

CASTLE PINES NORTH



METROPOLITAN DISTRICT

Securing Our Future Water Supply:
CPNMD's 12-Year Plan

FALL 2017

Why Renewable Water?

Securing our future, protecting our investments

Key Factors Driving This Conversation

- 2/3 of the water that originates here is promised to rights' holders outside the state (this is why it's expensive)
- Two Forks dam denied by EPA in 1990; communities forced to look at alternatives
- Douglas County witnessed unprecedented growth in 90s
- 2003 South Metro Water Supply Study highlighted drastic reductions in well water supply



The Problem:

Increasing demand and decreasing supply of non-renewable ground/well water

What We Know:

Well water from Denver Basin aquifers is being depleted

- CPNMD relies on 7 wells, some drilled as deep as 2,000 feet below the surface
- These wells do not get replenished
 - And groundwater is increasingly expensive because water must be extracted from layers of sandstone and shale
- Water levels in the aquifers drop 17 to 65 feet each year
- Our pumps have been lowered as far as they can go

What We Know:

The Denver Basin Aquifers Are A Shared Resource

- Over 330,000 people in Douglas County alone rely on water from the wells in the Denver Basin aquifers; usage continues to increase
- Douglas County population will continue to grow, which means water utilities throughout the region will pull water from wells at increasing rates
 - 47% increase from 2010 to 2030
 - 68% increase by 2050

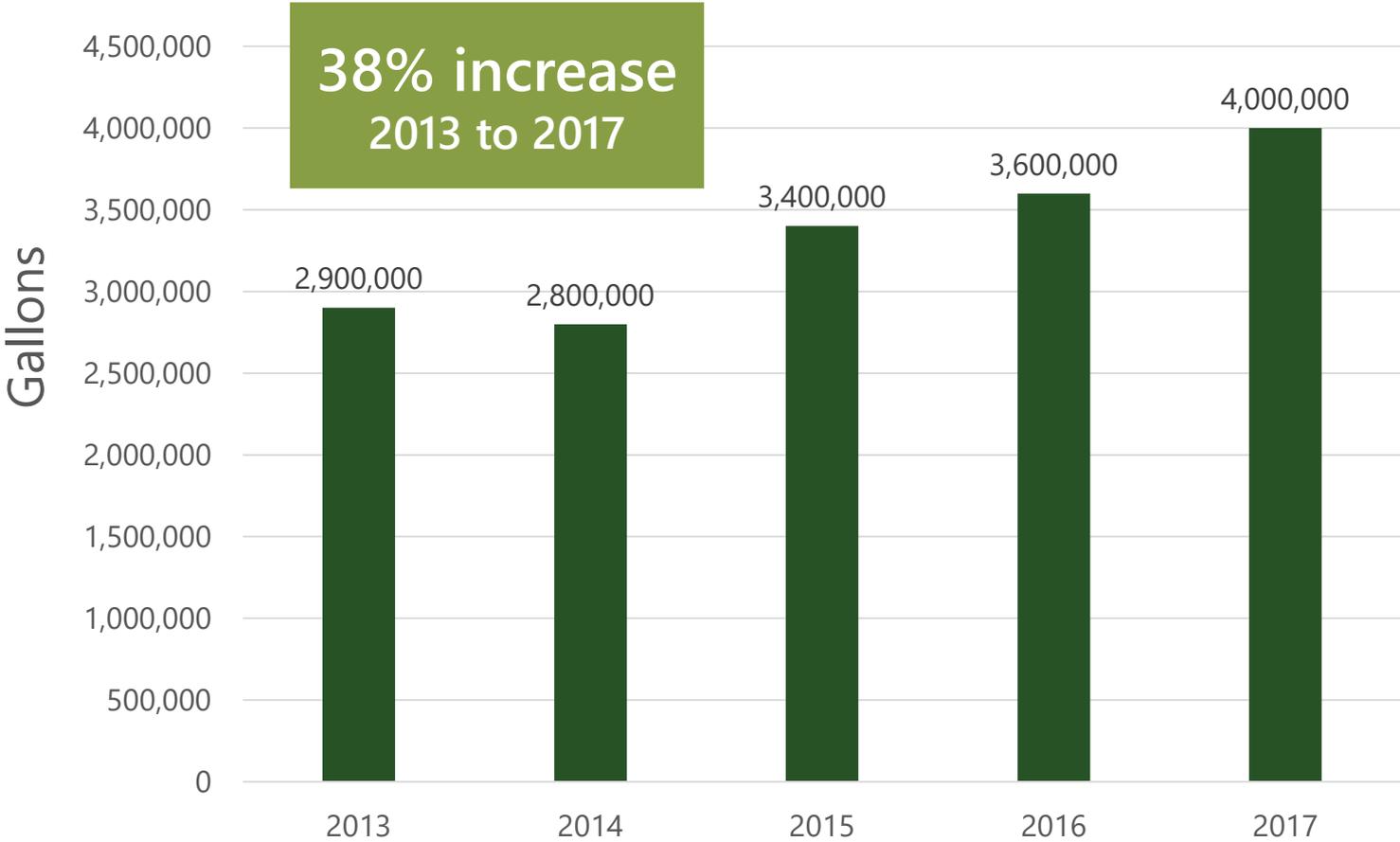
What We Know:

