

# **WEST BASIN**

Municipal Water District

Overview of West Basin Municipal Water District

**MWD Board Meeting** 

February 8, 2022





Provide a **safe** and **reliable** supply of **high-quality water** to the communities we serve.

#### Celebrating 75 Years of Water Reliability (1947-2022)



West Basin was **formed in 1947 to make local water supplies more reliable** through the
protection of local groundwater sources and
identification of new water sources.

75 years later, the District remains committed to its mission to "provide a **safe** and **reliable** supply of **high-quality water** to the communities we serve."

### Board of Directors



Division I

Harold C. Williams Immediate Past President



Division II

Gloria D. Gray Secretary



Division III

Desi Alvarez Treasurer



Division IV

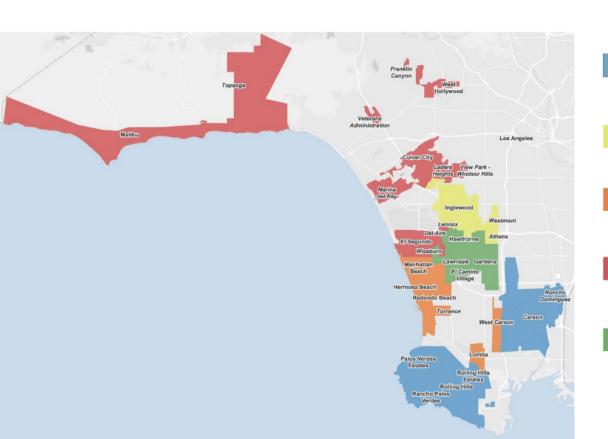
Scott Houston Vice President



Division V

Donald L. Dear President

#### Service Area





Carson, Palos Verdes Estates, Rancho Palos Verdes, Rolling Hills, Rolling Hills Estates, and unincorporated LA County areas of Rancho Dominguez

#### Division II

Inglewood, and unincorporated LA County areas of Lennox, South Ladera Heights, West Athens, and Westmont

#### Division III

Hermosa Beach, Lomita, Manhattan Beach, Redondo Beach, portion of Torrance and West Carson

#### **Division IV**

Culver City, El Segundo, Malibu, West Hollywood, and unincorporated LA County areas of Del Aire, Lennox, Marina del Rey, North Ladera Heights, Topanga, View Park - Windsor Hills and Wiseburn

#### Division V

Gardena, Hawthorne, Lawndale, and unincorporated LA County area of El Camino Village

### History of West Basin

#### 1947

Formation of West Basin Municipal Water District

#### 1948

West Basin becomes a member agency of the Metropolitan Water District of Southern California

#### 1991

Agreement between West Basin and Los Angeles to deliver treated sewage from Hyperion Plant to new West Basin recycled water facility in El Segundo

