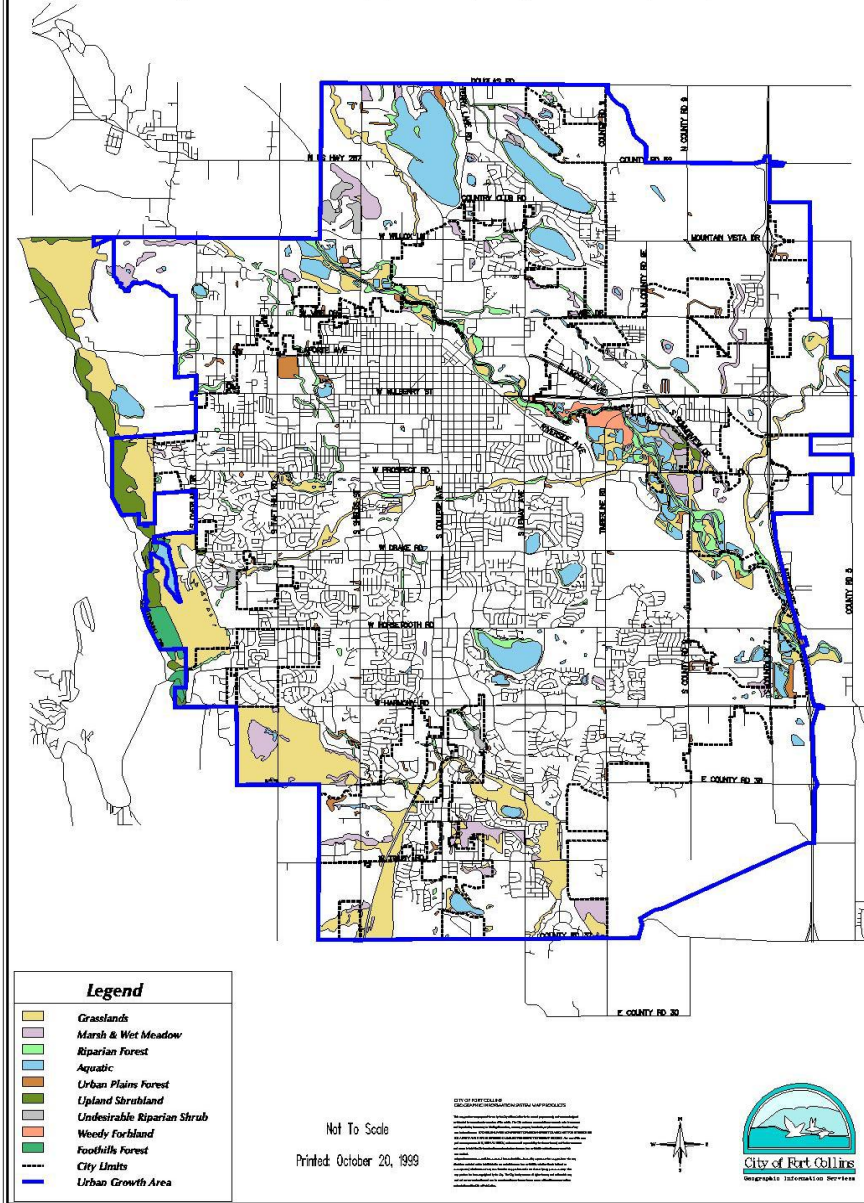




Regulatory & Non-Regulatory Approaches To Creating Sustainable Communities



CITY OF FORT COLLINS
NATURAL HABITATS & FEATURES INVENTORY MAP



Natural Habitats and Features Inventory Map

- In the beginning and again as the program and the city grew, inventories of the resources being protected are conducted to help determine where to conserve lands.
- Areas to focused on:
 - Corridors
 - Community edges
 - Community separators

