

#### **Poudre River Forum**

# A Working River: Water for Cities and Towns

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## The Poudre supplies water to...



- Twelve cities and towns
- More than 300,000 people
- Two major universities
- More than 9,000 businesses
- One regional power plant

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## **Major M&I Water Providers**

- City of Fort Collins
- City of Greeley
- Tri-Districts
  - Fort Collins-Loveland Water District
  - North Weld County Water District
  - East Larimer County Water District
- City of Thornton (future)

## **City of Fort Collins**



- Service area population ≈ 130,000
- Also supplies water to: West Fort Collins WD, large industrial users (Anheuser-Busch), Rawhide Power Plant via reuse plan
- Water use ≈ 29,000 AF (treated and ditch water)
- Water supplies: Colorado River, Poudre River, Michigan River
- Storage: Joe Wright Reservoir (6,500 AF)
- Water from Poudre ≈ 13,000 AF (treated and ditch water)

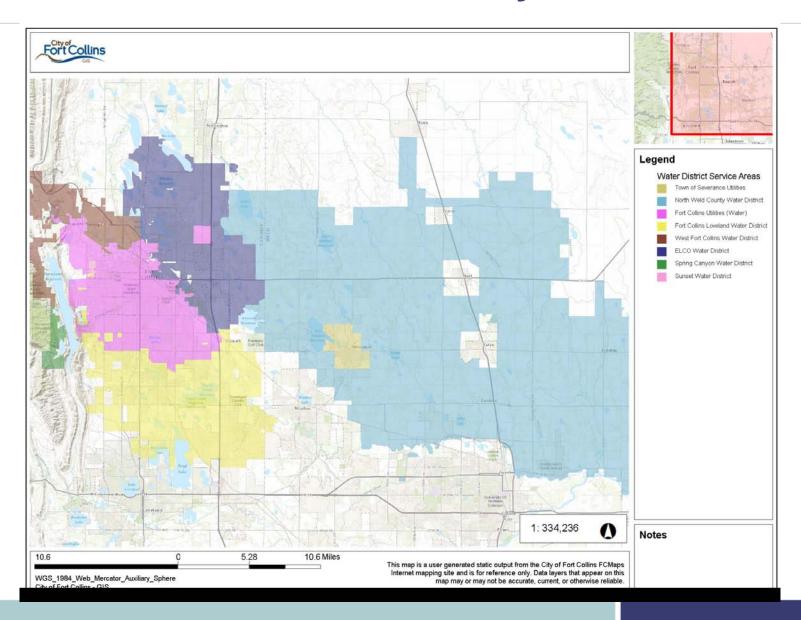
## **City of Greeley**



- Service area population ≈ 100,000
- Also supplies water to: Kodak, Evans, Windsor, Milliken
- Water use ≈ 30,000 AF (treated and raw water)
- Water supplies from Poudre River, Big Thompson River, Colorado River, Laramie River
- Storage: Five high mountain reservoirs (8,000 AF), Milton Seaman Reservoir (5,000 AF)
- Water from Poudre ≈ 15,000 AF (treated and raw water)

## **Tri-Districts: Where Are They?**





#### **Tri-Districts**



- Combined service area population ≈ 100,000
- Rural Larimer & Weld counties, Ault, Eaton, Galeton, Gill, Lucerne, Pierce, Severance, Timnath, Windsor, parts of Fort Collins & Loveland
- Water use ≈ 22,000 AF (treated and raw water)
- Water supplies from Colorado River, Poudre River, Laramie River
- No owned storage, rely on CBT project
- Water from Poudre ≈ 2,000 AF (treated and raw water)

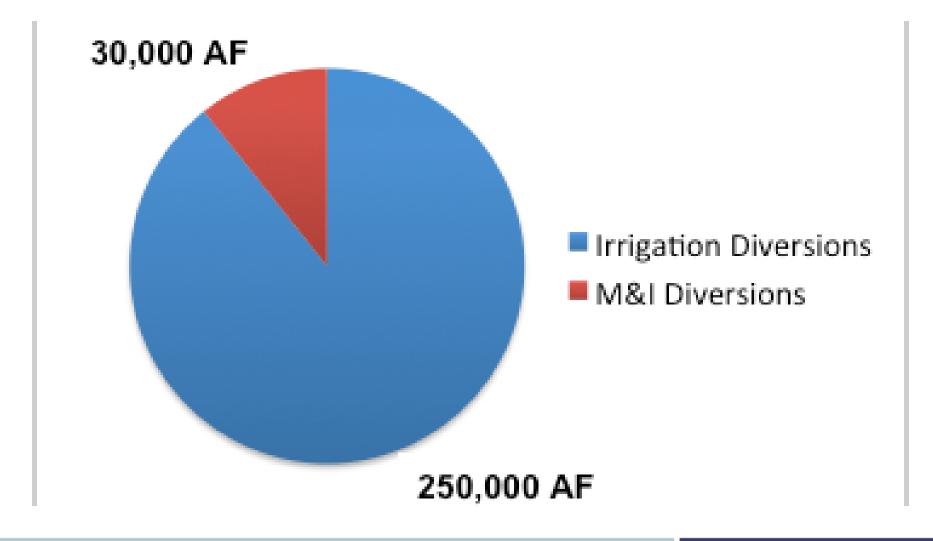
## **Existing M&I Uses**



Provider	Total Water Use	Water from Poudre
Fort Collins	29,000 AF	13,000 AF
Greeley	30,000 AF	15,000 AF
Tri-Districts	21,000 AF	2,000 AF
Totals	80,000 AF	30,000 AF

