

Rates, Bills, Costs & Consumption: The “Conservation Conundrum”

AMWA Conference Presentation

October 21, 2014

by

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Seattle Public Utilities

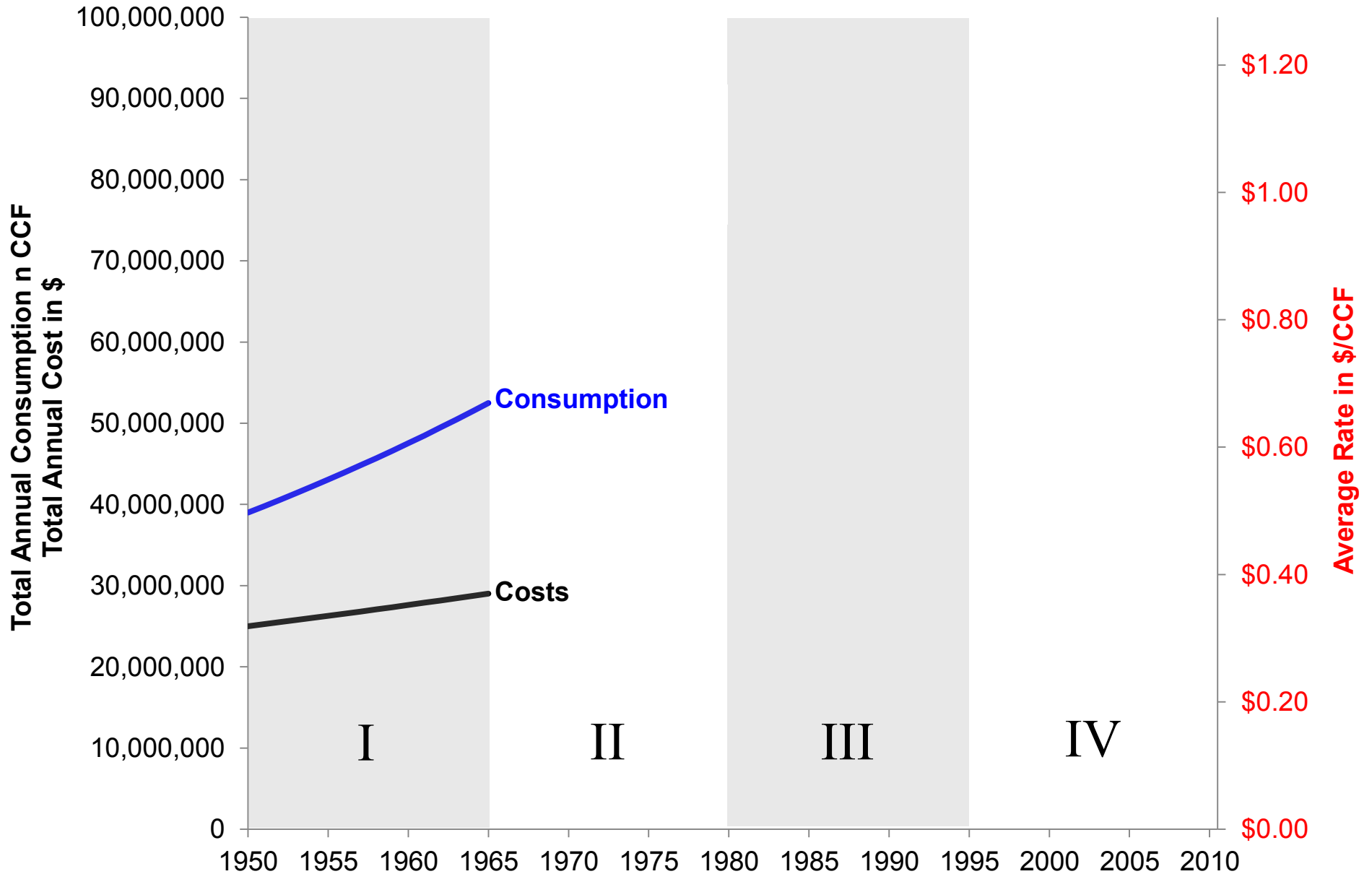
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Structure of Presentation

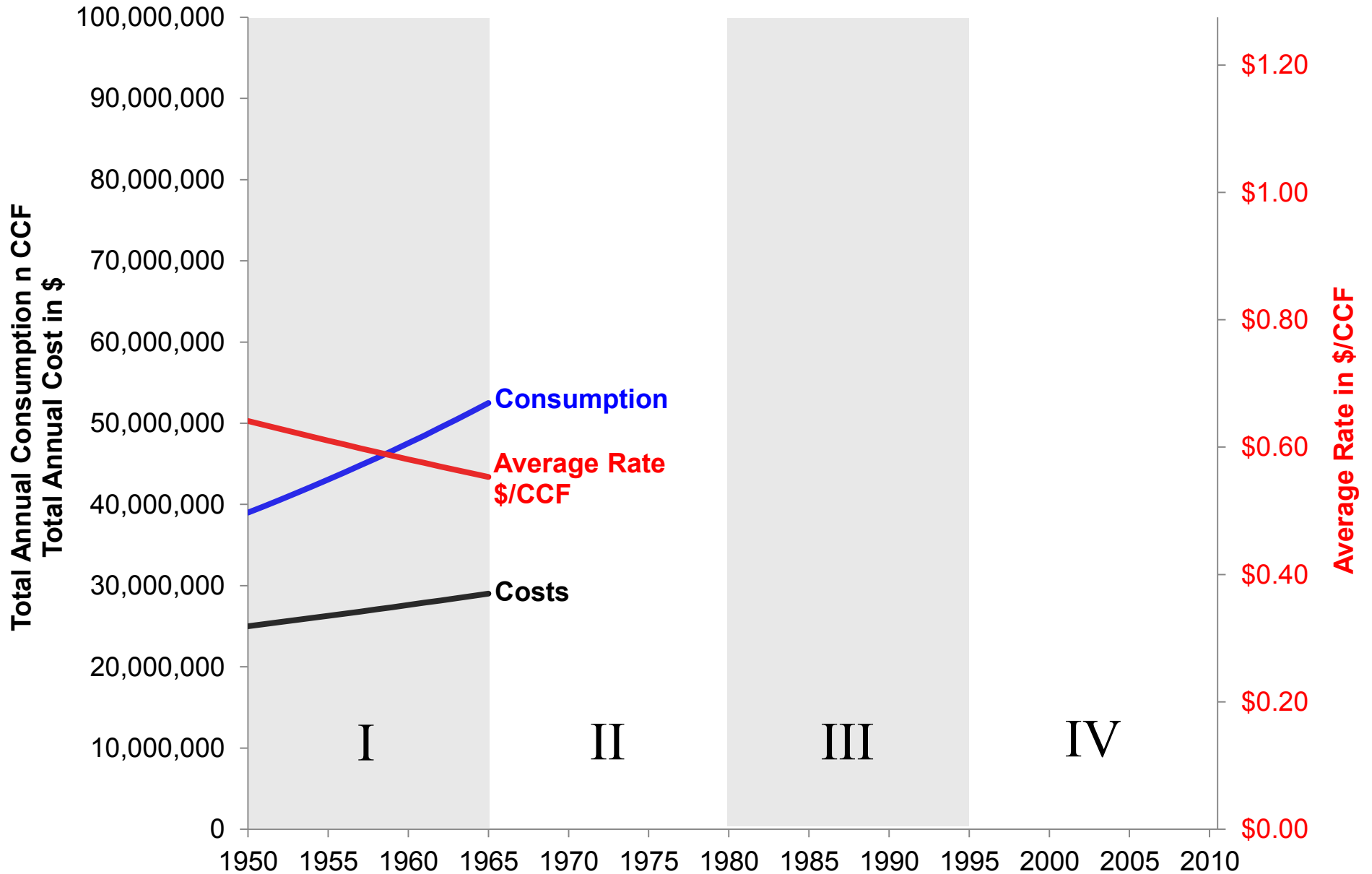
- Review impact on rates of cost changes and consumption changes -- hypothetical examples
- Look at the Seattle experience over the last several decades:
 - ✓ Consumption, costs, rates
 - ✓ Rates versus customer bills
- Look again at conservation: is it a good idea?