River and Stream Corridors



Wetlands





Waterfronts

Foothills Forest





Grasslands



Wildlife Habitat

Threatened or Sensitive Species



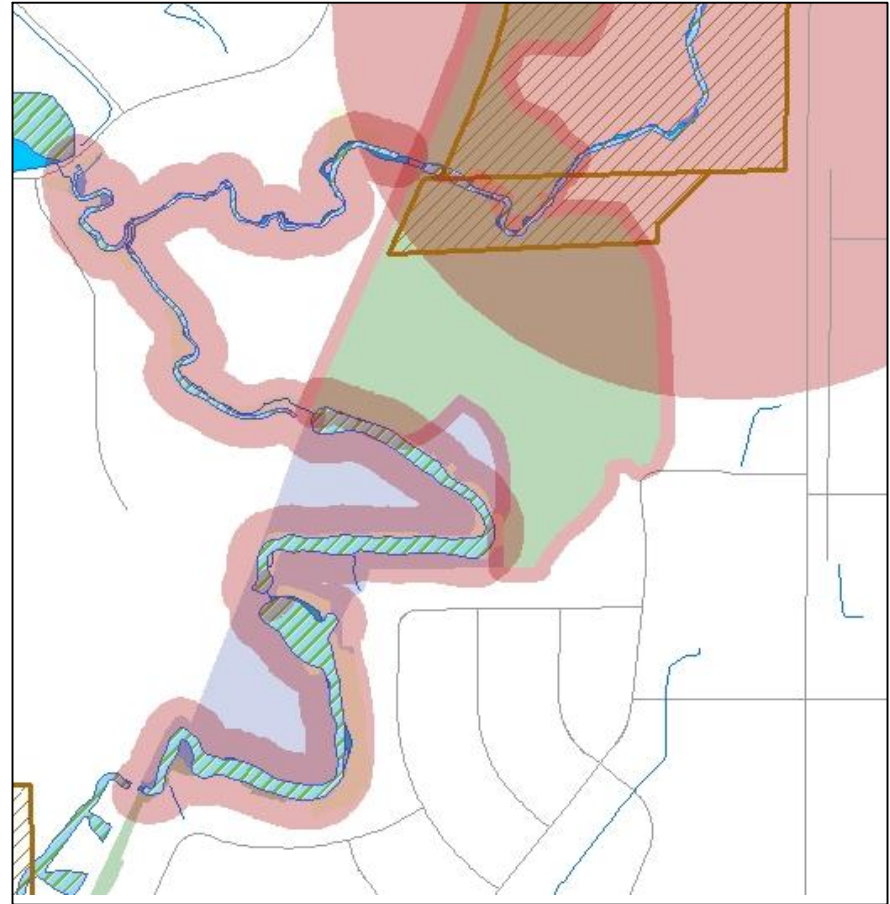
Geological Features



Zoning & Land Use Regulation

Buffer Zones for a Wetland, Native Grassland & Raptor Roost

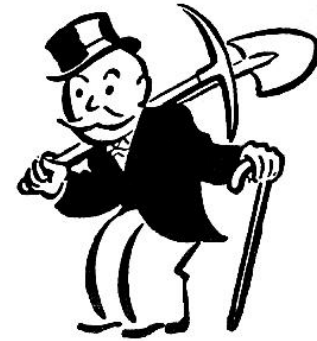
- Density/Cluster development
- Rural or farmland designations
- Buffers zones for wetlands and other natural resources



