

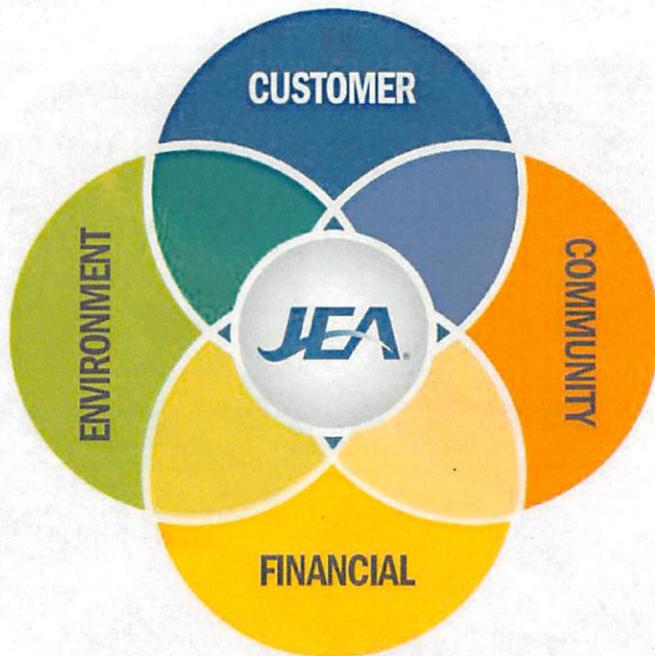
JEA®





## GUIDING PRINCIPLES

ACCELERATING UTILITY INNOVATION



### Corporate Measures

*Our mission will be guided by and evaluated against how we as employees drive these four Corporate Measures of JEA's Value*

- 1) Customer Value
- 2) Financial Value
- 3) Environmental Value
- 4) Community Impact Value

## **HEADLINE PRIORITIES**

*Five focus areas of JEA necessary  
for future success.*

- 
- 1) Create an Adaptive Culture**
  - 2) Align to a pervasive commitment to profitability and value**
  - 3) Create platform for customer choice**
  - 4) De-Risk business**
  - 5) 10-Year strategic plan in line with Guiding Principles**

# ACCELERATING WATER INNOVATION

Integrated Water Resource Planning

Renewable Natural Gas

Beneficial Reuse of Byproducts

Organics Recycling

Conserving our Water Resource

Protecting the St. Johns River

Purified Water

IMPROVING LIVES BY  
**JEA**  
ACCELERATING INNOVATION

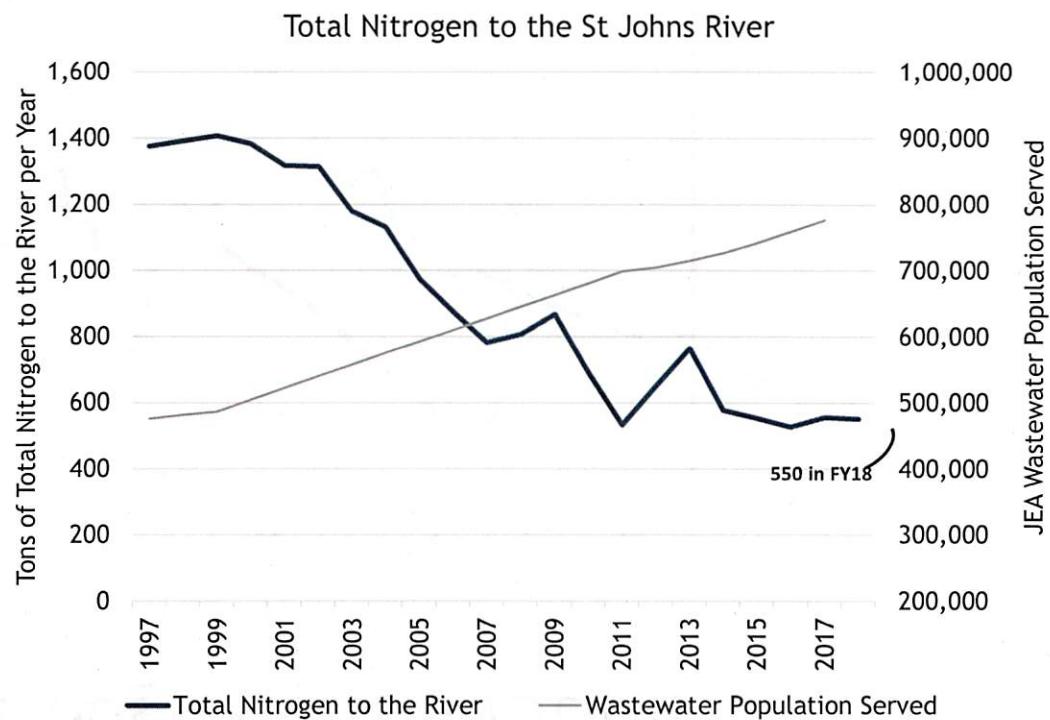
JEA reduced nitrogen discharge by 60% while population grew by 37%

