



2009 Proposed Water Management Plan

March 12, 2009

Rates Advisory Committee

Kelley Neumann

Senior Vice President of Engineering and Water Resources

Managing Our Resources

Overview

- Supply and Demand
- The Permitted Supply Gap
- Conservation
- The Proposed Water Management Plan
 - Filling the Permitted Supply Gaps

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Supply and Demand

Proposal - New Parameters

- **Plan to meet SAWS Service Area Demand**
 - Acknowledge and honor feedback from other communities and purveyors.
 - Recognize the high ongoing cost to SAWS ratepayers to meet peaking demands of regional water purveyors.
 - Continuing to plan with other communities, as requested, on an equitable partnership basis.
- **Plan for Demand using the Drought of Record**
 - Region L uses the Drought of Record
 - State of Texas uses the Drought of Record

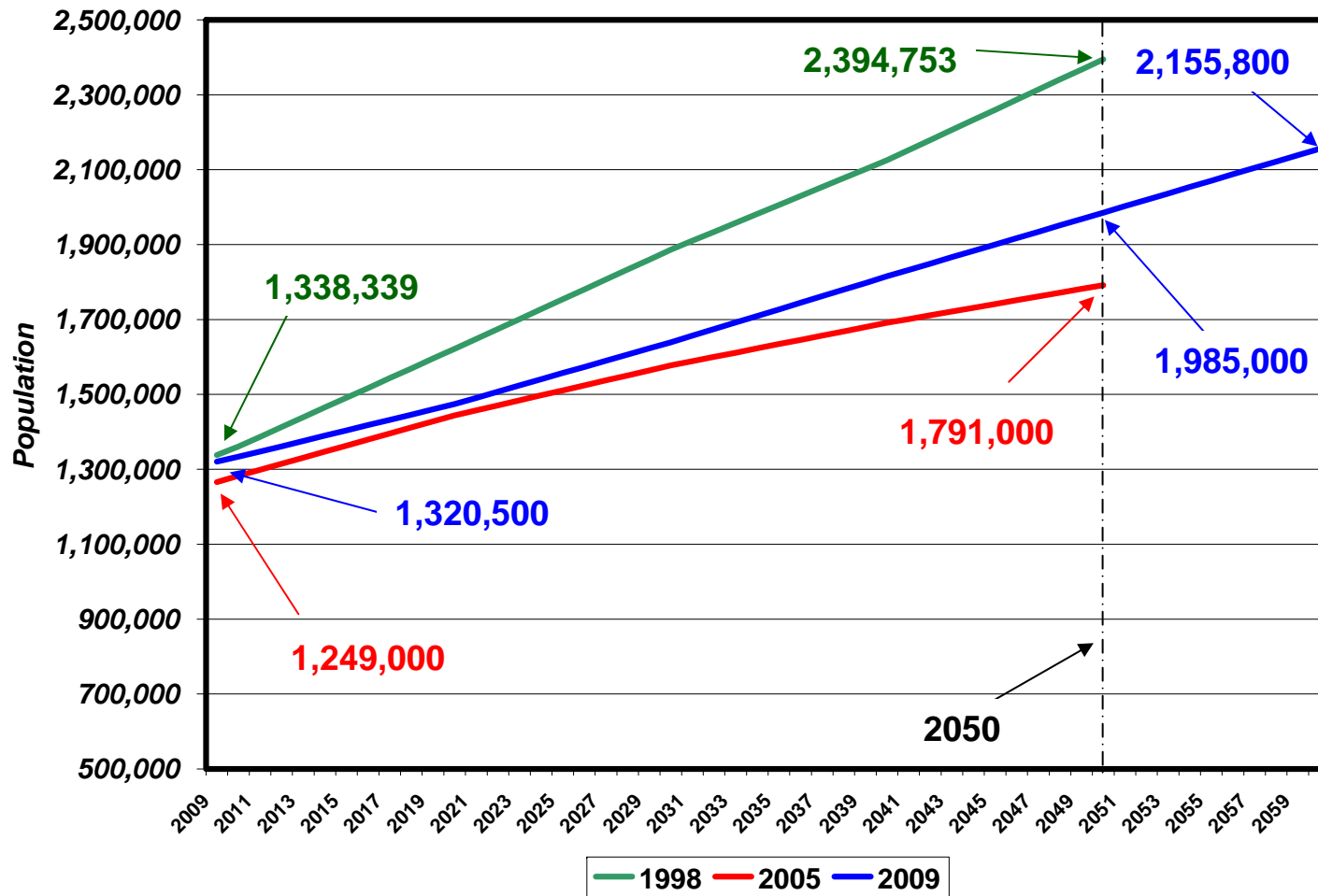
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Supply and Demand

