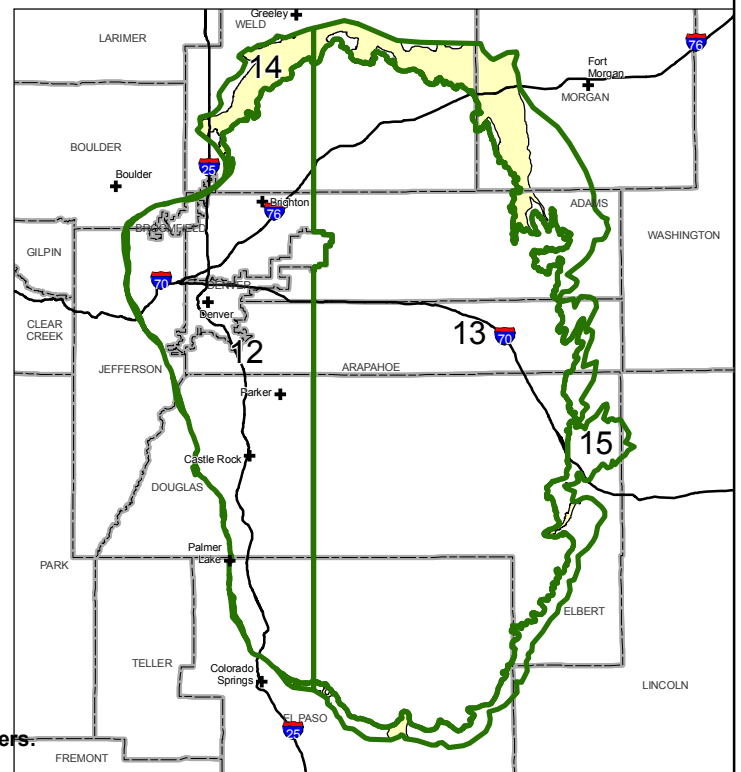
Denver Aquifer



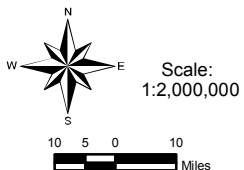
Arapahoe Aquifer



Laramie-Fox Hills Aquifer



Proximity to alluvial aquifers only applies to unconfined regions of bedrock aquifers.
Sources: CDM 2006 d, e



