

# Office of Sustainability Quarterly Update

Resource Management Commission  
February 16, 2016

# Topics to Cover

- Community Climate Plan Status Update
- Climate Change and the Austin Water Integrated Water Resource Plan (IWRP)
- Joint Sustainability Committee Update



# Council Resolution 20140410-024

- Council established goal: Net zero community wide greenhouse gas emissions by 2050
  - Prefers to achieve as soon as feasible
  - Emission reductions accomplished sooner are more important
- Review goals & objectives in 2007 Climate resolution
- Recommend:
  - Measurable interim targets starting with 2020, periodically to 2050
  - How and when annual progress reports will occur
  - How often to conduct comprehensive updates to the climate plan



# Recommendations adopted in Resolution 20150604-048

- Status update on top 9 actions recommended for immediate implementation
- Develop implementation plan for Phase 1 actions and public outreach plan by summer of 2016.

## March 1<sup>st</sup> Memo to City Council

- Determine feasibility of carbon impact statement for major City Council decisions.
- Determine feasibility of local carbon fee or trading and investment program.

## June 1<sup>st</sup> Memo to City Council

- Continue climate research and resilience planning efforts.

## Ongoing (in this presentation)







# Austin Water's Climate Program (to date)

## **MITIGATION:**

REDUCE OUR  
CONTRIBUTION  
TO CLIMATE  
CHANGE

### – **EMISSIONS:** Greenhouse Gas Inventory and Reduction

- Started in 2007 with Austin Climate Protection Plan
- Operational GHG emissions reduced by 85% in 2015

## **ADAPTATION:**

REDUCE CLIMATE  
CHANGE'S  
IMPACT ON OUR  
ABILITY TO  
PROVIDE  
SERVICES

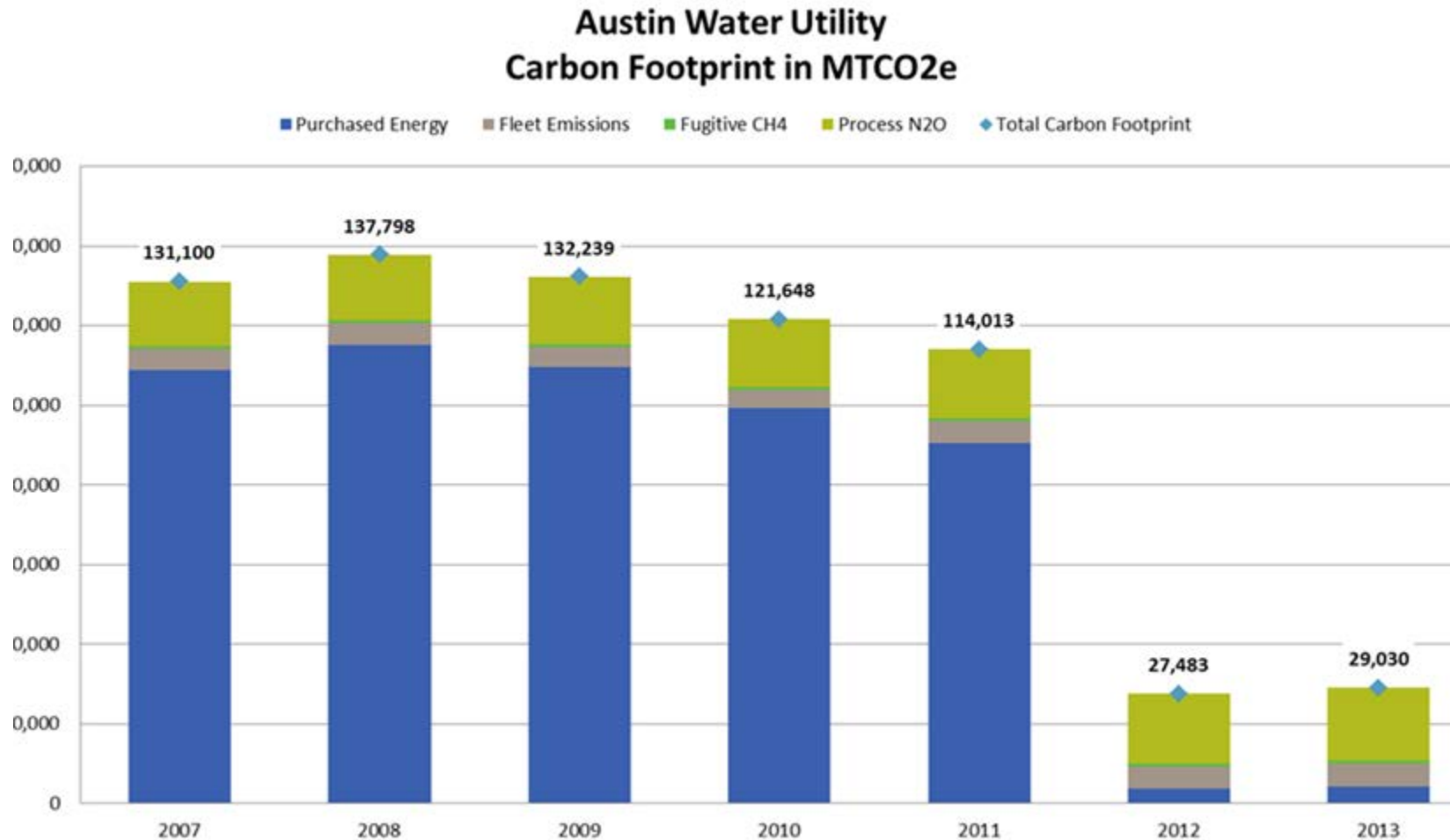
### – **OPERATIONS:** Reduce impacts on operations