Proposal – SAWS Service Area Population



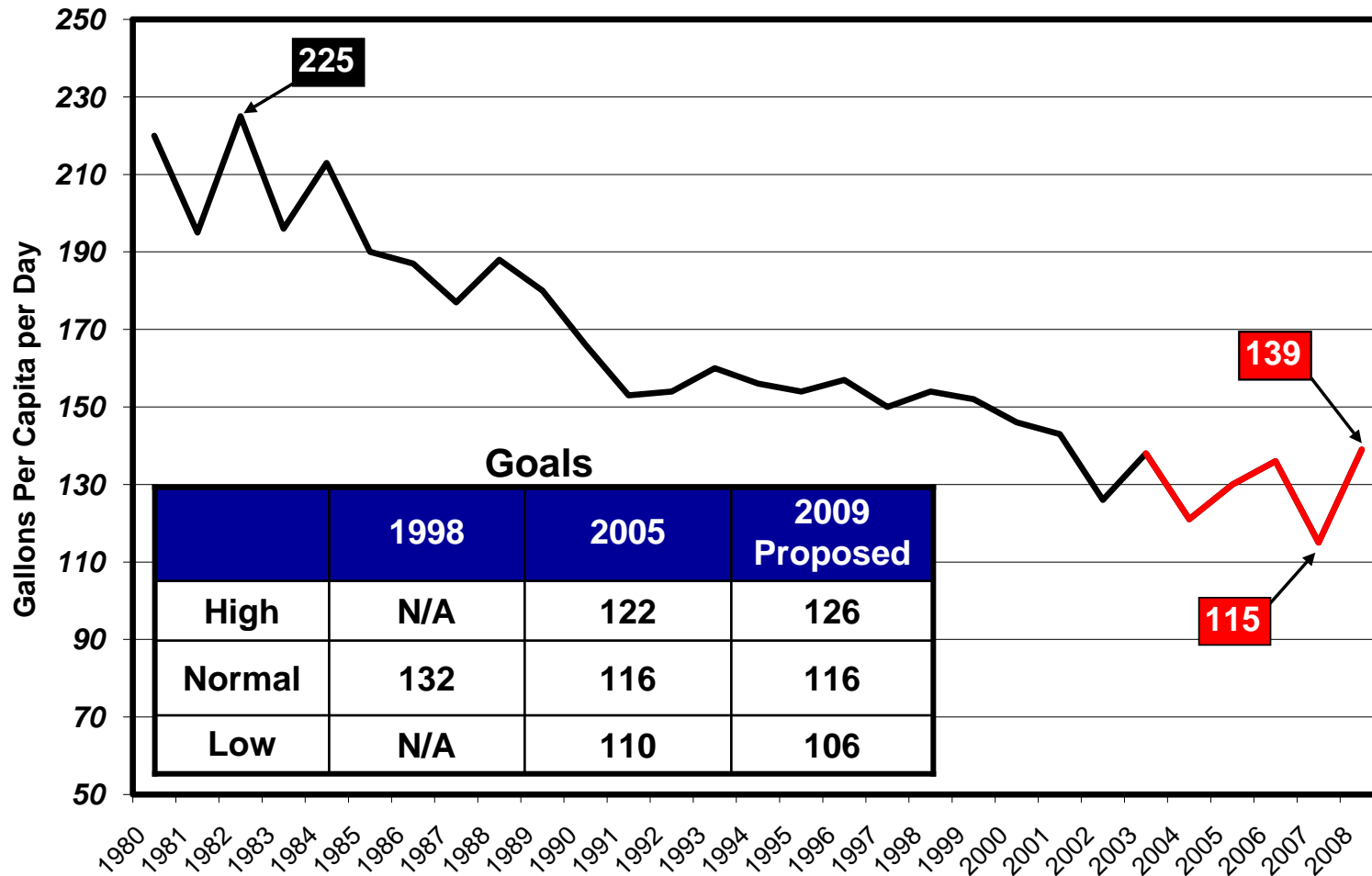
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Supply and Demand

