

Statewide Water Needs

and future estimated costs

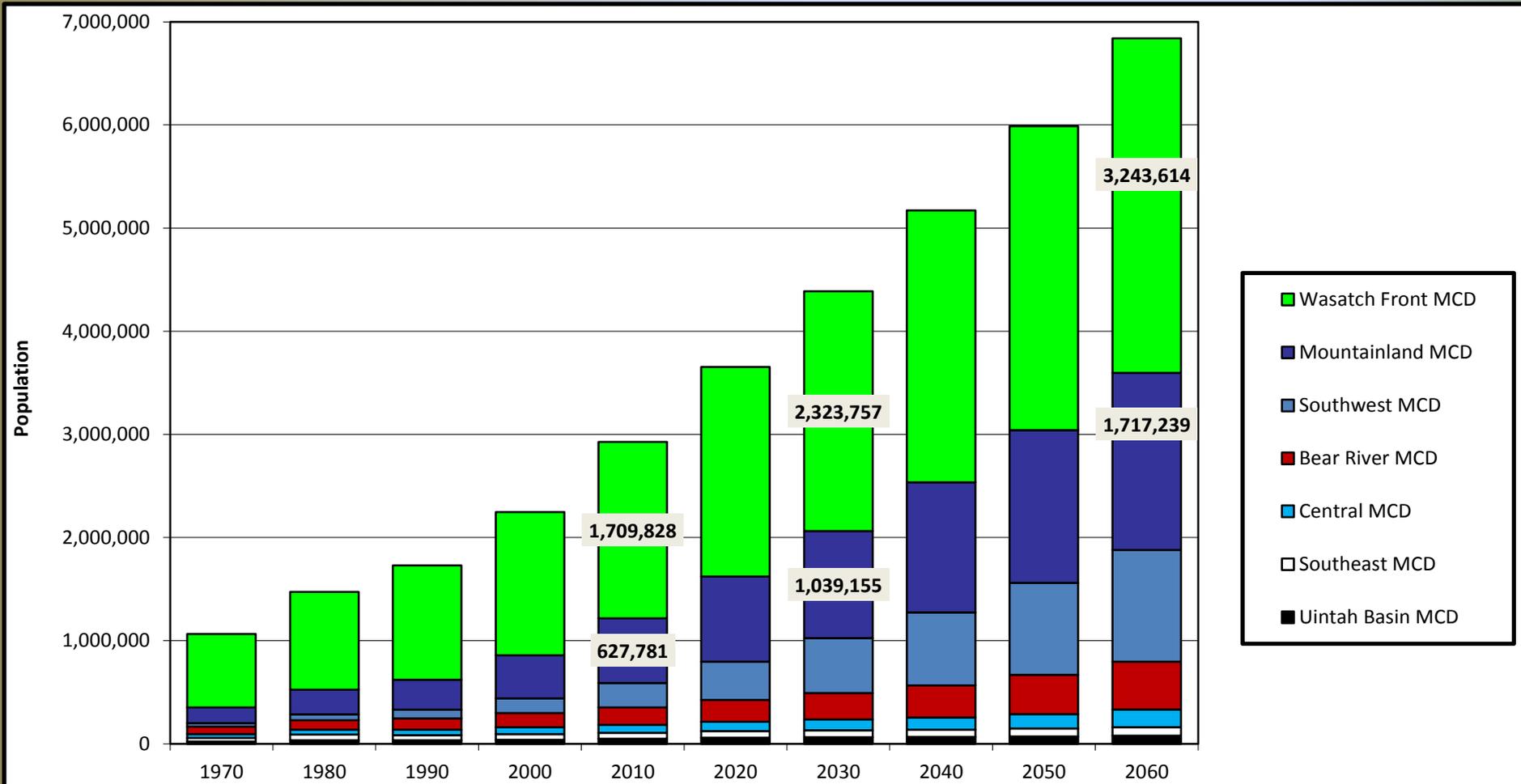
November 2011

Report from the Water Issues Task Force

Statewide Water Supply and Use

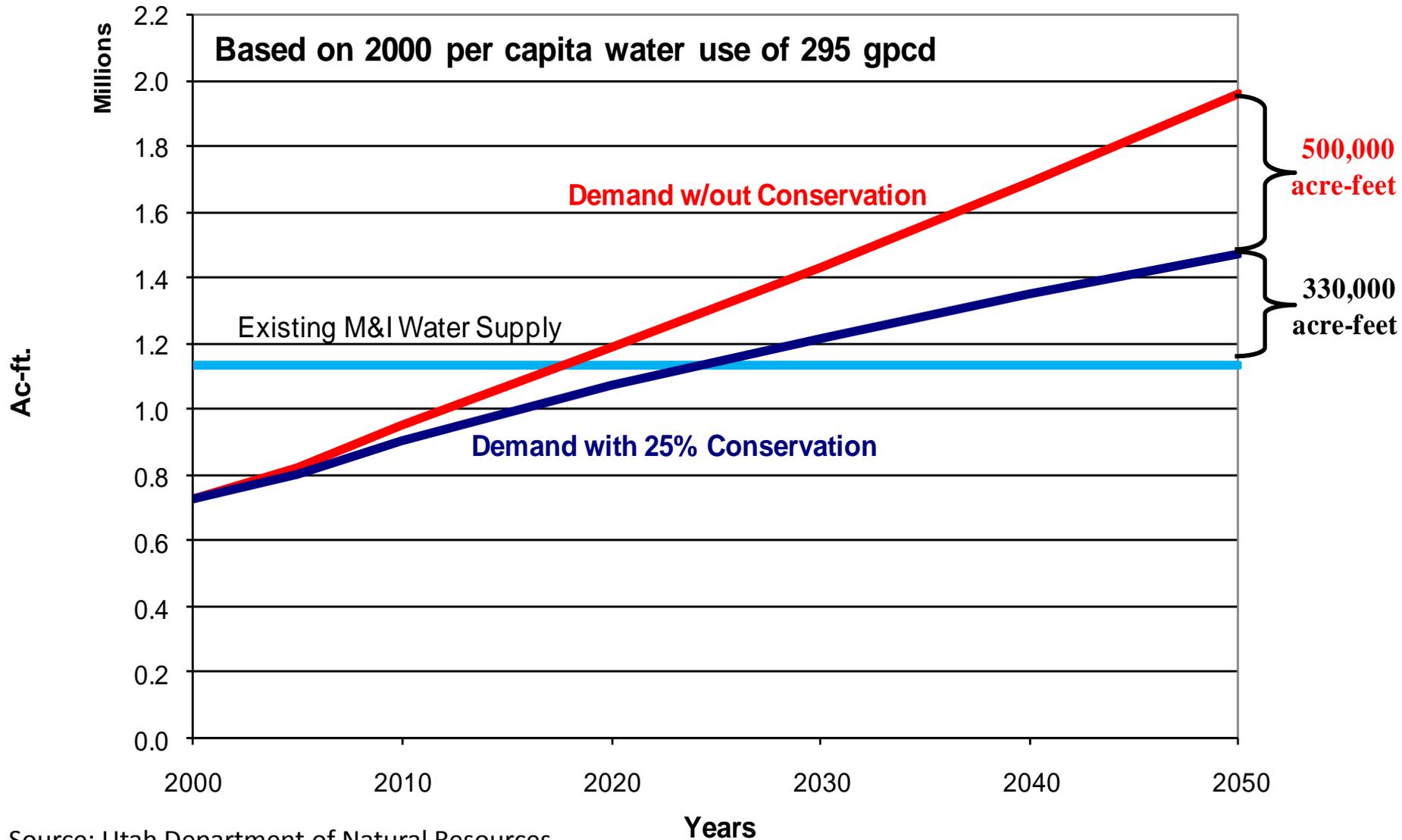
	Acre-feet/year
Total Precipitation	61,500,000
Water used by the Natural System	55,300,000
Great Salt Lake Evaporation	3,000,000
Agricultural Depletions	2,175,000
Municipal & Industrial Depletions	555,000
Developable Water Exiting Utah	470,000