$$\text{Rate} = \frac{\text{Cost (\$)}}{\text{Consumption (ccf)}}$$

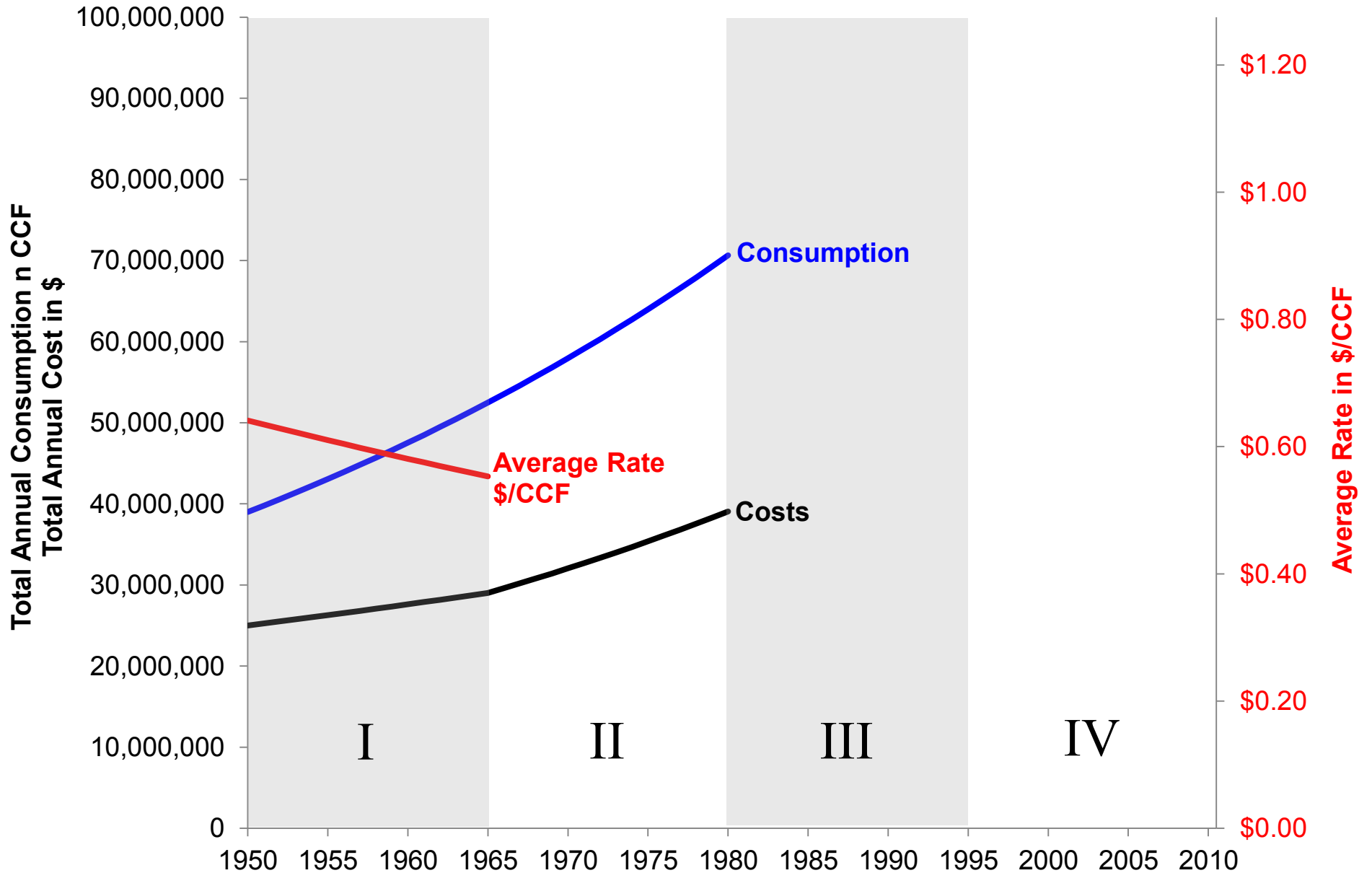
Impact of Relative Growth Rates of Costs and Consumption on Average Rates



