Fort Collins Utilities
Water Supplies & Demand Management

Poudre River Forum
January 31, 2015
Water Supply & Demand Management Policy

- Adopted in 2003, updated in 2012
- Guides the Utilities in balancing water supplies and demands
- Policy Objective
  - Ensure an adequate, safe and reliable supply of water for the beneficial use by customers and the community
  - Manage the level of demand and the efficient use of a scarce and valuable resource
Current Water Demand (Use)

- Deliver about 26,000 acre-feet/year treated and 4,000 acre-feet/year of raw water

- Demand levels have declined significantly
  - ~230 gpcd early 1990s
  - ~200 gpcd before 2002
  - ~150 gpcd last several years
Use (gallons per capita per day - GPCD)
Water Conservation

- Measures to reduce demands long-term
  - Restrictions used for short-term reductions
    - Water Supply Shortage Response Plan

- On-going conservation efforts
  - All customers metered in 2003
  - Tiered & seasonal rate structures
  - Educational programs
  - Rebates, sprinkler audits, etc.
  - Commercial audits and incentives
Water Conservation

• Water Conservation Plan
  – Adopted by State in 2010
  – Conservation goal of 140 gpcd by 2020
  – Use most state/national BMPs

• Plan update starting in 2015
Future Water Demands/Supplies

• Depends on population and commercial growth

• Estimated Utility population ~165,100 by 2050 (~129,900 in 2010)

• Large contractual use increase of ~3,000 acre-feet/year by 2050

• Supplies needed depends on future demands (planning demand level)
Future Supply Plans

- Acquire additional water rights and/or cash through Raw Water Requirements

- Acquire/develop storage capacity to help manage current and future water rights
  - Operational storage (gravel pits or similar)
  - Carryover and vulnerability protection storage (Halligan Res. or similar)
Storage per Capita Comparison

Note: Based on 2010 population
Potential Uncertainties???

- Modeling does not include:
  - Climate change
  - CBT curtailment
  - Reuse Plan issues
  - Water quality blending

- Supplies could be reduced by:
  - River administration changes
  - Competing water rights
Key Policy Elements

• Water Supply Reliability
  – Continue 1-in-50 year drought criterion and Water Supply Shortage Response Plan
  – Other key criteria
    • Storage reserve factor (20% of annual demand)
    • Planning demand level (150 gpcd)

• Demand management (140 gpcd goal by 2020)
Closing Thoughts

• Conservation continues to be important

• Water Utility approaching buildout

• Advocate lower water use and increased storage to make effective use of conserved water
  – Provides uncertainty protection
  – Sustainable water supply future
Thank You