

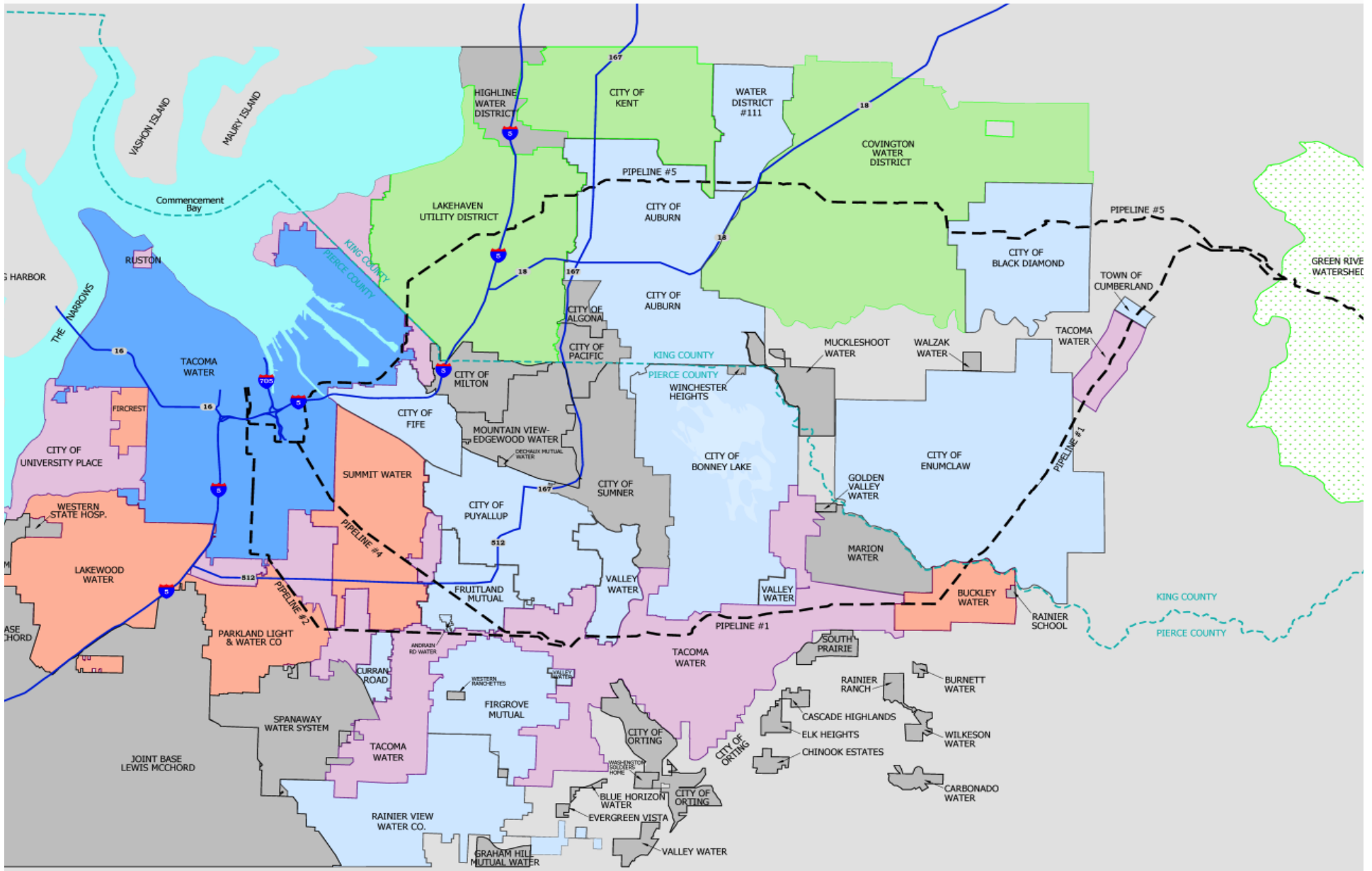
NEW THINKING ABOUT RATES, COSTS, AND CONSUMER DEMAND

**2014 AMWA EXECUTIVE MANAGEMENT CONFERENCE
OCTOBER 21, 2014**

**LINDA MCCREA
SUPERINTENDENT**

TACOMA  WATER
TACOMA PUBLIC UTILITIES

TACOMA WATER'S SERVICE AREA



TACOMA WATER'S BACKGROUND

REGIONAL UTILITY WITH 250 EMPLOYEES

- Directly serves 318,000 people (Pierce/King Counties)
- Significant industrial customer base
- Indirectly serves nearly one million additional people via wholesale and partnership supply arrangements