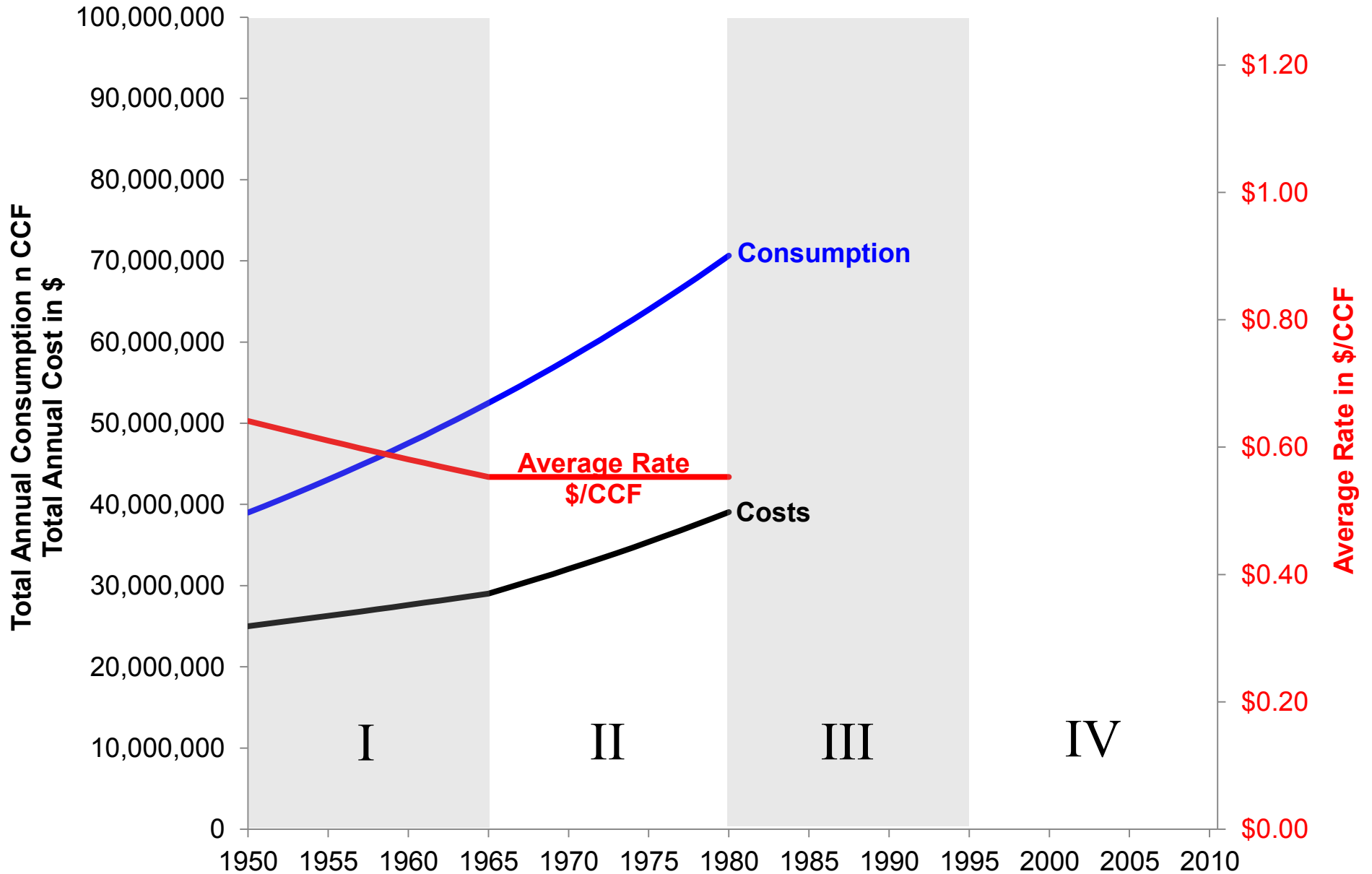
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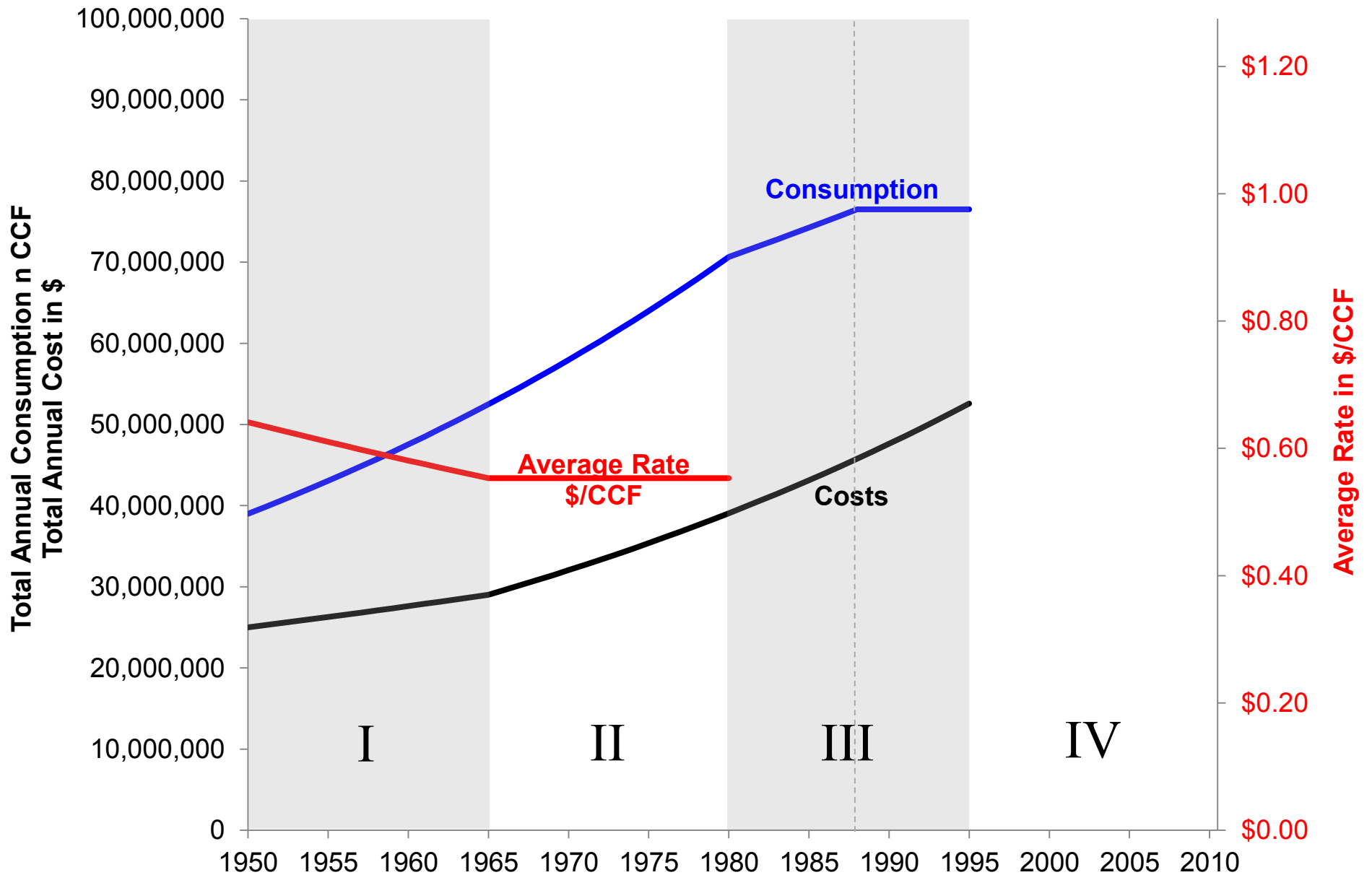
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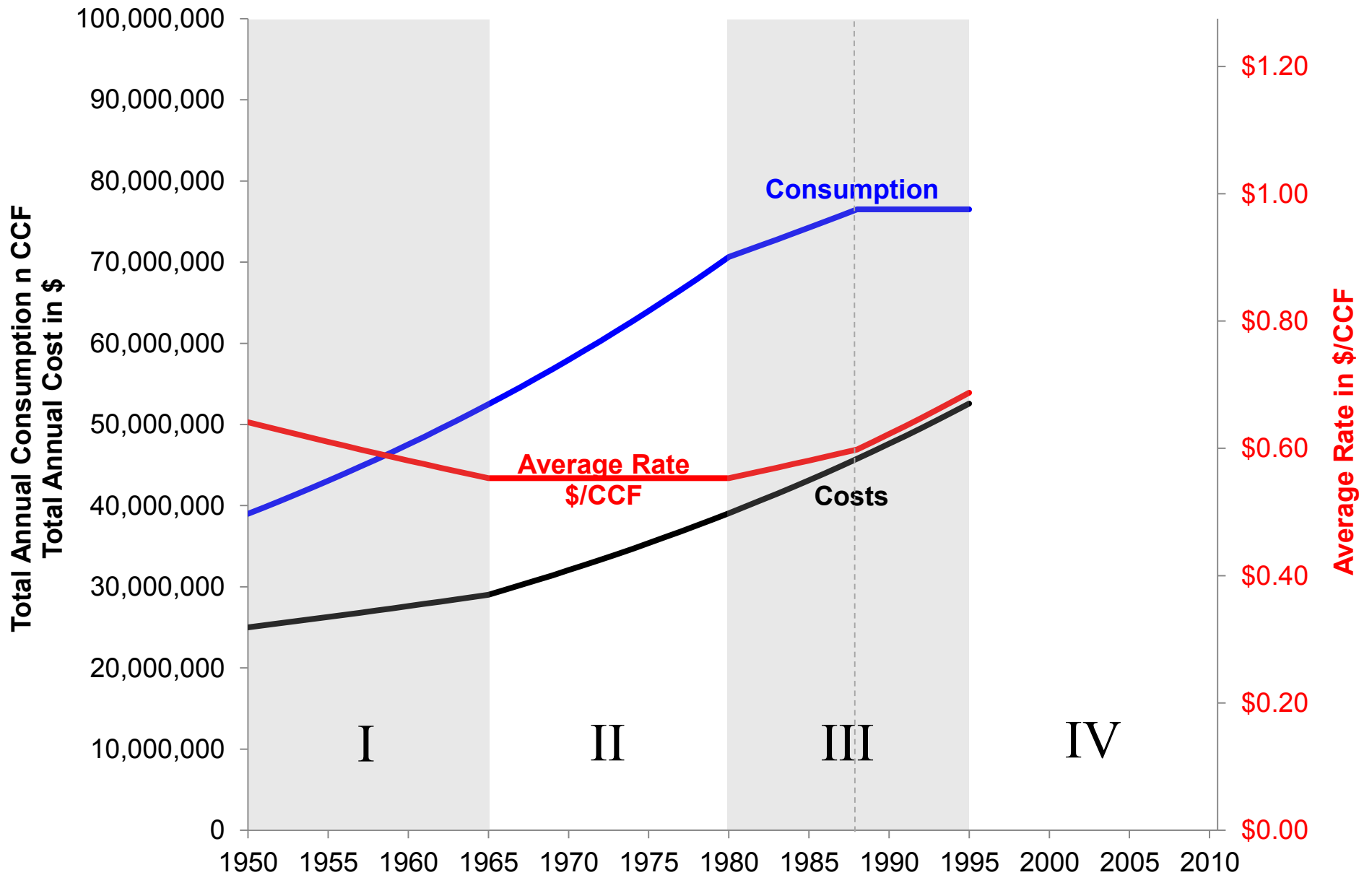
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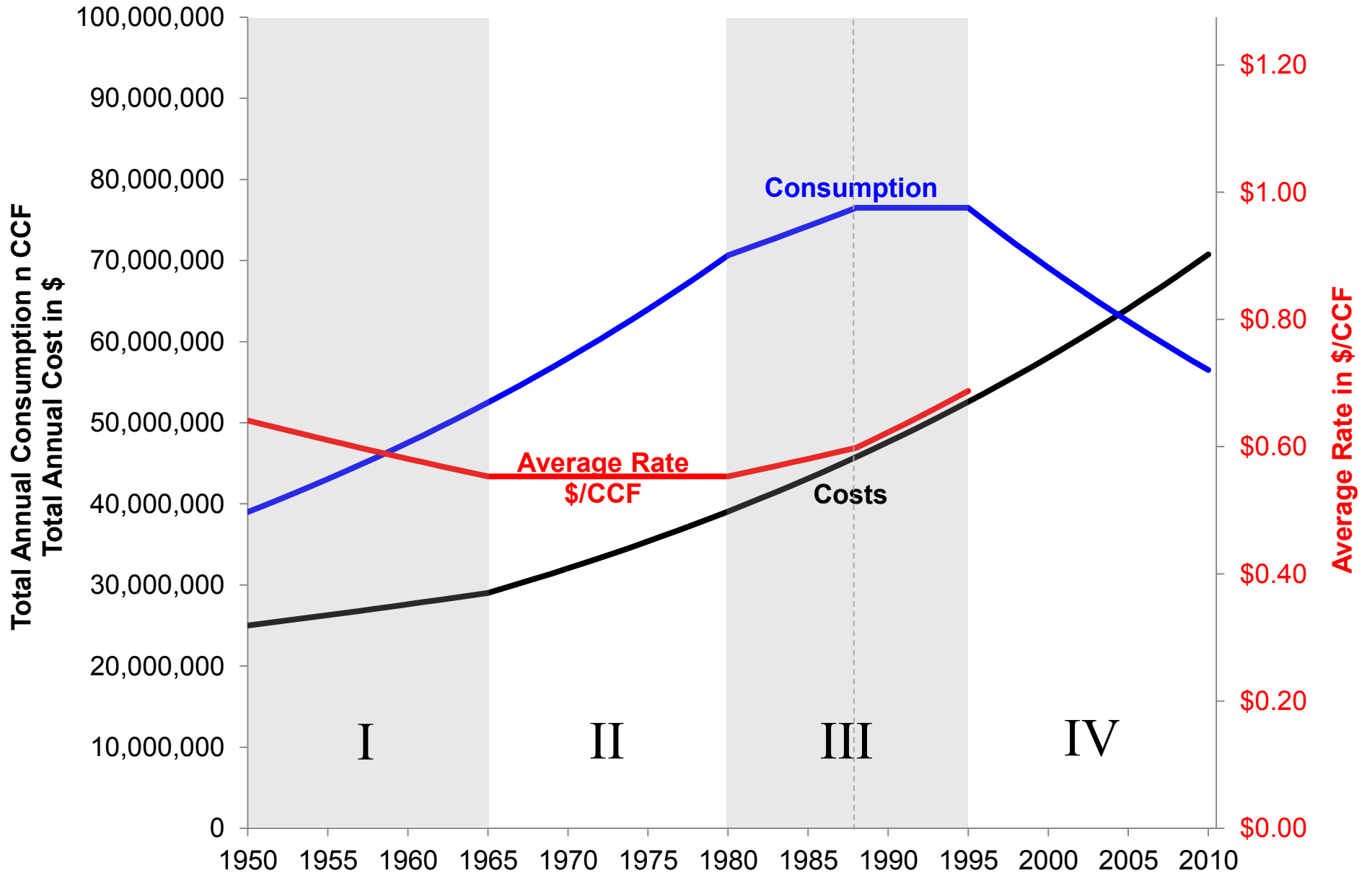