- Spurred by 2011 heat and drought extreme events
- Collaborated with NOAA, EPA, etc. to host workshop and produce case study

### – **SUPPLY & DEMAND:** Long-term planning to meet future demands under changed climate

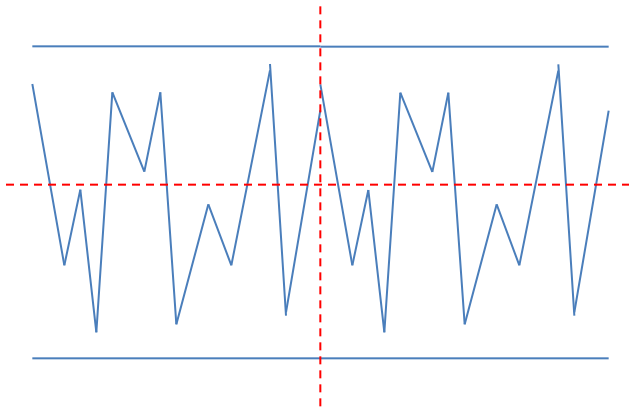
- 2014-15 Pilot participation in EPA CREAT planning
- Climate consultant assessing potential impact on supply

# MITIGATION: GHG Emissions dramatically reduced since 2012

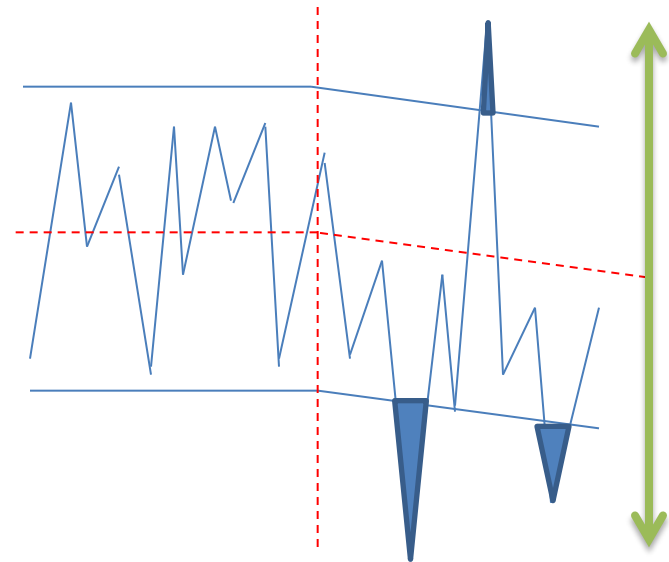


