Section 9. BIP at a Glance

CHALLENGES

Primary challenges center around water scarcity due to growth, stressing already over-allocated water resources.

Water users and managers in the South Platte and Republican River Basins currently face many challenges meeting municipal, industrial and agricultural water needs while maintaining or enhancing environmental and recreational resources. These challenges can lead to conflicts that force water users to make difficult choices in meeting their existing and future needs.

KEY ACHIEVEMENTS

Key projects and efforts demonstrate successes in meeting basin goals and water needs:

- Aquifer Storage and Recovery
- Charlie Meyers State Wildlife Area Habitat **Enhancement Project**
- Chatfield Reservoir Reallocation
- Direct Potable Reuse Demonstration
- Environmental Water Needs and Concerns
- Protecting the Future of Agriculture
- Greeley Municipal Water Conservation
- Protection and Enhancement of Forest and Watershed Health
- Resource Central Conservation Made Easy
- South Platte Regional Opportunities Water Group Feasibility Study
- Stakeholder Understanding in Water Supply Planning

OUTREACH STRATEGIES

Provide guidelines for stakeholder engagement through regular meetings and encouraging informed citizen participation. The Basin Implementation Planning process provides the forum to promote scientifically informed public policy. Involvement of elected officials and local decision makers is essential.



GOALS + OBJECTIVES

The basin has 12 GOALS centered around:

- ✓ Encouraging project implementation
- ✓ Maximizing development of native supplies while supporting cooperative outside supply options
- ✓ Maintaining and improving municipal and industrial conservation and efficiency
- ✓ Maintaining and promoting reuse
- ✓ Protecting irrigated agriculture
- ✓ Protecting and enhancing watershed function and environmental and recreational attributes
- √ Using scenario planning to manage uncertainty of future water needs
- ✓ Broadening communications, outreach, and education
- √ Improving efficiency and effectiveness of water project permitting

DEMAND, SUPPLY, POTENTIAL WATER NEEDS

M&I: Between 2015 and 2050, the South Platte Basin population is projected to grow 42 percent to 70 percent. The areas of the South Platte River Basin that are outside of the Metro Region are projected to grow at a faster pace in all scenarios. While per capita water use rates are projected to decrease, overall municipal and industrial water demand is projected to increase due to population growth.

Agriculture: Due to urbanization, water transfers, and groundwater sustainability, the amount of irrigated land in the South Platte and Republican Basins is anticipated to decrease in the future. Climate change may increase on-farm shortages due to increased irrigation demand and lower irrigation water supply.

Environment and Recreation: The Flow Tool, applied to eight Basin locations, suggests that climate change may reduce future stream flows and shift snowmelt runoff patterns to earlier in the year. Altered streamflow regimes will increase risk to a wide variety of environmental and recreational attributes.

Water Supply and Storage: Water supplies in the South Platte Basin vary substantially based on location. Analysis of two important locations in the South Platte River Basin showed available supplies periodically during wet periods. Increasing demands could draw storage down to lower levels, leading water providers to develop additional supplies or boost reserves.

FUTURE PROJECTS

\$9.8 billion total estimated costs for project implementation*

282 Total Projects**39** Tier 1

54 Multi-purpose projects

185 New projects added in 2020

STRATEGIC VISION

Basin goals, future projects, and desired water future for the Basin informed four primary strategies:

These strategies are:

- Meet the municipal supply gap
- Protect irrigated agriculture
- Protect and enhance watersheds
- Implement projects

* for projects that have identified a project cost