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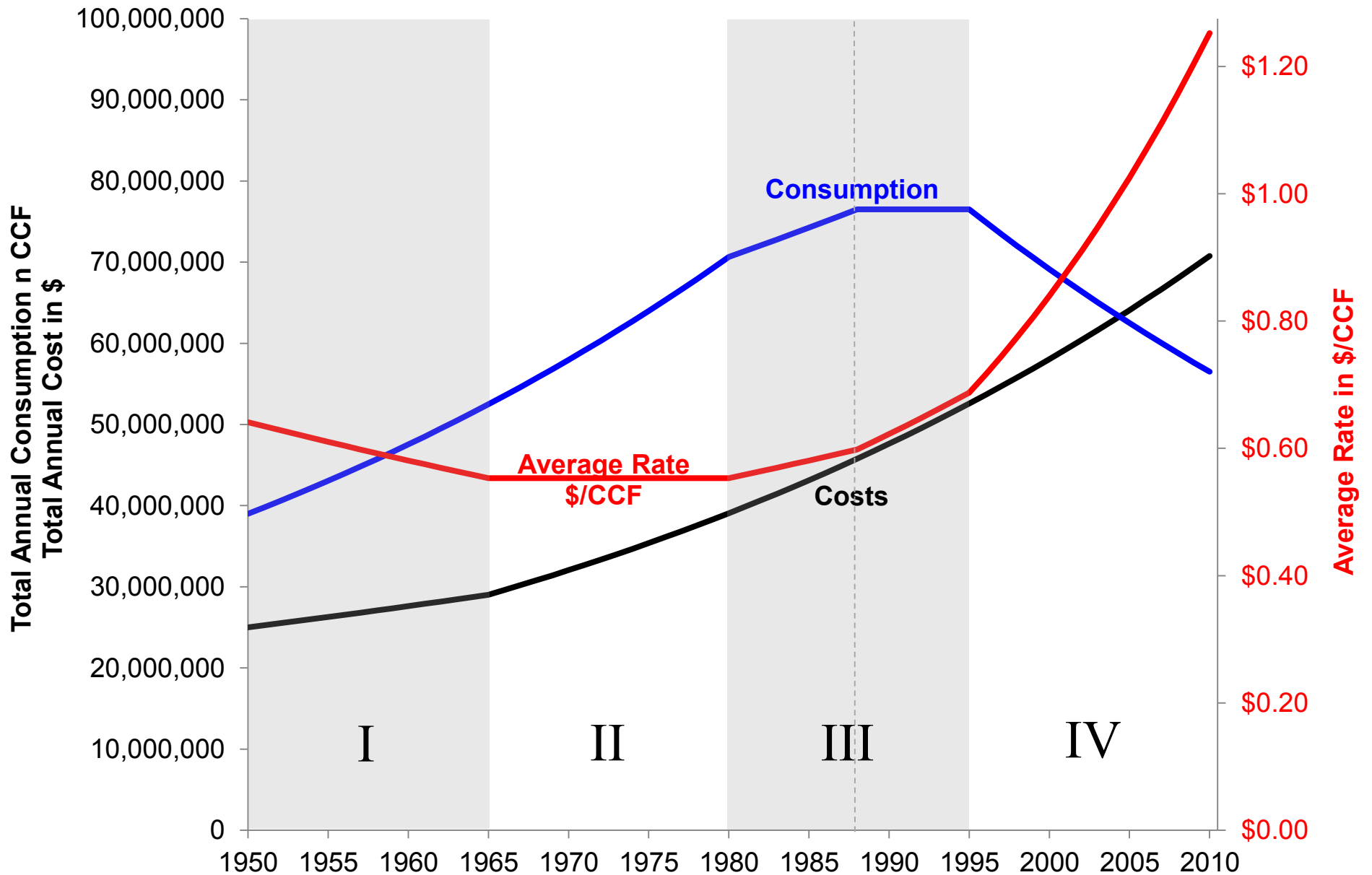
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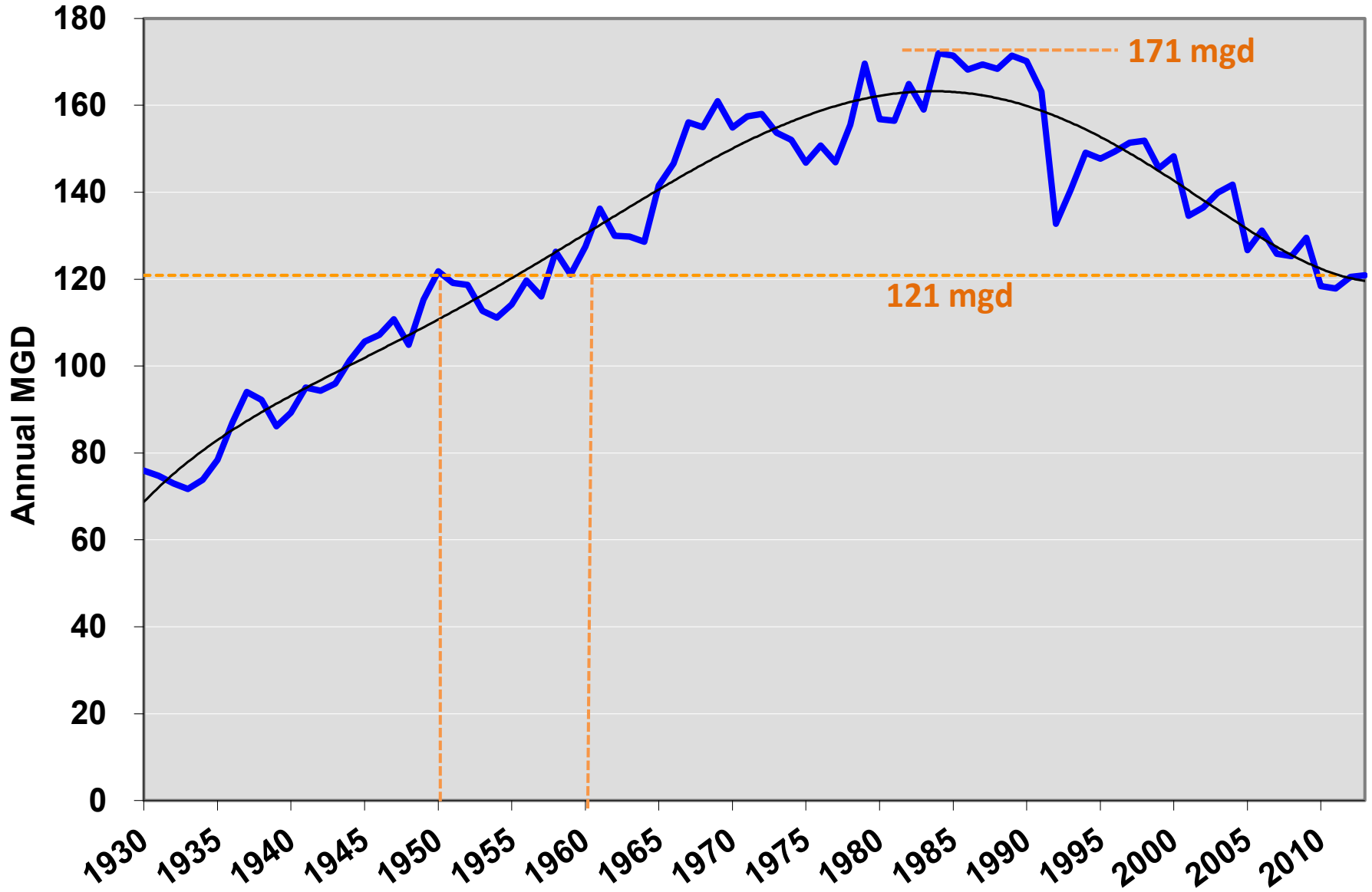
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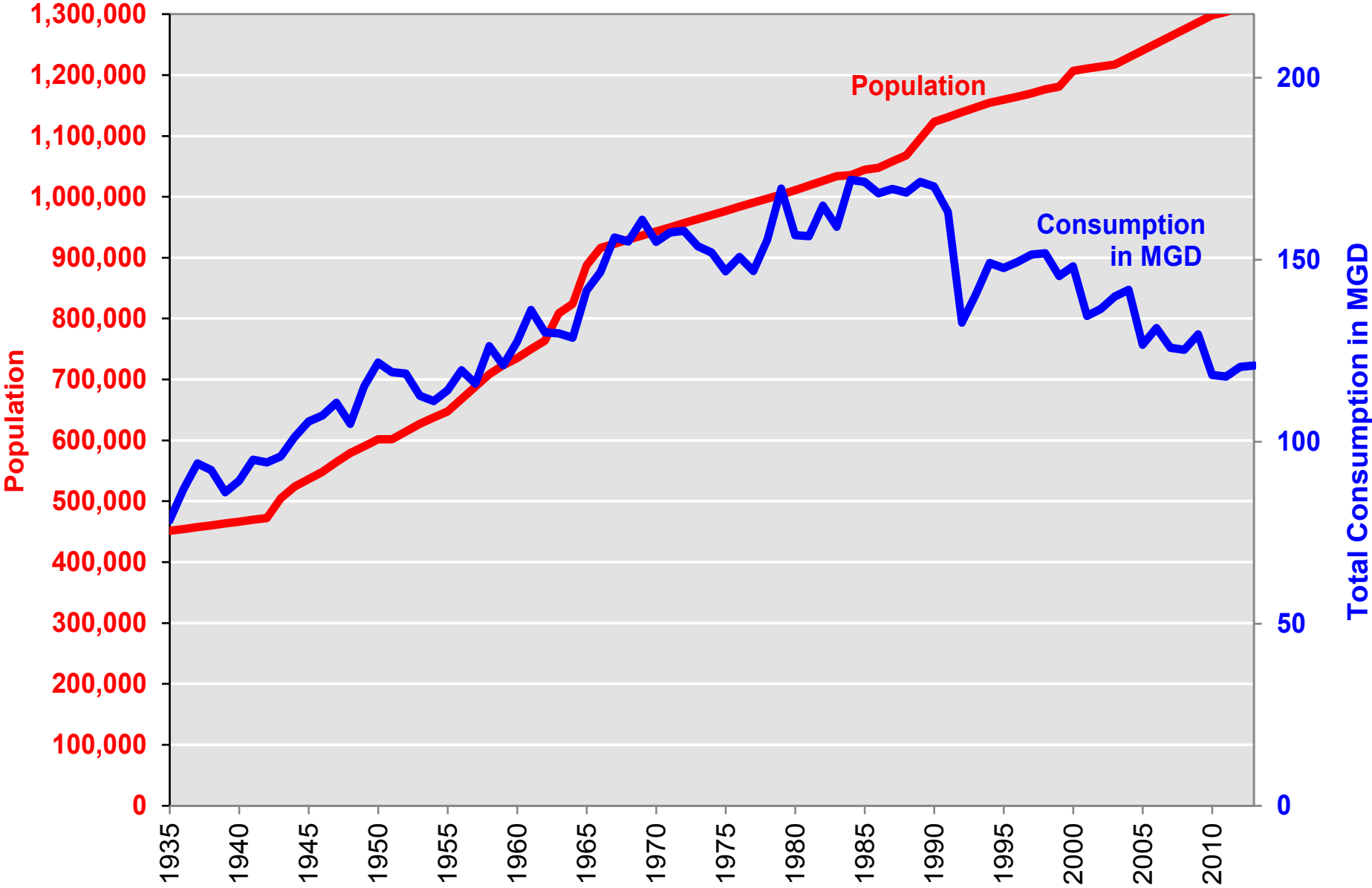
Impact of Relative Growth Rates of Costs and Consumption on Average Rates