Proposal – Demand Goals (GPCD)



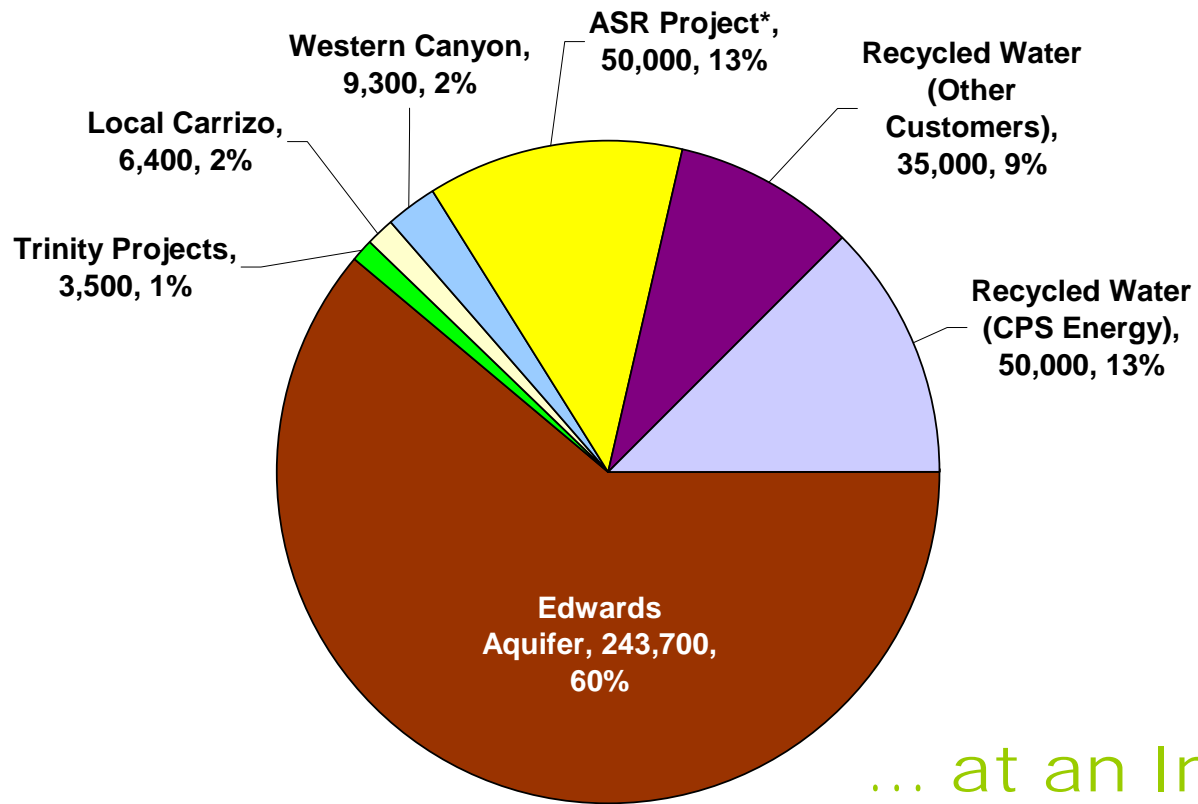
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Supply and Demand

Successful Diversification...



... at an Investment of over \$600 Million

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Existing Supplies

Impact of the Drought of Record

- What happens if
 - SAWS doesn't add supplies, and
- AND**
- We get no measurable rain until 2014?