- City
- Highway
- County
- Subregion
- Alluvial extent

**Colorado Water
Conservation Board**

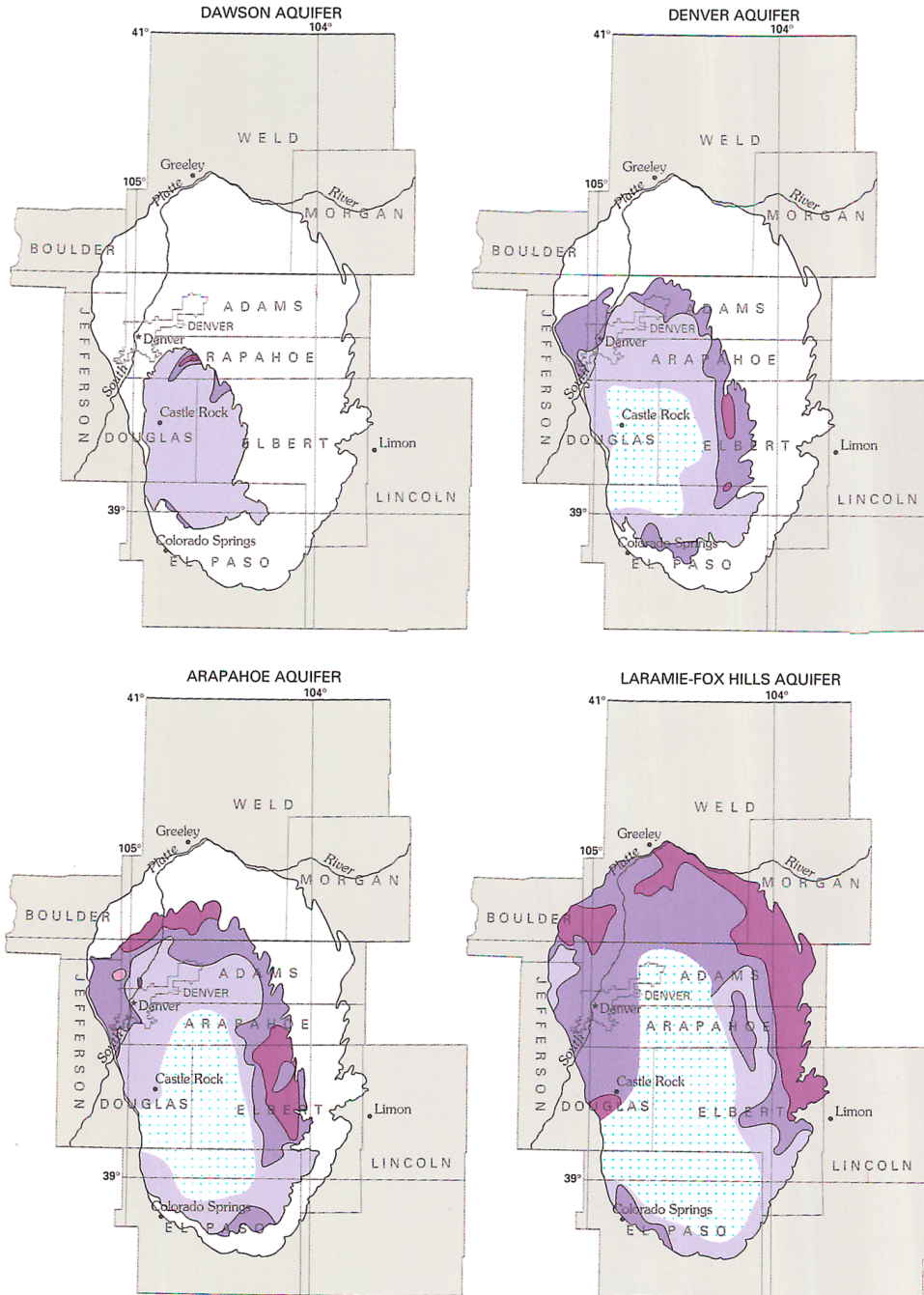


Prepared by: **CDM**

Figure 28

SB06-193 Underground Water Storage Study

Denver Basin Bedrock Aquifer TDS Values



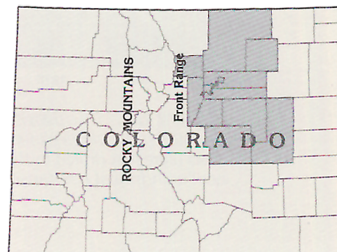
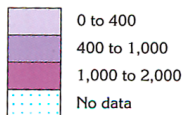
Base modified from U.S. Geological Survey, digital data, 1:2,000,000, 1972

Modified from Robson and others, 1981a, 1981b; Robson, Romero, and others, 1981; and Robson, Wacinski, and others, 1981