PURCHASED WITH POWER UTILITY BY CITY FOR \$1.75 MILLION IN 1893

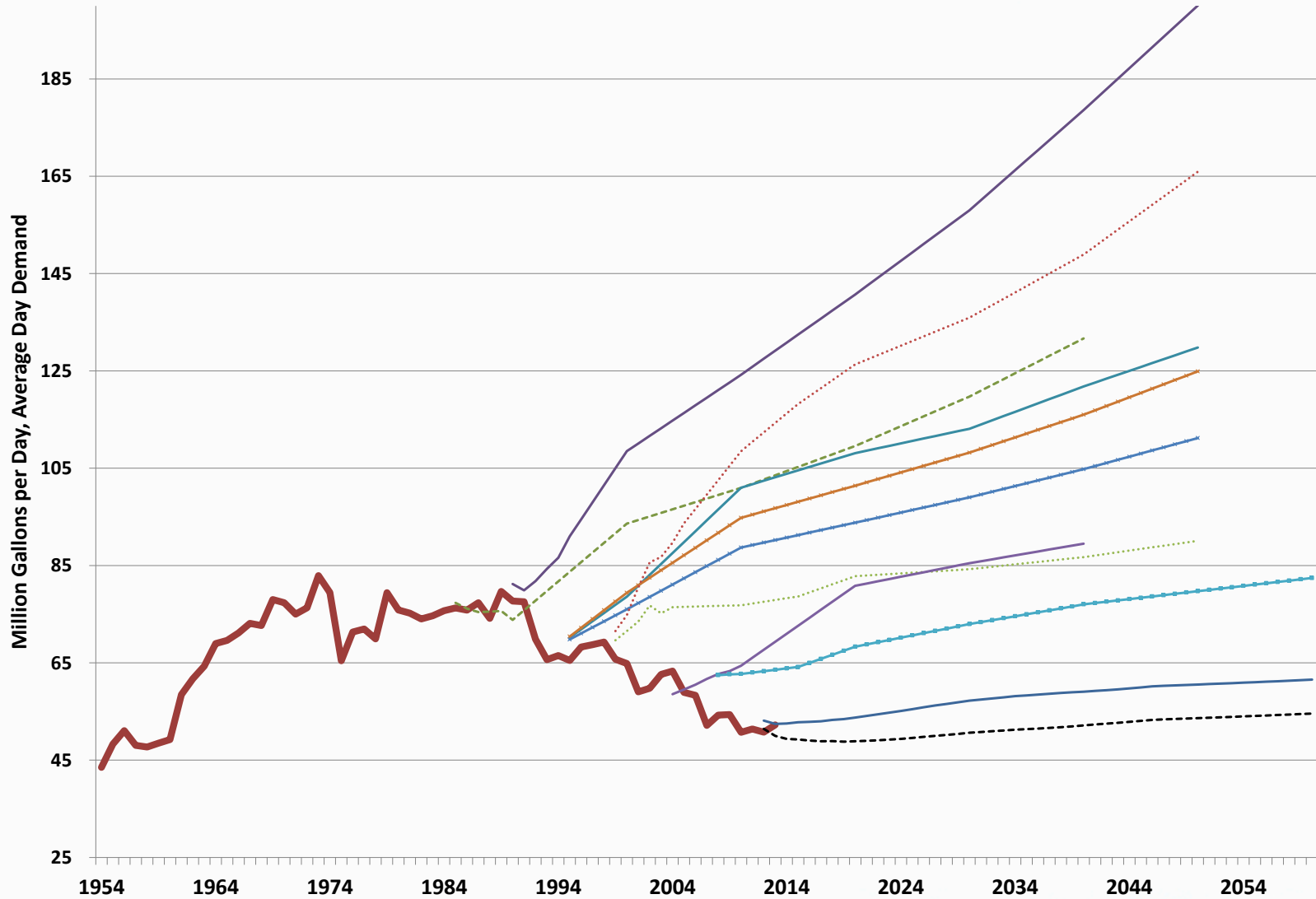
NOW HOLDS OVER \$1 BILLION IN ASSETS

ONLY 4% OF COSTS ARE DUE TO VOLUME PRODUCED

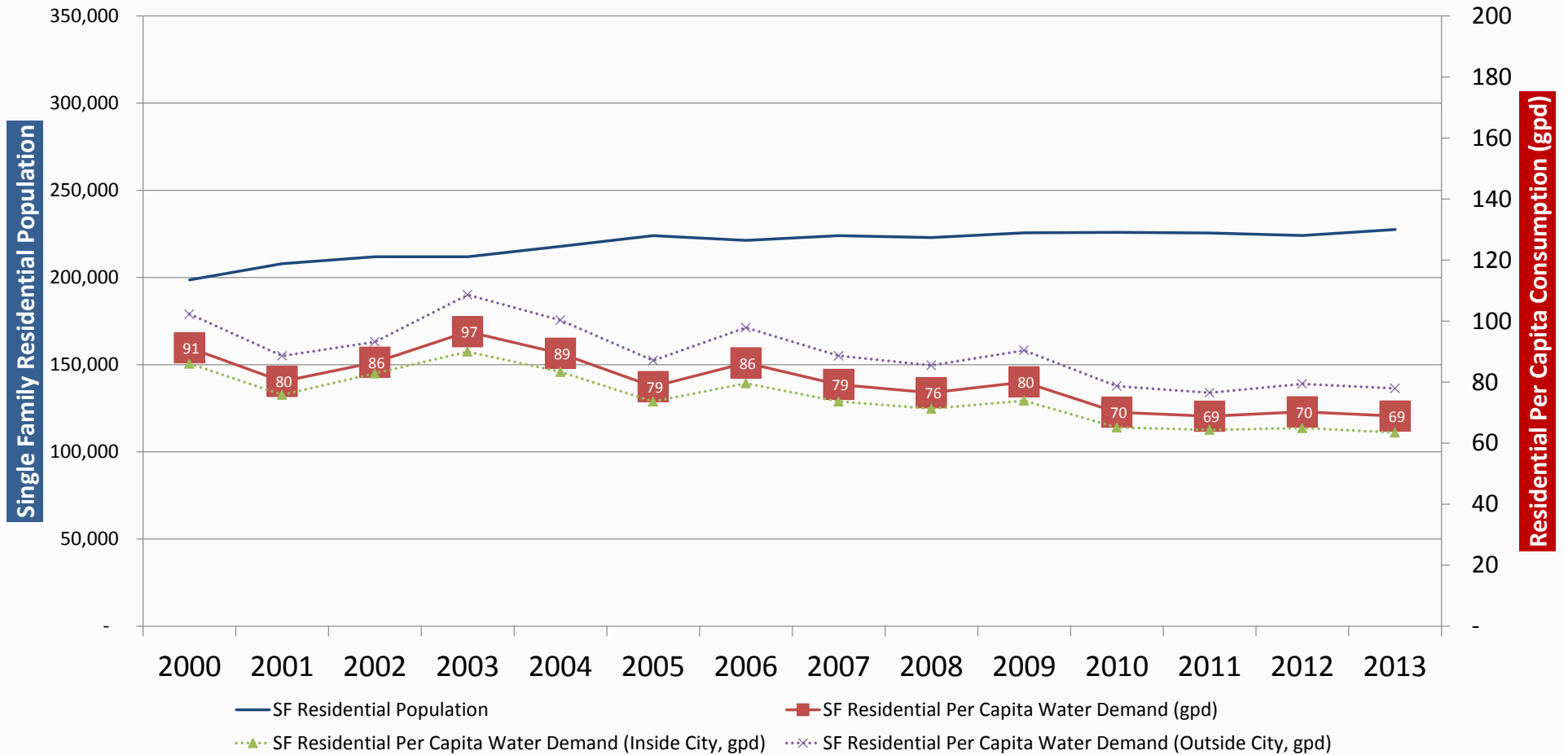
ASSETS ARE VERY LONG-LIVED (50-200 YEARS)

