

Orange County Water Reliability Study 2015

**Municipal Water District of Orange
County**



Broad Topics Affecting Water Reliability in OC

OCWD Groundwater Basin

MET & Import Supplies

Ocean & Brackish Desalination

Water Transfers & Exchanges

Santa Ana River

Earthquake Emergency Preparedness

FUNDING & Willingness to Pay

BDCP

Climate Variability

Water Recycling

Water Use Efficiency

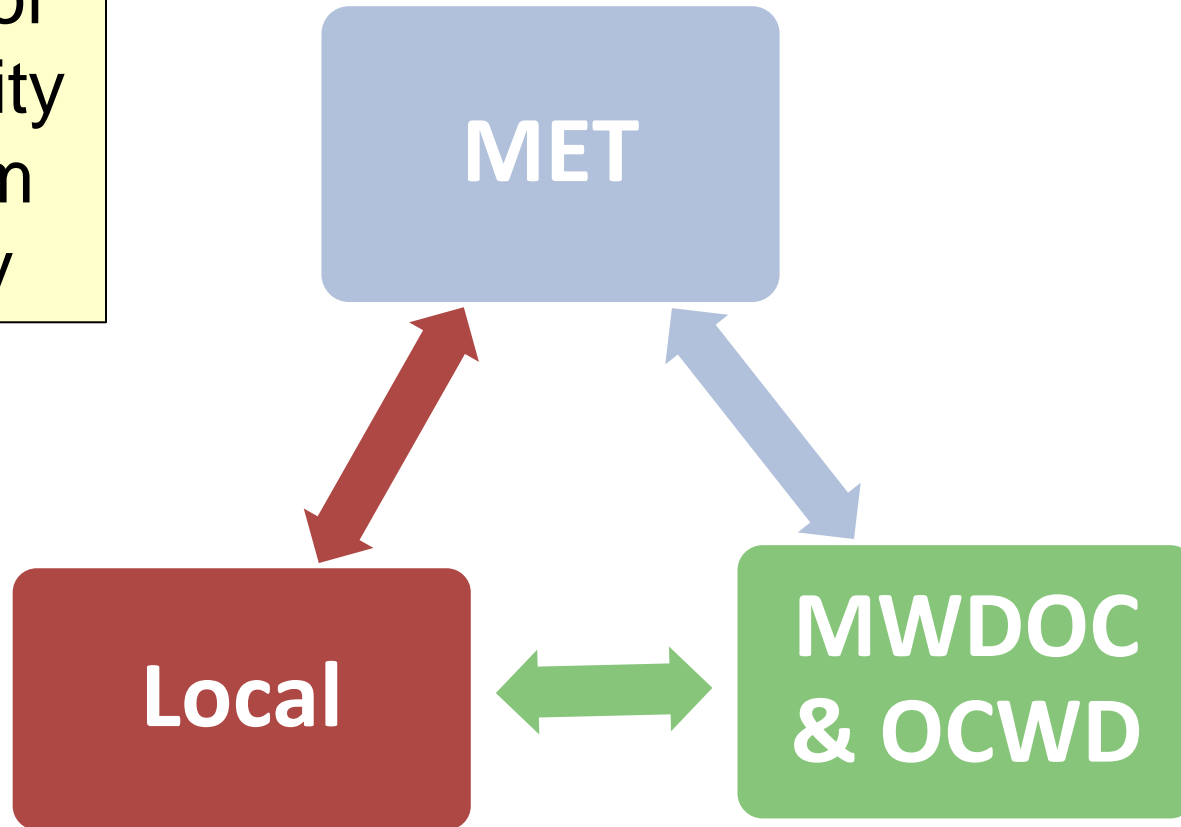
DECISION MAKING

Stormwater Urban Runoff

Water Supply Reliability Results from the Collective Work at All Levels

Types of Reliability

- System
- Supply



The OC Water Reliability Study is NOT intended to:

- Dictate what agencies in Orange County do
- Mandate decisions
- Supplant work being performed by others in the County
- Reinvent the Wheel



Approach for the Study

- Use information already developed by others to the extent possible
- Bring ALL of the information together in one location to help inform future decisions
- Add NEW information, as appropriate
- Add analysis and perspective
- Share the reliability outlook for OC