- Improve treatment at regional facilities
- Phase out old technology
- Build reclaimed system



## JEA's SUCCESSFUL STRATEGY

## Lowest in JEA's History



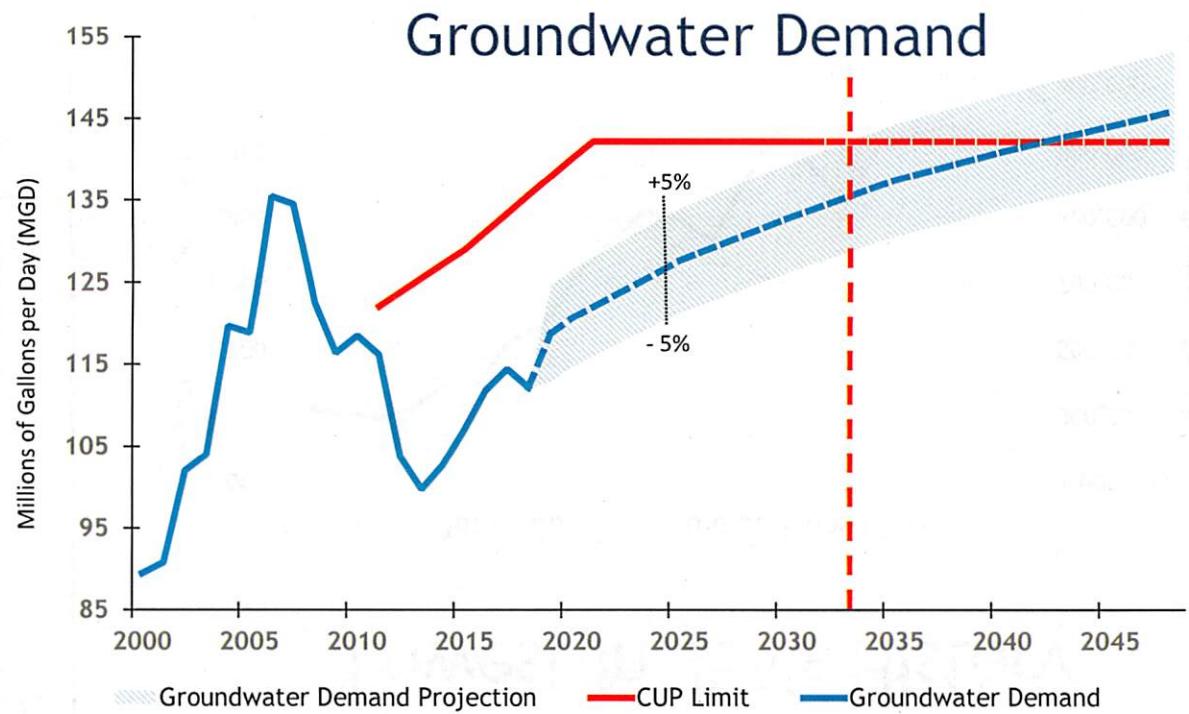
# Protecting the Aquifer through Conservation

