

## EXECUTIVE SUMMARY

Lee's Summit continues to grow at a pace that challenges the water supply capacity during the summer demand season. This Water Master Plan updates the 2002 Plan by using current population projections and a hydraulic model calibrated against 2005 demand and system data. The results include recommendations for capital improvements to meet customer needs for the next 10 years and ultimate build-out. The goals in developing these improvements were to provide an orderly plan, improve reliability, simplify operations and maximize the use of existing facilities.

The maximum day demand in the summer of 2006 was 25.4 MGD. The total contracted supply capacity was 21.5 MGD. Planned improvements over the next several years will increase the supply capacity in two phases to 27.5 MGD and then 34.5 MGD. Maximum day demands are projected to increase by 0.9 MGD per year. If growth and demand patterns continue as projected, additional supply will be needed by 2010, 2013 and 2024.

The opinion of probable cost for the recommended improvements over the next 10 years is summarized in Table 1.

**Table 1 - Opinion of Probable Costs Next 10 Years**

<b>Description</b>	<b>Opinion of Probable Cost</b>	<b>Percent of Total</b>
Tap Fee (Lee's Summit)	\$48.2 million	70%
Tap Fee (Water District 14)	\$4.2 million	6%
Road Projects	\$10.7 million	16%
Maintenance	\$5.6 million	8%
Total	\$68.7 million	

Recommendations are summarized as follows:

- 1) Encourage water conservation through public education and rates.

- 2) Complete negotiations with Kansas City to develop the East Terminal supply projects. The transmission line, pump station and storage facilities are needed by 2013.
- 3) Complete these significant projects in the next 10 years (additional projects are included on Table 9):
  - a. North System Supply Improvements by 2007
  - b. South Terminal East Discharge by 2007
  - c. KCMO Phase III by 2007
  - d. Low Head Storage at South Terminal by 2008
  - e. Phase IV by 2010
  - f. East Leg and East Terminal by 2013
  - g. Internal transmission projects by 2013
- 4) As the Lee's Summit Road corridor project develops, obtain easements for the transmission lines indicated on Figures 7 and 8.
- 5) Pursue additional water supplies for 2024. Evaluate three alternatives by the end of 2007. Select the best alternative by the end of 2008. Negotiate an agreement by 2010.
- 6) Leverage new and developing resources in the City's geographical information system and data management software to quantify and predict renewal needs.
- 7) Monitor the assumptions made in this analysis. Update the demand and population projections annually. Update this Master plan as necessary to incorporate new information or deviations from the assumptions and projections.