# Climate Change Changes the Game

## The Past = The Future



## Uncertain Future:



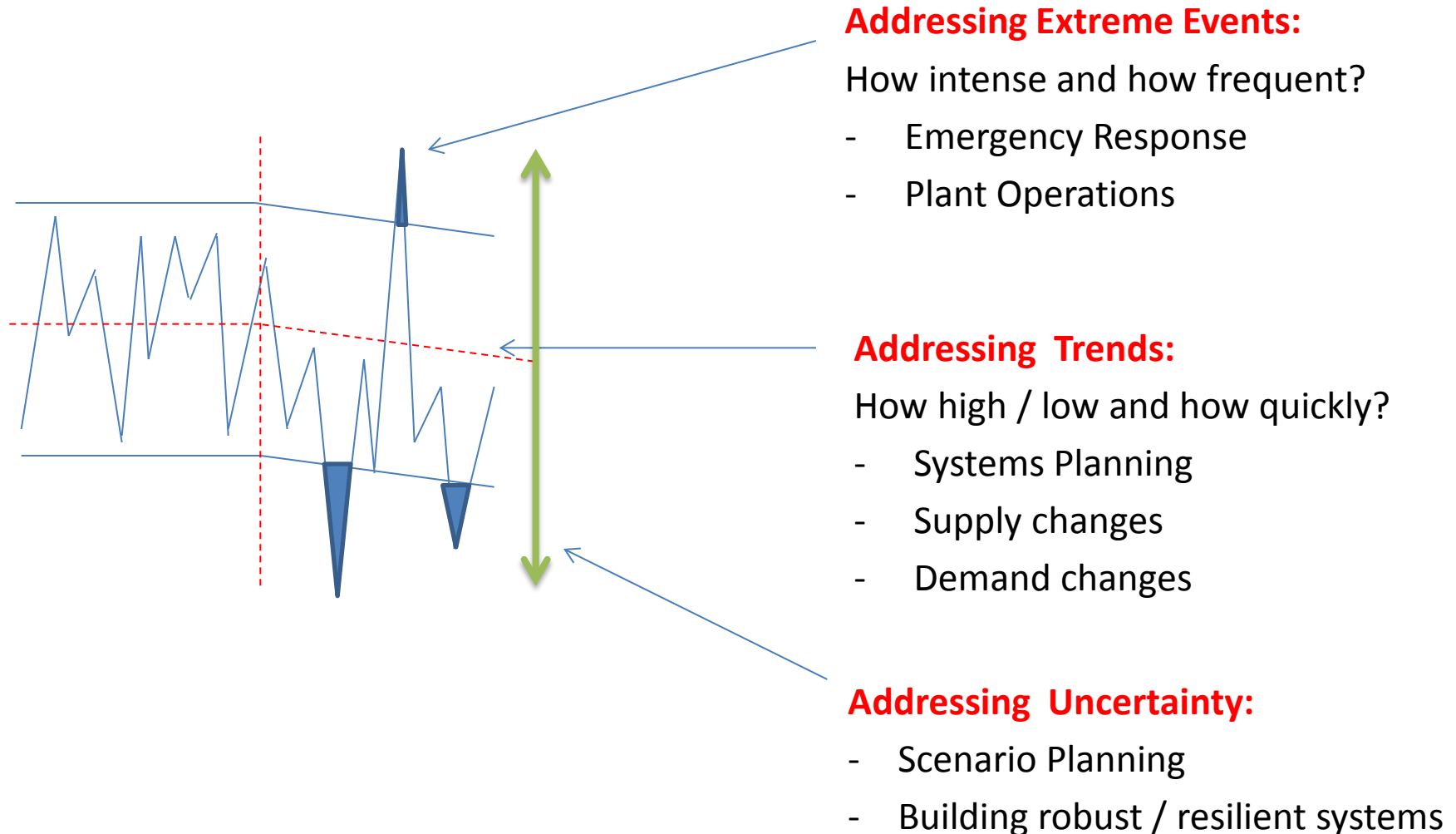
**Extreme Events**

**Changing Trends**

**Increased