Natural Habitat Protection: Prescriptive and Performance Standards

Prescriptive

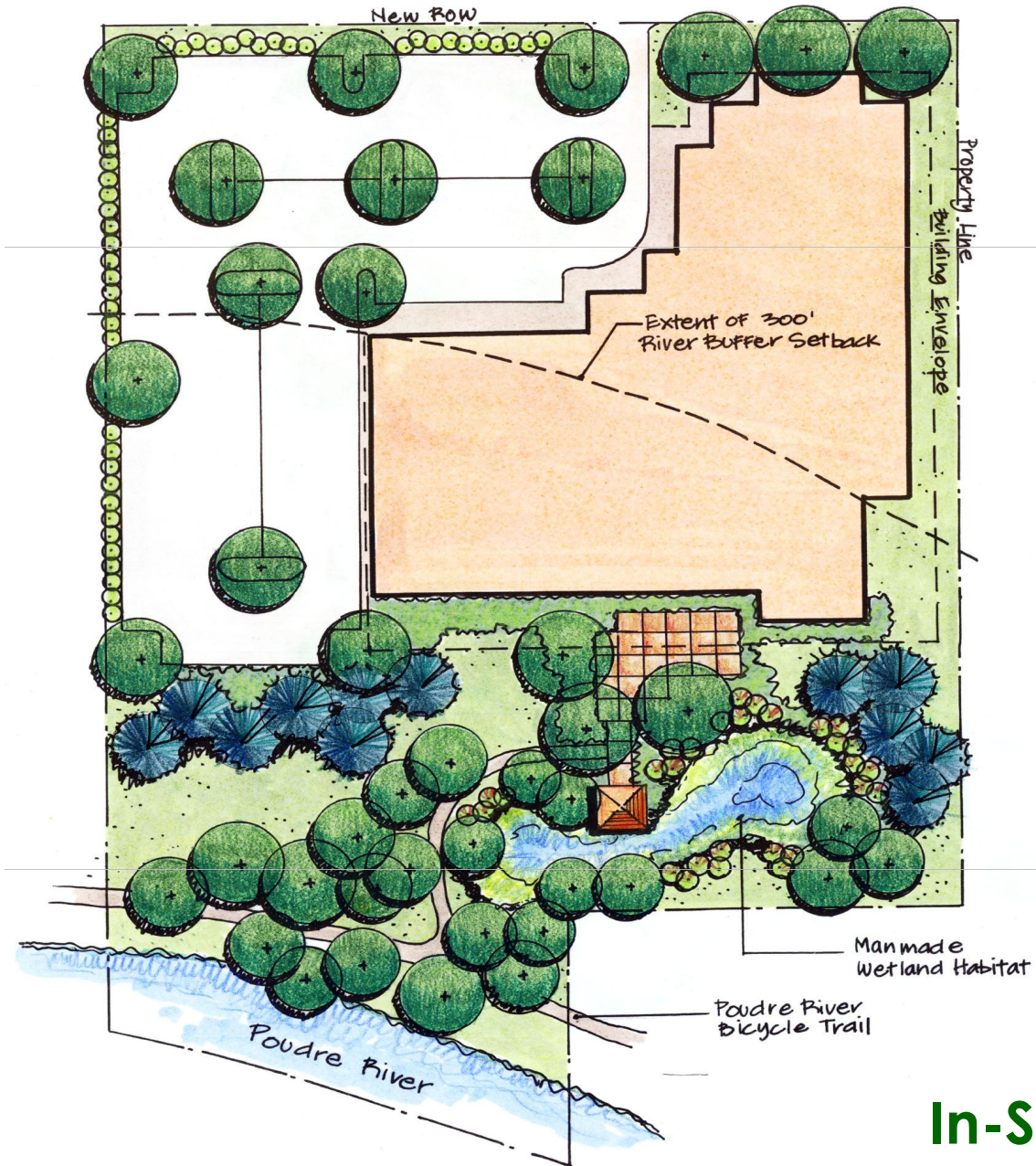
- Applies to any portion of a site within 500 feet of the resource
- Buffer Zones 50 feet to ½ mile



Performance

- Ecological Characterization Study
- Buffer Reduction through Mitigation

Lincoln Avenue



In-Situ

Site Design Standards

- **Tree Protection**
- **Xeriscape**
- **Solar Access**
- **Alternative Paving Materials**
- **Recycling Facilities-
Commercial/MF**



Override Private Covenants that Fail to Conserve Resources

Don't let private covenants get in the way of:

Solar/photovoltaic collectors on residential rooftops;

Low-water demanding plants and turf;

Soil improvements and/or mulches;

Odor-Controlled Compost Bins; and



Let people use their
clotheslines, for heaven's
sake!!!



Electric Energy Policy

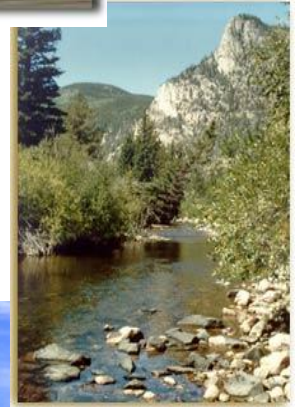
2003 Energy Policy addressed reliability, customer rates and the environment

Supply Target:

- Increase renewable energy to 15% by 2017

Demand Targets:

- Reduce per capita energy consumption 10% by 2012
- Reduce per capita peak demand 15% by 2012



Renewable Energy Program

Wind Program

- Voluntary green pricing premium program
- First in Colorado, second in nation
- City purchased initial turbines, expansions by Platte River and other member cities
- Green-e certified in 2007

Electric Energy Supply Policy

- 2% in 2004, 6% in 2007, 15% by 2017

Sources

- Platte River Power renewable energy tariff
 - Medicine Bow, 8.3 MW, 10 turbines
 - Renewable energy certificates