## Groundwater Allocation

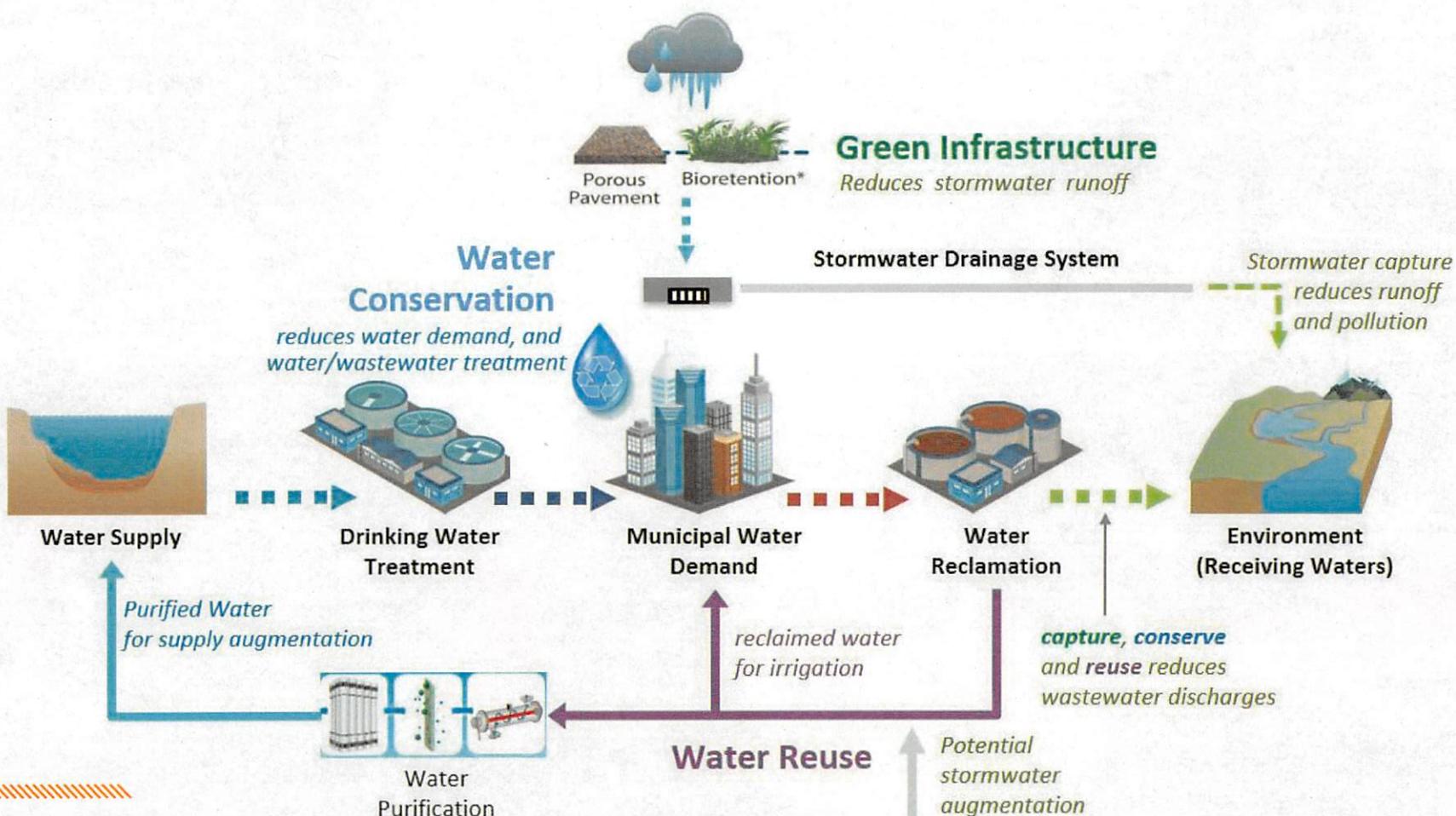
- Consumptive Use Permit expires in 2031
- Capacity is limited to 142 MGD

## Water Conservation

- Expansion of reclaimed system
- Tiered rates
- Public messaging/conservation efforts
- Housing fixture efficiencies