Uncertainty**



# Planning for Trends & Extremes in Water Sector



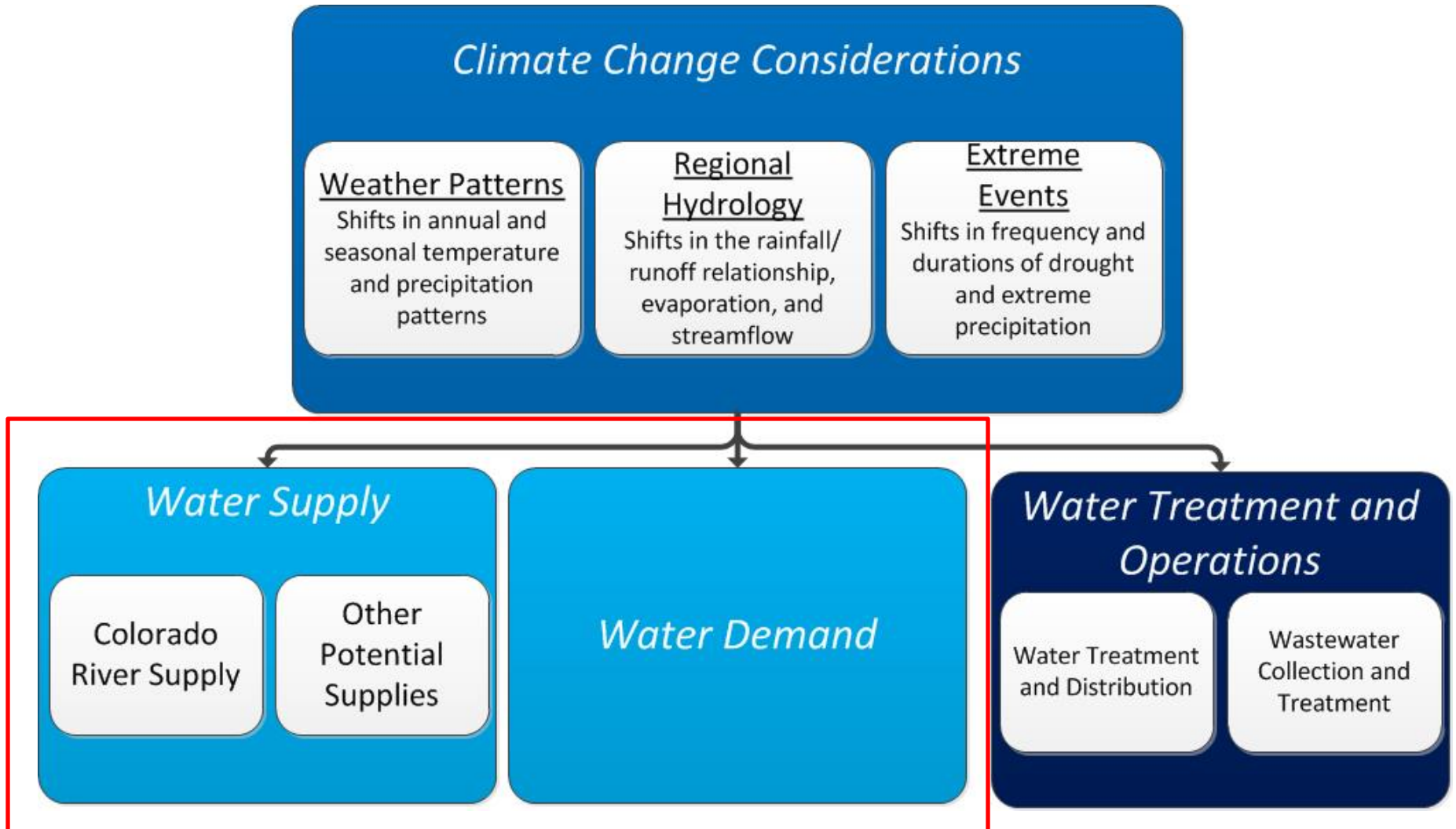
# Adaptation Planning Framework



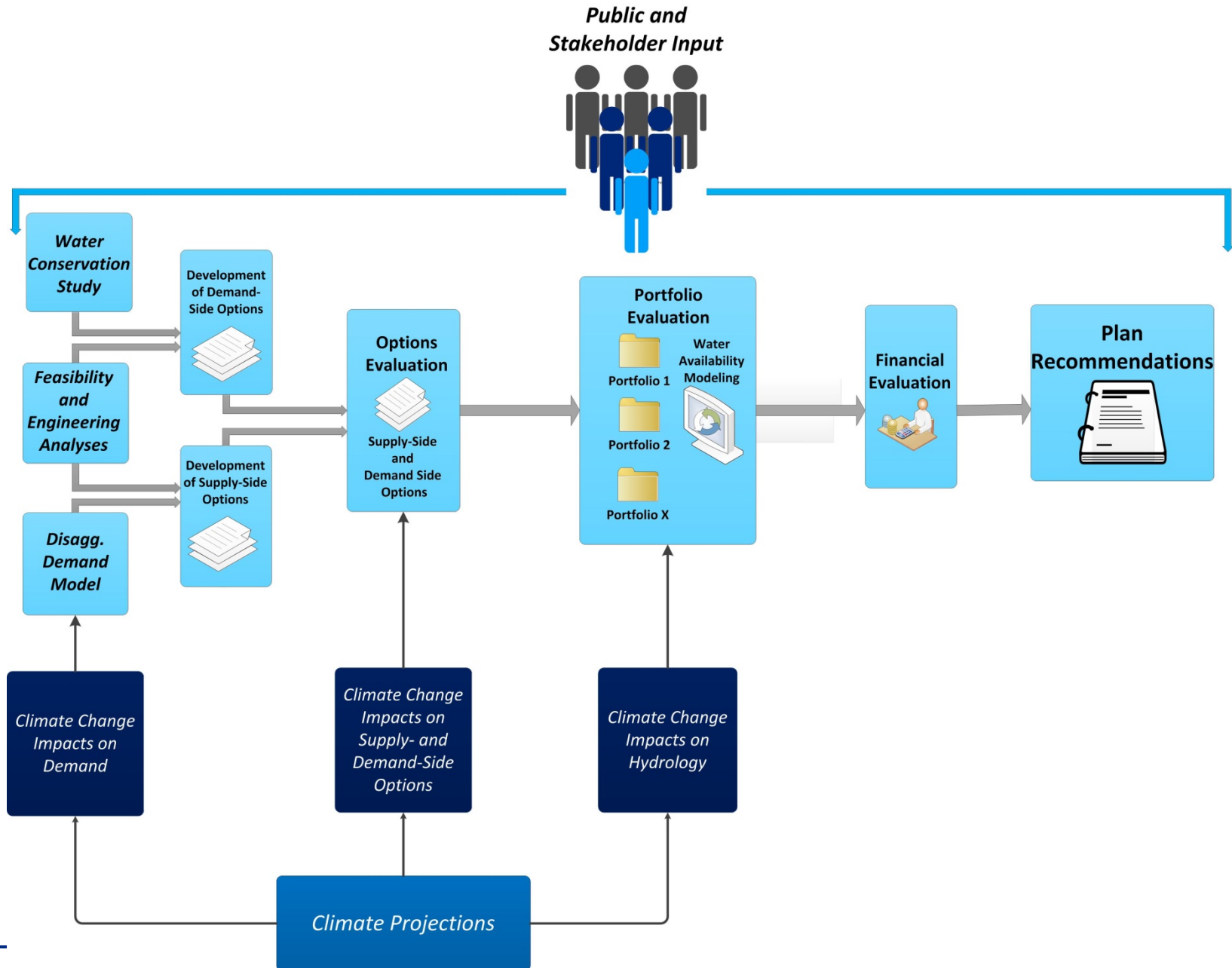
# EPA CREAT exercise: Asset-Threat Pairs