PLANNING HORIZONS MUST ALSO BE LONG

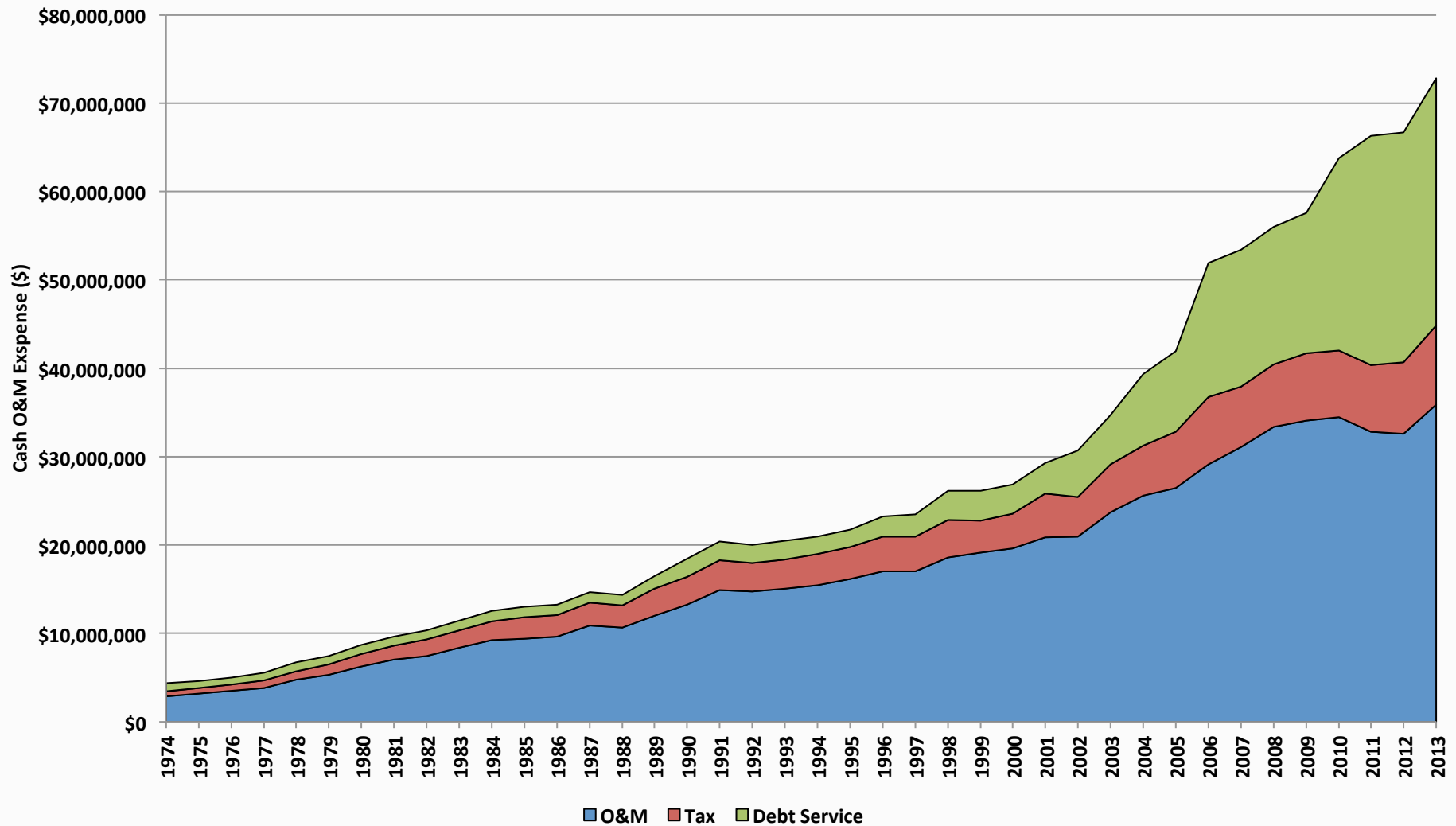
LONG PLANNING HORIZONS = UNCERTAINTY



PER CAPITA DEMANDS ARE DECLINING

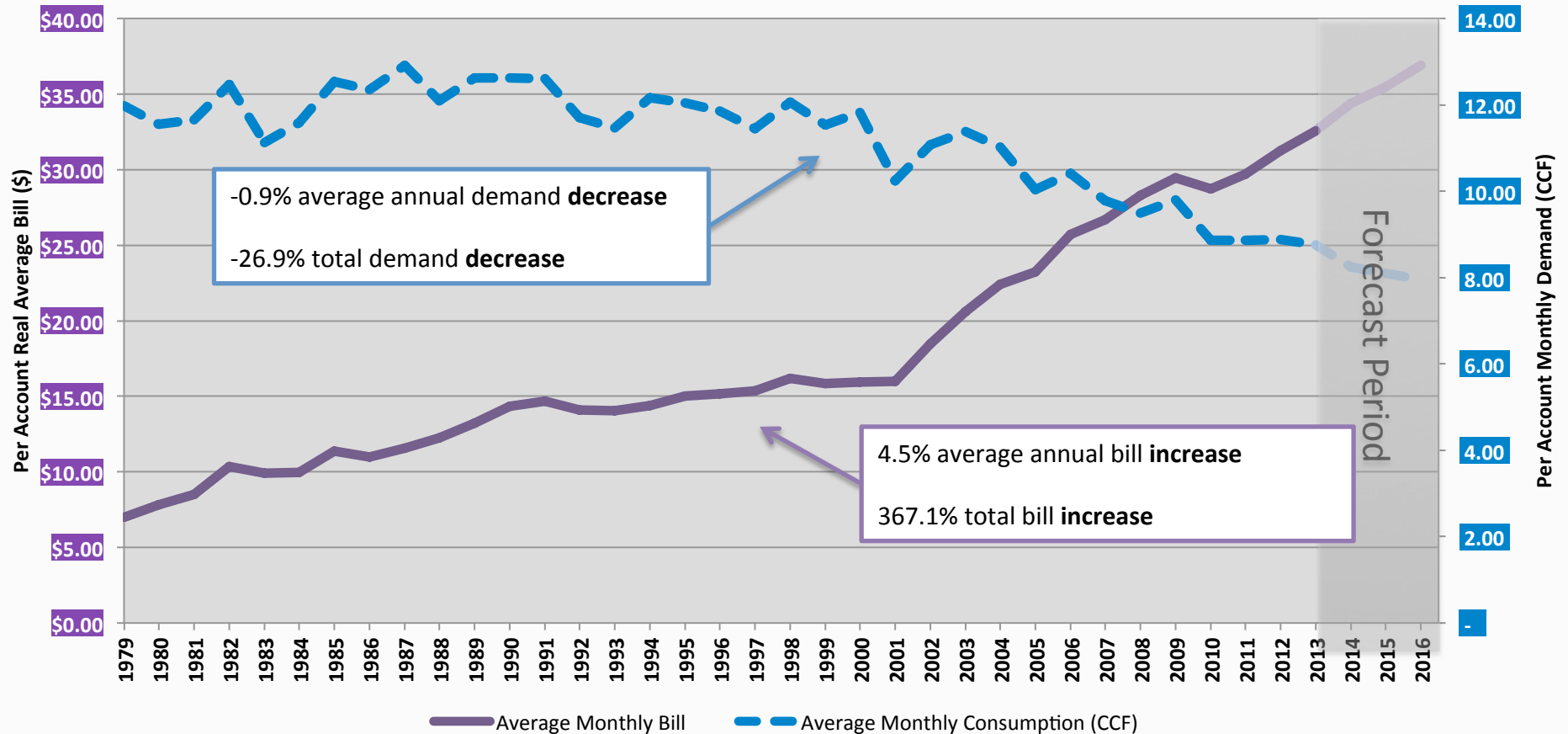