Total Seattle Regional Water System Annual Demand in Millions of Gallons per Day: 1930-2013



Growth in **Population** and **Water Consumption** Seattle Regional Water System: 1935- 2013



A Multiple Choice Question

Which of the following statements are true for Seattle over the past 30 years?

- A. Real (inflation adjusted) rates per ccf have increased 5.7% per year on average
- B. Real costs have increased 4.5% per year on average
- C. Real customer bills have increased 3.6% per year on average

Answer: They're All True!

- A. Real (inflation adjusted) rates per ccf have increased 5.7% per year on average
- B. Real costs have increased 4.5% per year on average
- C. Real customer bills have increased 3.6% per year on average

It's a Question of Focus

Often, the headline is all about rate increases

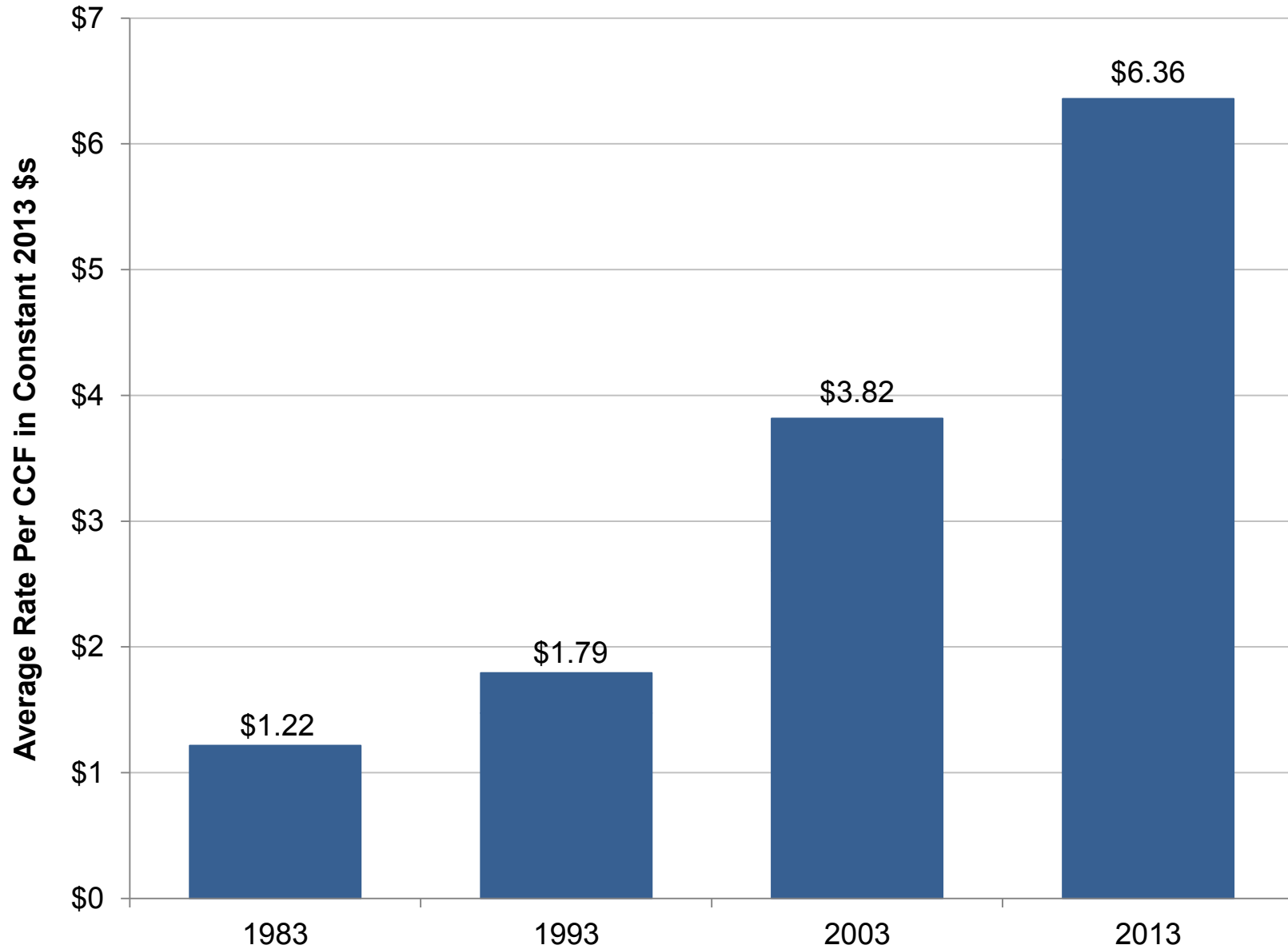
Better to focus on managing costs, and keeping customer bills affordable