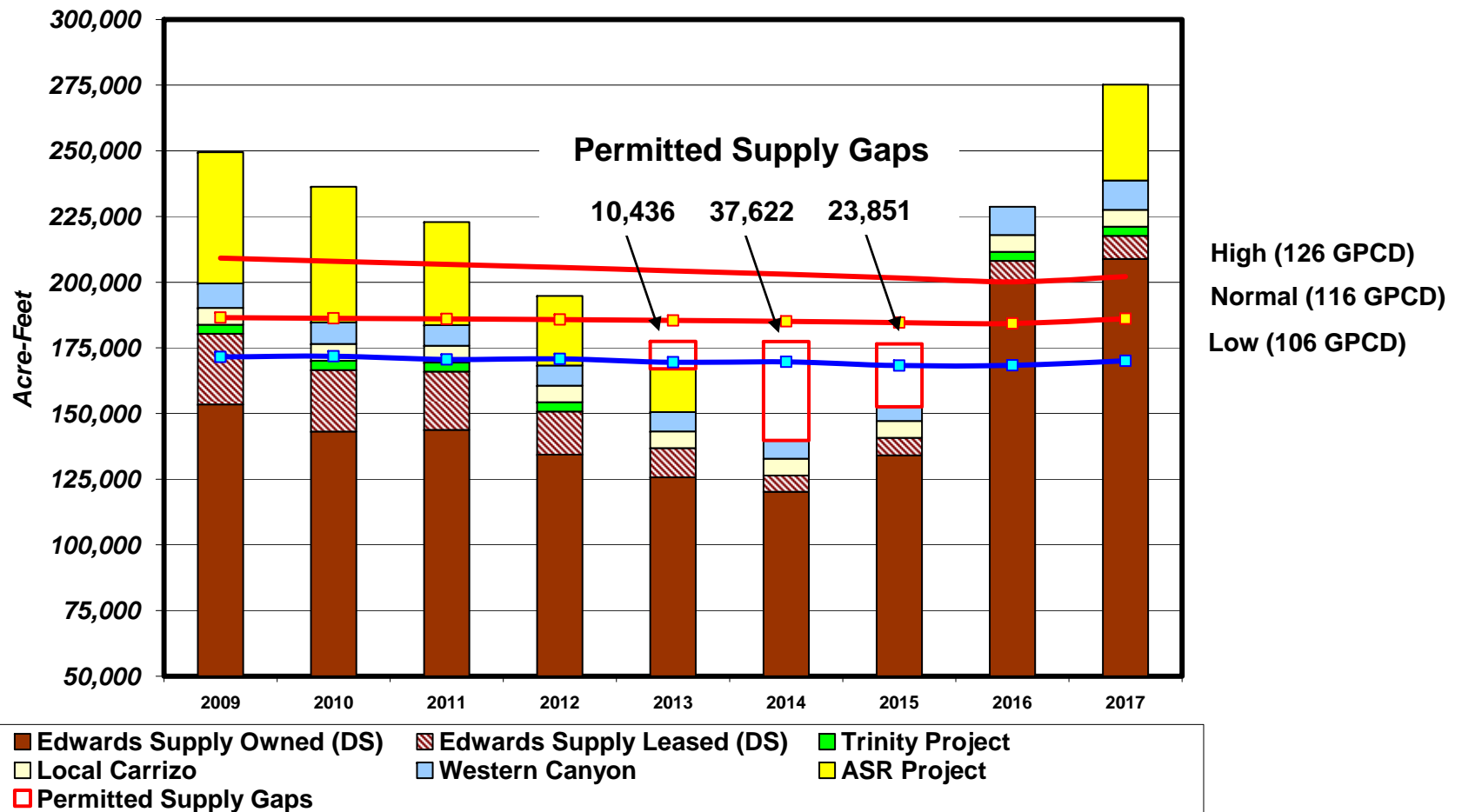
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Existing Permitted Supplies

Drought of Record Impact Today



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Permitted Supply Gap

Assuming Stage IV Restrictions of Existing Permitted Supplies

- Permitted Supply Gaps at midpoint of Normal and Low demands
 - 2014 : 37,000 acre-feet
 - 2034 : 81,000 acre-feet
 - 2060 : 141,000 acre-feet

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Filling the Permitted Supply Gap