## INTEGRATED WATER RESOURCE PLAN (IWRP)

# Investing in Our Water Evolution

## SINCE 1997

**\$4 Billion**

invested in advancing  
infrastructure

## 2019 - 2024

**\$1.2 Billion**

planned in expansion,  
renewal & replacement  
and environmental  
stewardship

## BEYOND 2024

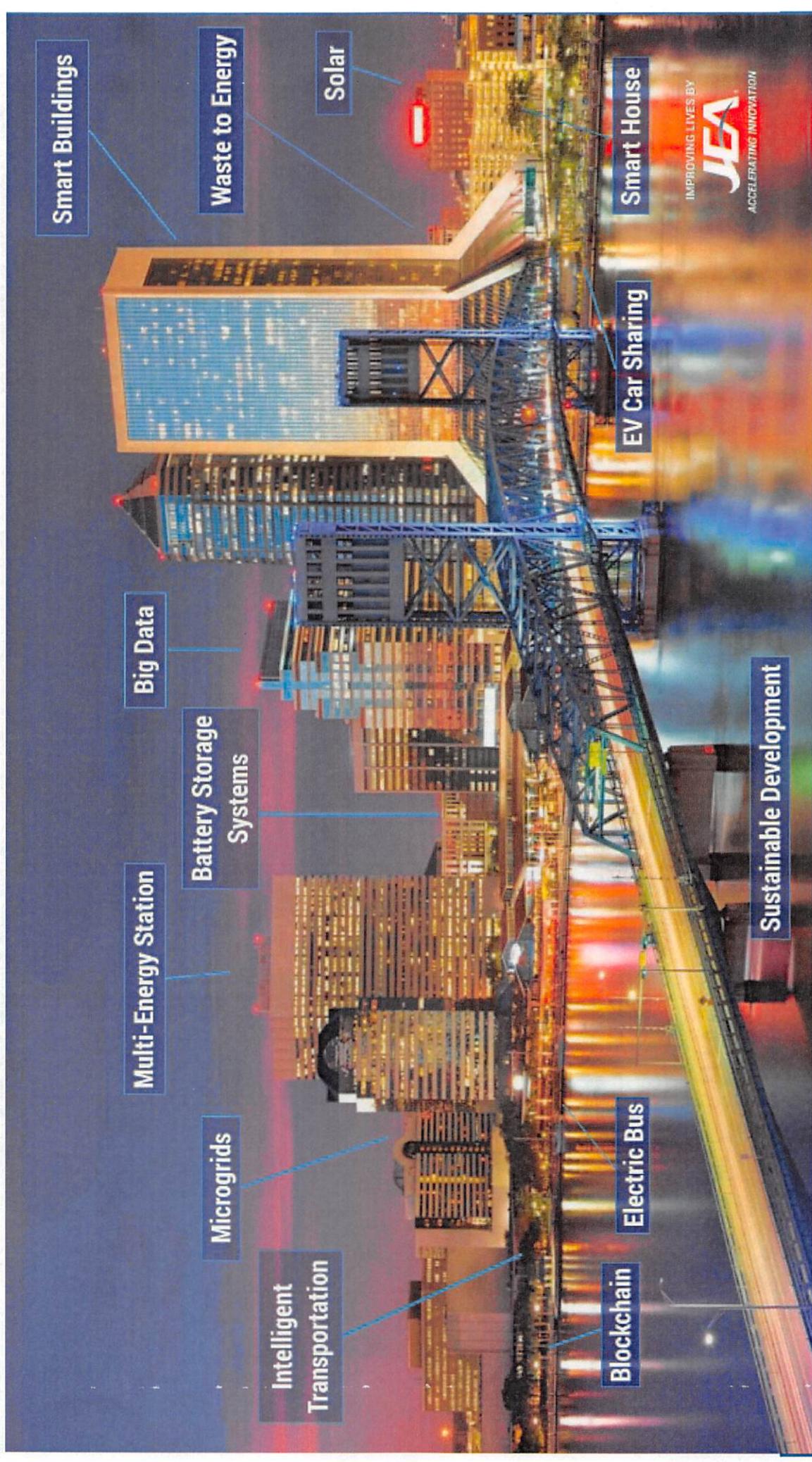
**\$3 Billion**

unfunded community issues:  
\$2B in Septic Tank Phase Out  