# M&I & Irrigation Diversions of Poudre River Water



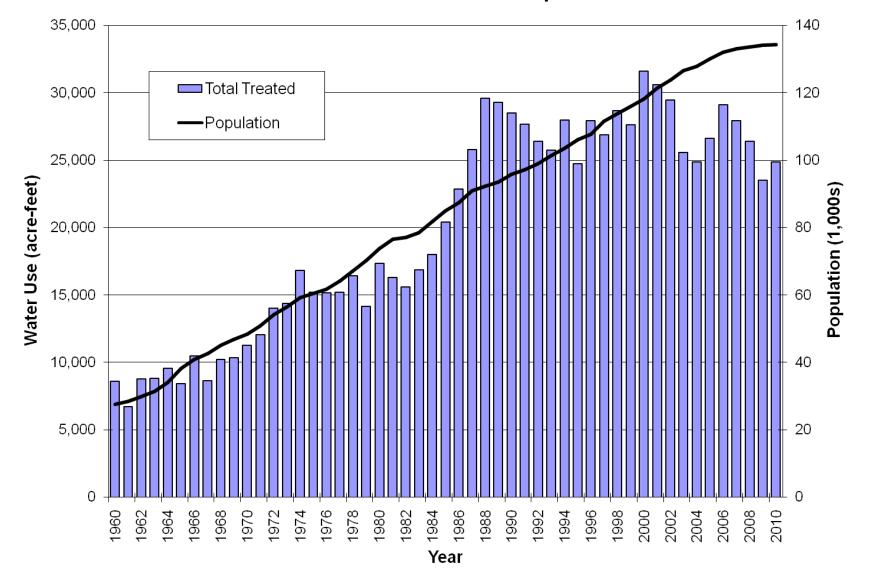


#### **M&I Demand Trends**



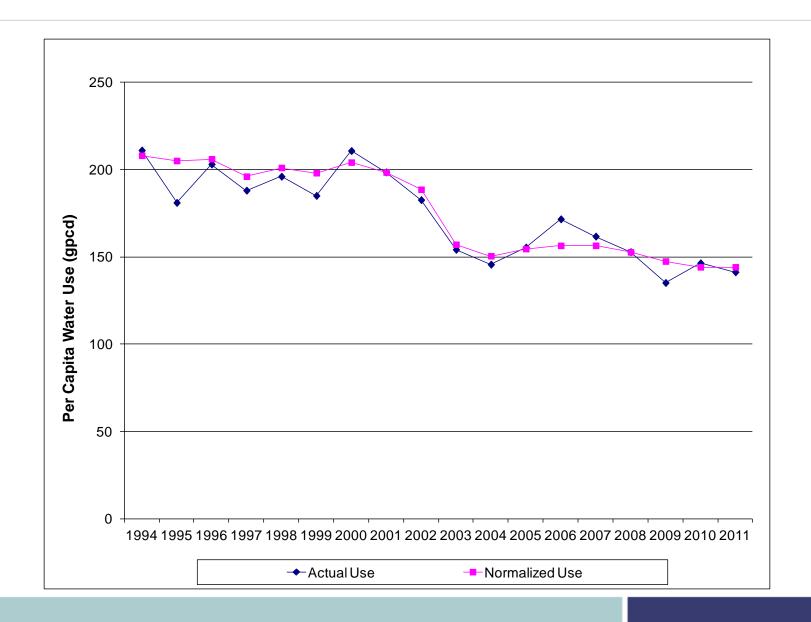
- Since 2002, per capita uses have generally declined by about 20%
- Overall uses have declined by 10% -15% while populations have grown by 10%
- Indoor per capita uses continue to decline due to advances in technology
- Outdoor per capita uses also declining, but not as much





### Fort Collins Per Capita Water Use ame





#### **M&I** Wastewater



Fort Collins (Drake WWTP)	10	MGD
Fort Collins (Mulberry WWTP)	4	MGD
South Fort Collins Sanitation District	2.8	3 MGD
Box Elder Sanitation District	2.5	5 MGD
Windsor	1.3	3 MGD
Kodak	1.0	) MGD

Significant amount of reuse: Anheuser Busch, Rawhide Power Plant

#### M&I Water Use – The Future



- Population growth (endless?)
- Continued savings in indoor uses (maybe 25%)
- Water loss reduction: a no-brainer
- Some near-term savings in outdoor use (how much without impacting level of "urban green"?)
- Climate change:
  - Earlier snowmelt loss of "free storage"
  - Outdoor uses: eventually greater unit demands or a "less green" urban environment

#### **M&I Uses – The Future**



- Overall, M&I water demand is projected to grow by more than 60% by 2050
- Fort Collins & Greeley: full use of CBT and changed irrigation rights, more storage
- Tri-Districts: use of Poudre supplies, more storage
- More storage, but where? Could it come from partnerships with agriculture?
- Thornton: Northern Supply Project delivery options: could a river run through it?