Despite conservation efforts, usage increases

- CPNMD continues its commitment to conservation
 - Conservation-based rate structure
 - Free 90-minute irrigation/sprinkler audits
 - Rebates for water-efficient nozzles, rain sensors, low-flow toilets and showerheads, sod replacement, etc.
 - Watering schedule (every 3 days during early morning and late evening)
 - Abundance of tips and resources on our website

Water Use in Castle Pines is Increasing

One Day Summer Peak for Castle Pines



The Solution:

Reduce dependency on ground/well water; reserve it for emergencies

What We've Accomplished:

Between 2003 and Today

- ✓ Purchased surface (renewable) water rights
 - East Plum Creek, Upper South Platte, Lower South Platte
- ✓ Purchased storage (requires entities to supply water)
 - Rueter-Hess Reservoir, Chatfield Reservoir (once complete)
- ✓ Delivering renewable water October – April
 - Made possible through partnership with Centennial Water & Sanitation District

12-Year Renewable Water Plan

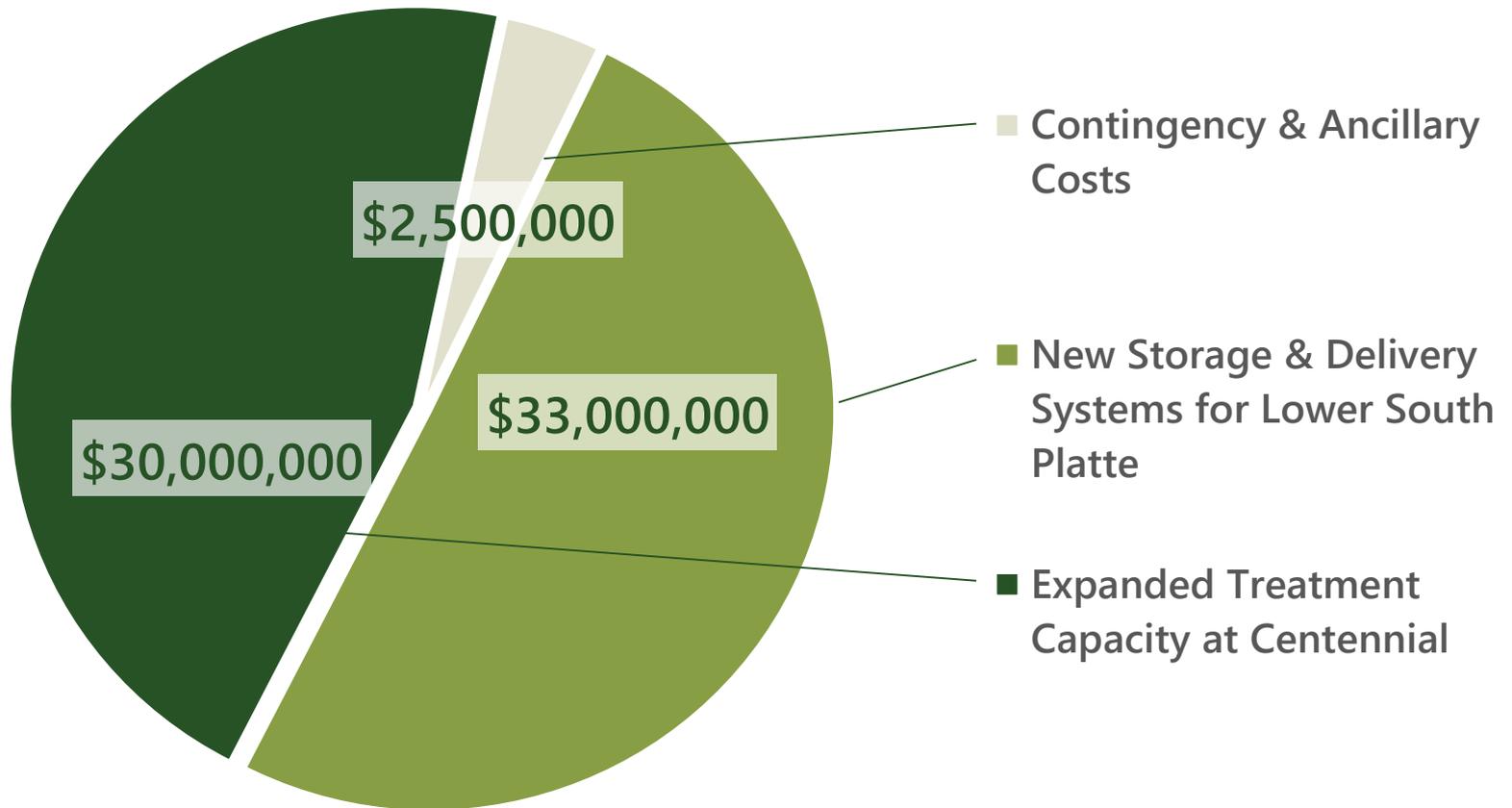
- In 2013, CPNMD commissioned a **2-year analysis** of **300 options** for renewable water
- Engineering experts and consultants narrowed the options to the **3 most economical** solutions
- In 2015, the Board of Directors chose a strategic direction centered on expanding existing and building new **partnerships** to help contain costs

