GRANT ADMINISTRATOR:

- Santa Ana Watershed Project Authority

APPLICANT – Consortium of:

- Eastern Municipal Water District
- Inland Empire Utilities Agency
- Orange County Water District
- San Bernardino Valley Municipal Water District
- Western Municipal Water District

Consultant Team:

Dudek
Raftelis
UC Riverside
SCWC
CV Strategies
Bob Ohlund, PE
Sanjay Gaur
Dr. Kurt Schwabe
Rich Atwater
Erin Gilhuly
• Expedited Schedule (Application/Funding Schedule cut in Half)
• $200M – Emphasis on Northern California
• How much can we expect?
  o  ?????
    o  We’ve assumed $10M, Could be $0
• SAWPA-Santa Ana River Watershed Application
  o  One Project Application: Watershed – Scale Water Use Efficiency Program
WHY CONSERVE WATER?

• Drought – Seasonal/Short Term Conservation

• California Constitution:
  - “…be put to beneficial use to the fullest extent…capable”
  - “…waste or unreasonable use or unreasonable method of use of water be prevented”
  - “…conservation of such waters is to be exercised with a view to the reasonable and beneficial use…for the public welfare”

• 20x2020

• Reliability
  - Property Values
  - Economy
WHAT IS REASONABLE/BENEFICIAL USE?
WHAT IS THE VALUE OF WATER?

Conflicting Messages:

pre·cious

ˈpreSHəs/

adjective

adjective: precious

1. (of an object, substance, or resource) of great value
HOW CAN WE MOST EFFECTIVELY PUT $10M TO WORK?
HOW CAN WE MOST EFFECTIVELY PUT $10M TO WORK?

A targeted approach based on the following:

- Price of water has a direct/sustainable influence on water use
- Customer’s understanding of how much water they use
- Grass is the default landscape
Program Elements / Suite of Tools:

• Aerial Imagery
• Conservation-based Water Rates
• Commercial, Institutional, and Homeowners Association Landscape Conversion
• Technology-Based Water Conservation Program
• Entire Urbanized Watershed Area

• Imagery: 6” 4-band (3-color and 1 infrared band) orthorectified

• Supervised classification of vegetated areas

• Modeling and analysis of conservation potential

• Utilize Aerial Imagery to Reduce Labor Cost
AERIAL IMAGERY

- Aerial Imagery available to all water purveyors in the Watershed

- Uses:
  - Target high water users
  - Turf replacement – reduce site inspection/labor
  - Water allocation/budget development
  - Identification of excessive runoff
  - Other uses
• Consumption is influenced by price of water
• Must be in Compliance with Prop 26 & 218 – Cost of Service
• Very effective water conservation measure
• Criteria:
  o Studies identify up to 17% demand reduction
  o Goal: 10% reduction of demand
  o 5% minimum per program
• Sanjay Gaur – Raftelis Financial Consultants
Elements of the Program:

1. **Education** – Four workshops in three counties (total of 12) would be held with elected officials and staff members on the benefit of promoting outdoor water use efficiency.

2. **Benchmarking Outdoor Water Use** – Conduct benchmarking analysis for 30 agencies on what is the efficient amount of water use for Single Family customers. The outcome of this analysis will assist staff in identifying which customers have the largest saving potential and assist with meeting the requirements of SBX7-7.
Elements of the Program:

3. **Feasibility Study** – Estimated 20 agencies will analyze the business case of implementing a new rate structure. This will inform policymakers on both the costs and benefits of a new rate structure.

4. **Conservation Rate Pricing** – It is anticipated that 10 agencies would implement a conservation rate structure that promotes efficient outdoor water use.
Participation of Program and Saving Estimates

• ~100 retail agencies in the Santa Ana Watershed

• ~30 agencies would be interested in conducting outdoor efficiency analysis
  - Saving is anticipated

• ~20 agencies would conduct the business case analysis

• ~10 agencies would implement conservation rate structure that promotes efficient outdoor water use
  - Saving is anticipated

• Estimated annual saving: 16,000 AF
LANDSCAPE CONVERSION

- Commercial, institutional, and HOAs
- Goal: +/- 4,000,000 SF of turf removal
- Cost to remove turf: $6/SF to $8/SF typically
- Fund up to $3/SF removal (including other rebates such as MWD at $2/SF)
- Landscape consulting
LANDSCAPE CONVERSION

• **Website**
  
  o Design templates and examples
  
  o Plant palettes
  
  o Collaboration with WMWD, Inland Empire Garden Friendly, OC Coastkeeper, Inland Water Keeper

• **Criteria:**
  
  o Commercial, institutional, or Homeowner’s Association
  
  o Minimum SF removal
  
  o Public visibility area
  
  o Meet MWD program requirements
No it doesn’t, it takes a lot of Water!

(and fertilizer, and labor . . . )
TECHNOLOGY-BASED WATER USE REDUCTION PROGRAM

• Technology-Based Conservation Program
  
  o Raise awareness of water use compared to similar lots and/or budget
  
  o Educate – Provides a vehicle for information to reduce water use
  
  o Better align customers’ perception of the value of water and its reasonable use
TECHNOLOGY-BASED WATER USE REDUCTION PROGRAM

- Criteria:
  - Must demonstrate that it will be part of an active outreach program
IMPLEMENTATION

- SAWPA: Administrator of Grant Funding
- Applicant: 5 Regional Water Districts (EMWD, IEUA, OCWD, SBVMWD, WMWD)
IMPLEMENTATION

• Implementation:
  - Initially allocating budget by Water Bearing Sub-Regions based on population
    - Upper Basins Sub-Region
    - Eastside Service Area Sub-Region
    - Inland Empire Sub-Region
    - Orange County Sub-Region
  - Proposals made to Regional Agency
    - First come, first served
    - Must meet criteria
  - Implementation monitored and tracked by initial allocation
  - Applicant may elect to re-allocate by Sub-Region if funding not being utilized on schedule
• **Next Steps**
  
  o Incorporate review comments
  
  o Establish final goals, criteria and implementation
  
  o Complete grant application information
    
    o Due to SAWPA beginning of June
  
  o Coordinate with SAWPA’s packaging and approval of application
    
    o Due to DWR the beginning of July