SCALE 1:2,500,000
 0 25 MILES
 0 25 KILOMETERS

EXPLANATION

Dissolved-solids concentration, in milligrams per liter



Source: Robson and Banta 1995



Colorado Water Conservation Board



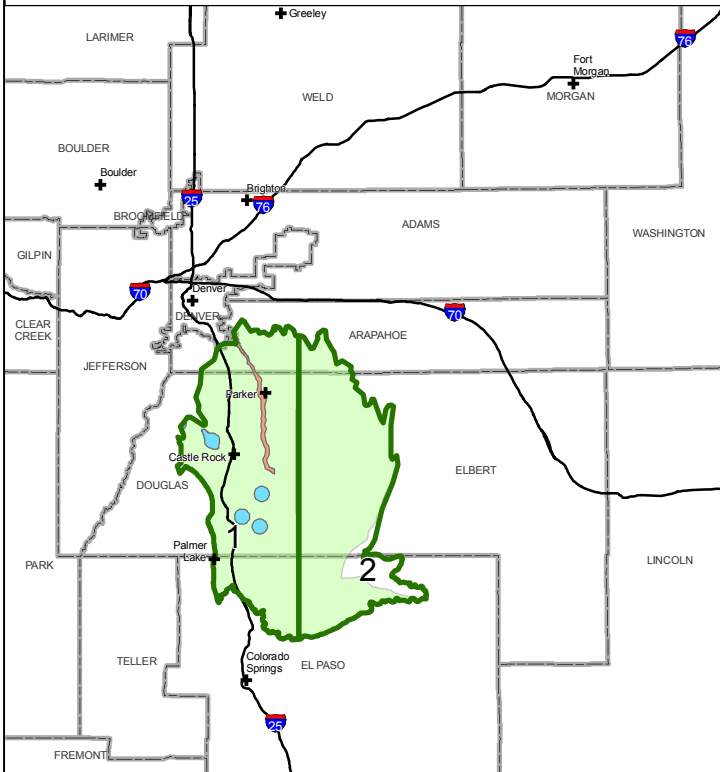
Prepared by: **CDM**

Figure 29

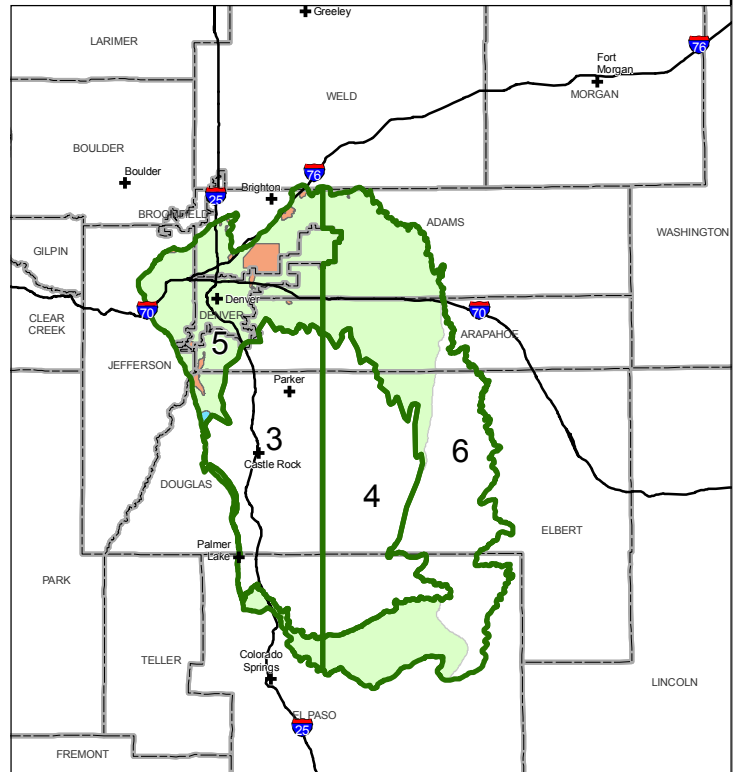
SB06-193 Underground Water Storage Study

