



**Colorado's Water
Supply Future**



CWCB Board Meeting

Denver, CO

November 18-19, 2008

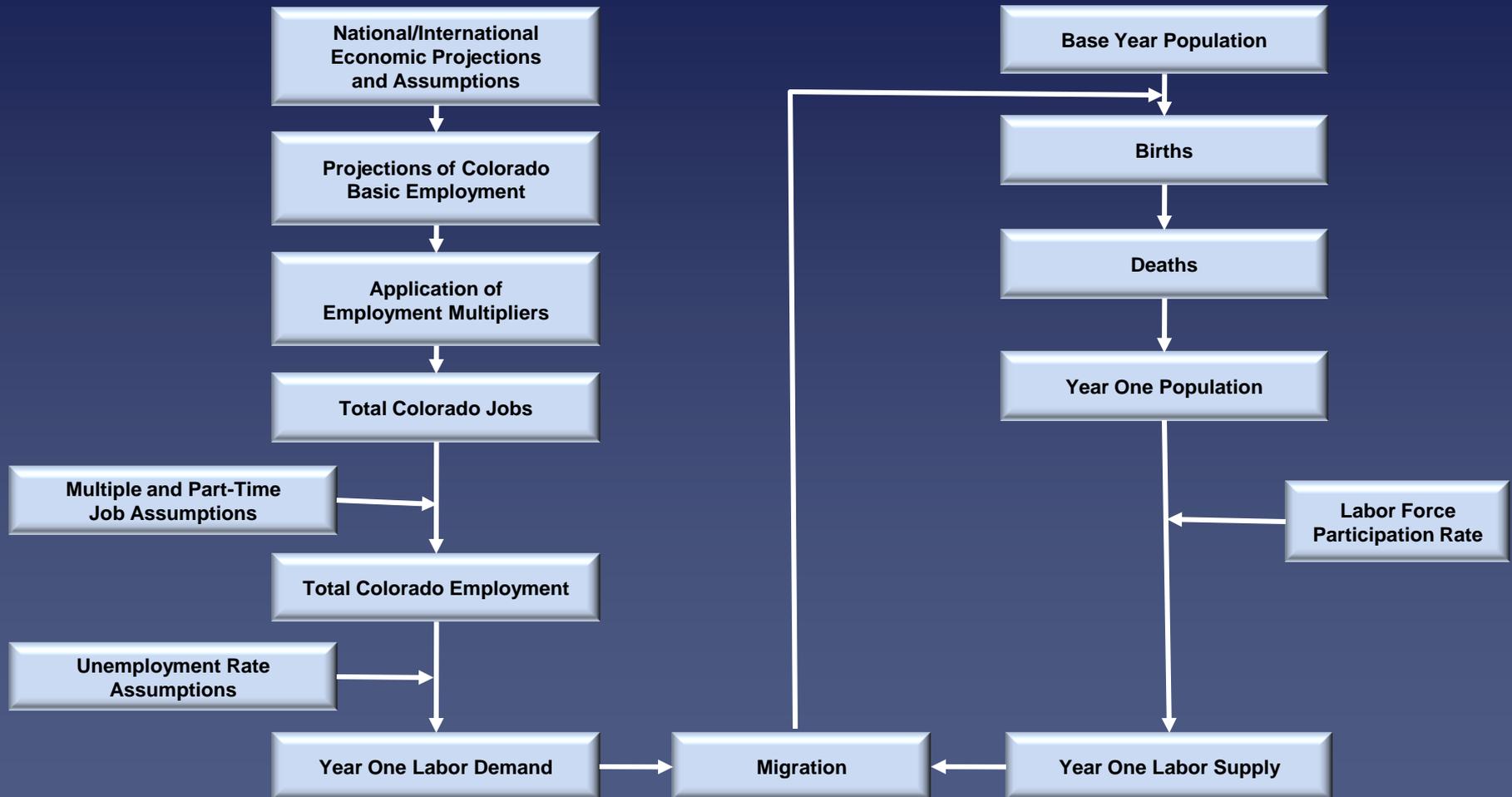
Agenda Item 9

**Intrastate Water Management and Development Section
Water Demands to 2050**

Overview – M&I Water Demands to 2050

- Population
 - 2035 population projection from Colorado State Demographer's Office (SDO)
 - 2050 population project using SDO's methodology
- Demands
 - Updating Statewide Water Supply Initiative (SWSI) gallon per capita per day (gpcd) values
 - Projecting water demands at 2035 and 2050

Population Projection Methodology – Center for Business and Economic Forecasting (CBEF) and SDO's Model



Note: CBEF uses employment commuting pattern assumptions and historical growth capture rates to allocate job growth from the state to regions and counties.