COSTS ARE INCREASING



BILLS ARE GETTING LARGER (NOMINAL)

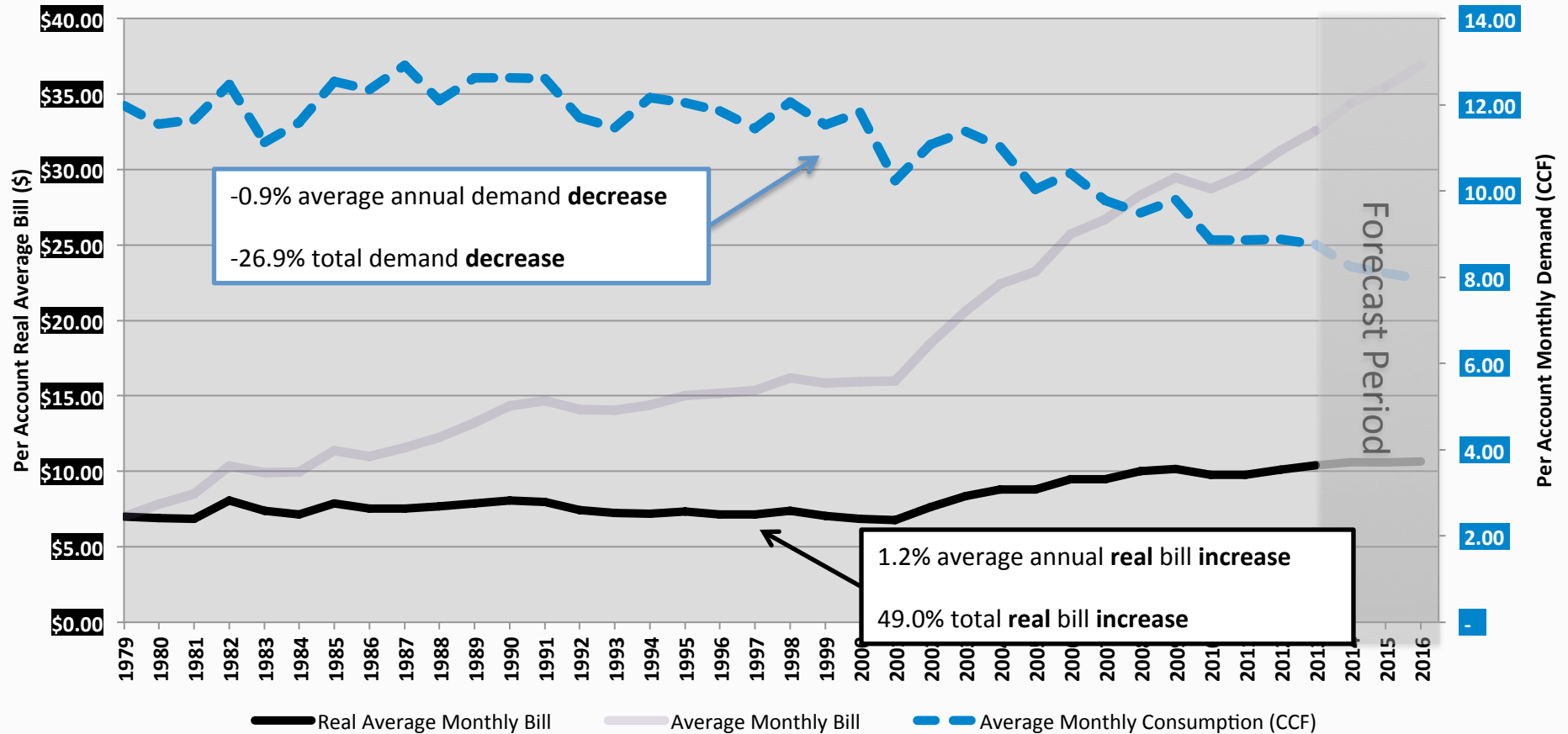
Inflation Adjusted Average Monthly Bill of a Residential Inside City Customer



