

Rueter-Hess Reservoir:

Its Role for Parker Water and the Ancillary
Benefits to Watershed Water Quality

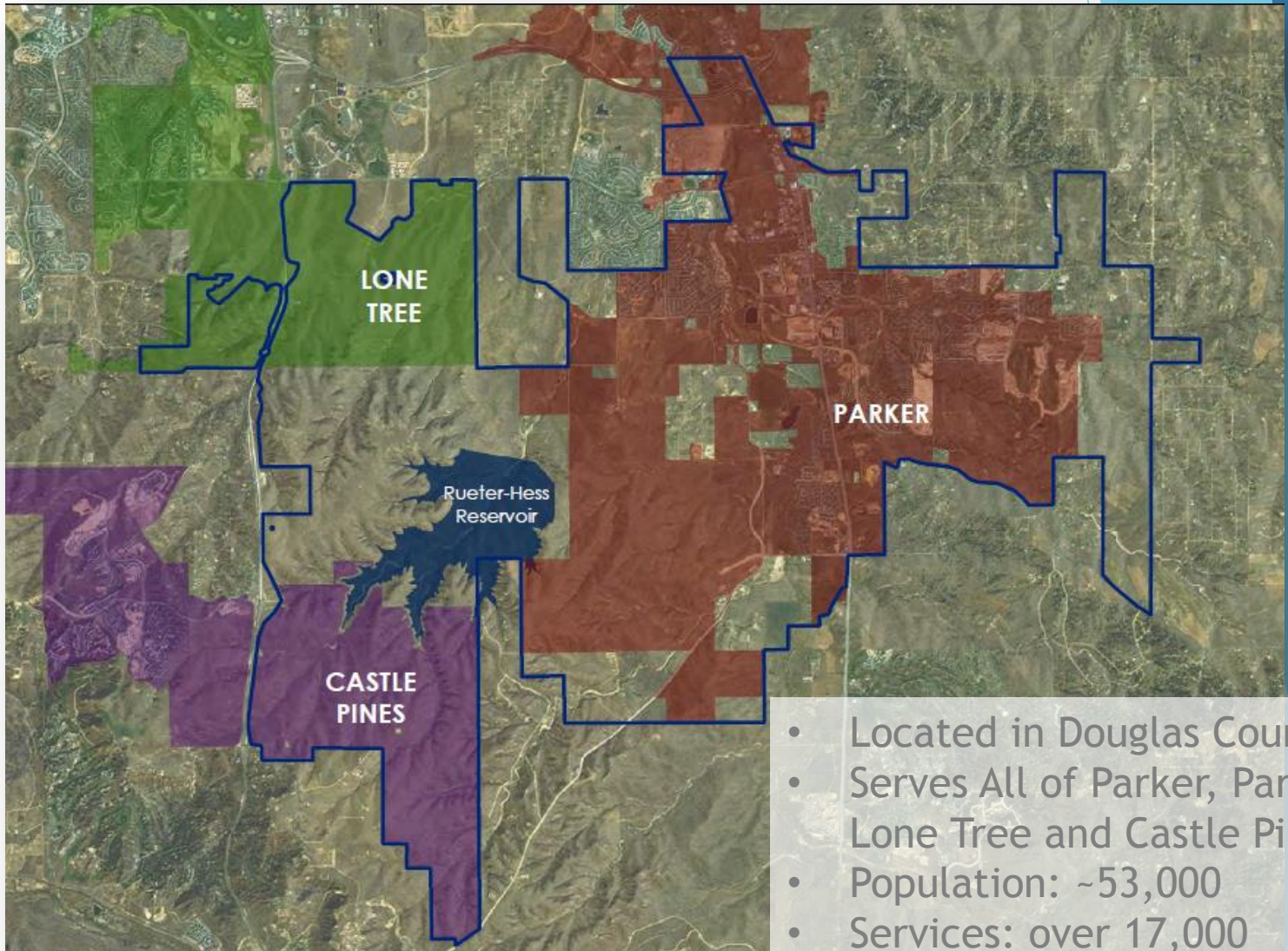


Agenda...

- The District
- The Reservoir
 - Its History
 - Its Purpose
- The Basin
- The Benefits
- The Next Steps



The District...



- Located in Douglas County
- Serves All of Parker, Parts of Lone Tree and Castle Pines
- Population: ~53,000
- Services: over 17,000
- Area: 43 sq. miles

The Reservoir...



Rueter-Hess Today

- 23,500 acre/feet
- 98 Feet Deep
- 500 Surface Acres

Rueter-Hess When Full

- 75,000 acre/feet
- 1,200 acres (1.5 times larger than Cherry Creek)
- 164 Feet Deep
- Active Storage Reservoir



The Reservoir... its History

- 1996: Court decree entered for Rueter-Hess Reservoir
- 1996: First geotechnical studies at Rueter-Hess Reservoir
- 1997: First environmental studies at Rueter-Hess Reservoir Site
- 2000: U.S. Army Corps of Engineers EIS process begins
- 2002: Final design
- 2004: Completion of EIS process and approval for construction
- 2004: Start of Construction
- 2005: Request for enlargement of original project
- 2006: Completion of Cherry Creek Diversion and Pump Station
- 2006: Completion of construction on Phase 1 of Rueter-Hess Dam
- 2008: Approval of Rueter-Hess enlargement (Phase 2)
- 2012: Completion of and begin filling of Rueter-Hess Reservoir
- 2014: Entering into a future of recreation
- 2017-2019: Recreational programs & events are held at the reservoir