Denver Basin Bedrock Aquifer Potential Habitat Concerns

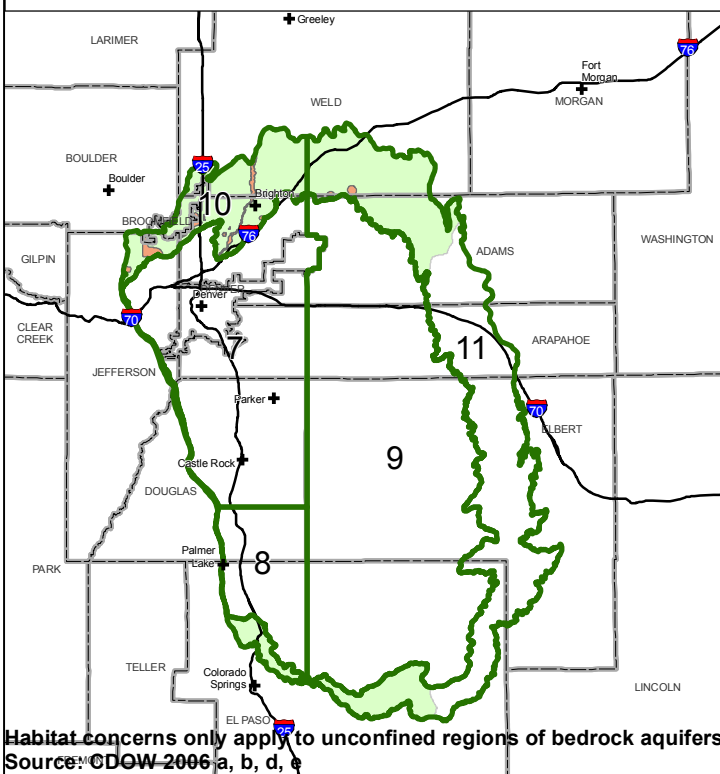
Dawson Aquifer



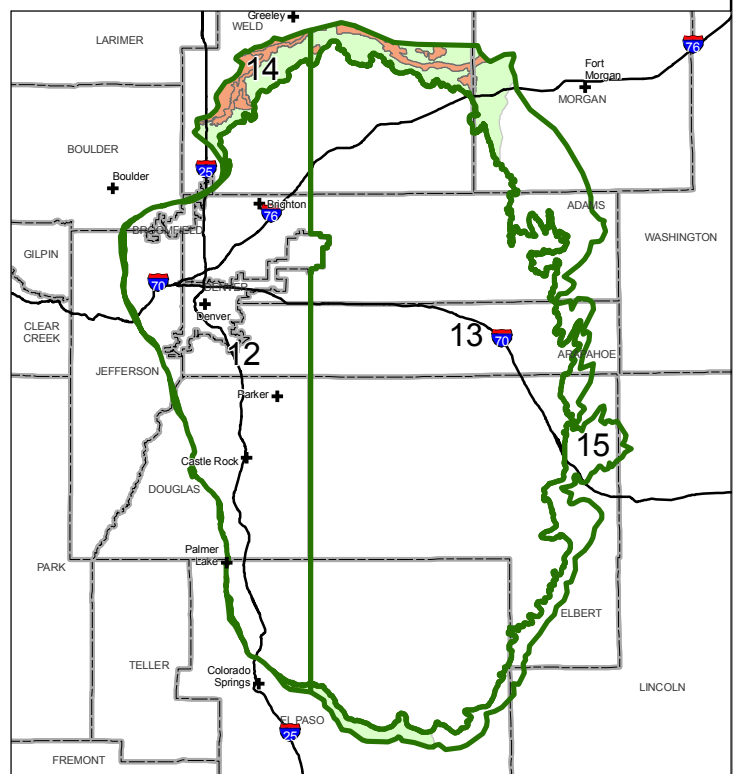
Denver Aquifer



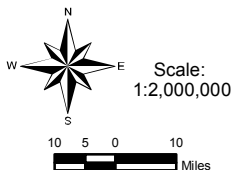
Arapahoe Aquifer



Laramie-Fox Hills Aquifer



Habitat concerns only apply to unconfined regions of bedrock aquifers.
Source: CDOW 2006 a, b, d, e



- + City
- Highway
- County
- Subregion
- Bald Eagle Range
- Plains Sharp-Tailed Grouse Range
- Preble's Meadow Jumping Mouse Range