and \$1B in alternative  
water supplies  
\$210M/year recurring  
investment in water system

ACCELERATING  
INNOVATION

### JEA Leading State and Community on STPO and Purified Water

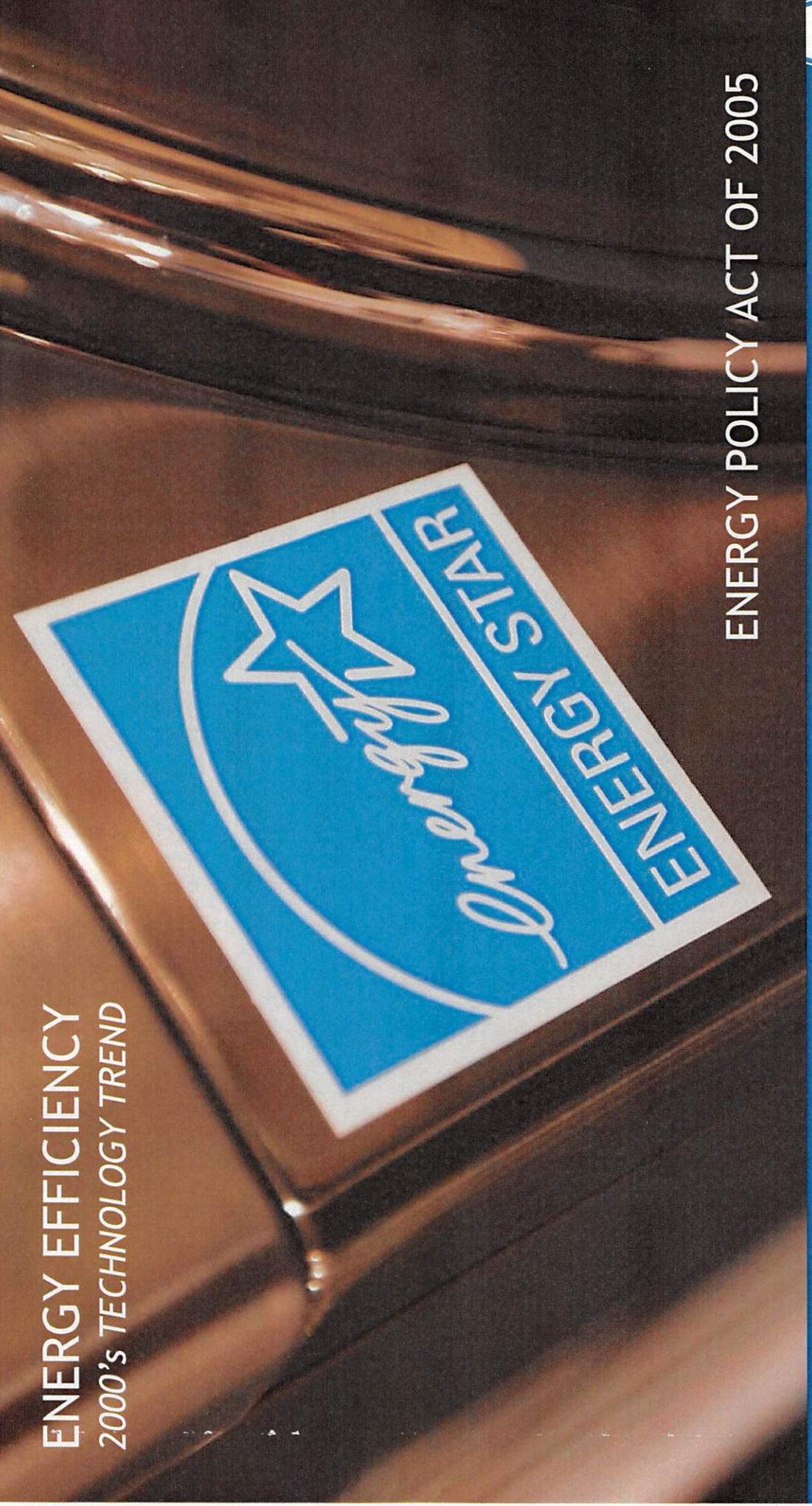
- Additional \$15MM (\$45MM total)
- 1<sup>st</sup> neighborhood started
- RFP for new technologies issued
- Completed 1<sup>st</sup> purified water test





