City of Aurora's Forest Health Initiatives

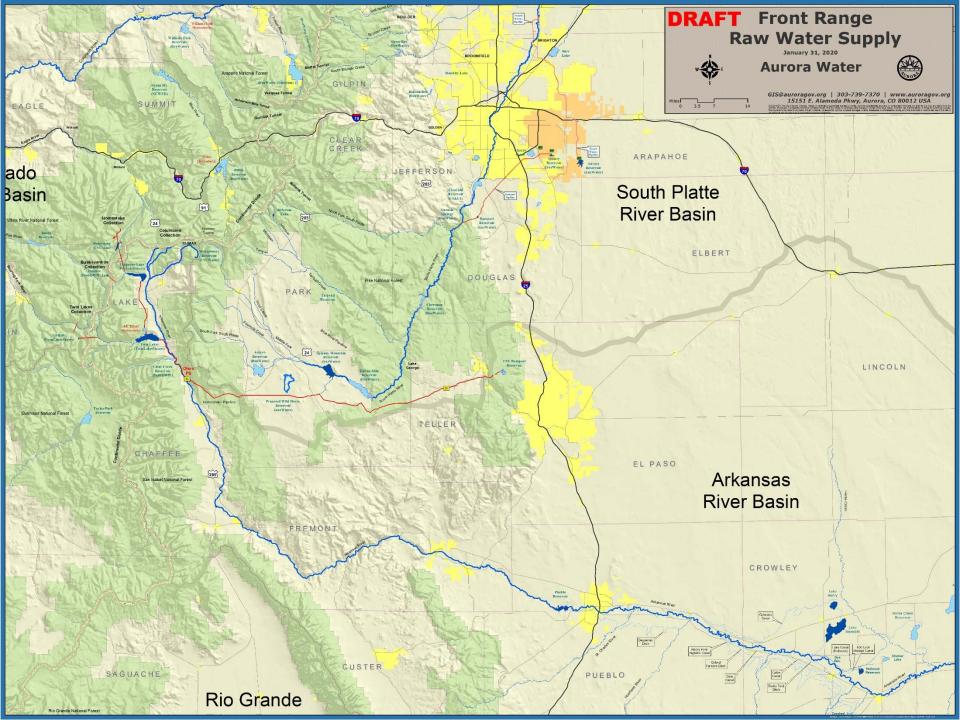
Rocky Mountain Land Use Institute
Friday March 6, 2020
Presented by
Michael F. McHugh, P.G.
Senior Water Resources Project Manager



Agenda

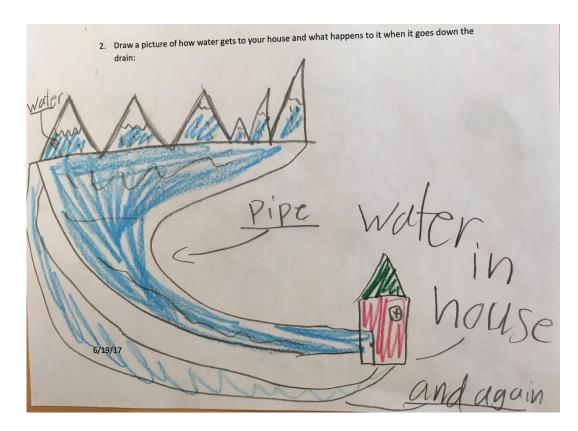






About Aurora

- 3rd largest city in Colorado
 - Population 381,000
 - 160.53 mi²
- 54th largest city in US
- Water department is responsible for 5-types of water
 - Raw water
 - Treated water
 - Waste water
 - Reuse water
 - Storm water
- Water supply
 - Colorado River, Arkansas River and South Platte River basins
 - Water can be delivered from up to 180 miles away
 - 12-Water storage reservoir in current system (156,000 AF)
 - 3-Water treatment plants
- Water conservation
 - 2015 Municipal water efficiency plan
 - Water-wise landscape rebate (Xeriscape)
 - Ultra-high-efficiency toilet rebates
 - Irrigation system efficiency rebates
 - Programs for low income residents
 - Water education
 - Landscape code changes
 - Tiered water rates
- Reuse
 - Sand Creek Water Reclamation facility 5MGD
 - 3 golf courses, 4 parks, City Hall and I-225 interchange
 - Prairie Waters Project
 - \$650M indirect potable reuse project
 - 10,000 AF annually
- Integrated Water Master Plan
 - Comprehensive plan updated every 5-years
 - Multi scenario / demand based plan
- Upcoming conversion to advanced metering infrastructure