Population Estimates by Multi-County District



Source: Governor's Office of Planning and Budget

Future M&I Water Needs vs Existing Supply



Source: Utah Department of Natural Resources

Water Districts

Estimated Future Needs

At the July, 2011 Water Task Force Meeting, the Jordan Valley Water Conservancy District, Weber Basin Water Conservancy District, and the Central Utah Water Conservancy District reported that each district would require between \$1.1 billion to \$1.2 billion in new water development projects over the next forty years to meet the projected demand for water in 2050.

Jordan Valley Water Conservancy District

The Jordan Valley Water Conservancy District (JVWCD) primarily serves Salt Lake County. The JVWCD reported that the estimated population in its service area would double by 2050 (from 603,000 to 1,169,000 - based on estimates provided by the Governor's Office of Planning and Budget).

JVWCD instituted an aggressive water conservation program in 2000 to decrease per capita water use by 25% by 2025. This is progressing well. Since 1999, water users served by JVWCD have decreased per capita consumption by 18%. However, this is not enough to meet the projected future water needs. JVWCD estimates another \$1.2 billion in new water development projects will be needed to meet future demand.

Weber Basin Water Conservancy District

The Weber Basin Water Conservancy District (which primarily serves Northern Utah) estimates that the population in the service area is expected to nearly double by 2050 from 608,000 to 1,034,000.

WBWCD estimates a need for \$1.1 billion in new water development projects to meet this growing demand.

Central Utah Water Conservancy District

The Central Utah Water Conservancy District (CUWCD) currently serves a population of about 1.7 million. This is expected to increase by approximately 75% by 2050.

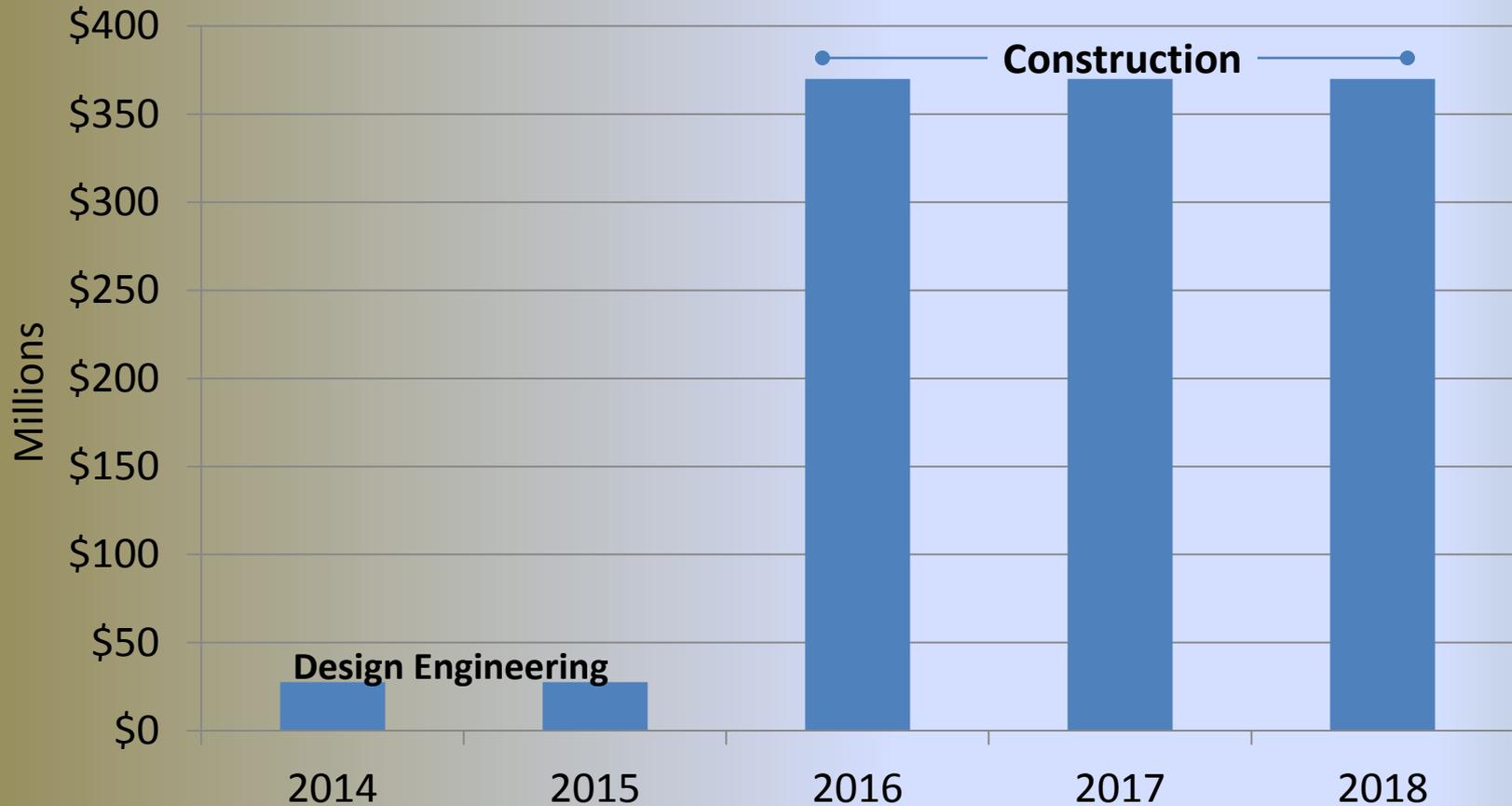
The CUWCD is currently working on the Central Utah Water Project, to be finished in roughly 10 years. This project is being financed by the federal government and the CUWCD and debt service costs will be paid entirely by the water users through fees.