rates increase = 5.7%

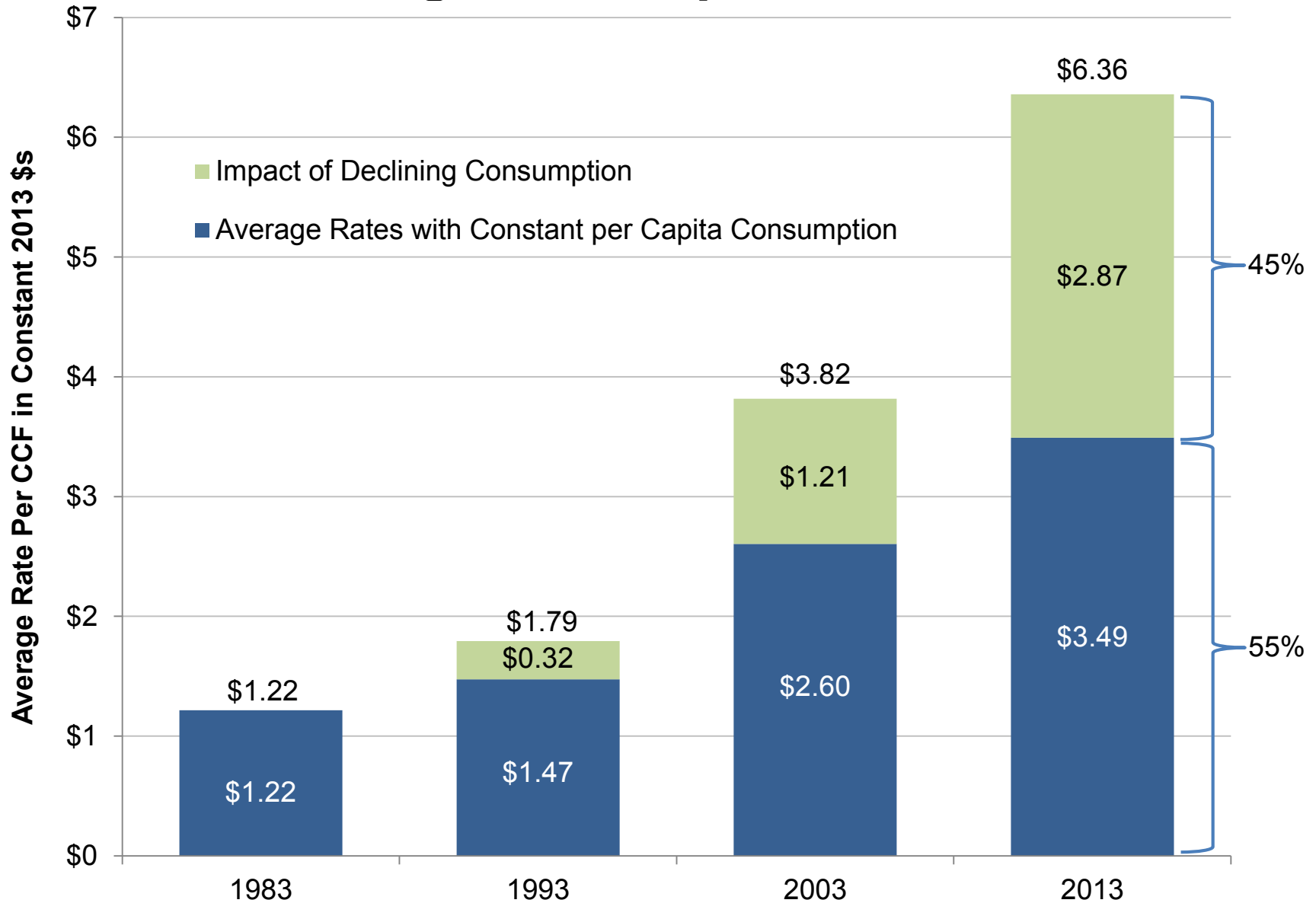
costs increase = 4.5%

customer bills increase = 3.6%

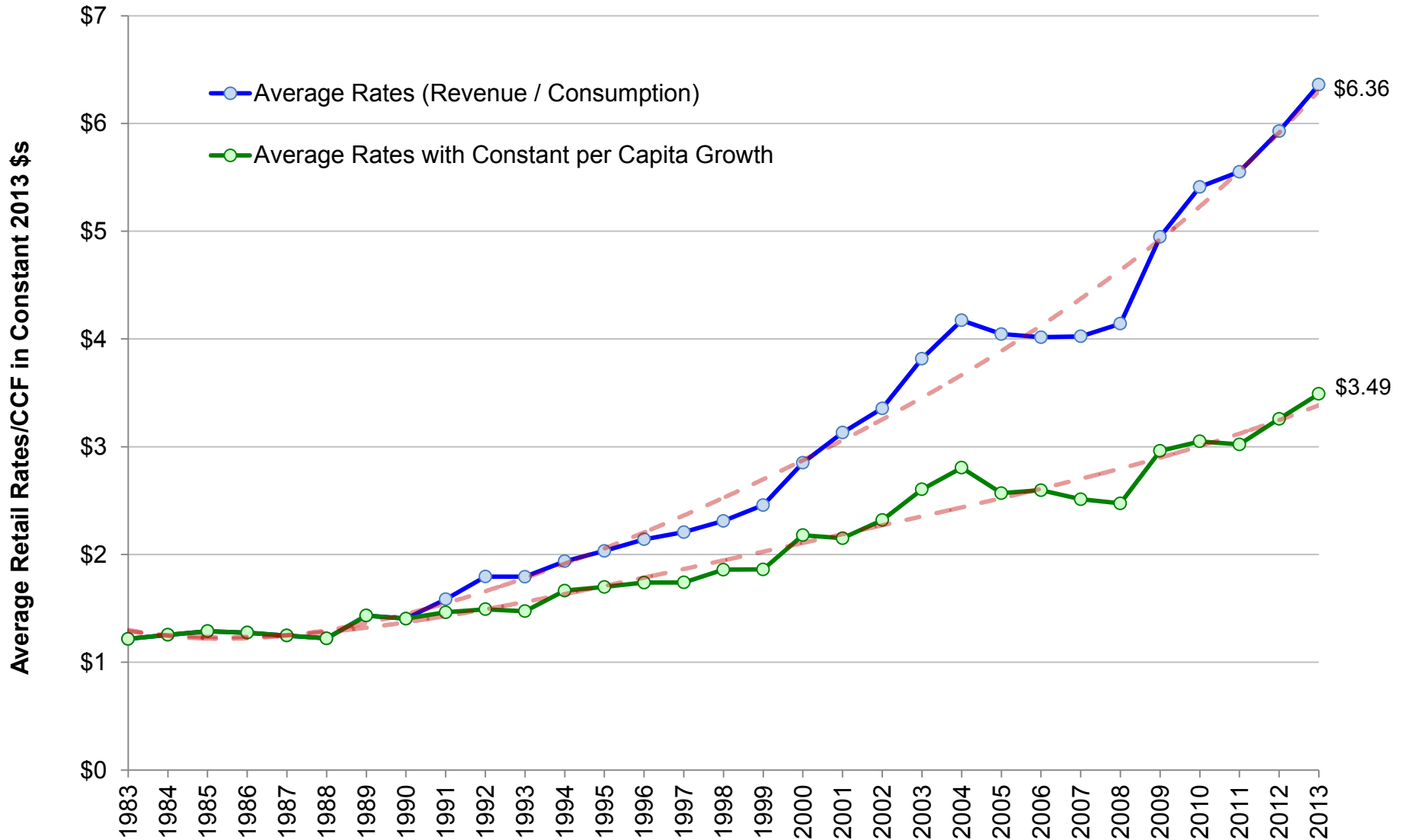
Increase in Average Rates per CCF: 1983-2013



Portion of Rate Increases Due to Declining Consumption: 1983-2013



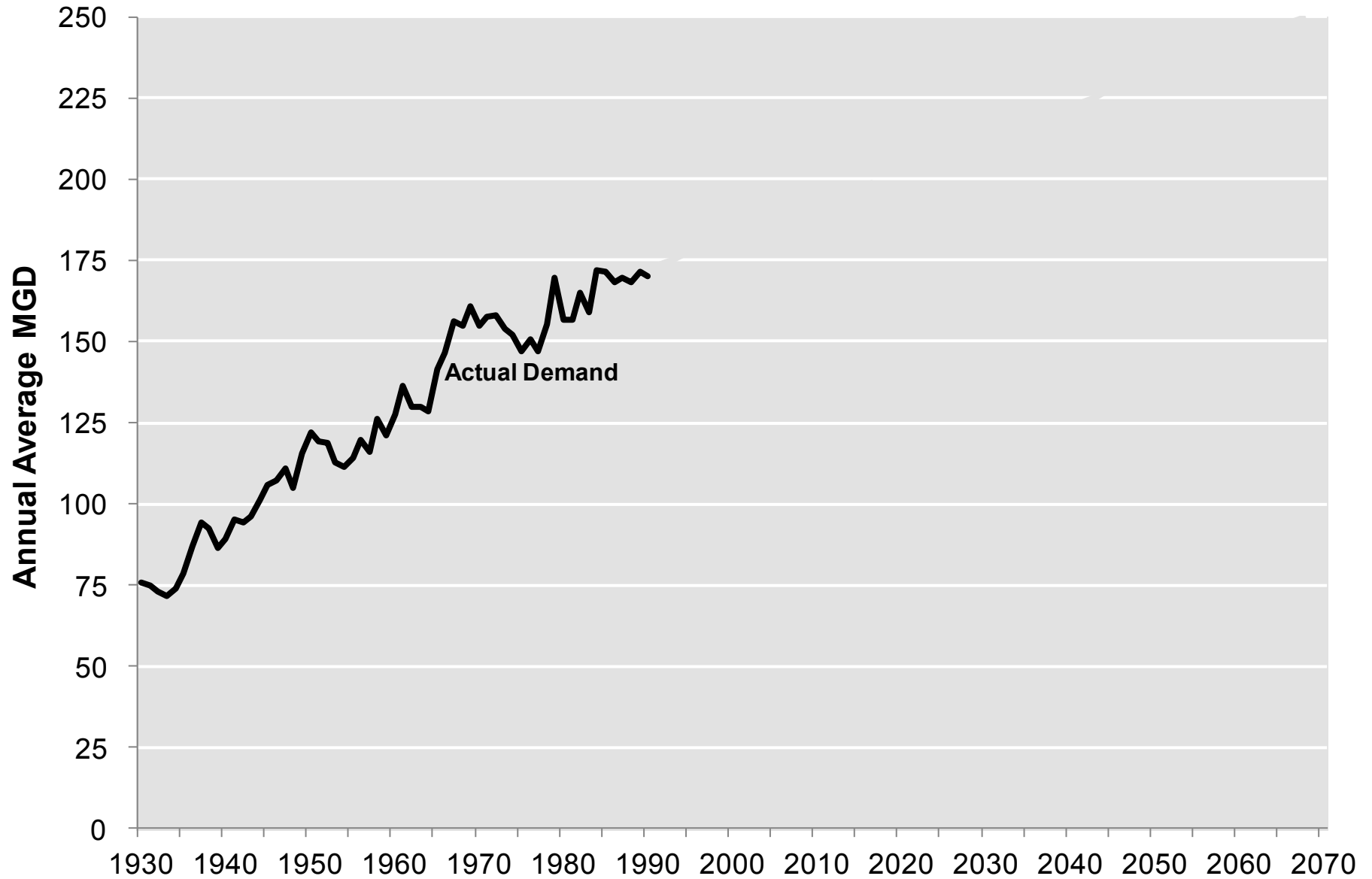
Rates per CCF and “Bills” in Constant 2013 \$s: 1983-2013