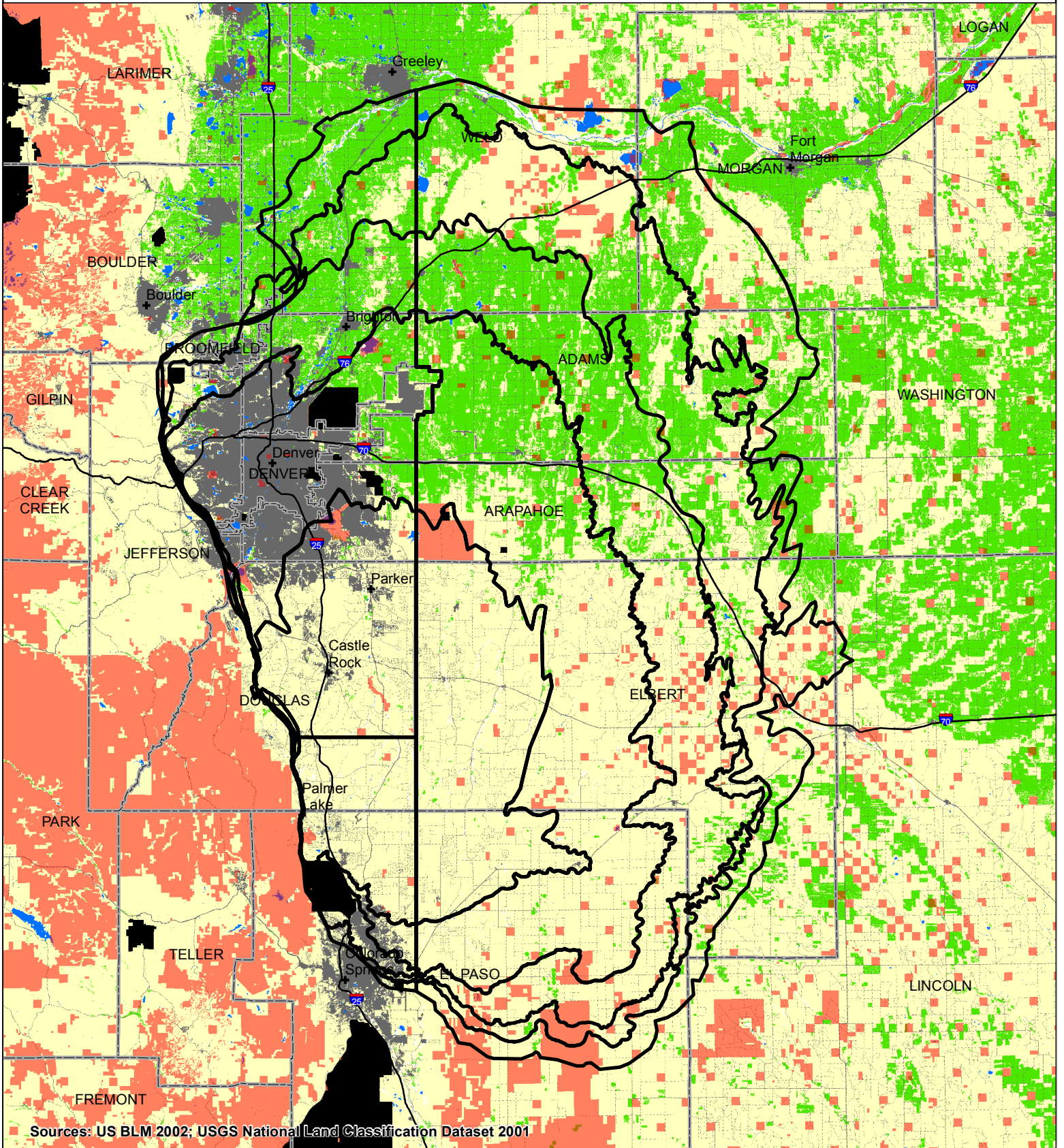
Colorado Water Conservation Board



Prepared by: CDM

Figure 30

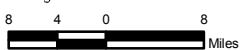
Denver Basin Bedrock Aquifer Land Use and Ownership



Sources: US BLM 2002; USGS National Land Classification Dataset 2001



Scale:
1:1,000,000



- + City
- Highway
- County
- 1 Subregion
- Potentially Inaccessible Public Lands
- Publicly Accessible Lands