Net Metering Pilot Program

- 9 customers with photovoltaic grid-tied systems
- 21 kilowatts total



Demand Side Programs - Residential

Incentives

- Clothes Washer Rebate Program
- Refrigerator and Freezer Recycling Program
- Residential Lighting Program



Information and Expertise

- The Power to Save
- What to Look for in a New Home
- Home Performance with ENERGY STAR
- Environmental Program Series



Other

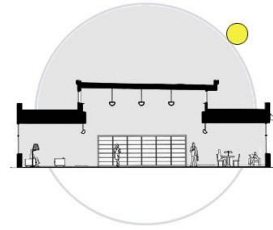
- ZILCH (zero interest loans)
- REACH (income based weatherization)
- HotShot (water heater load control)
- Home Energy Ratings



Demand Side Programs - Commercial

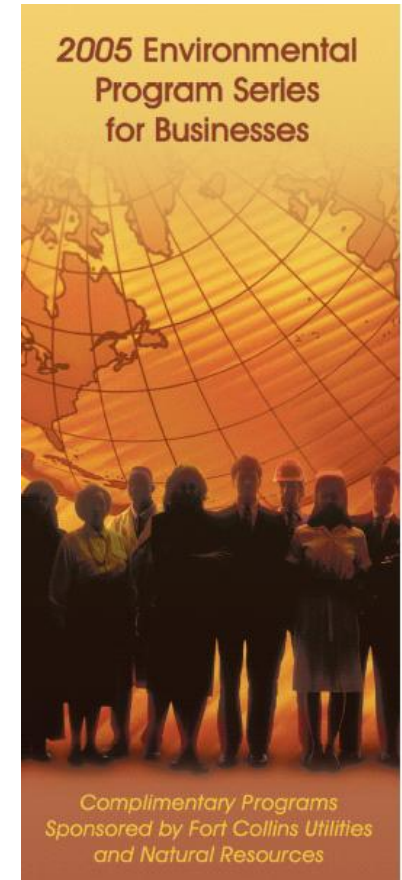
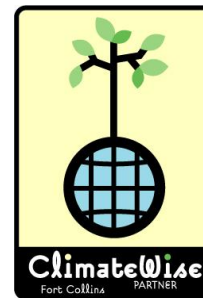
Incentives

- LIGHTENUP
- Electric Efficiency Program
- Cooling Rebate Program
- Integrated Design Assistance Program
- Climate Wise



Information and Expertise

- Climate Wise
- Keep Current
- Electri-Connect
- Energy Assessments / Technical Assistance
- Business Environmental Program Series



ELECTRICCONNECT

Fort Collins Utilities' Integrated Design Assistance Program

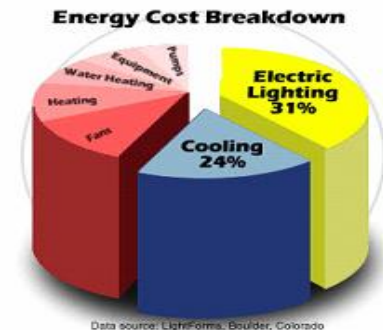
Purpose: Encourages high-performance buildings that exceed building code requirements for energy performance

Offers:

- financial incentives
 - free technical support

Criteria:

- Located in Fort Collins Utilities electric service area
- New construction or major renovations
- Commercial buildings and high-rise residential



Integrated Design Assistance Program

Two Approaches

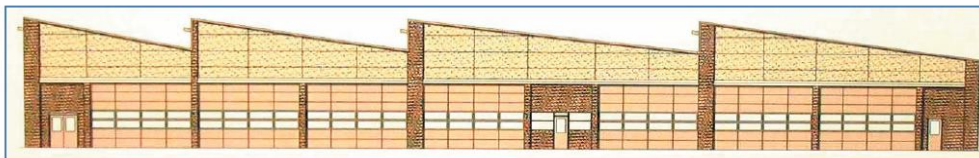
• Whole Building

- Integrated design early in the process
- Design Incentives to offset professional costs
- Performance incentives based on electricity savings