#### 1995

West Basin begins deliveries of recycled water to customers and seawater barrier

#### 1999

Construction completed on Juanita Millender-McDonald Water Recycling Facility

Edward C. Little Water Recycling Facility in 1995

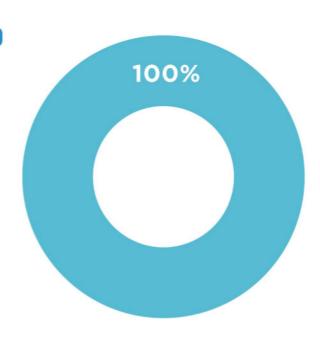
#### 2018

West Basin produces 200 billionth gallon of recycled water

#### Water in the West Basin – Pre-1947

# Water Supply Portfolio Pre-1947

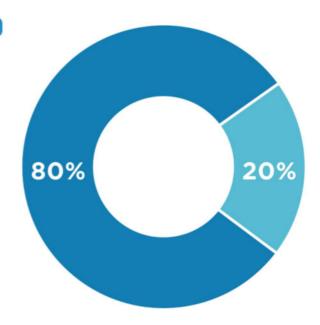
Groundwater



#### Water in the West Basin - 1990

# Water Supply Portfolio 1990

- Imported Water
- Groundwater

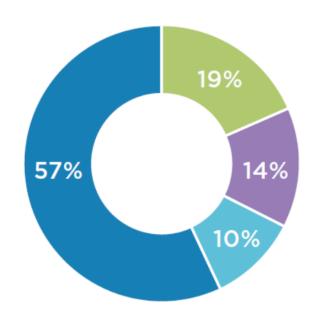


### West Basin Water Supply Today

# Water Supply Portfolio

Based on 2020 Urban Water Management Plan

- Imported Water
- Conservation
- Recycled Water
- Groundwater

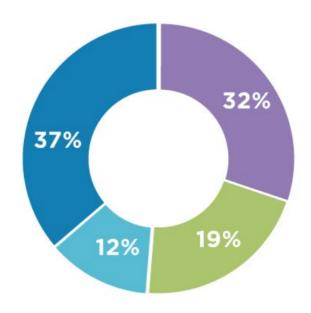


## West Basin Water Supply Tomorrow (2045 Projection)

# Water Supply Portfolio

Based on 2020 Urban Water Management Plan

- Imported Water
- Recycled Water
- Conservation
- Groundwater



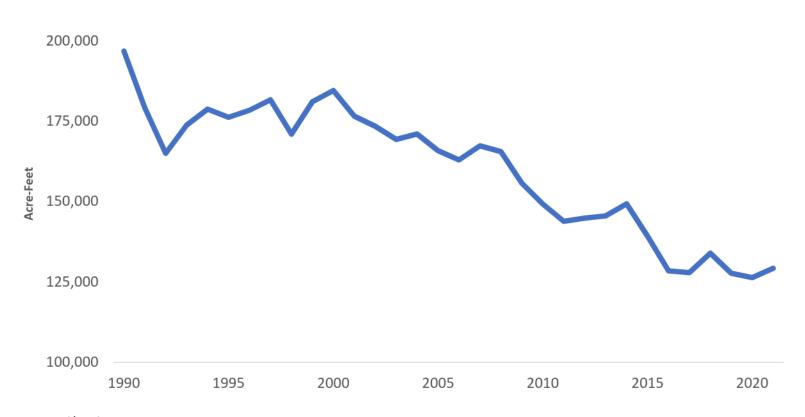
### West Basin and the One Water Concept



Since 1990, West Basin has embraced the One Water concept by investing in its regional recycled water and water efficiency programs

Together, these programs have helped reduce annual potable water demand by ~70,000 Acre-Feet in the last 30 years

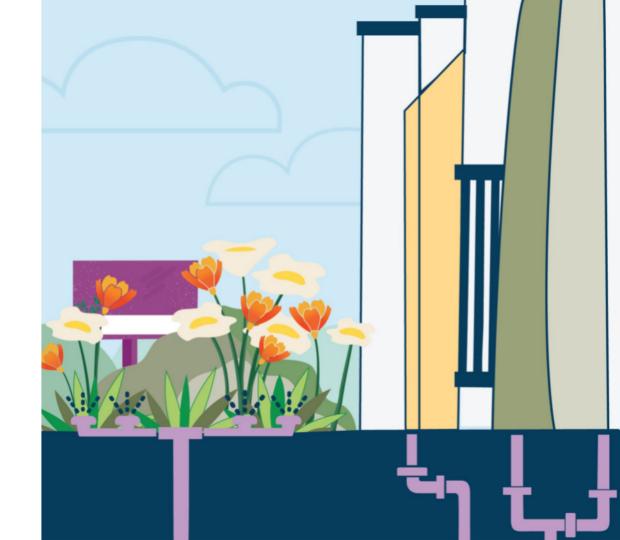
### Potable Water Demand in West Basin Service Area





## Water Recycling

Diversifying the Water Supply Portfolio



## Water Recycling



Edward C. Little Water Recycling Facility El Segundo, Calif.

- 30-40 million gallons per day produced and prevented from entering the ocean
- Five types of recycled water
- Nearly 250 billion gallons of recycled water produced since 1995

# 5 Types of Recycled Water



#### **Irrigation Water**

Filtered and disinfected for industrial and irrigation use.



#### **Cooling Tower Water**

Processed to remove ammonia for industrial cooling tower use.



#### **Low-Pressure Boiler Feed Water**

Membrane filtration and reverse osmosis membranes



#### **High-Pressure Boiler Feed Water**

Membrane filtration and passed through reverse osmosis membranes twice



#### **Groundwater Replenishment Water**

Membrane filtration, reverse osmosis, and disinfection for use in a barrier against seawater intrusion, augmenting local well water supplies.