The Reservoir... its Purpose

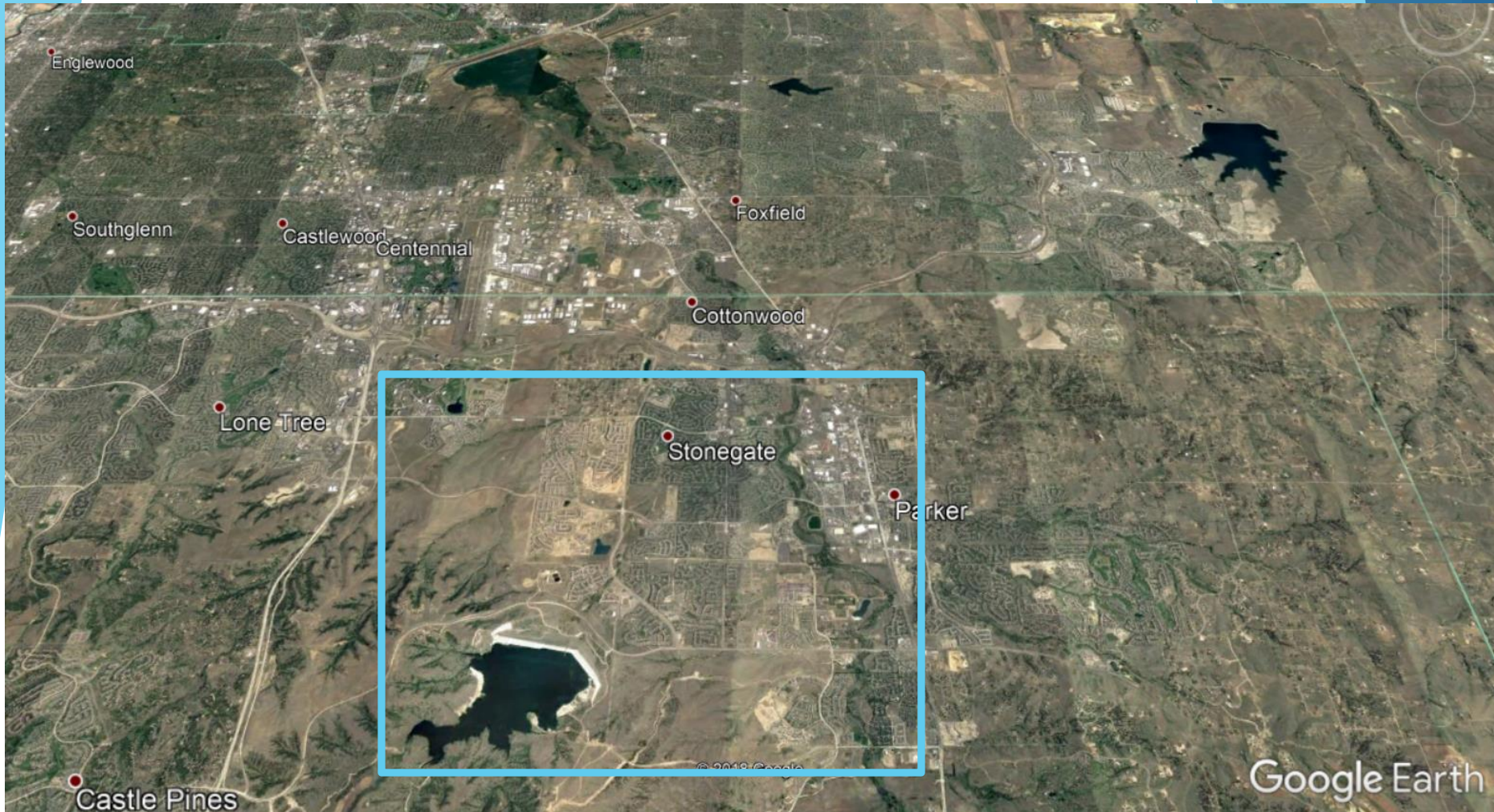


- Stores raw water supplies for Storage Partners
 - PWSD
 - Town of Castle Rock
 - Stonegate Village
 - Castle Pines North
- Serves as a regional water management facility

- Meet peak water demands during summer months
- Enhancing water management in the region
- Reduce reliance on non-renewable groundwater



The Basin...



Google Earth

The Benefits...

- Phosphorus Removal

Data have shown that the reservoir has removed almost 9,000 lbs/year of P from Cherry Creek (through diversion of water from CC and capture of Newlin Gulch flows).



Inflow / Outflow	Source	Avg. Flow (AF/yr)	TP (mg/L)	Loading (lbs/year)
Inflow	Cherry Creek Pump Station (CCPS) ¹ : Cherry Creek, AWT, and alluvial water	See note	See note	8,723
Inflow	Newlin Gulch	1,251	0.405	1,378
Outflow	Storm Event	2,000	0.180	980
Outflow	Seepage	211	0.180	104
Outflow	Out-of-Priority Release	425	0.180	208
Total TP Inflow (lbs/year)				
Total TP Outflow (lbs/year)				10,101
Total TP Retained/Removed (lbs/year)				1,292
				8,809

The Benefits...

- Recreation

Recreational uses within the watershed include public education on watershed ecosystem services and the importance of watershed protection. Fostering respect and affinity for the watershed is a primary long-term benefit.



The Benefits...

- Bees

PWSD has partnered with local beekeepers to install and maintain beehives at Rueter-Hess. Inhabiting bees at our Reservoir is just one of the Encouraging Environmental Excellence (E3) 2019 initiatives. Rueter-Hess not only offers a serene, unspoiled landscape, but also a diverse environment, perfect for bees' inhabitation.





Question

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