- Water
- Urban
- Native/Rangeland
- Agricultural

Colorado Water
Conservation Board

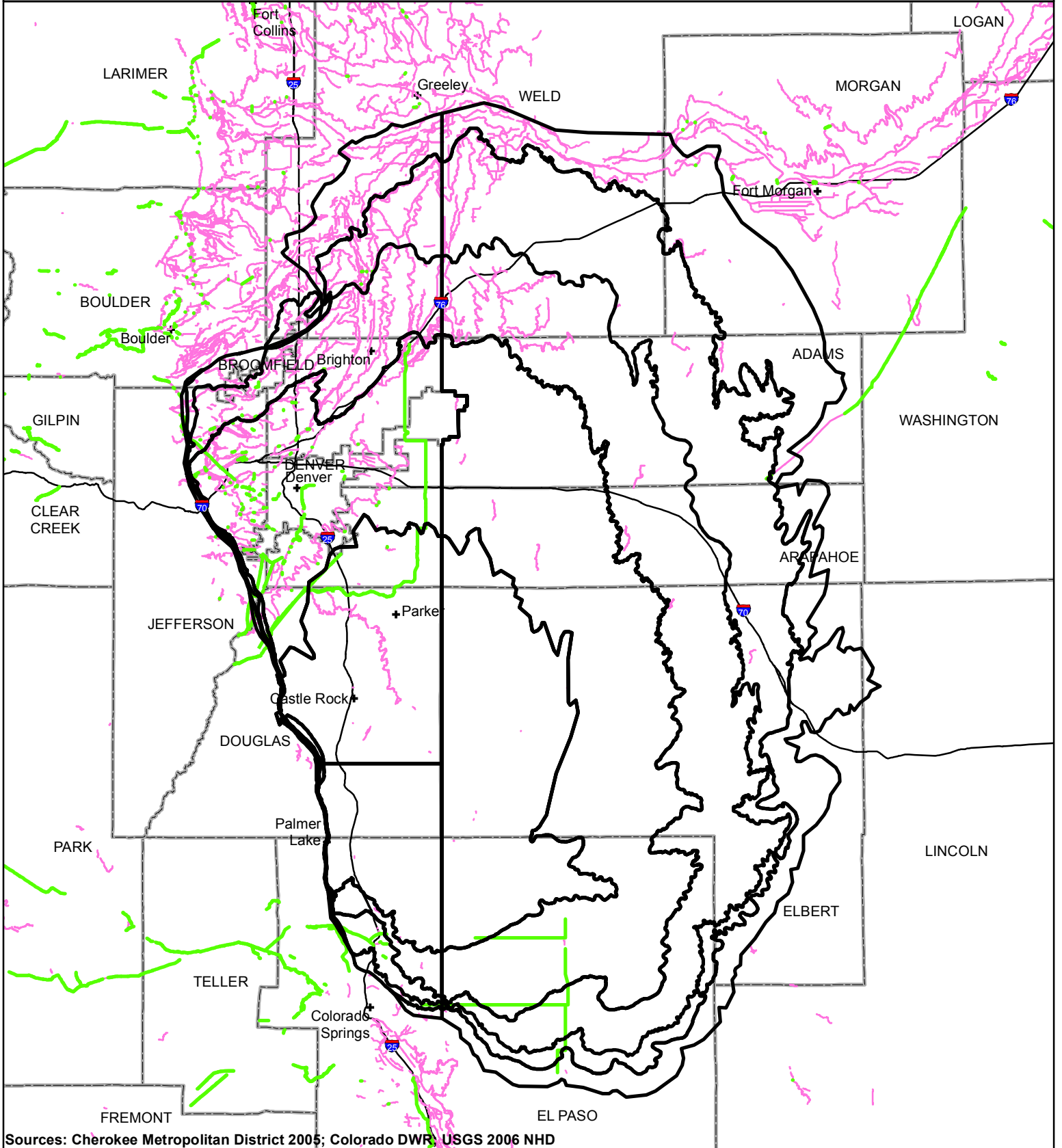


Prepared by: CDM

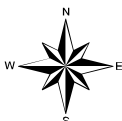
Figure 31

SB06-193 Underground Water Storage Study

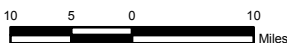
Denver Basin Bedrock Aquifer Existing Infrastructure



Sources: Cherokee Metropolitan District 2005; Colorado DWR; USGS 2006 NHD



Scale:
1:1,000,000



- City
- Highway
- County
- Subregion
- Canals and Ditches
- Pipelines and Tunnels