Components of the Plan

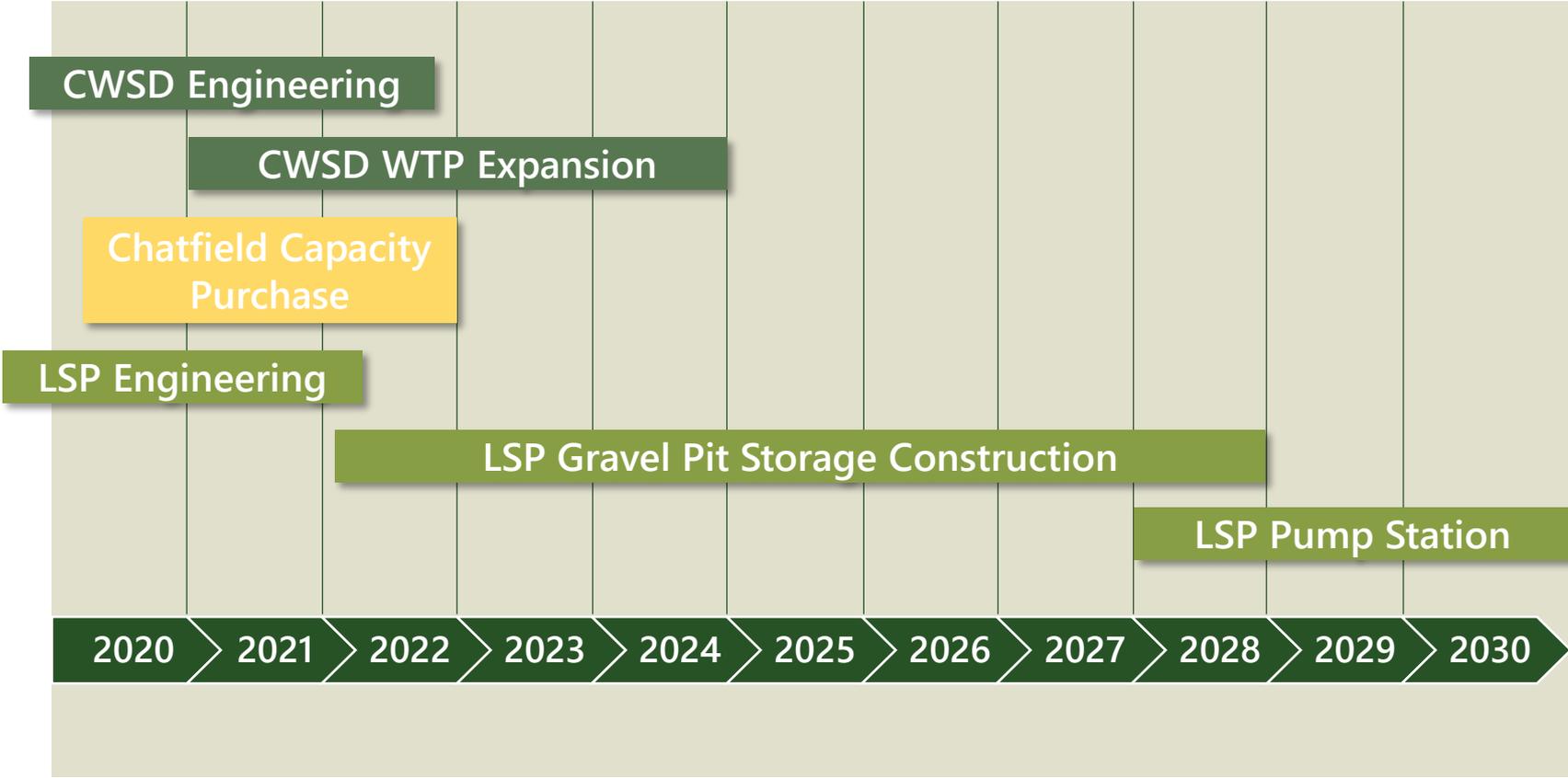
- \$65.5 million for 50% renewable water by 2030
 - Will allow us to utilize renewable water rights we already own
 - East Plum Creek, Upper South Platte, Lower South Platte (LSP)
 - Will pay for enhanced treatment capacity at Centennial
 - Surface water requires additional treatment and processes
 - Will fund the construction of gravel pit storage at LSP near Fort Lupton and infrastructure to move water to and from