Colorado's Basic Employment Sectors

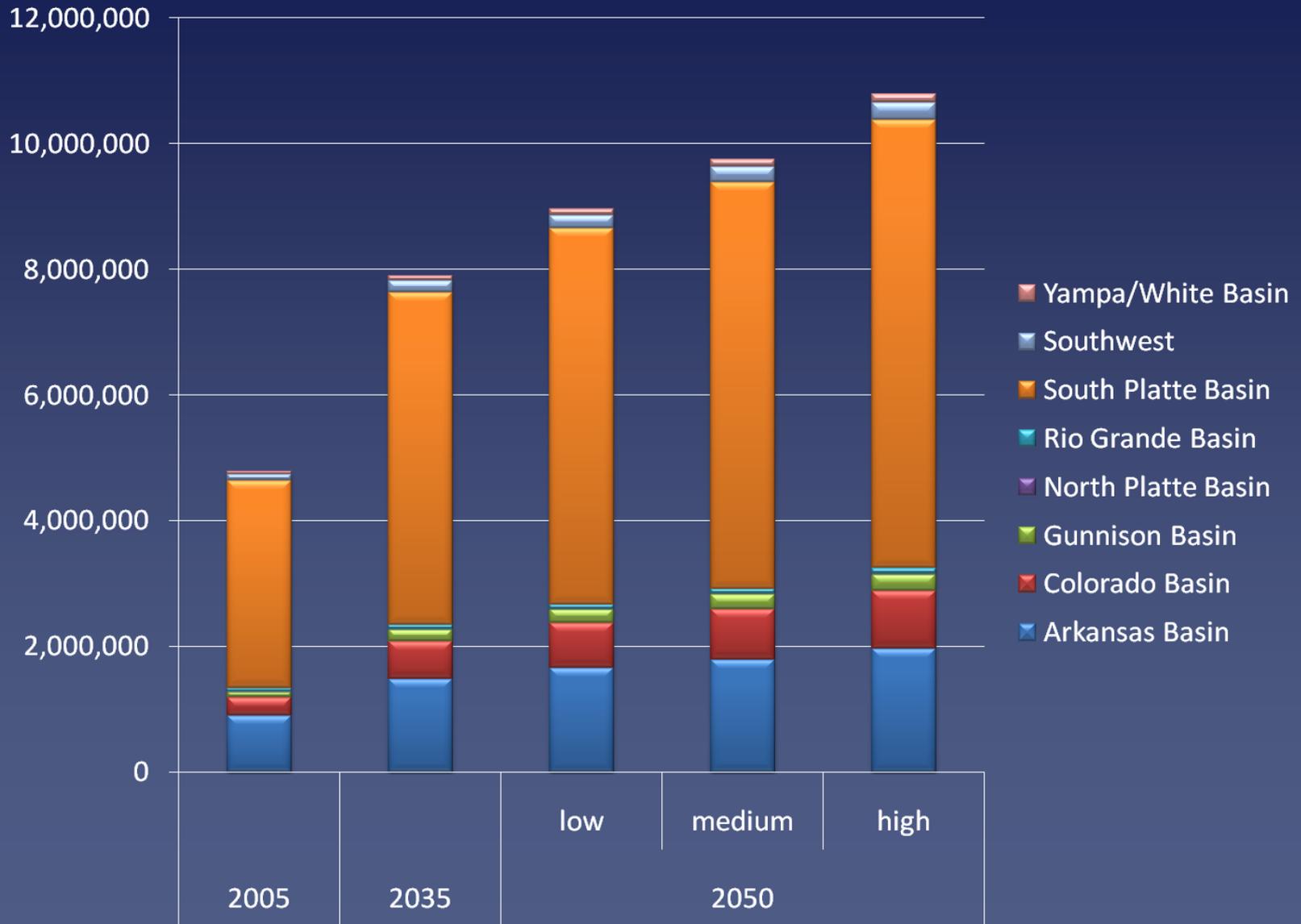
Traditional Basic Sectors

- Agriculture
- Government
- Mining
- Manufacturing
- Regional and National Services
- Tourism