Residential class includes Single-Family and Multi-Family (Condominiums, Apartments, Multiplex)

BILLS ARE GETTING LARGER (REAL)

Inflation Adjusted Average Monthly Bill of a Residential Inside City Customer



Residential class includes Single-Family and Multi-Family (Condominiums, Apartments, Multiplex)

Inflation Adjusted – Base year 1979 (CPI-U)

WHAT DOES THIS MEAN FOR THE FUTURE OF THE WATER BUSINESS IN THE NORTHWEST?

NEED TO CONTINUE TO EXERT COST CONTROL

- Preserve access to low-interest state loan programs
- Protect tax-exempt revenue bond financing
- Manage agreements effectively (e.g. w/ Army Corps of Engineers)
- Apply asset management principles to maintenance, replacement, and operation of infrastructure

WE CAN'T CONTROL EVERYTHING, BUT THERE ARE LEVERS WE CAN USE TO INCREASE OUR FLEXIBILITY AND USE AS NEEDED

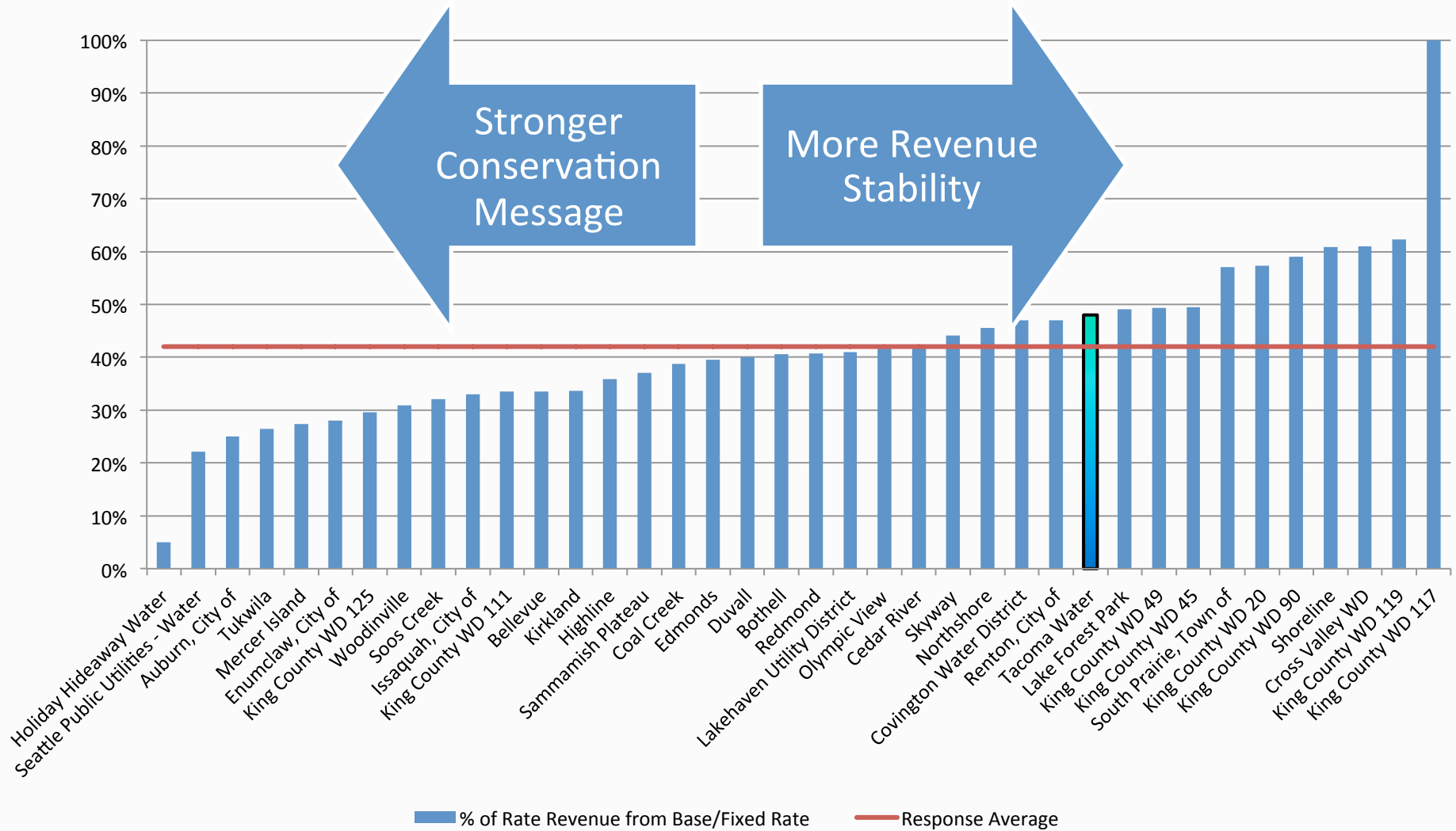
NEED TO ESTABLISH DYNAMIC DEMAND MANAGEMENT