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Conservation Board**

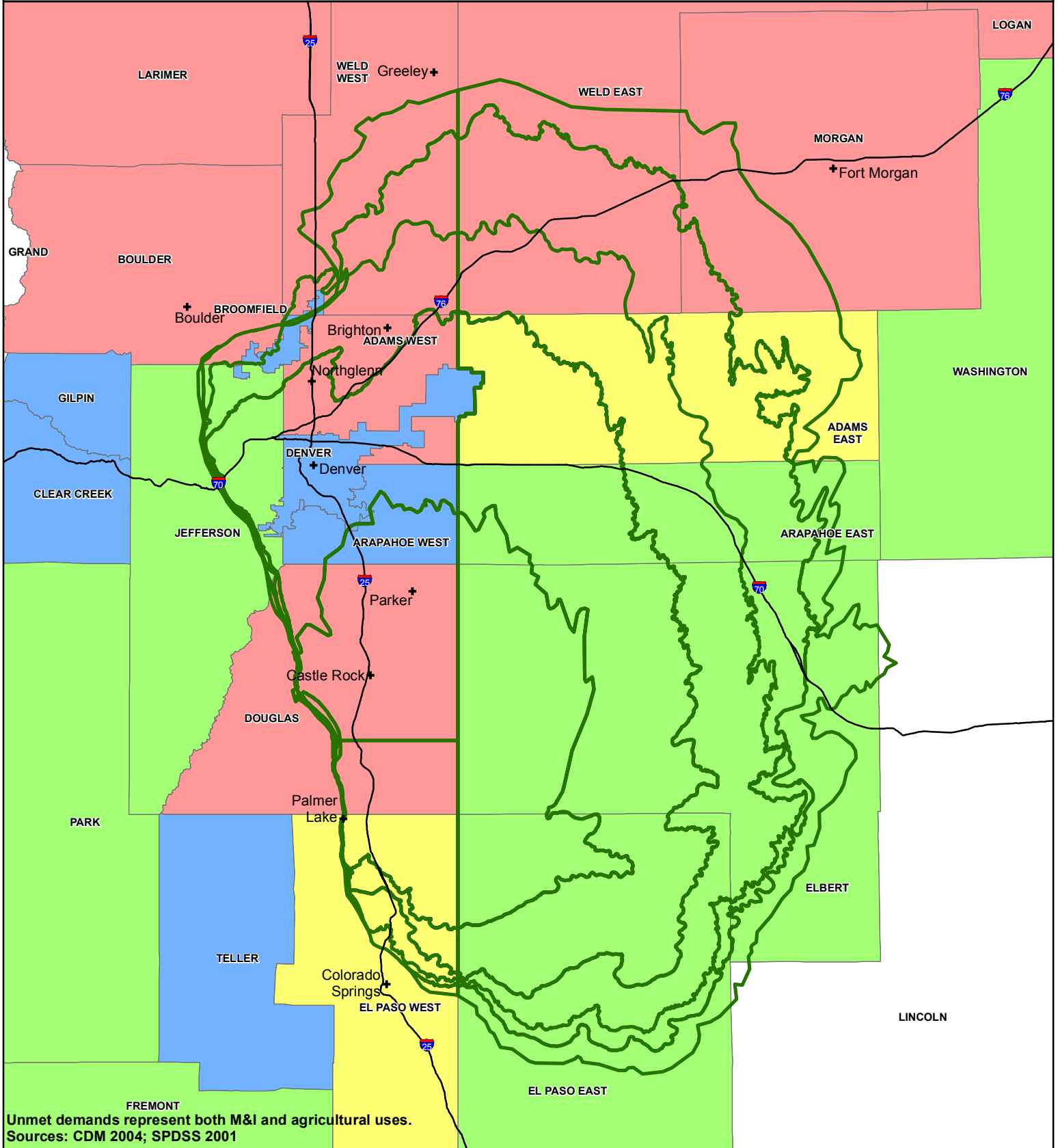


Prepared by: **CDM**

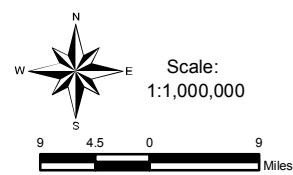
Figure 32

SB06-193 Underground Water Storage Study

Denver Basin Bedrock Aquifer Projected Unmet Demand in 2030



Unmet demands represent both M&I and agricultural uses.
Sources: CDM 2004; SPDSS 2001



- + City
 - Highway
 - Subregion
- Projected 2030 Unmet Demands by County (ac-ft/yr)
- No data available
 - 1 - 1,000
 - 1,000 - 5,000
 - 5,000 - 10,000
 - > 10,000

Colorado Water Conservation Board



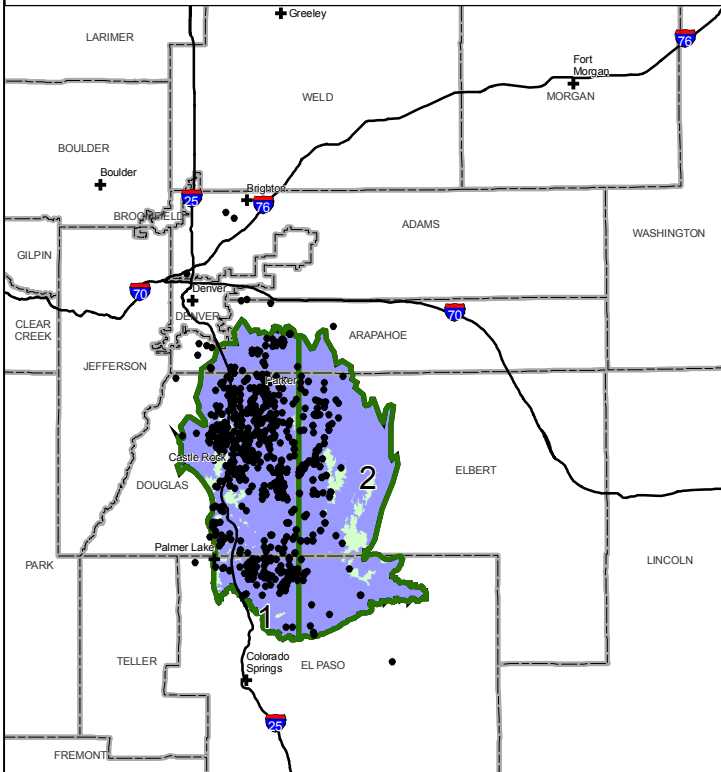
Prepared by: CDM

Figure 33

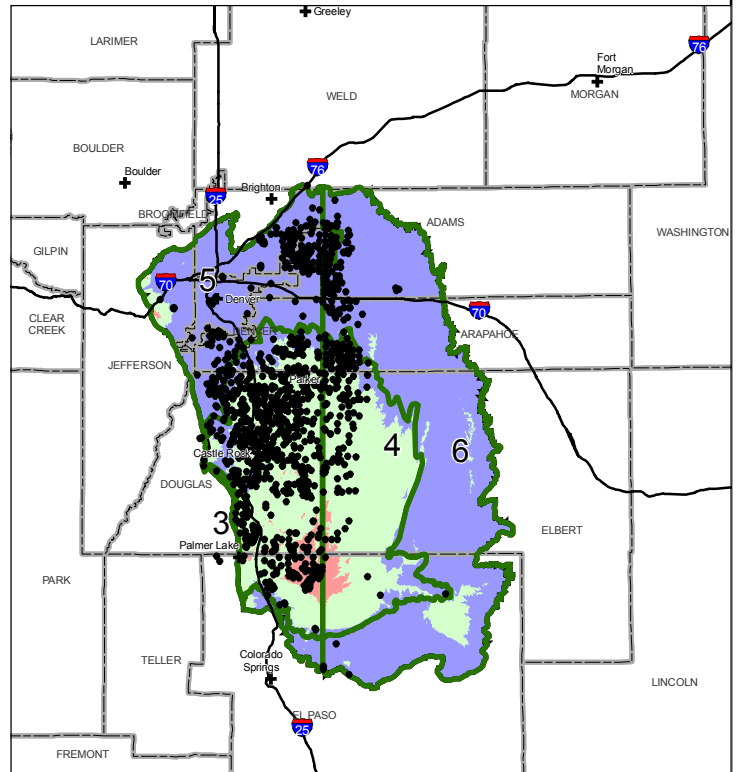
SB06-193 Underground Water Storage Study