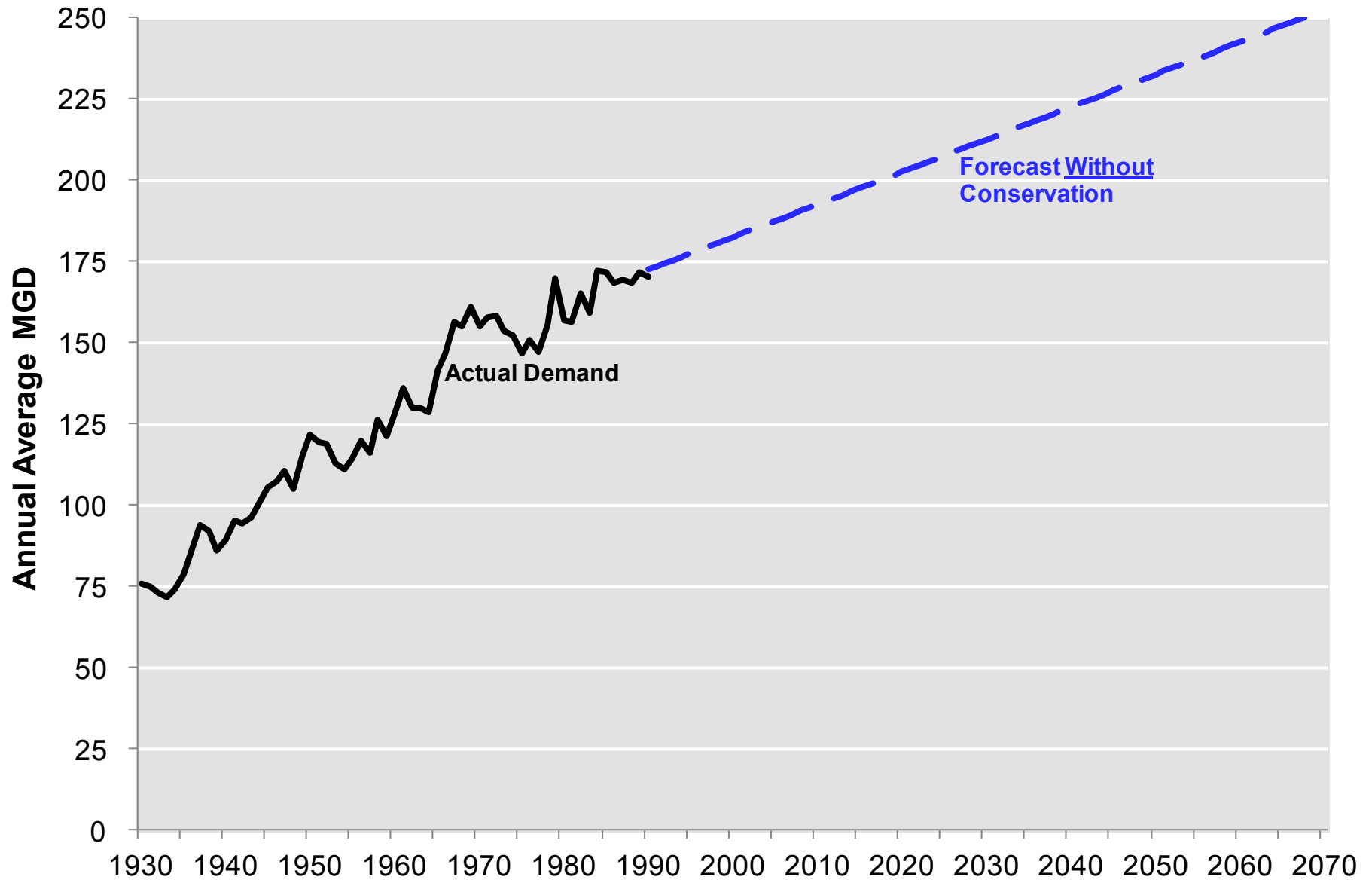
Conservation

Why did we do that, again?