Successful Management through Conservation

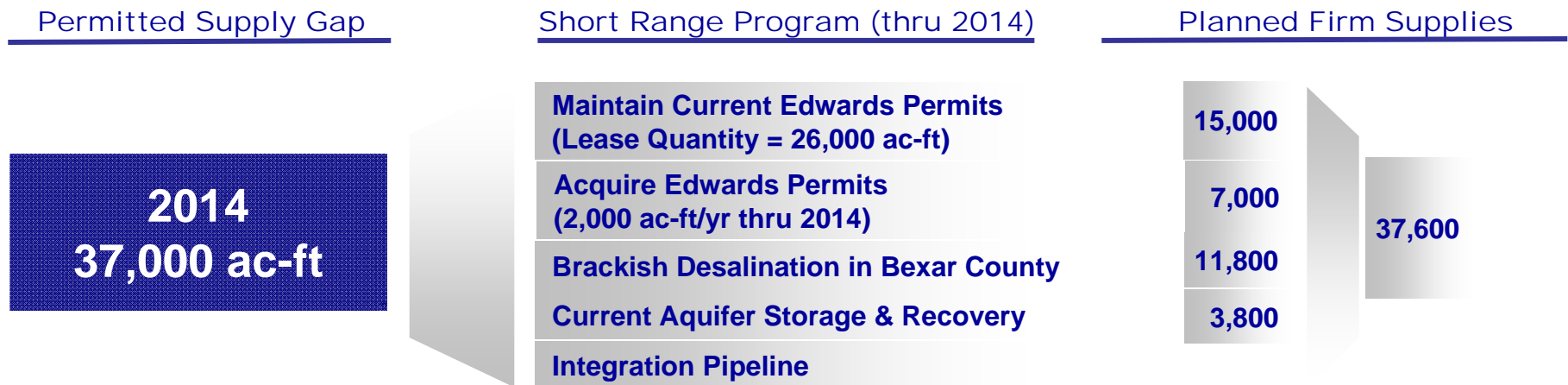
- Adjusted Drought Triggers
- Increase Resources
- Targeted Education and Awareness
- Review Rate Structure
- Consistent Landscape Irrigation Policy
- Analyze Unbilled Water
- Pursue Regulatory Reform at State and Federal Levels

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Filling the Permitted Supply Gap*



**National
Leader in
Recycled Water
and
Conservation**

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*Assuming *the Single Worst Year* of the Drought of Record

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Filling the Permitted Supply Gap*



National Leader in Recycled Water and Conservation

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Filling the Permitted Supply Gap*



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Filling the Permitted Supply Gap*

<u>Permitted Supply Gap</u>	<u>Short Range Program (thru 2014)</u>	<u>Planned Firm Supplies</u>	<u>Capital Cost**</u> <u>Low - High</u>
2014 37,000 ac-ft	Maintain Current Edwards Permits	15,000	37,600 \$362 – \$560
	Acquire Edwards Permits	7,000	
	Brackish Desalination	11,800	
	Current Aquifer Storage & Recovery	3,800	
	Integration Pipeline		
2034 81,000 ac-ft	<u>Mid Range Program (2015-2034)</u>		47,538 \$142 – \$421
	Maintain Current Edwards Permits	6,400	
	Recharge Enhancement	13,451	
	Regional Carrizo, Acquire Edwards permits, or Expanded Brackish Desal	11,687	
	Current Aquifer Storage & Recovery	16,000	
2060 141,000 ac-ft	<u>Long Range Program (2035-2060)</u>		\$2,000 – \$4,470
	Future Aquifer Storage & Recovery	75,600	
	Other Groundwater Supplies		
	Ocean Desalination		
LCRA			

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*Assuming *the Single Worst Year* of the Drought of Record **Estimated in Millions

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Filling the Permitted Supply Gap

Summary of Changes

- Planning for the Drought of Record and the SAWS Service Area
- Brackish Desalination
 - Initially in Bexar County, expandable to other counties
 - Soliciting the assistance of the State to help change the Regulatory Environment
- Regional Carrizo
 - Focus on Western Gonzales permit application
- Aquifer Storage and Recovery (ASR)
 - Additional supplies
 - Study optimal and maximum storage, and additional sites
- Study Recharge and Recirculation
- Study Ocean Desalination
- Issue RFP for Groundwater Supplies in Texas
- Enhanced Conservation

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