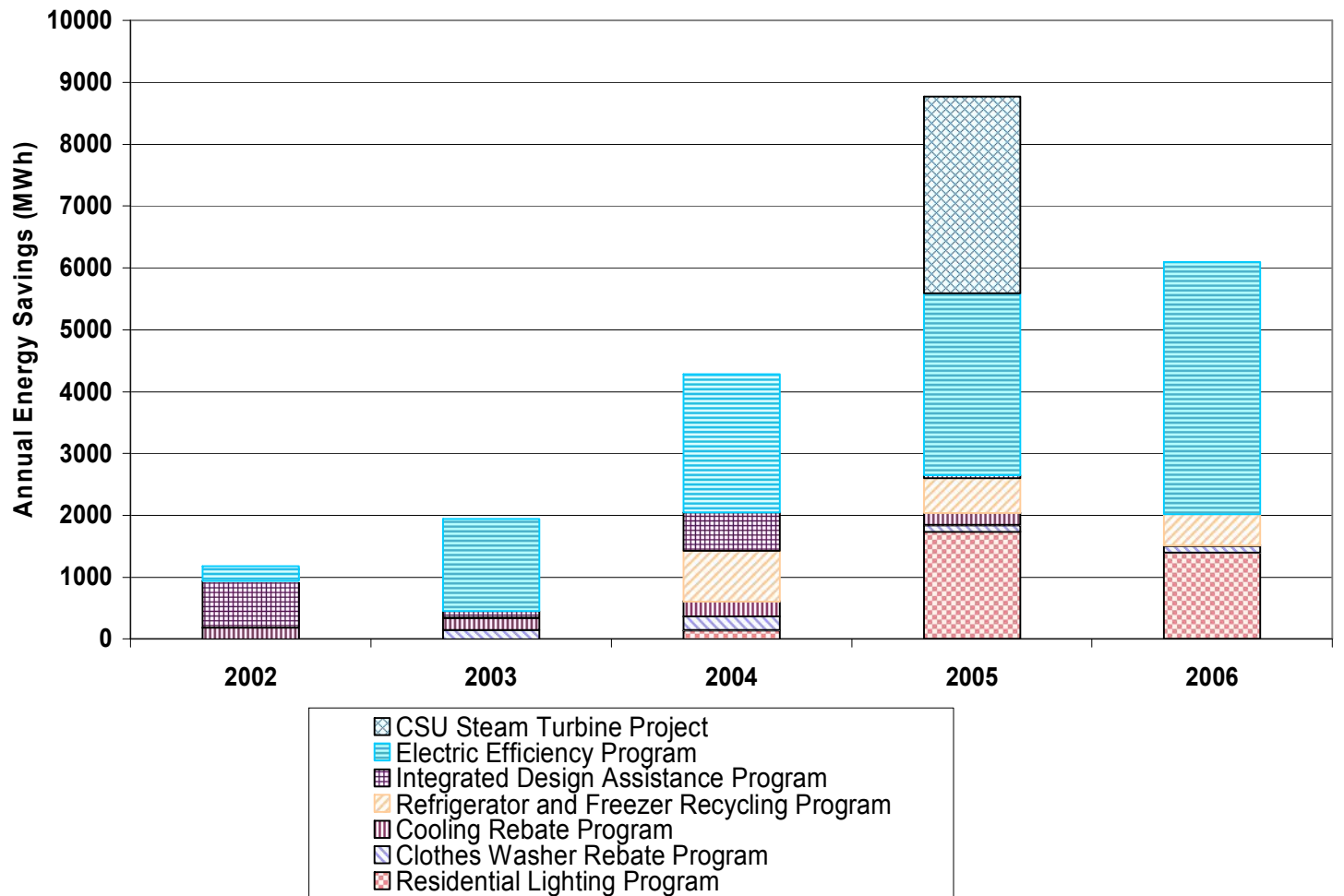
• Prescriptive

- Targets specific equipment and systems
 - Lighting, HVAC, Electric Motors
 - Building envelope
 - Custom Measures
- Incentive based on improvement from efficiency requirements