The CUWCD estimates roughly \$1.2 billion in future water development project needs to meet the growing population by 2050.

Lake Powell Pipeline Development Act - Section 73-28-201 (1)(a)

“The board [of Water Resources] shall construct the [Lake Powell Pipeline] project as funded by the Legislature”

Estimated Lake Powell Pipeline Project Costs

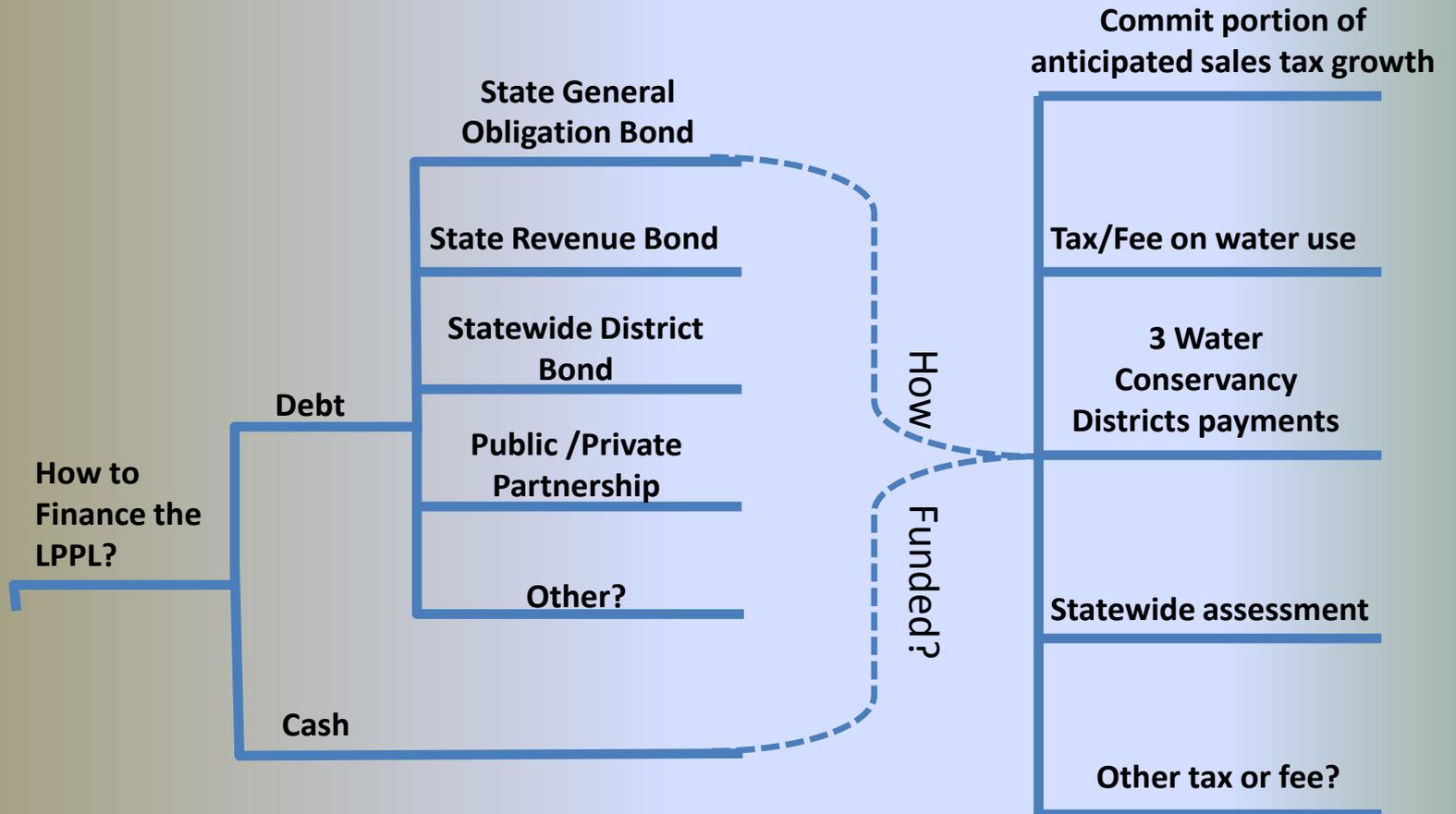


Based on 2009 projections made by Division of Water Resources Consultant

Question

Financing

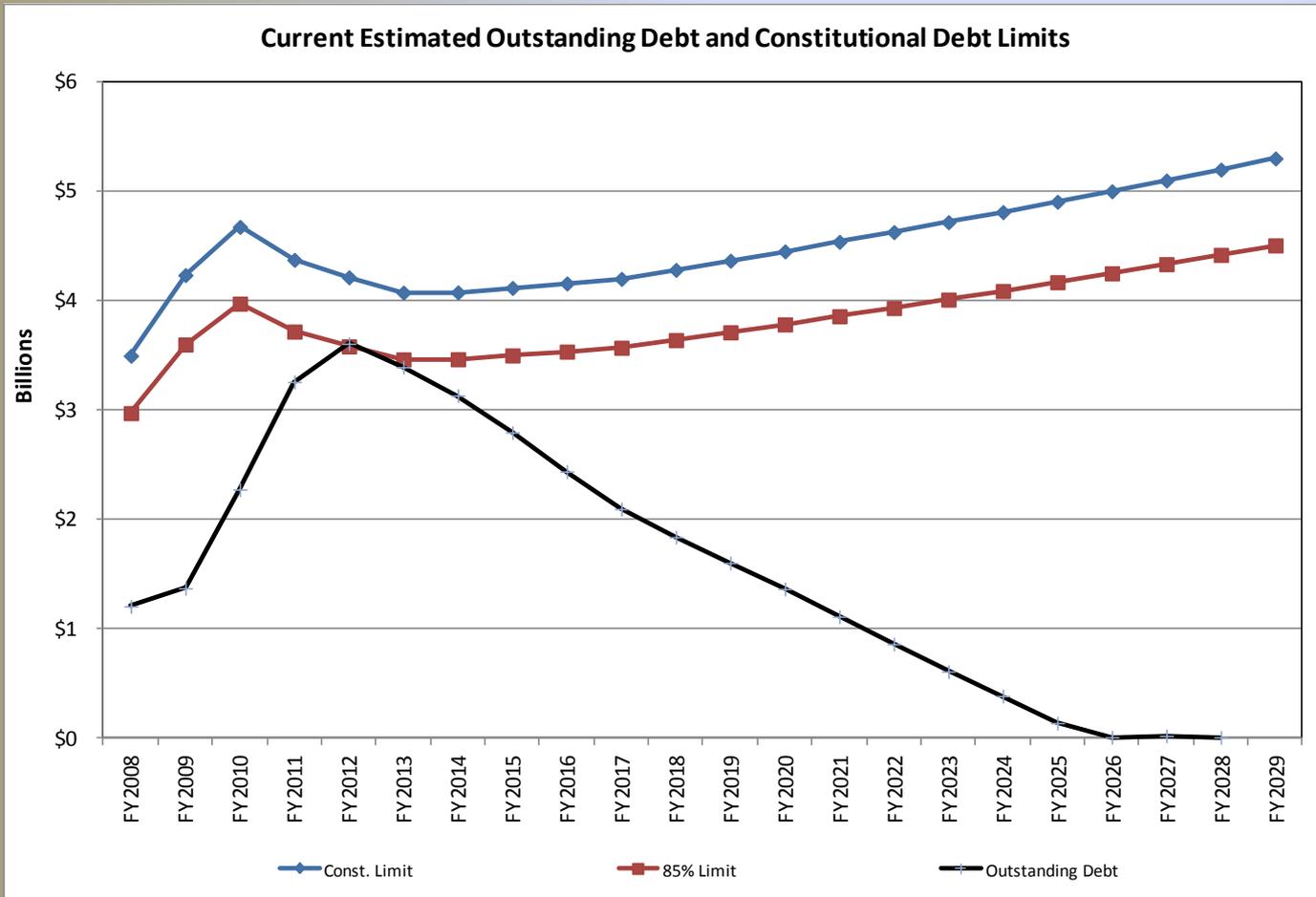
Funding



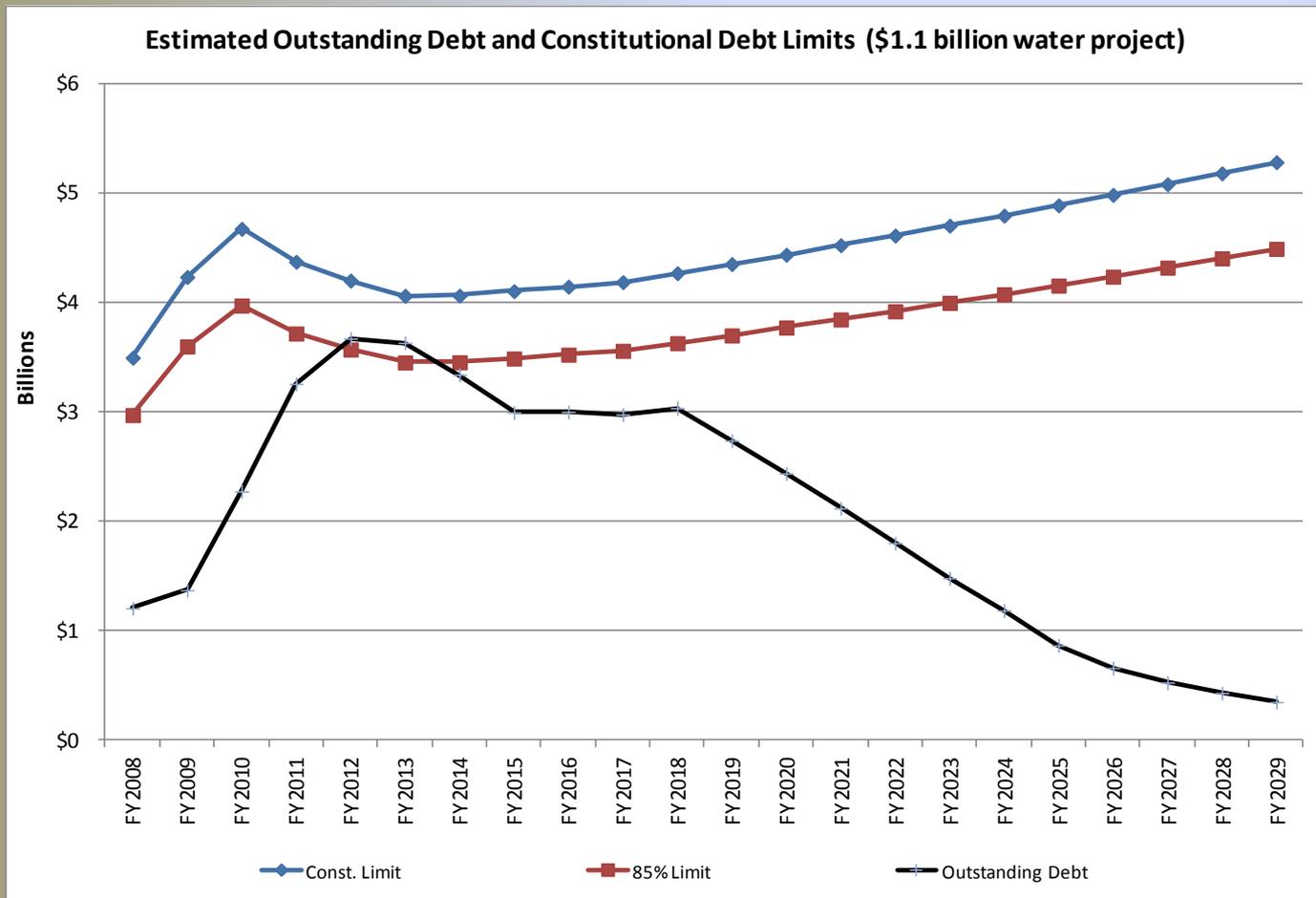
Using General Obligation Bonds to Finance the Lake Powell Pipeline Project

- 15 year maturities
- Lowest interest rate (AAA rating)
- Assuming that the design phase is cash funded over two years (\$27.5 million in 2014 and 2015)
- Assuming three \$370 million issuances in 2016, 2017, and 2018 to finance the construction phase of the Lake Powell Pipeline project.
- Annual debt service payment on this debt is estimated to be roughly \$90 to \$100 million.