### Recycled Water Customers











































# Recycled Water Partnerships











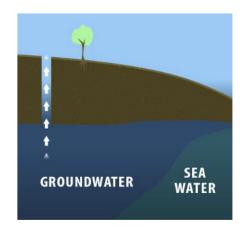




### Recycled Water Portfolio



Refineries 50%



Seawater Barrier 37%



Irrigation & Other 13%

### Investments in Capacity and Treatment Capabilities



# **Future Recycled Water Opportunities**

### 70,000 AFY (62 MGD) of new opportunities



■ Tier 1 and Tier 2 markets 2 MGD

■ Title 22 Expansions 6 MGD



Expansion of Barrier System 10 MGD





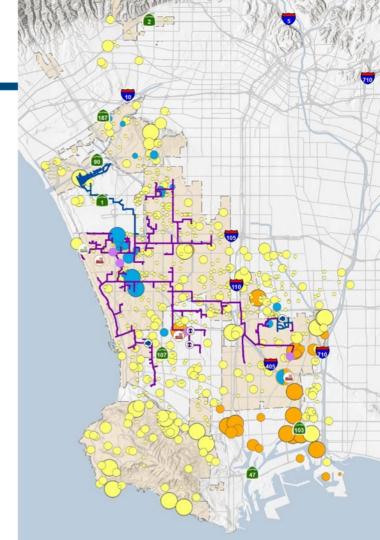
■ Refinery Use 12 MGD



Groundwater Augmentation22 MGD



■ LA Harbor/Long Beach Industrial 10 MGD



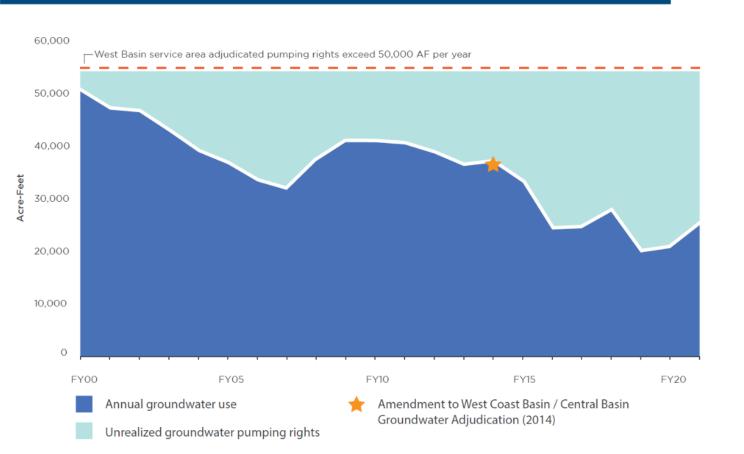


Groundwater

Maximizing Local Resources



#### West Basin Service Area Groundwater Pumping



### Groundwater Partnerships

- Support ongoing efforts to increase pumping volumes in West Coast Basin to historical averages
- Partner with WB retailers, West Basin Water Association, and Water Replenishment District to identify and implement projects that provide dual benefits
  - Use of advanced treated recycled water as source of replenishment and IPR
  - Increased groundwater pumping as local source of sustainable drinking water

















A California Way of Life



# West Basin Programs that Save Water and Money



Grass Replacement Rebates



Landscape Classes & Plant Resources



Free Rain Barrels



Change & Save Program

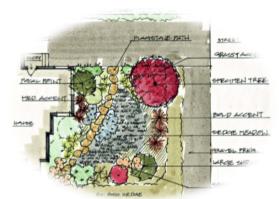


Cash for Kitchens Device Rebates

## Grass Replacement +



- ✓ Bigger Rebate
- ✓ Free Custom Landscape Design
- ✓ Free Drought-Resistant Tree
- www.westbasin.org /grass-plus





### Change & Save





#### For a limited time

Get your **FREE**water-saving
device kit.

# Sign up today!

www.westbasin.org/change-save changeandsave@westbasin.org (310) 371-4633





#### Get your FREE

water-saving device kit.

- SAVE MONEY
- **O** SAVE WATER
- **SAVE ENERGY**



E.J. Caldwell Interim General Manager

EdwardC@westbasin.org

Connect with us www.westbasin.org