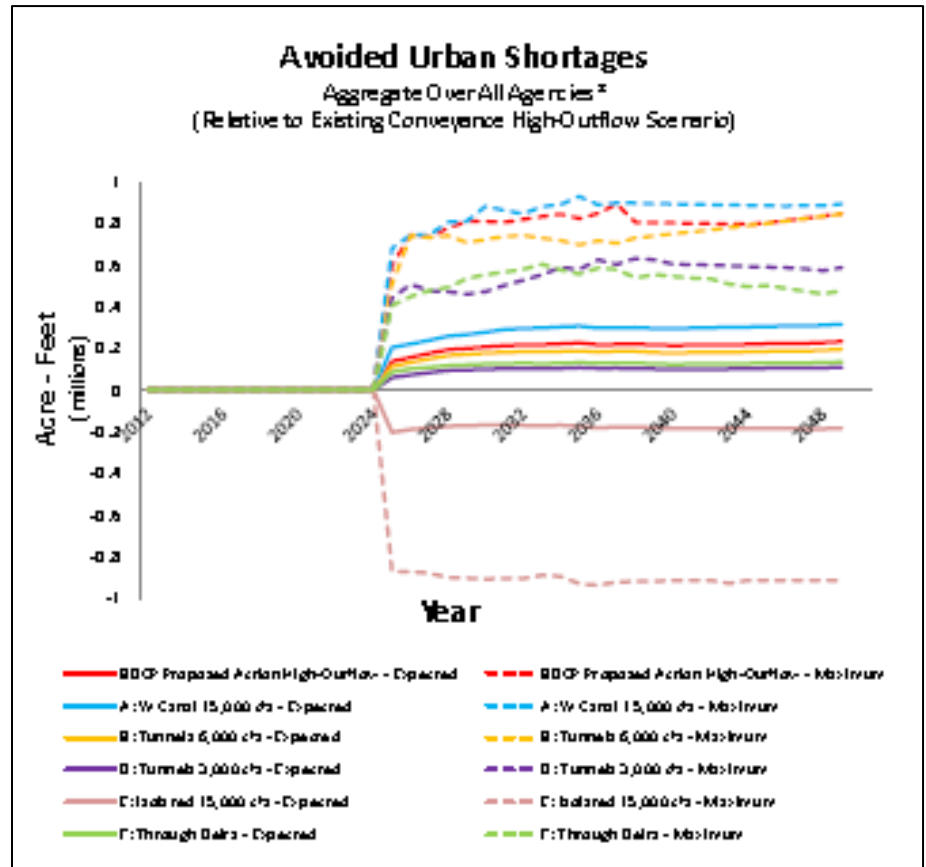


Main Study Objectives

- 1. Evaluate System and Supply Reliability Issues in Orange County**
 - **What are our areas of deficiencies and what investments will be most beneficial?**
- 2. Examine policy issues at MET that can affect investments being made in Orange County**
 - **What elements should be considered in decision-making**
- 3. Develop Solutions/Recommendations from an Orange County Perspective**
 - **What is the payback on investments?**

Key Aspects

1. Demands and Water Use Efficiency Efforts in the County
2. Imported Supplies
3. Santa Ana River Supplies by OCWD
4. Other Local Supplies
5. Decision-Making Framework



Imported Water Supply Issues

- Typically, imported water supplements local supplies in meeting demands:
 - What is our existing and projected reliability?
 - What can be done to improve the reliability for Orange County?
 - What happens if:
 - BDCP does not move forward?
 - Climate change impacts supplies and demands?
 - We experience extended droughts?
 - The SWP is out of operation for an extended period?

Categories of Project Options

- **Purchase MET Water**
 - **Contract for a Higher Reliability from MET (concept)**
- **Ocean Desalination**
- **OCWD Basin Options (Working with OCWD)**
 - **Conjunctive Use Storage of Imported Water for emergency supplies to South OC**
- **Recycling Projects (outside of OCWD)**
- **San Juan Basin Options**
- **Water Exchanges and Transfers**