- Use conservation flexibly
- Programmatic incentives/messaging
- Rate design
- Contracting
- Market Creation

DYNAMIC DEMAND MANAGEMENT: PLANNING IN SPITE OF UNCERTAINTY

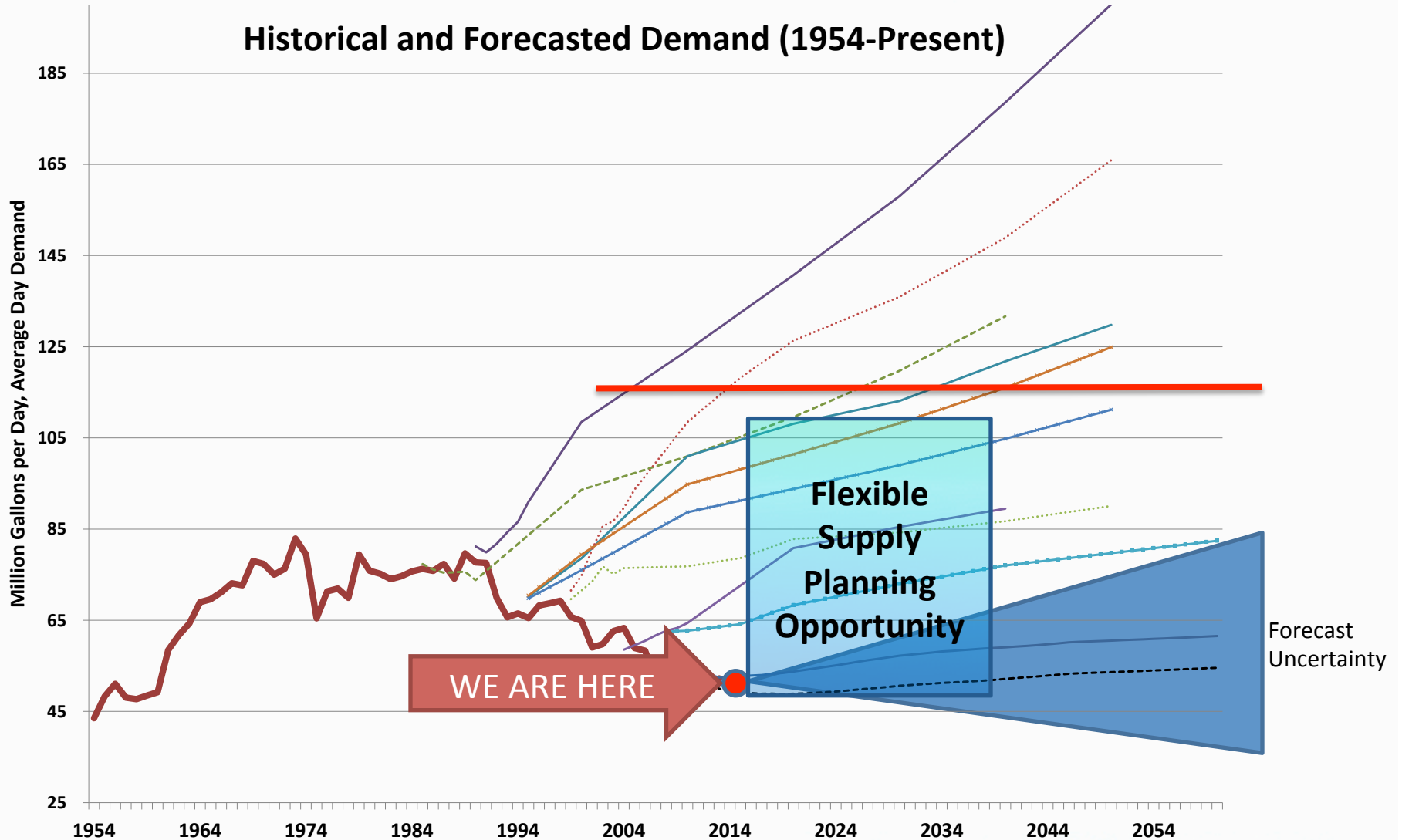