Demand Side Program Results

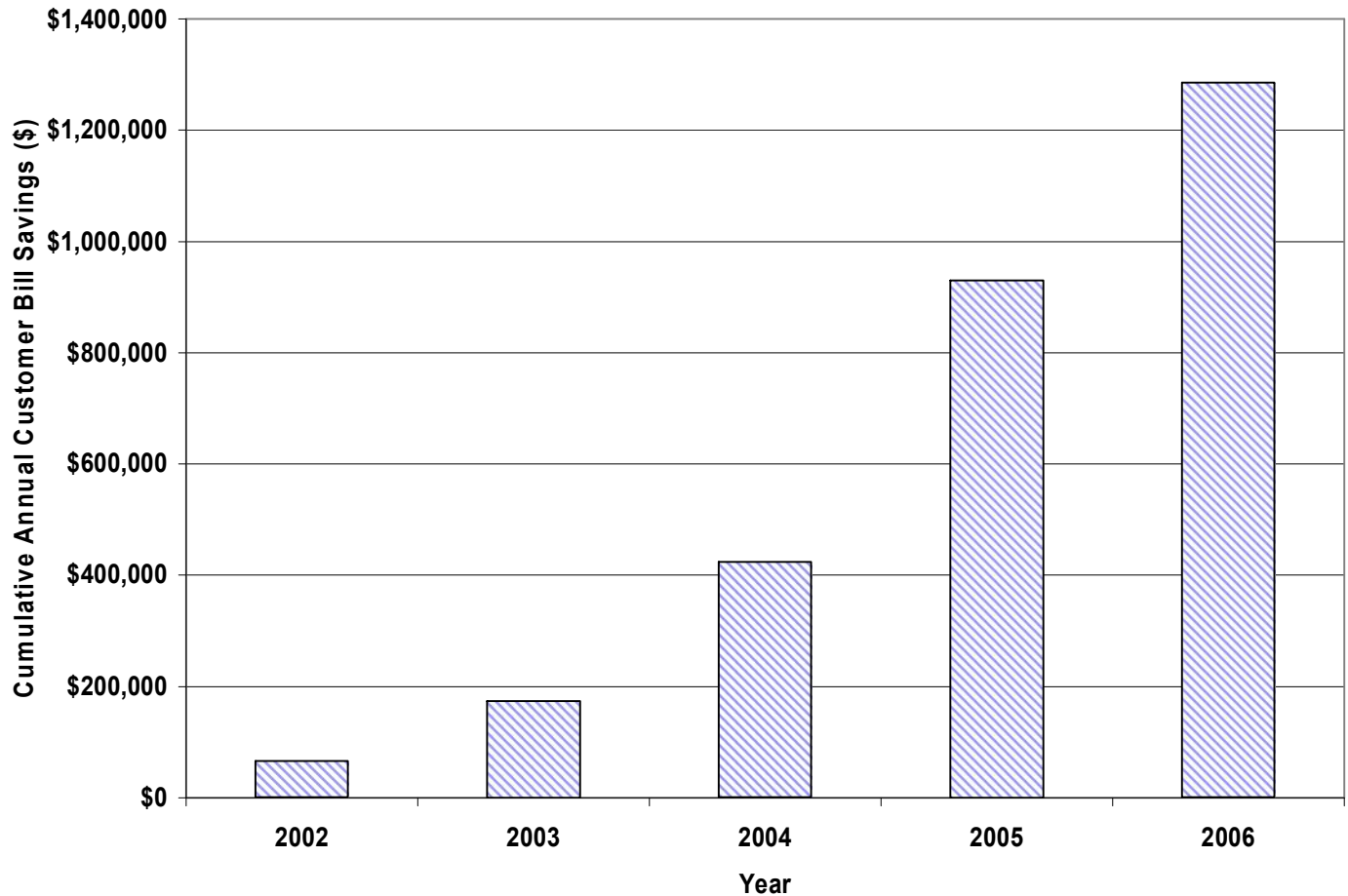
Fort Collins Demand Side Management, Annual MWh Saved





Demand Side Program Results

Fort Collins Demand Side Programs Cumulative Annual Customer Bill Savings



Climate Wise

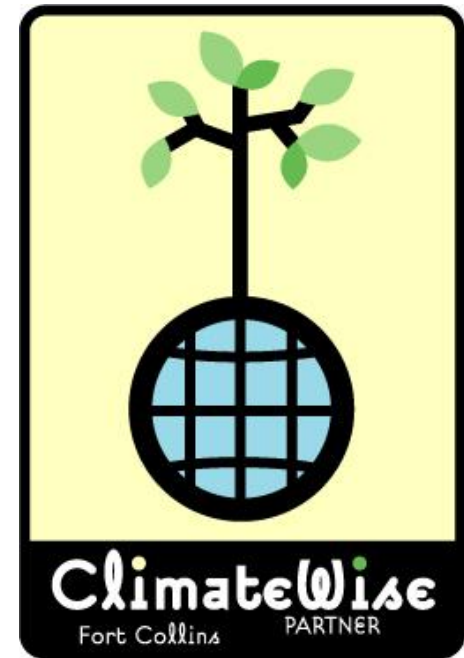
Business Outreach Program

Promotes voluntary GHG reduction through:

- Energy efficiency
- Pollution prevention
- Waste reduction
- Water conservation
- Transportation reduction

Climate Wise provides:

- Technical assistance
- Public recognition
- Peer networking opportunities
- Carbon quantification
- Cost Savings....and much more!