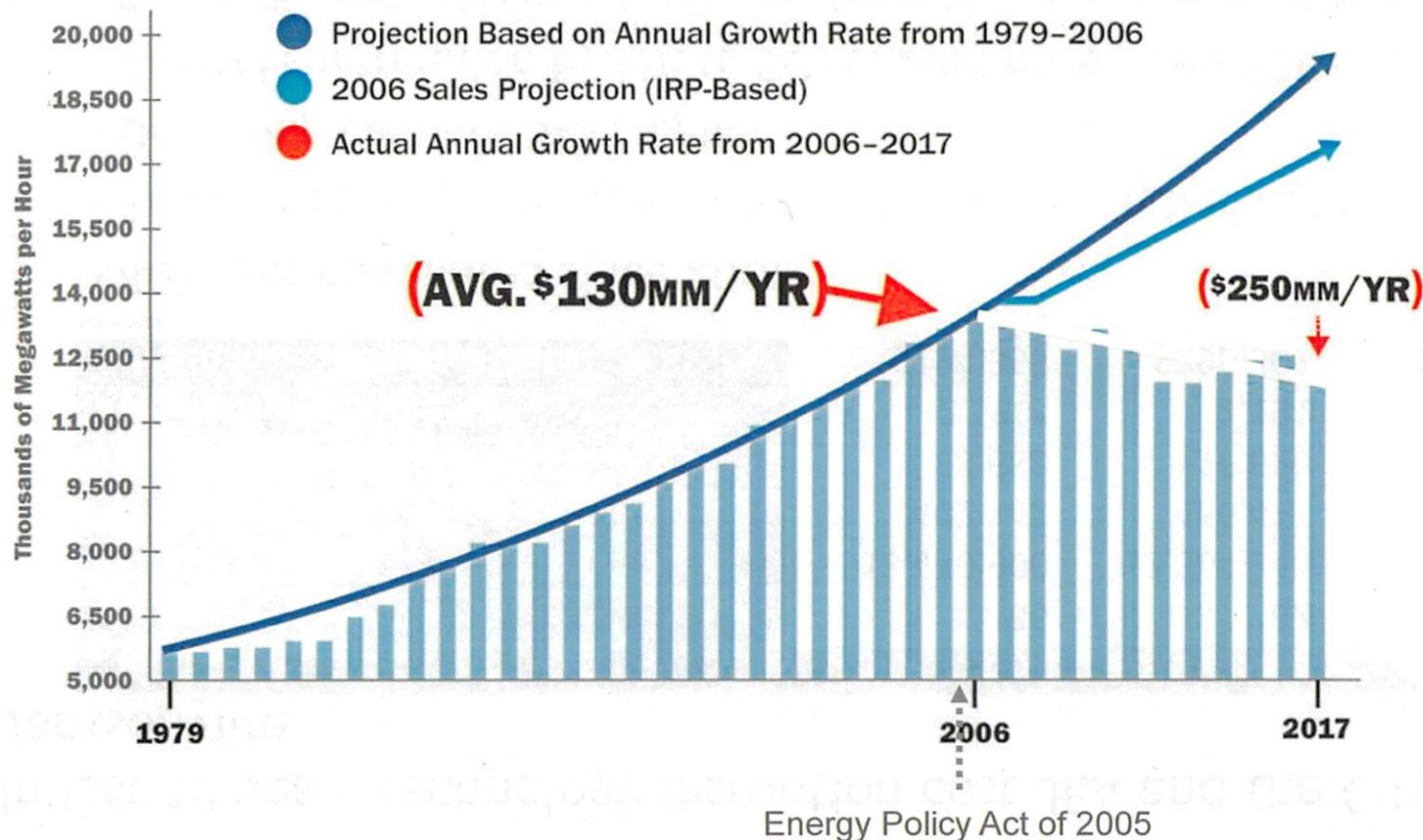
AUGUST 8, 2005

ENERGY EFFICIENCY  
2000's TECHNOLOGY TREND



ENERGY POLICY ACT OF 2005

## 2007-to-2017: Loss Of \$1.4 Billion In Free Cash Flow



### Energy Efficiency IMPACT

- Mandates account for >90% of reduction in electric sales
- 30% lower sales in 2017 than forecasted back in 2006

## In last 10 year, technology disruption cost JEA and the City of Jacksonville

	2006 Actual	2018 Actual	Change	Change %
Rates (\$ yield per Mwh)	36	62	26	71%
Unit Sales (MWh)	13,440,900	12,364,340	(1,076,560)	(8)%
# of Customers	402,142	466,411	64,269	16%
Annual City Contribution	88,688	116,620	27,932	31%
Total JEA Headcount	2,598*	2,191	(407)	(16)%
Maintenance and other OpEx	\$194,355	\$296,307	\$101,952	52%

\*As of 2008

- 407 jobs eliminated since 2008
- Customer rates 71% higher (went from lowest in the state to median)
- Operating cost are 52% higher
- Annual contribution by JEA to COJ should have been \$80+MM / yr higher
- \$1+ billion of infrastructure investments in the community diverted to accelerate debt in order to deal with over leveraged business (90+% debt / assets in 2006)