DYNAMIC DEMAND MANAGEMENT: RATE DESIGN



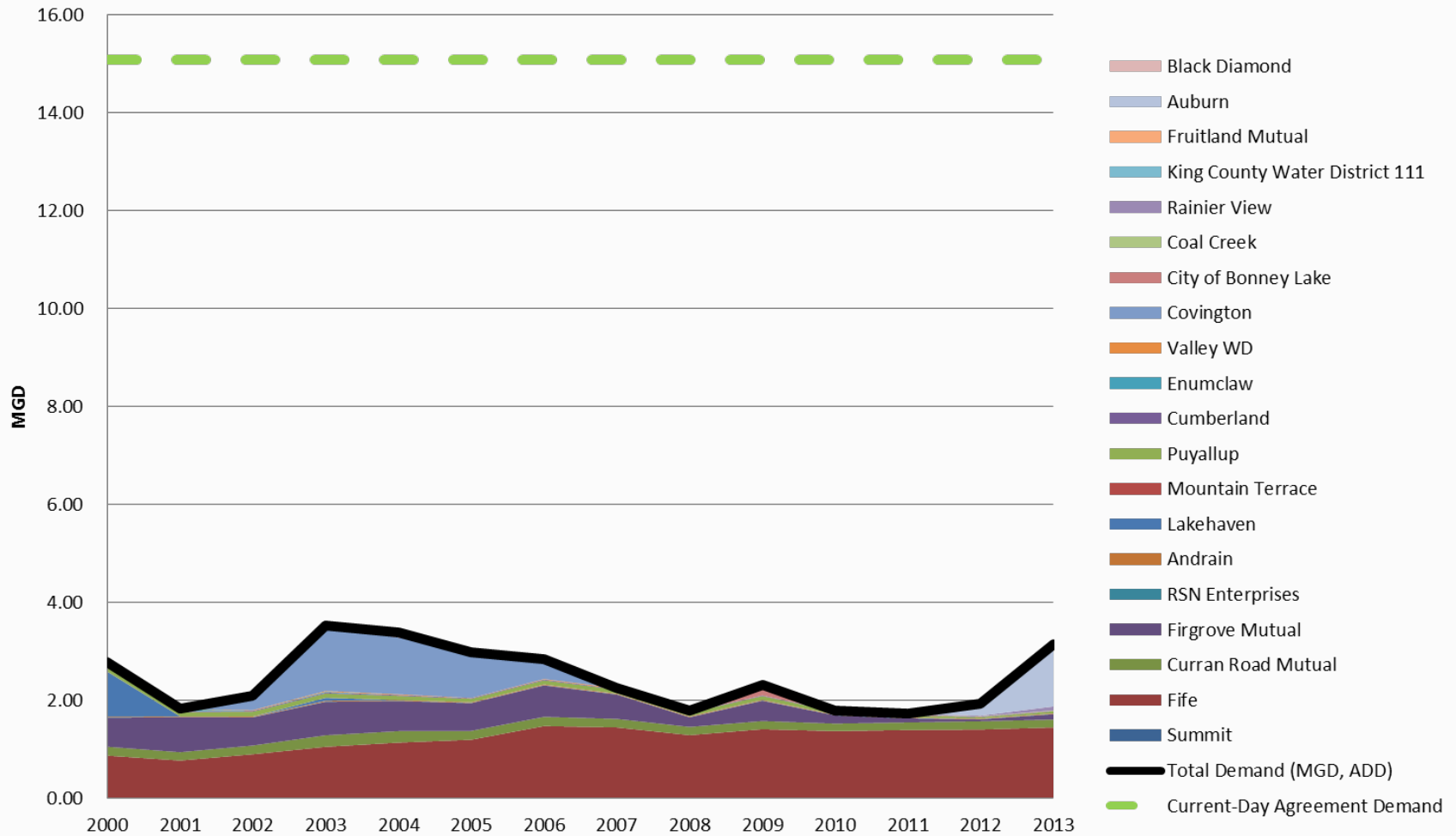
DYNAMIC DEMAND MANAGEMENT: FLEXIBLE SUPPLY PLANNING

Historical and Forecasted Demand (1954-Present)

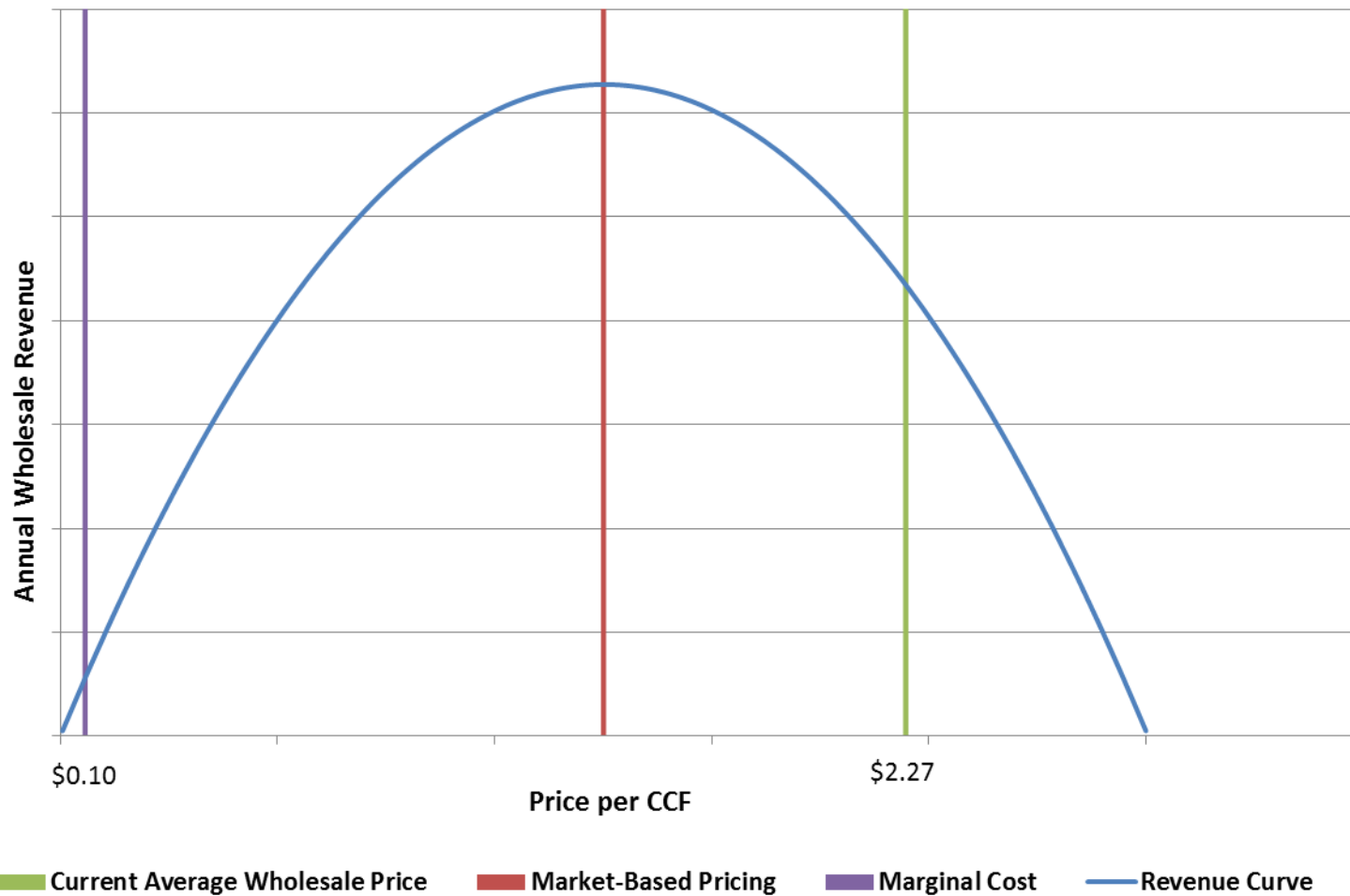


— = Yield (Supply Capacity)