Buffalo Creek Fire 1996

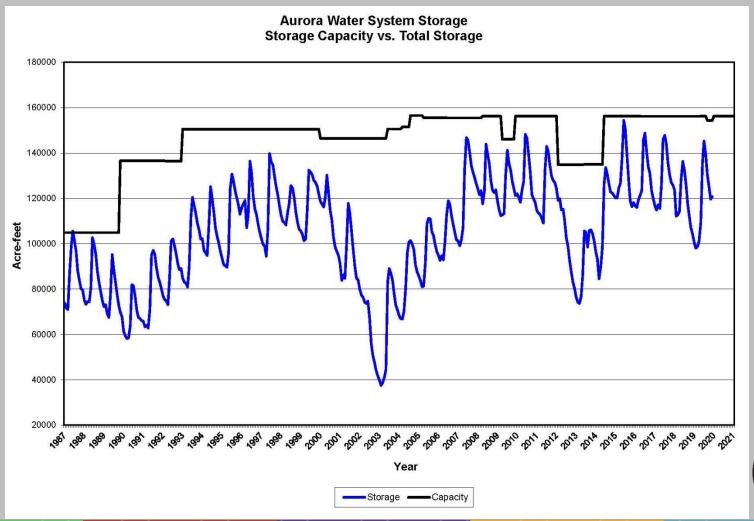








Reliability, Drought Resistance and Resilience





Mountain Pine Bark Beetle Epidemic









Denver Begins Forest to Faucets Program



The Pinchot Report deliveredttershedo Front Range Water Providers



Became clear that Aurora Water and other water providers needed to be involved!



Watershed Wildfire Workgroup Established

Major Fires Sweep Colorado

- Buffalo Creek 1996
- High Meadow 2000
- Hayman 2002
- Four Mile 2010
- High Park 2012
- Waldo Canyon 2012
- West Fork Complex 2012
- Black Forest 2013
- Spring Hill and 416 Fires 2018



Watershed Wildfire Protection Workgroup

- Worked for X years to develop GIS approach
- Creates overlays that help to prioritize watersheds and creates zones of concern
- Brad will talk more about the details



Front Range Roundtable

- Established as the Front Range Fuels Treatment Partnership
- At its Height—Membership tops 300
- Outreach and Education
- Community Protection
- Forest Restoration



Healthy Headwaters Leadership

- Established to share lessons-learned across the American West
- Brings diverse organizations together to discuss what works and why
- Beginning new expansion as part of the National Wildlife Federation
- Sarah will discuss this more!



What Can be Done—Trail Creek

- \$4 million Project –CUSP
 - Vail Associates
 - Aurora Water
 - National Forest Foundation
 - Coca Cola
 - Gates Family Foundation
 - Private Doners



Trail Creek Before





Trail Creek After





Trail Creek Before









Trail Creek Before





Trail Creek After





Trail Creek Before





Trail Creek After





What's Next



Meetings and Coordination with Stakeholders



Bring More Partners and Funding to the Table



Memorandum of Agreement with the USFS, CSFS, NRCS



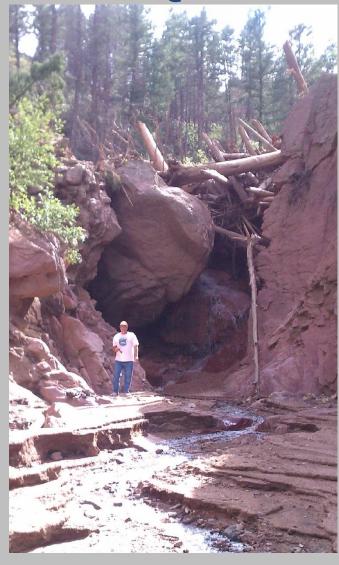
Development of Project components



Identification of processes required for to increase pace an scale



Questions at the End !!??





Camp Creek Debris Flow Geologist for scale