Household Basic Sectors

- Retirees
- Wealth & Income
- Public Assistance
- Commuting/Employment

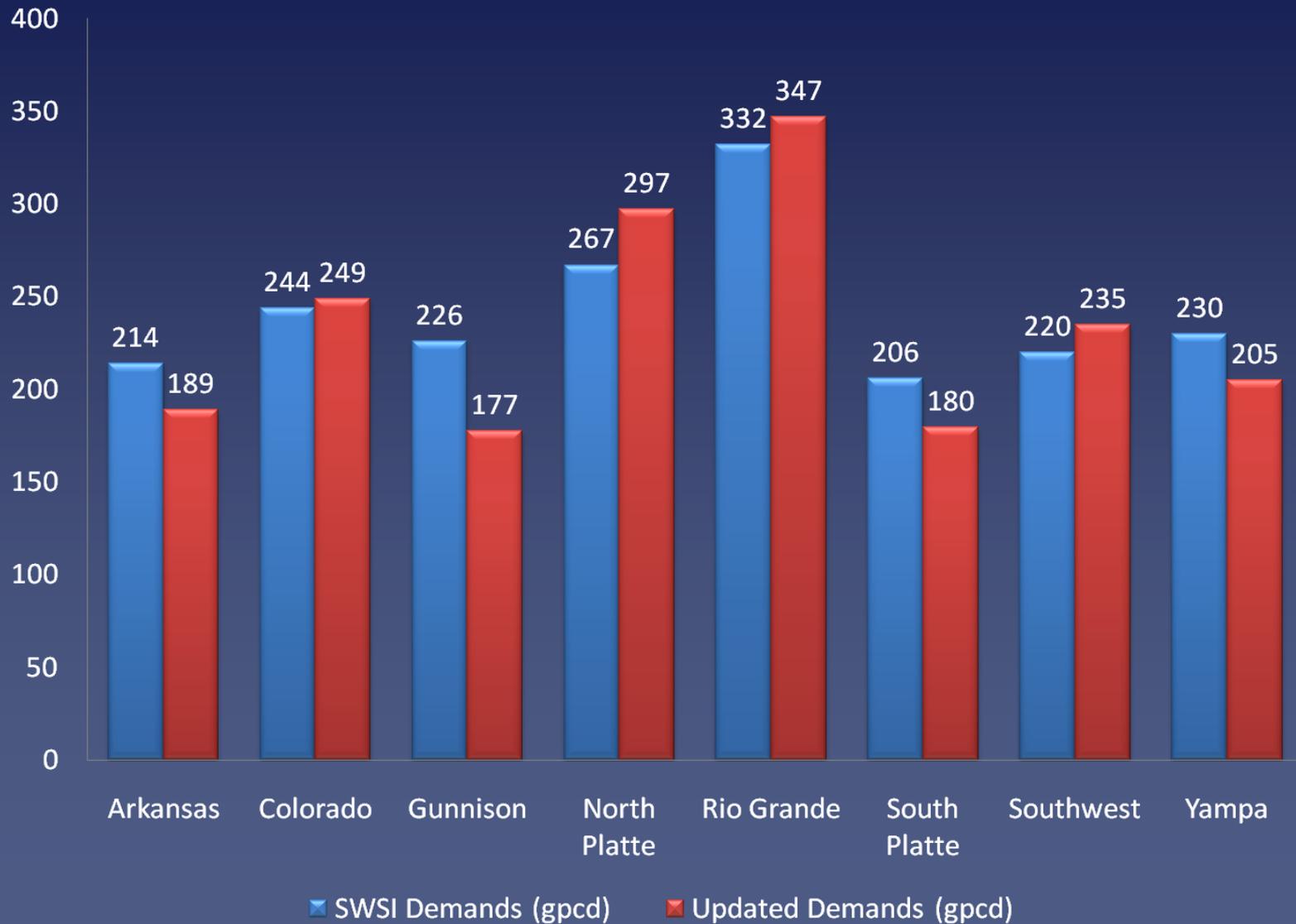
Population Projections



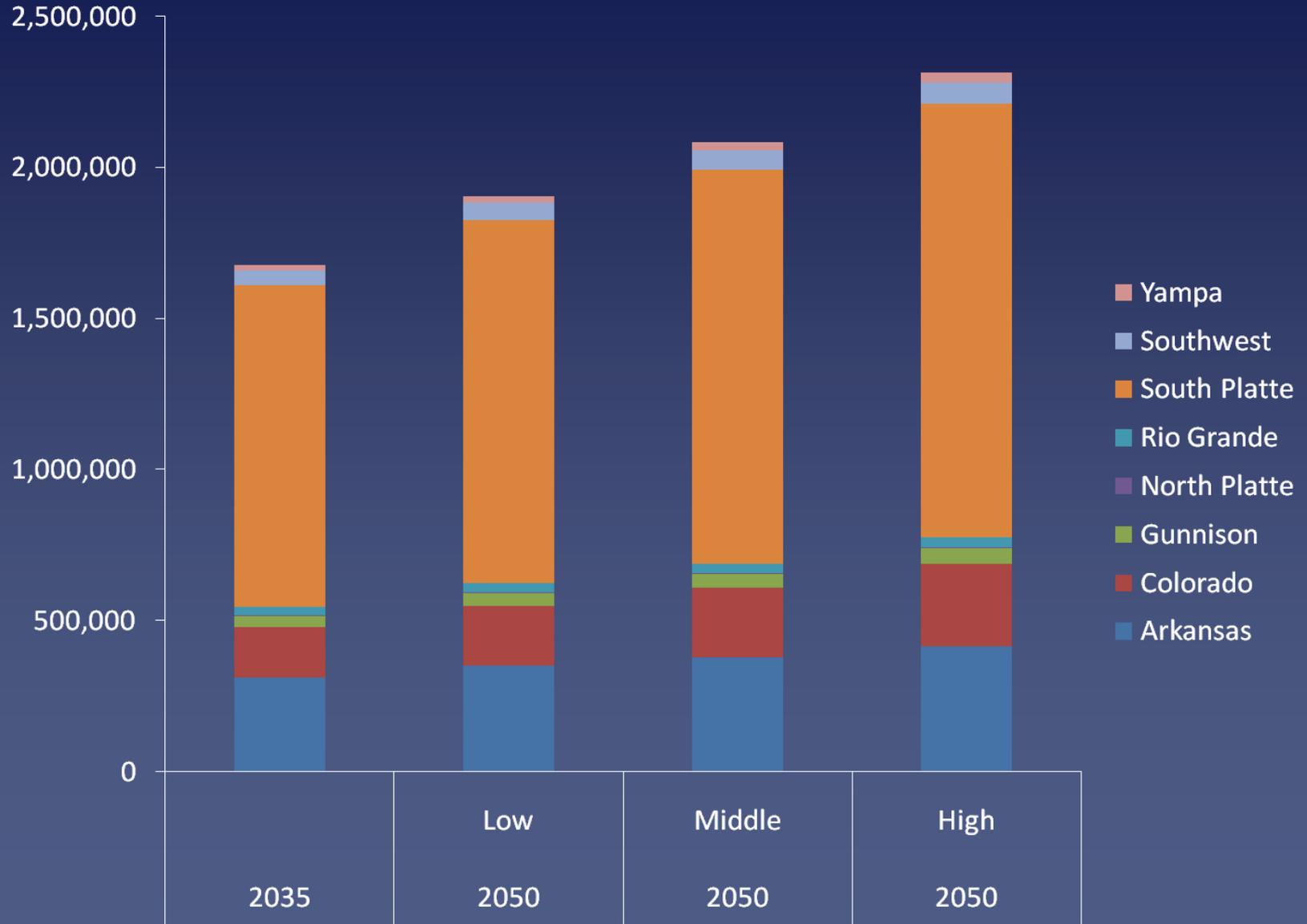
M&I Water Demand Methodology

- Used SWSI Methodology
- SWSI Database was updated with recent demand data
- Added additional 35 providers to database
- Updated per capita estimates collected for 149 providers covering 73 percent of Colorado's population