Program History

Identified in 1999 as one of several greenhouse gas reduction strategies in the City's Climate Change Action Plan.

Initiated in 2000 as a local adaptation of the federal EPA program.

Climate Wise, Business Smart.

Climate Wise Partners

More than 50 Businesses Strong

**Advanced Energy, Inc.
Avago Technologies
Alliance Construction, Inc.
Anheuser-Busch Inc.
Austin's
Moot House
Enzio's
Ben & Jerry's
Best Western Univ. Inn
Café Ardour
Colorado State University
Compliance Partners
Custom Blending, Inc.
Dako
Delta Construction
Drahota Construction
Eco-Thrift
European Motor Cars
Foothills Mall
F.C. Chamber of Commerce**

**Fort Collins Club
Fort Collins Marriott
Front Range Comm. College
Furhman Landscaping, Inc.
Hewlett-Packard
Houska Automotive Services
JAX Outdoor, Inc.
KRFC
Lafarge Corporation
Land Images, Inc.
Media Tech Productions
Merit Electric Company, LTD.
The Neenan Company
New Belgium Brewing Co.
Nolte Associates, Inc.
North Front Range MPO
Odell Brewing Company
Platte River Power Authority
Poudre School District
Poudre Valley Hospital**

**Residence Inn by Marriott
Rio Grande Restaurant
Sage Dwelling
Scuba Schools Intl.
The Coloradoan
The Cupboard
The RETEC Group
The Vineyard Church
Transpro, Inc.
Trinity Lutheran Church
United States Postal Serv.
USDA-APHIS
Value Plastics, Inc.
Vaught-Frye Architects
Wal-Mart Supercenter
Waterpik Technologies
Whole Foods Market**

Climate Wise Results (2005)

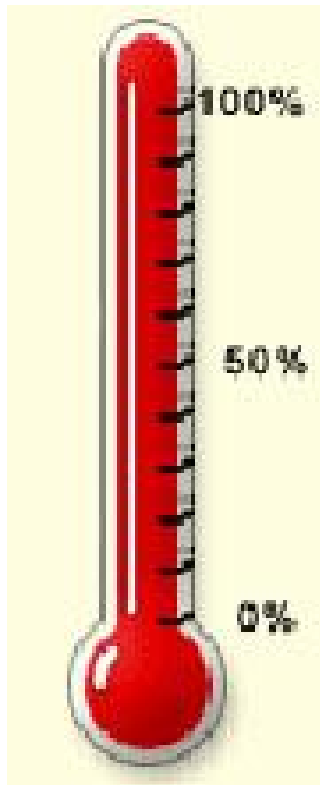
- 54+ partners
- Avoided 100,000 tons/year CO₂
- \$4 Million in cumulative cost savings



Assessment at Custom Blending

Climate Wise, Business Smart

Results to Date (eCO₂ tons/year)



Original 2010 Climate Wise Goal:

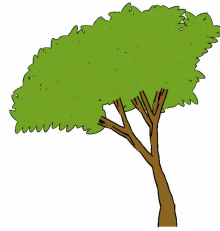
Reduce Greenhouse Gas emissions by 93,390 tons/year eCO₂

2004 Savings: **95,452 tons/year eCO₂**

Revised 2010 Goal: 296,128 tons/year eCO₂

Climate Wise, Business Smart.

The effects of reducing 95,452 tons eCO₂ are similar to:



...planting 6,316,467 trees



...reducing 1,408,949 car trips from Fort Collins to Denver and back



...saving 88,257 round-trip flights from Denver to NYC

Climate Wise, Business Smart.

The Power of Policy

Water Conservation Programs

Estimated Annual Water Savings:

- **High efficiency clothes washer rebates**
 - 5 million gallons
- **Water conservation kit giveaways**
 - 4.5 million gallons
- **Residential sprinkler system audits**
 - 1 million gallons



The Power of Policy

Water Use Per Person: 2000 - 2005

	Average Use (gpcd)	Peak Day Use (gpc)
2000	204	477
2001	198	503
2002	189	411
2003	157	383
2004	150	327
2005	155	363



Need More Info?

fcgov.com