Renewable Water Expansion

Project Capital Costs = \$65.5M



Capital Projects By Year



Financing Options:

Mills (Property Taxes) v. Fees

Castle Pines median home price is \$575,000

Home Value	\$500K	\$550K	\$600K	\$700K
15 Mills	\$540	\$594	\$648	\$756
\$60 Fee*	\$720	\$720	\$720	\$720
Difference	+ 180	+ 126	+ 72	- \$36

"Break even" point is about \$700,000

**To pay for these capital costs, fees will have to be increased to \$60/month per residential tap at some point in the near future.*

Financing Options:

A Closer Look at Mills/Property Taxes

12-YEAR RENEWABLE WATER PROJECT = 15 MILLS

- **2017** & prior = **41 mills** (w/legacy debt payment)
- **2018** = **19 mills** (legacy debt is paid off)
- **2019** onward = **34 mills** (19 base mills + 15 mills for renewable water)

NET DECREASE OF 7 MILLS FROM 2017 TO 2019

Benefits of Paying for Capital Costs via Increased Property Taxes

- Unless your home is valued ~\$700,000 or more, you will pay less in property taxes than fees.
- If you pay for these capital costs in property taxes, they can be used as a deduction on your federal taxes.
- CPNMD is paying off its legacy debt in 2017, which means the property taxes they collect go down.
 - Even if voters approve an increase to pay for renewable water, tax bills will still be less in future years than they are today.

Recap

- We only keep 1/3 of the water that originates here, making surface water expensive
- Groundwater is also expensive because we have to drill through layers of rock thousands of feet below the surface
- But ensuring a sustainable future water source is the best way to protect our investments
- We already own renewable surface water rights, but we must invest in additional treatment, storage and delivery systems to put them to use
- Beginning to invest now in this 12-year plan is the most cost-effective method because construction costs will only go up
- We'll save money by paying for it through taxes rather than fees

Next Steps: Now – Early 2018

- Continue public outreach/education efforts and gather community input
 - Community survey
 - Presentations to HOAs, Chamber groups, etc.
 - Communications via email, website, Nextdoor, Facebook and the Connection
 - Participation in community events
- Board of Directors will decide in 2018 whether to pursue a bond election

Q & A