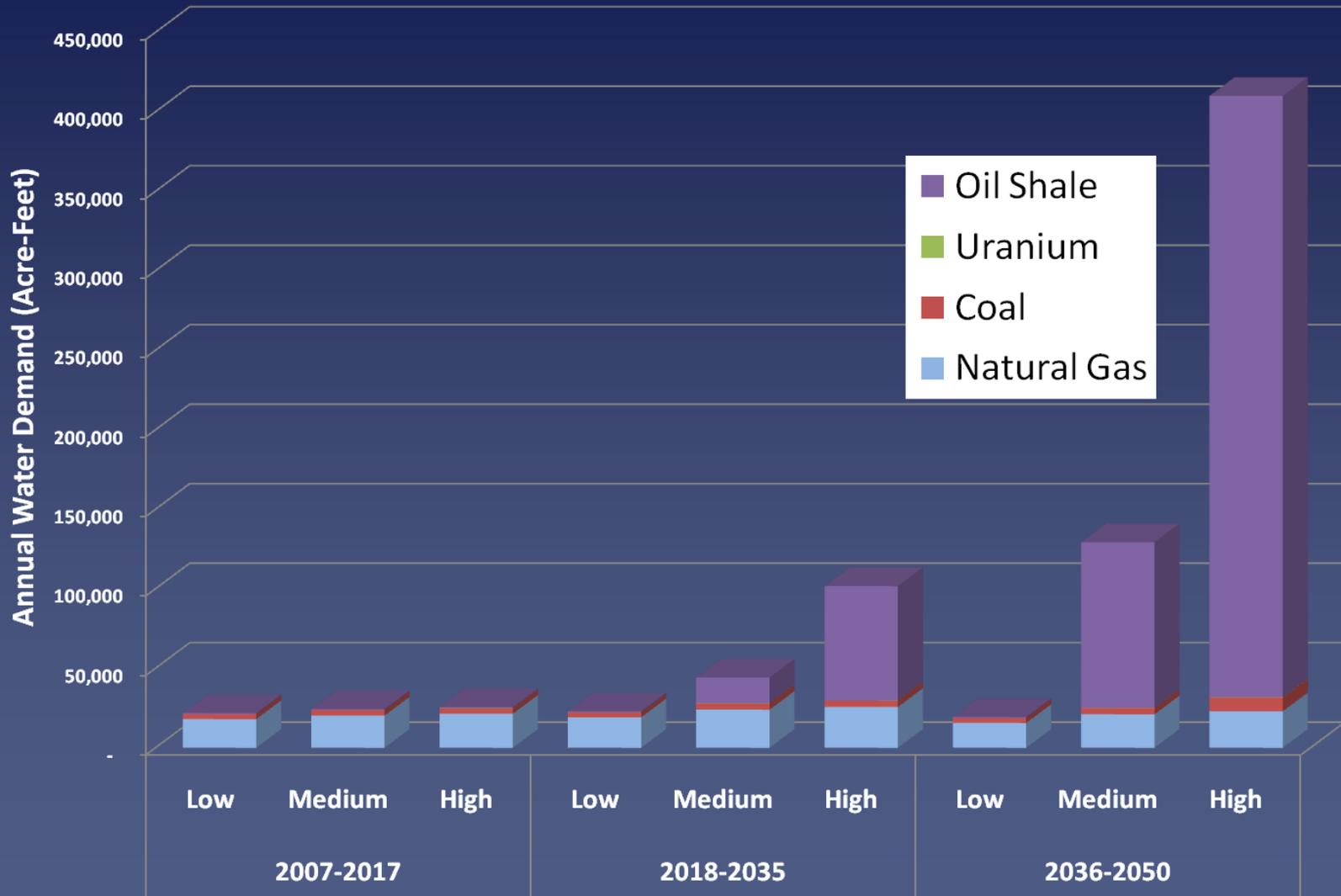
M&I Water Usage Rates by Basin



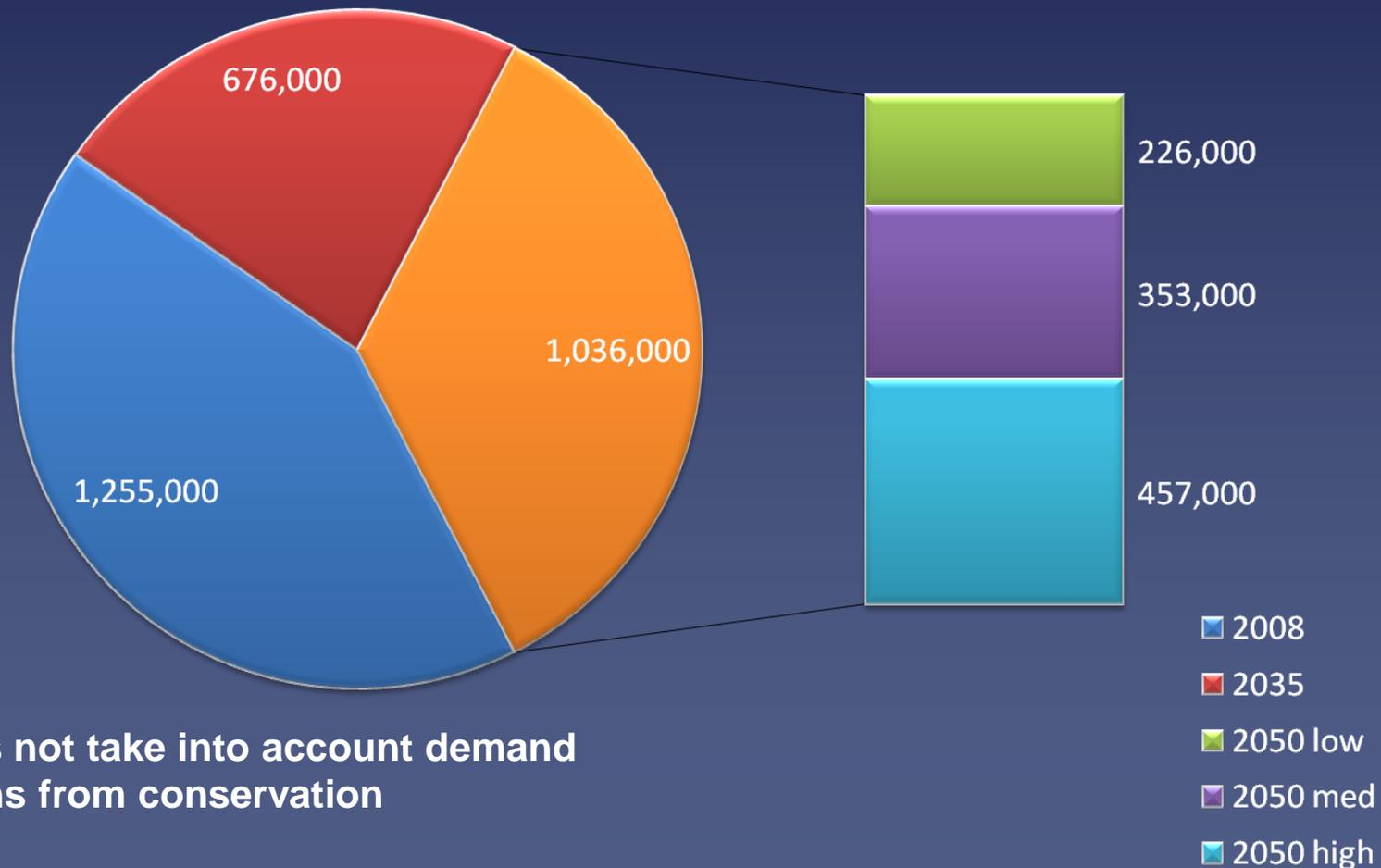
Municipal Water Demands by Basin



Colorado and Yampa/White Energy Demands



By 2050, Colorado will need up to 1.7 MAF to meet M&I demands*



*This does not take into account demand reductions from conservation

Next Steps

- Discuss Municipal and Industrial results with Basin Roundtables
- Discussion regarding how much of current demand reductions are technical vs. behavioral
- Conservation reductions for demands
- Incorporate into conservation strategy
- Project climate change impacts on demands
- Estimate agricultural demands at 2050