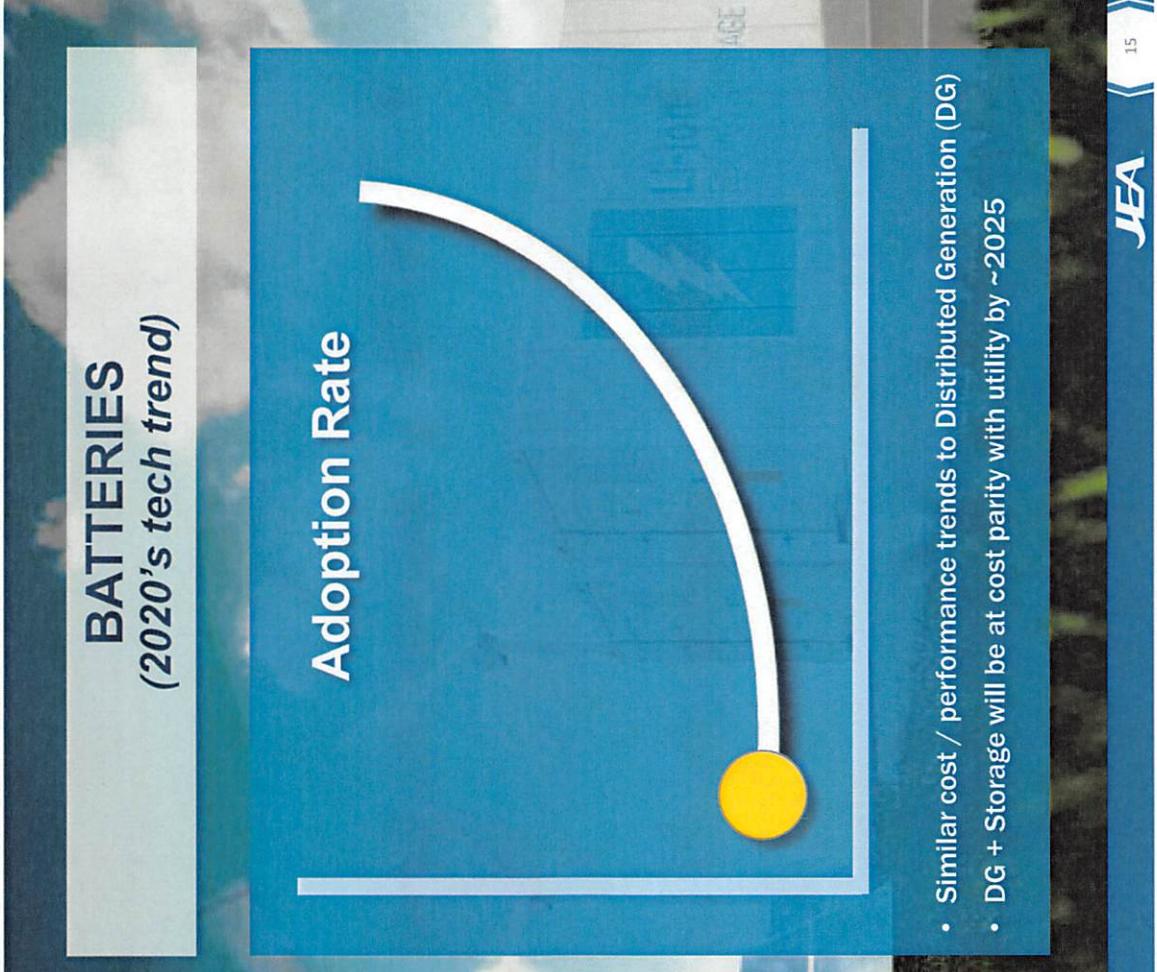


## SOLAR & OTHER *(2010's tech trend)*

Adoption Rate



- Solar growth increasing in JEA territory 67% CAGR since FY 14
- >\$2.5MM of Net Income lost to distributed generation annually



## BATTERIES *(2020's tech trend)*

Adoption Rate



- Similar cost / performance trends to Distributed Generation (DG)
- DG + Storage will be at cost parity with utility by ~2025