Current State Bonding Capacity



Projected State Bonding Capacity with Water GO Bonds



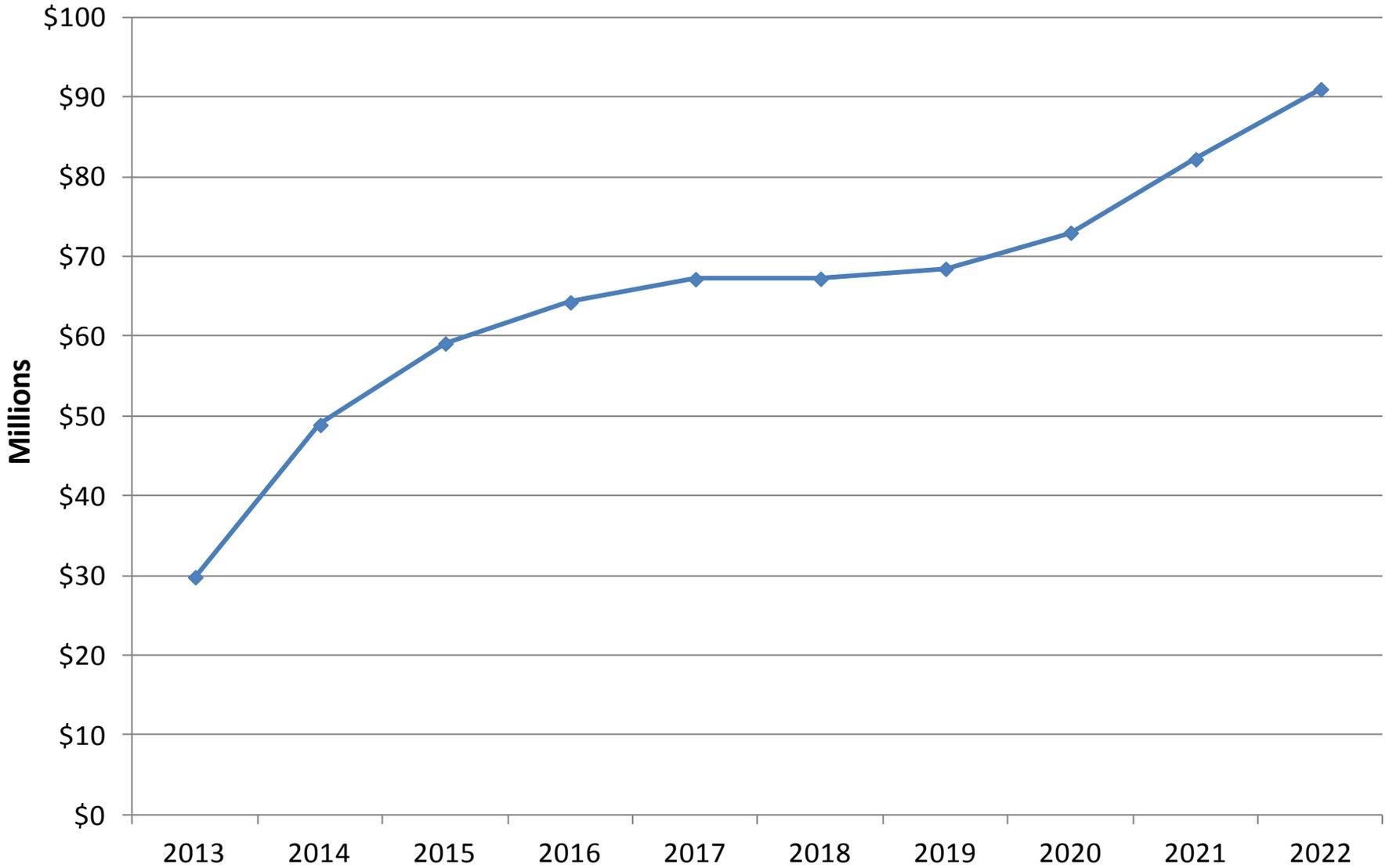
Outstanding Issues

- Assuming the Lake Powell Pipeline is built, what is the best way to finance the project?
 - **Cash** - How much can be captured prior to construction?
 - **GO Bond** – Directly impacts the State Constitutional Debt Limit and constricts the state’s ability to GO Bond finance competing bonding needs (i.e. transportation)
 - **Revenue Bond** – Would result in higher interest rates. It’s unclear whether revenue bonds would count against the State Constitutional Debt Limit.
 - **Statewide District Bond** – Would require statutory authority to create a statewide water district, independent of the Legislature, with the ability to raise and collect revenues, and issue bonds. It’s unclear whether such bonds would count towards the State Constitutional Debt Limit.
 - **Public Private Partnership** - Would result in higher annual costs to the state. This option assumes certain construction and financing risks would be transferred to the private project developer.
- What are the potential funding sources to pay the financing costs?
 - Earmark on anticipated growth in the sales tax revenue
 - Tax/fee on water usage
 - 3 Water Conservancy District payments
 - Statewide assessment or tax by a statewide local district
 - Other taxes or fees

Recommendation of the Water Issues Task Force

- The Water Issues Task Force recommends that the Legislature consider using up to 15 percent of the estimated increase in sales tax revenue, beginning in the 2014 fiscal year.

Rough Estimate of a 15% Earmark on Future Sales Tax Growth



Note: Numbers contained in the graph above are estimates only. The projections are based on 2011 revenue estimates and contain multiple assumptions. Actual results will vary due to unforeseen economic conditions and tax collection volatility.