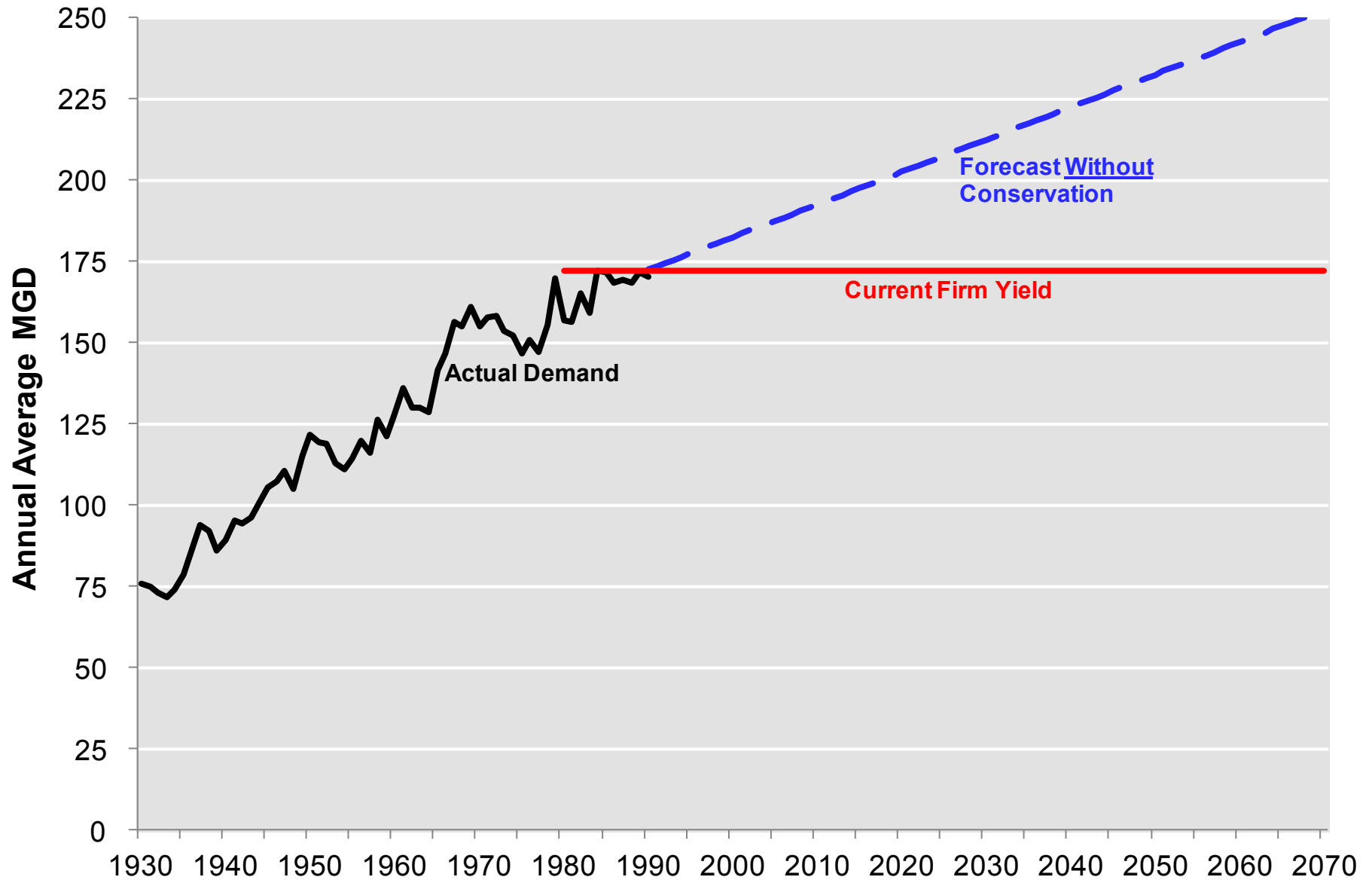
Conservation Vs. New Supply



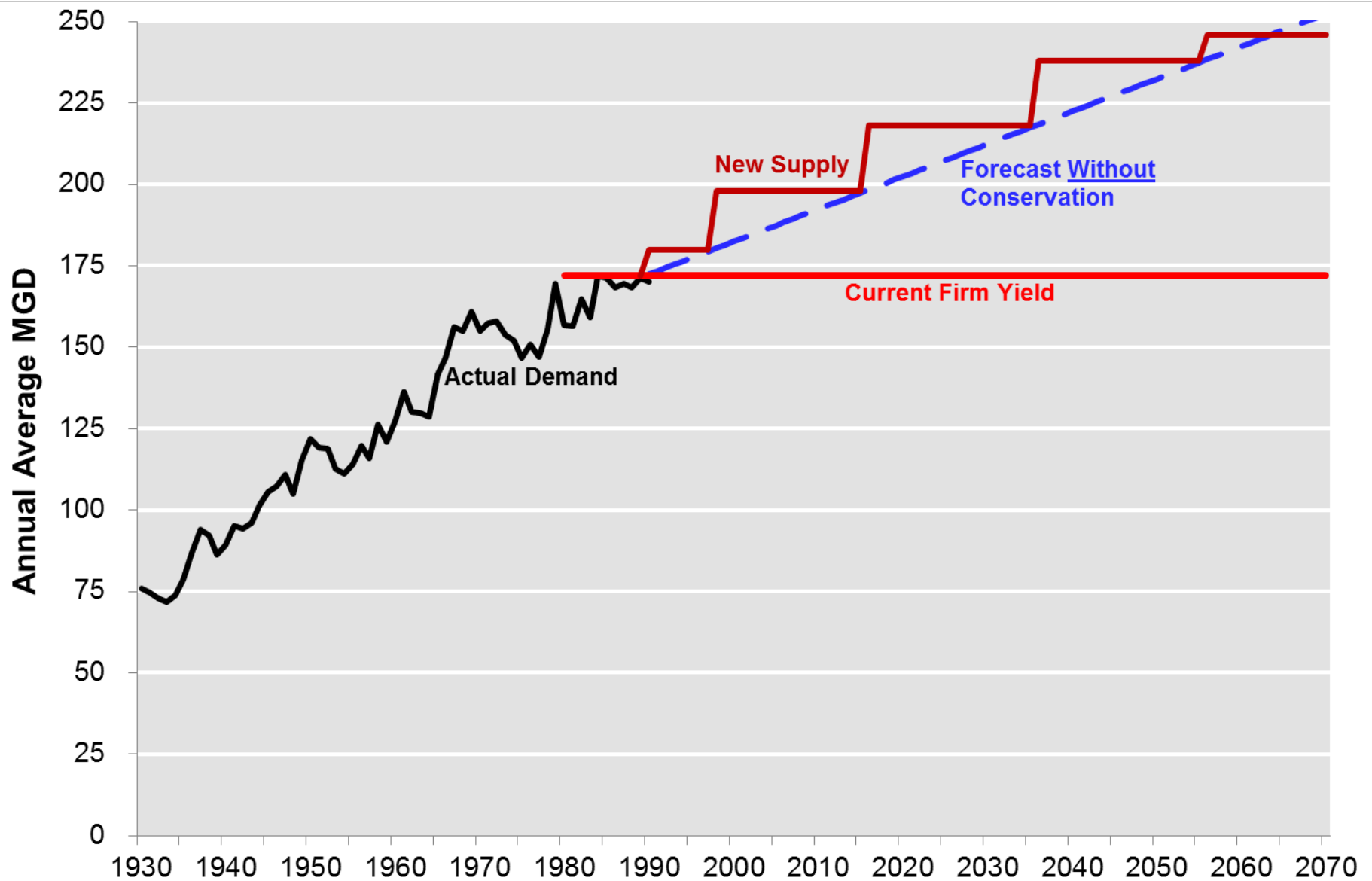
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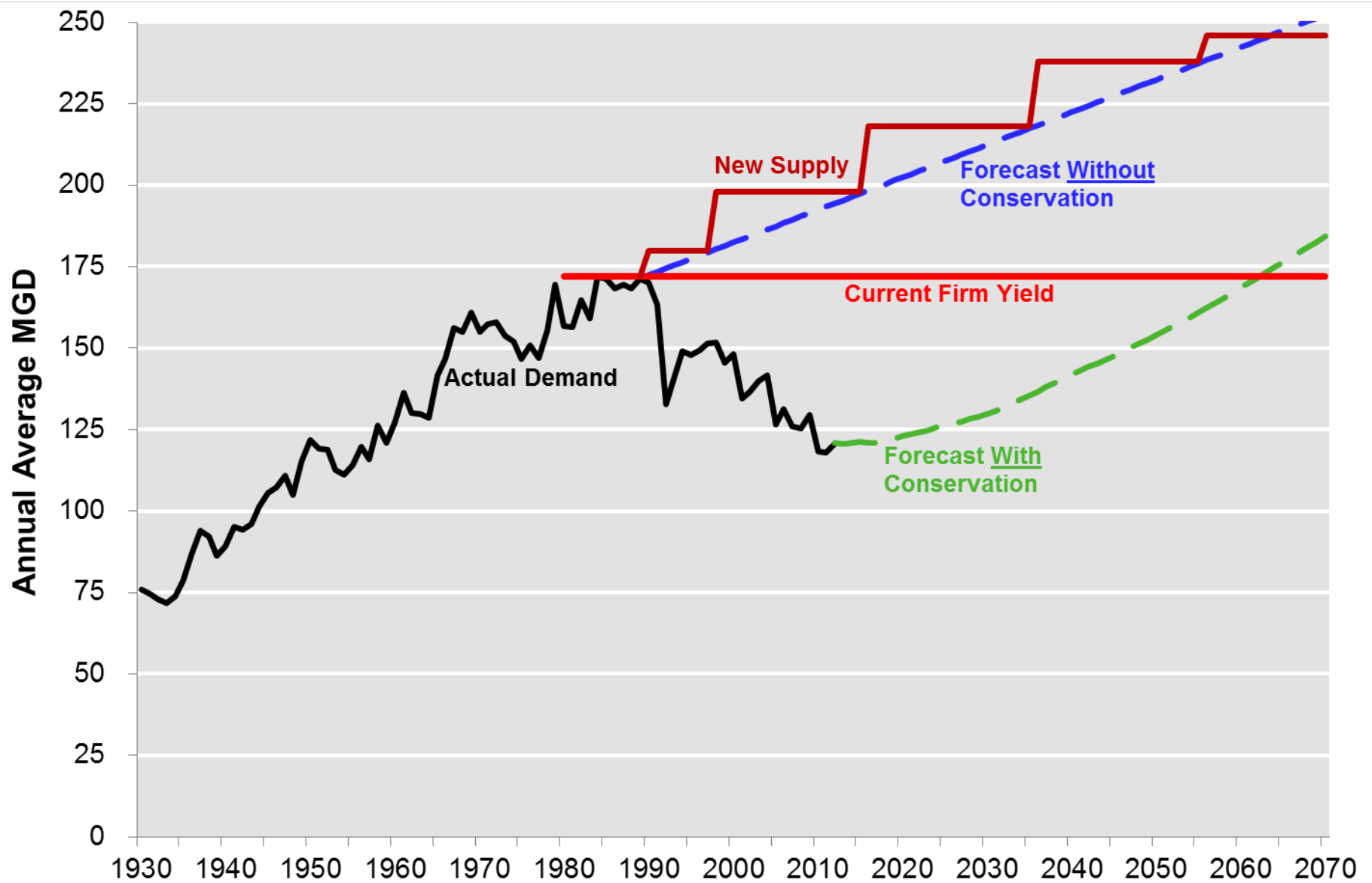
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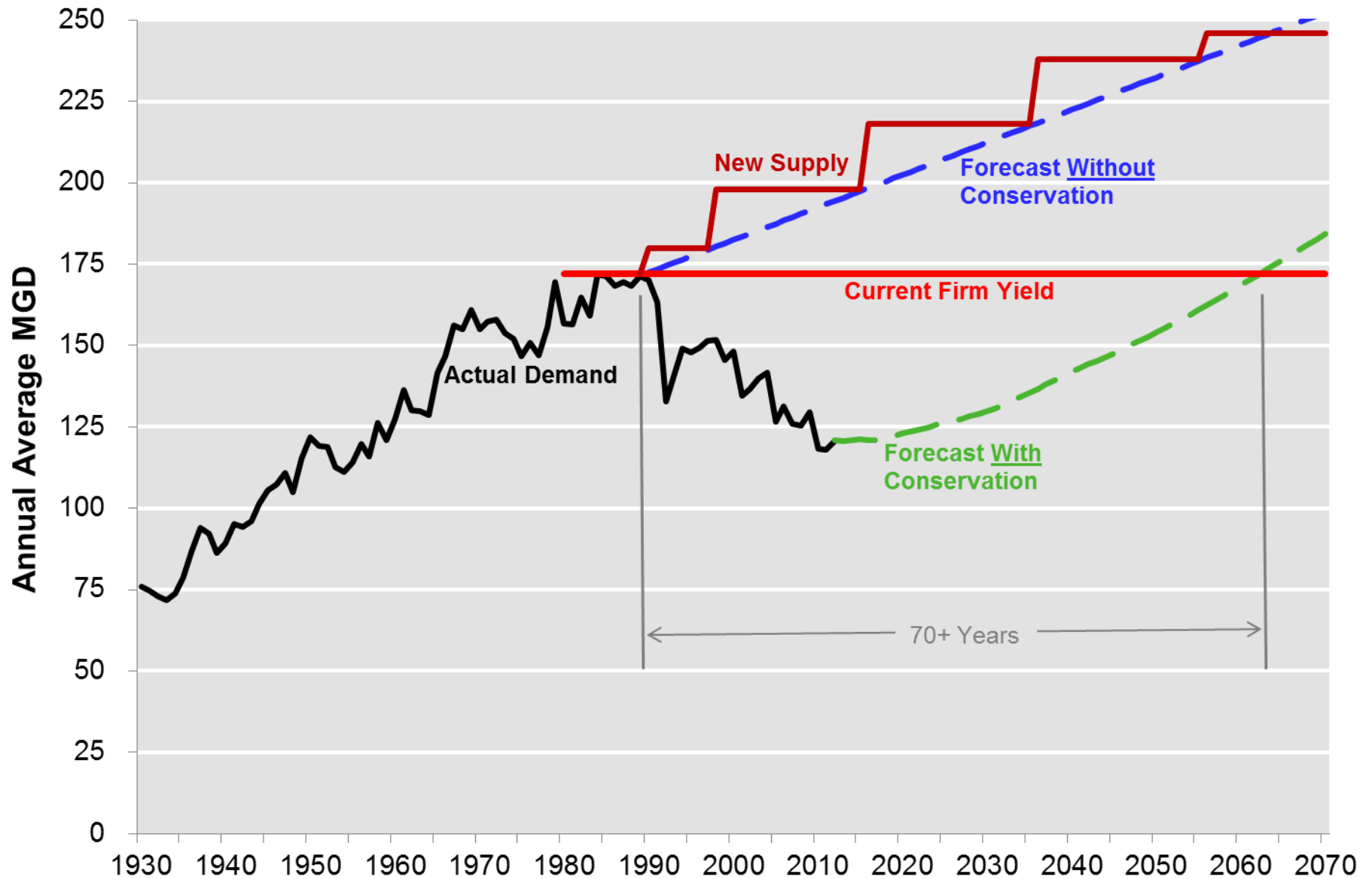
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Conservation Vs. New Supply



Conservation Vs. New Supply



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Cost of New Supply: \$000s of Millions

Cost of Conservation: \$50 Million
(past and future programmatic)

Bottom Line: Big Savings

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RATES ↑

BILLS ↓



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