ASSET CATEGORY	THREAT
Wildlands	Dry and hot conditions sparked wildfires Dry conditions change vegetation
Water supply	Low reservoir levels (drought and heat) Increased demand for firm water: LCRA contract trigger Watershed: floods threaten dams
Water treatment	Algae blooms and/or flooding result in changes in raw water quality
Distribution System	Water age from reduced demand (water quality) Line breaks from shifting soil
Customers & Conservation	Population growth ongoing Water demand for outdoor use
Collection System	I&I from flood events Line breaks from drought Flood damage to lift stations
Wastewater Treatment	Blowers may trip with high temperatures Peaking factor with intense rains Flood damage to package plants High temperature of receiving waters
Reclaimed	Flood damage to package plants that provide reclaimed water
Solids	Dry and windy conditions triggered compost fire
Personnel	High temperatures reduce work times, potential health impacts/overtime
Capital Projects	Projects delayed by budget cutbacks (low revenues)
Facilities	High heat impact on pavement Flooding can interrupt access to facilities (for personnel and/or supplies) Electricity supply (backup, dual feed) subject to grid dependability

# Considerations and Impacts of Climate Change in the IWRP



# Integrating Climate Change Considerations into the IWRP





# Joint Sustainability Committee

# Joint Sustainability Committee

**(E) The joint committee shall advise the council on matters related to conservation and sustainability. and;**

- (1) review City policies and procedures relevant to the Austin Community Climate Plan, including planning, implementation, community engagement, goal setting, and progress monitoring;
- (2) promote close cooperation between the council. City management. City boards, commissions, committees. and taskforces. and individuals, institutions, and agencies concerned with the politics, procedures, and implementation of the Austin Community Climate Plan with the goal of coordinating all similar activities within the City and the community in order to secure the greatest public benefit; and
- (3) forward to the city manager all advisory material that the joint committee provides to the council, the Office of Sustainability, City departments and offices, or City boards, commissions, committees, and task forces.

# Joint Sustainability Committee

## **(F) The joint committee may:**

- (1) advise the council, the city manager, the Office of Sustainability, City departments and offices, and City boards, commissions, committees, and task forces on policy matters related to the Austin Community Climate Plan;
- (2) ask the city manager for information related to the Austin Community Climate Plan;
- (3) make recommendations to the council's Open Space, Environment, and Sustainability Committee before final council action on relevant policies or procedures; and
- (4) establish advisory groups or working groups related to the Austin Community Climate Plan.

# Joint Sustainability Committee Members

Name	Representing Board or Commission
Joep Meijer	OSES Committee appointment
Sabrina Santos-Joplin	OSES Committee appointment
Jim Walker	OSES Committee appointment
Angela Pineyro De Hoyos	Planning Commission
Stacy Guidry	Zero Waste Advisory Commission
Adrienne Haschke	Sustainable Food Policy Board
Fred McGhee	Community Development Commission
Kaiba White	Resource Management Commission
Derrick Norris	Electric Utility Commission
Tom Donovan	Parks & Recreation Board
Kelly Davis	Urban Transportation Commission
Nhat Ho	Water & Waste Water Commission
Erin Gooch	Environmental Commission
Vacant	Economic Prosperity Commission

First Meeting set for March 30, 2016



Thank you!