MONCLAIR

# FEBRUARY 6, 2019

GOODBY'S  
CREEK

152

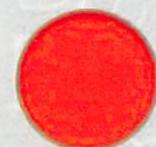
Beauclerc Rd  
San Jose Blvd

BEAUCLERC

BEL EAU

Craven Rd

Old Kings Rd S



CRAVEN

Sunbeam Rd

116

Sunbeam Rd

Hood R

Phillips Hwy

Baymeadows Rd

Phillips Hwy

95

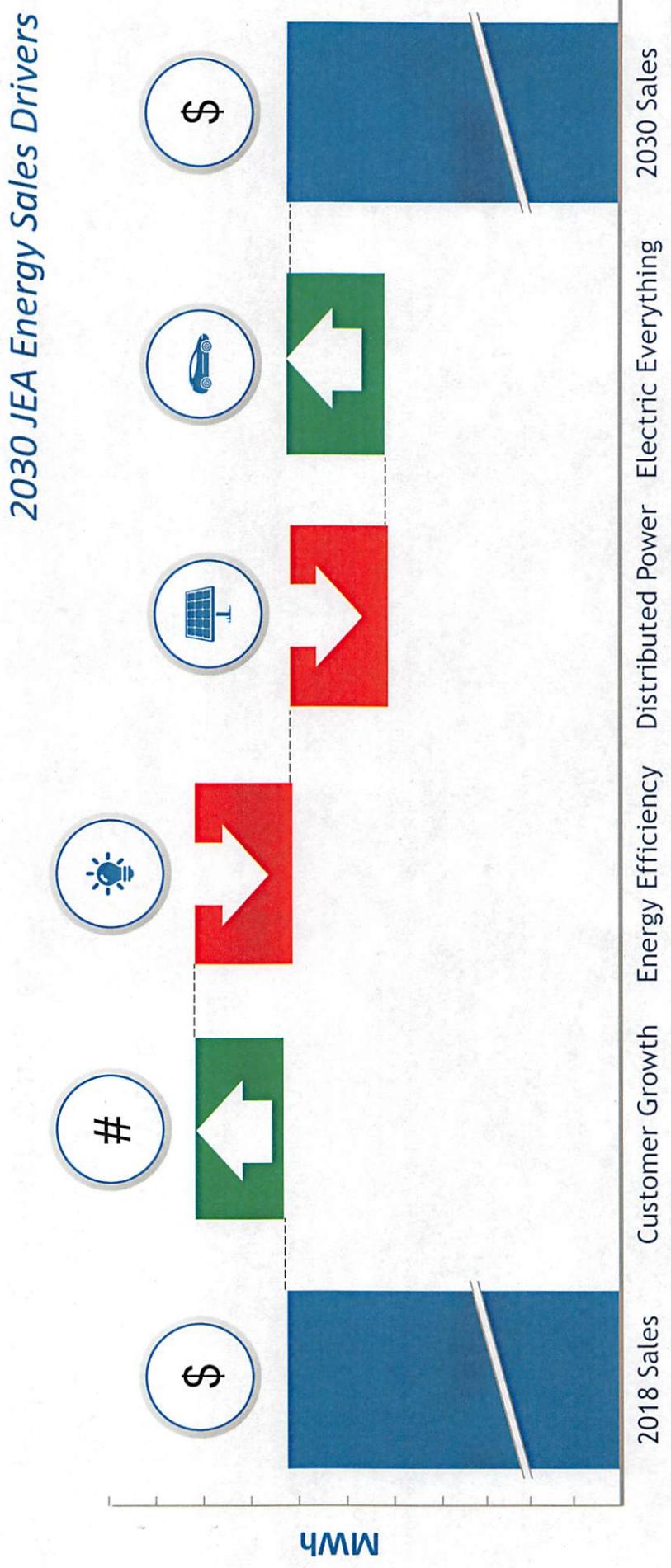
RO  
SOUT  
BAYMEADOWS  
CENTER



### SOUTHSIDE JACKSONVILLE

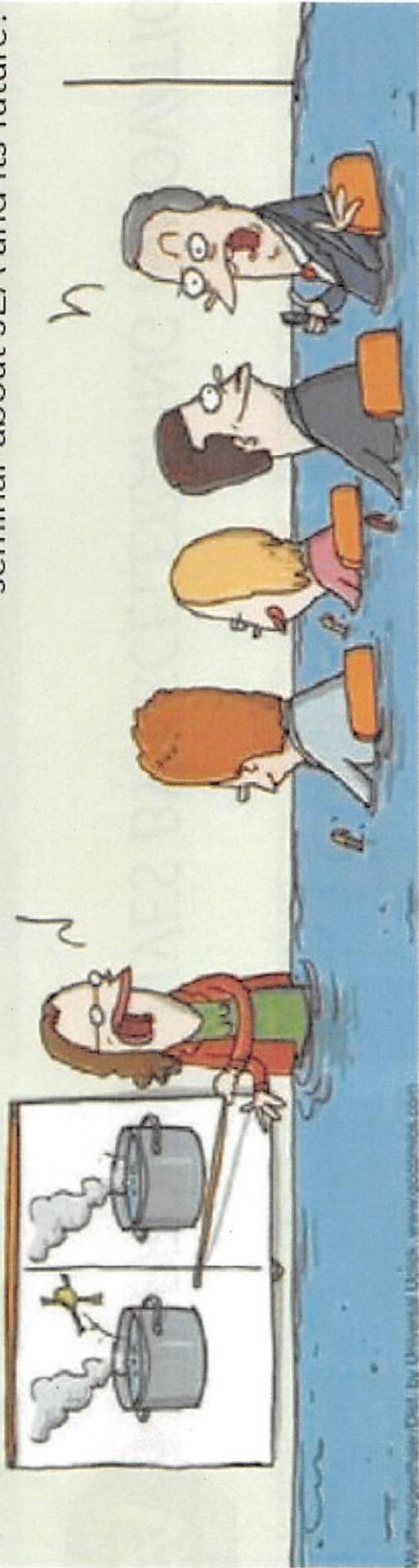
- 1,900 sq ft, Built 1993
- 3 bedrooms, 2 bathrooms
- Estimated value: \$250,000

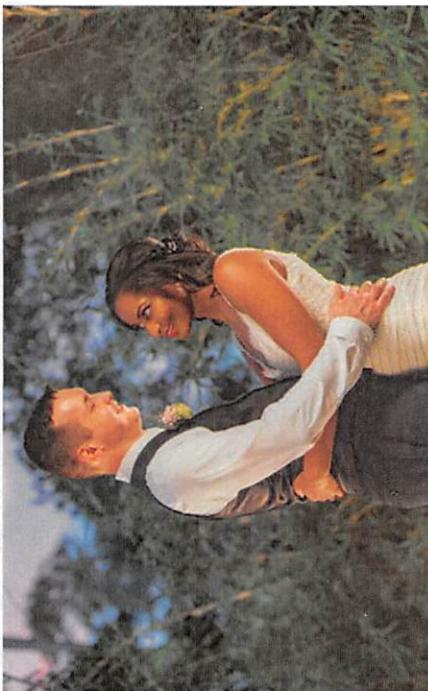
## National Trends Will Substantially Impact JEA by 2030



The boiling frog theory states that if a frog is placed in boiling water, it will jump out, but if it is slowly heated, it will not perceive the danger and die ...

I don't get the relevance ...  
Isn't this supposed to be a seminar about JEA and its future?





IMPROVING LIVES BY ACCELERATING INNOVATION