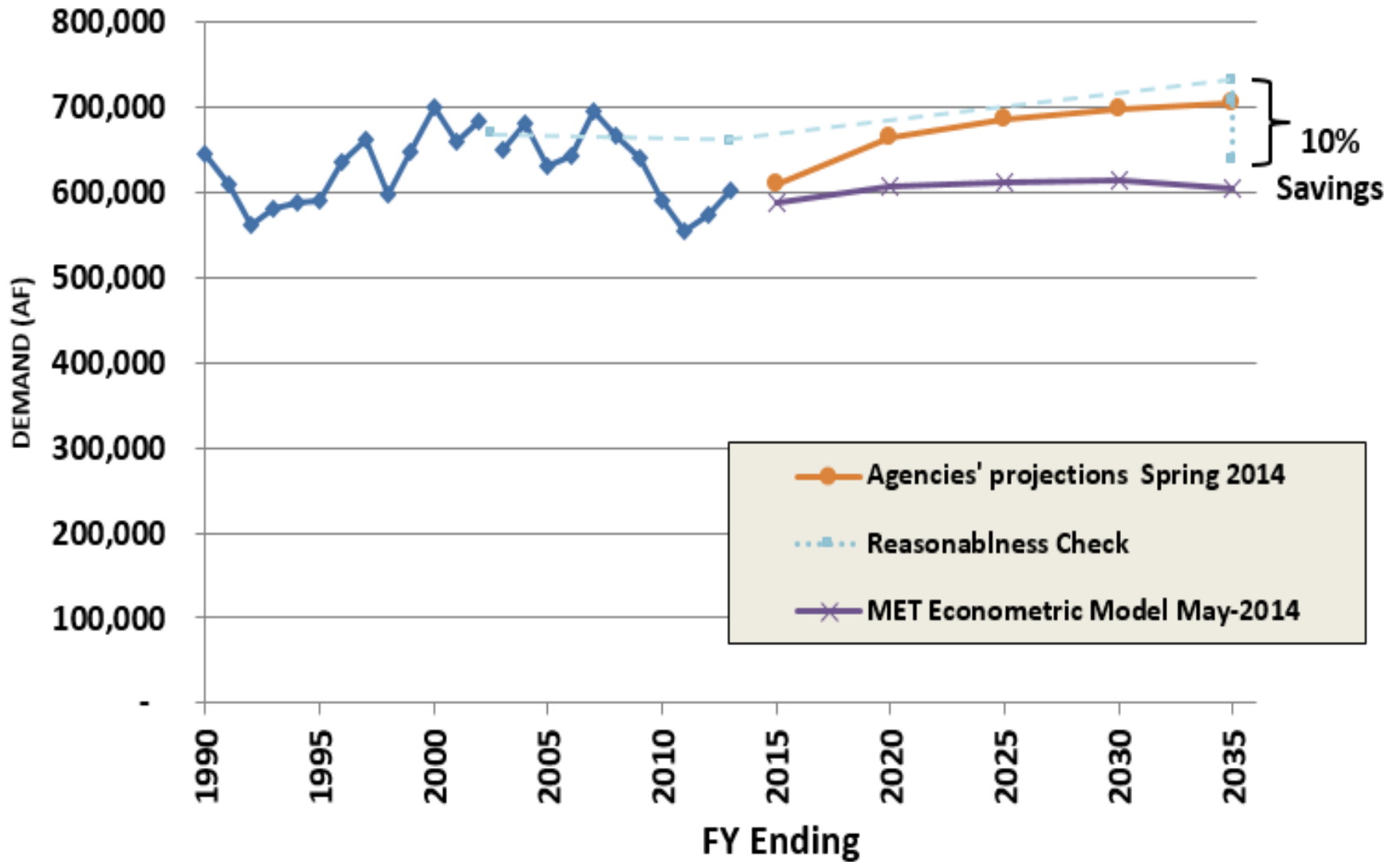


Types of Questions to be Addressed

- **Should we rely only on MET to meet our future needs? Why or why not?**
- **Is ocean desalination a good investment for OC? Why or why not? Under what conditions?**
- **Can conjunctive use arrangements be further developed to help with emergency supplies to SOC? What benefits accrue to the OCWD basin?**
- **Should OC be pursuing water transfers and storage options?**
- **Others**



Water Demands in OC

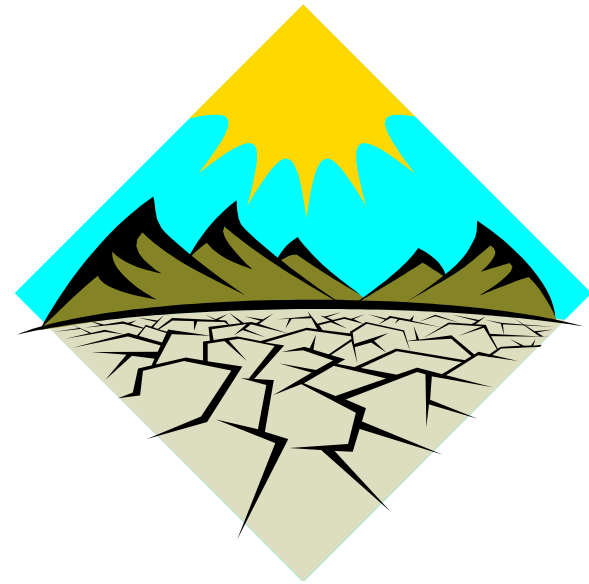


Policy Issues Regarding Imported Supplies

- **Local Supply Benefits during water shortage situations**
 - MET's allocation formula based on "NEED"
 - "Extraordinary" Water Supplies during water shortages
 - Regional vs Local Benefits of NEW Projects
- **Coordination to Avoid Over or Under Investing**
 - MET as the Regional Supplier in the Integrated Resources Plan
 - Level and Extent of MET Storage for Managing Supplies
 - Incentives Provided by MET

Policy Issues Regarding Imported Supplies

- **Future Planning**
 - **Extended Drought Planning Criteria**
 - **Water Supply and Storage Buffer Amounts/Risk Analysis**
 - **Decision-making process**



Member Agency Involvement

- OCWD efforts are key with respect to the groundwater basin and SAR Watershed
- Take advantage of work already done by OCWD, MWDOC, IRWD, MNWD, MET, SJBA and others
- Form Workgroup to meet with Consultant on Scope and Approach and on Critical Issues
- Volunteers to date include:
 - SMWD
 - LBCWD
 - IRWD
 - MNWD
 - ETWD
 - Mesa Water
 - HB
 - Anaheim
 - OCWD
 - MWDOC
 - NWRI (if needed)



Schedule

- **Meet with Workgroup of Member Agencies to review scope of work**
- **Consultant Selection to MWDOC Board – August 20**
- **Complete GAP Analysis and begin project evaluations – January 2015**
- **Complete Study – June 2015**
- **Proceed with Recommendations**

Questions