Denver Basin Bedrock Aquifer Depth to Aquifer Top and High Capacity Wells

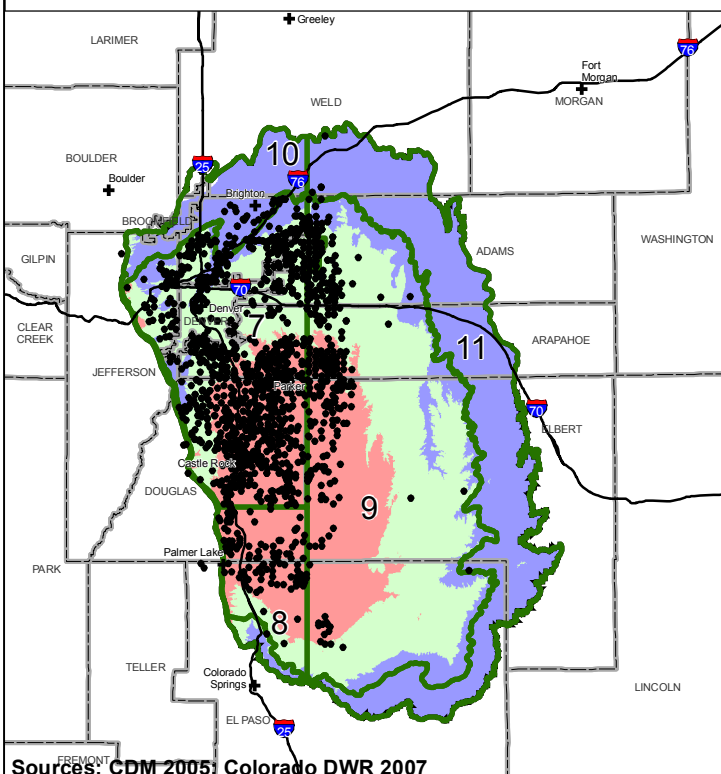
Dawson Aquifer



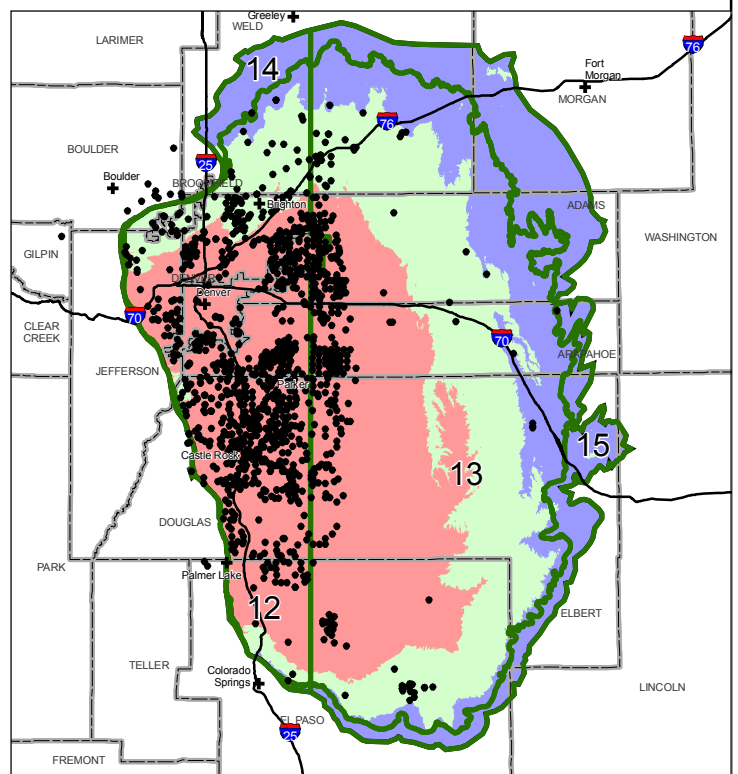
Denver Aquifer



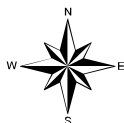
Arapahoe Aquifer



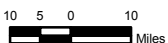
Laramie-Fox Hills Aquifer



Sources: CDM 2005; Colorado DWR 2007



Scale:
1:2,000,000



- City
- Highway
- County
- Subregion

- Wells > 50 gpm
- Depth to Aquifer Top (feet)**
- 0 - 250
- 250 - 1,000
- > 1,000

Colorado Water
Conservation Board



Prepared by: **CDM**

Figure 34