DYNAMIC DEMAND MANAGEMENT: CURRENT TRENDS OF WHOLESALE CUSTOMERS

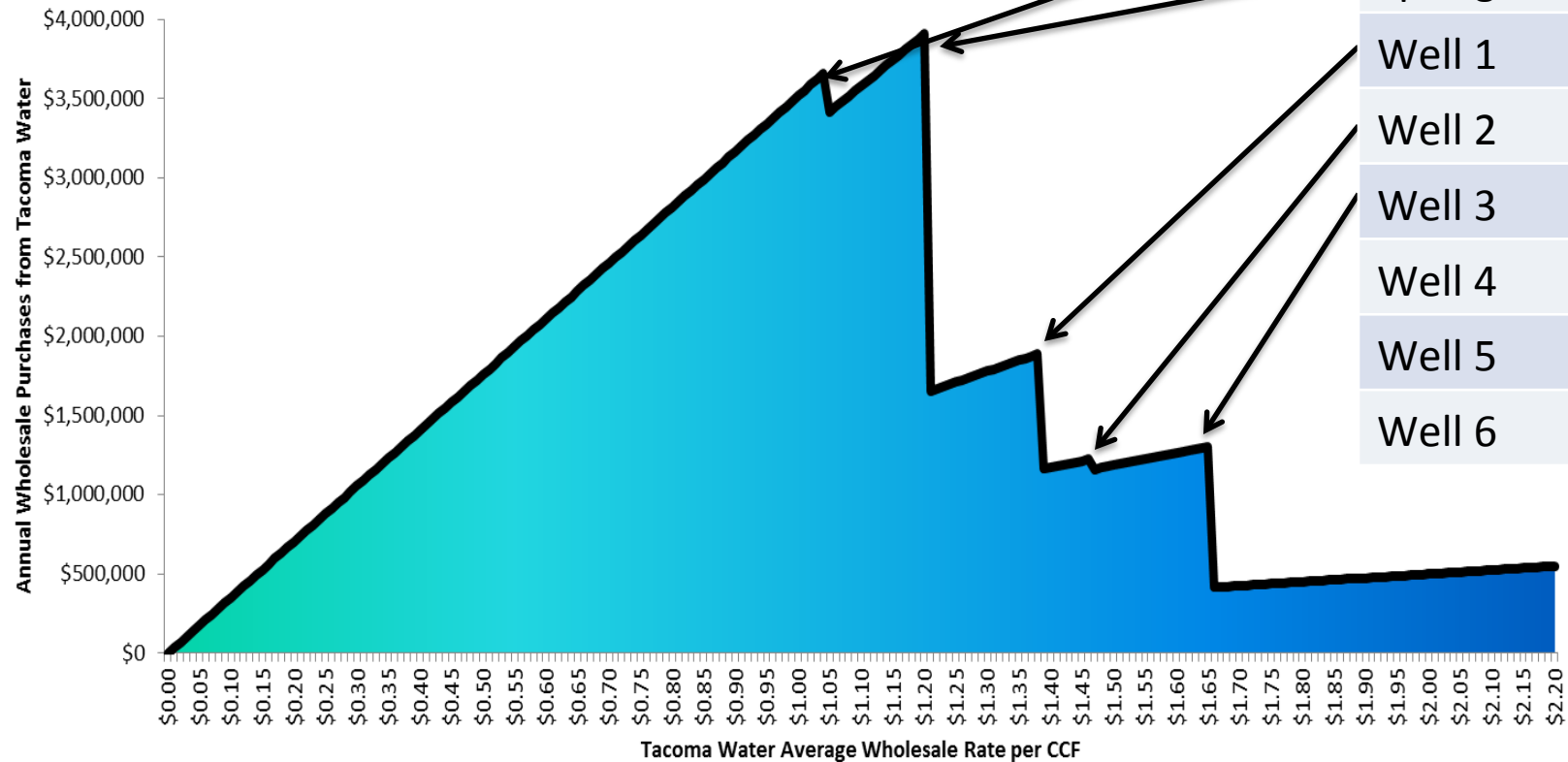


DYNAMIC DEMAND MANAGEMENT: REVENUE MAXIMIZATION IN A MARKET



DYNAMIC DEMAND MANAGEMENT: FLEXIBLE WHOLESALE MARKET PRICING

The opportunity cost of using your own sources vs.
Tacoma Water's sources



DYNAMIC DEMAND MANAGEMENT: SUMMARY OF VALUE

RETAIN CONSERVATION OPTIONS

- Deploy them as needed, dynamically
- Understand their short- and long-term effects

PROMOTE MORE EFFICIENT RESOURCE UTILIZATION THROUGH REGIONAL PLANNING

- **Encourage Market Development**
 - Less emphasis on provincial autonomy and control
 - Focus more on development of efficient options, cooperation, flexibility
- **Prevent inefficient (environmentally/economically) regional investment plans**
 - New water resource and water right development
 - Construction of redundant infrastructure (transmission, treatment, supply)

DELIVER THE VALUE OF OUR RESOURCE TO OUR RATEPAYERS