MARIN WATER

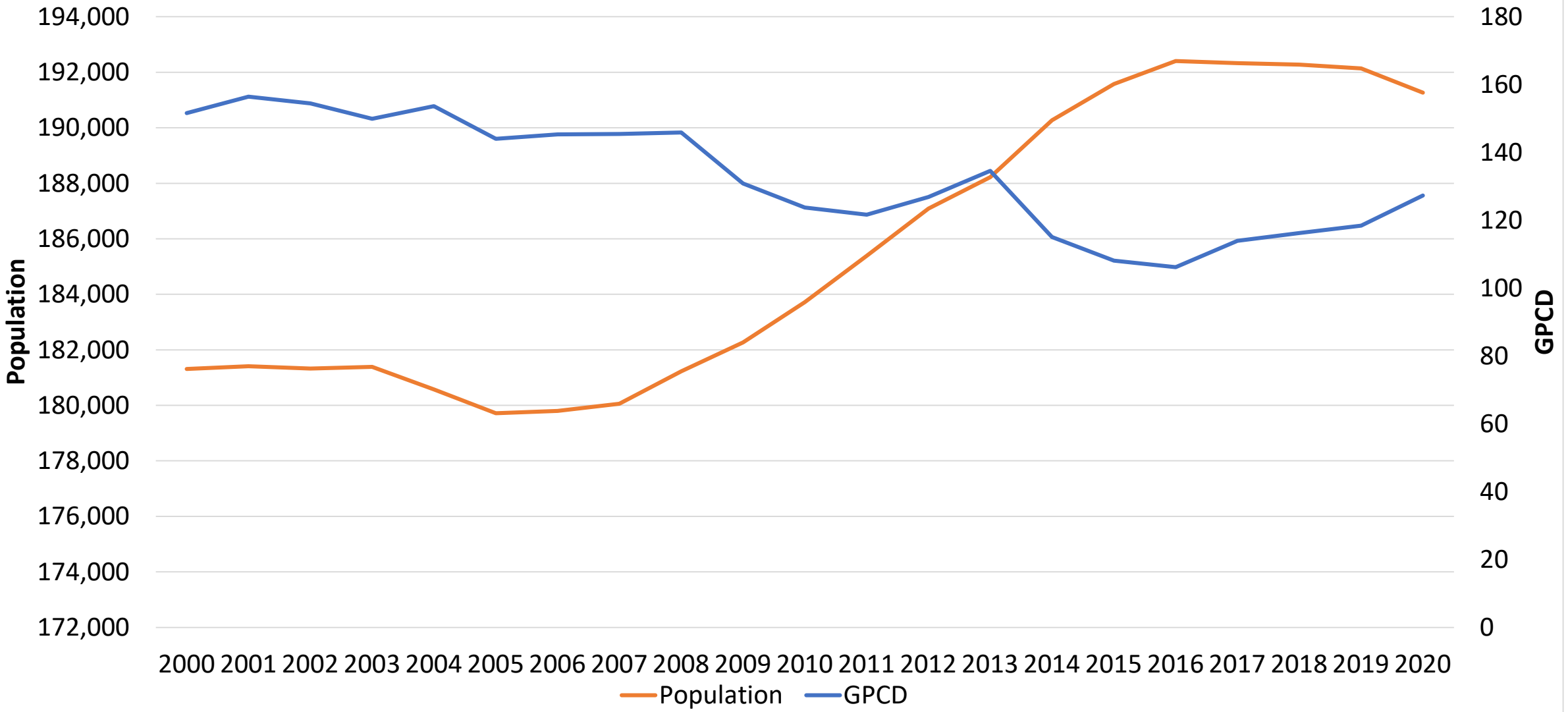
# Water Efficiency: Long Term

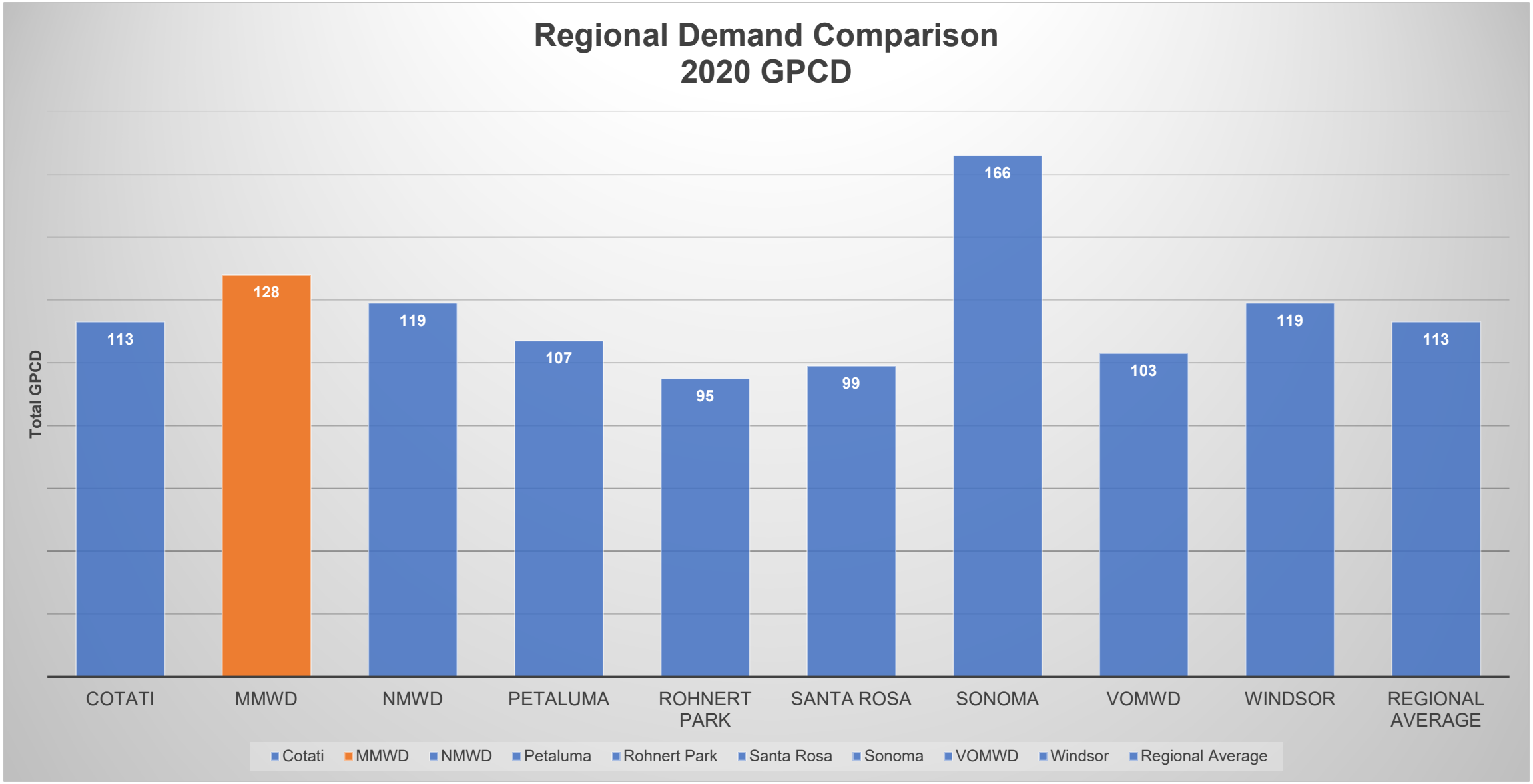
**October 15, 2021**

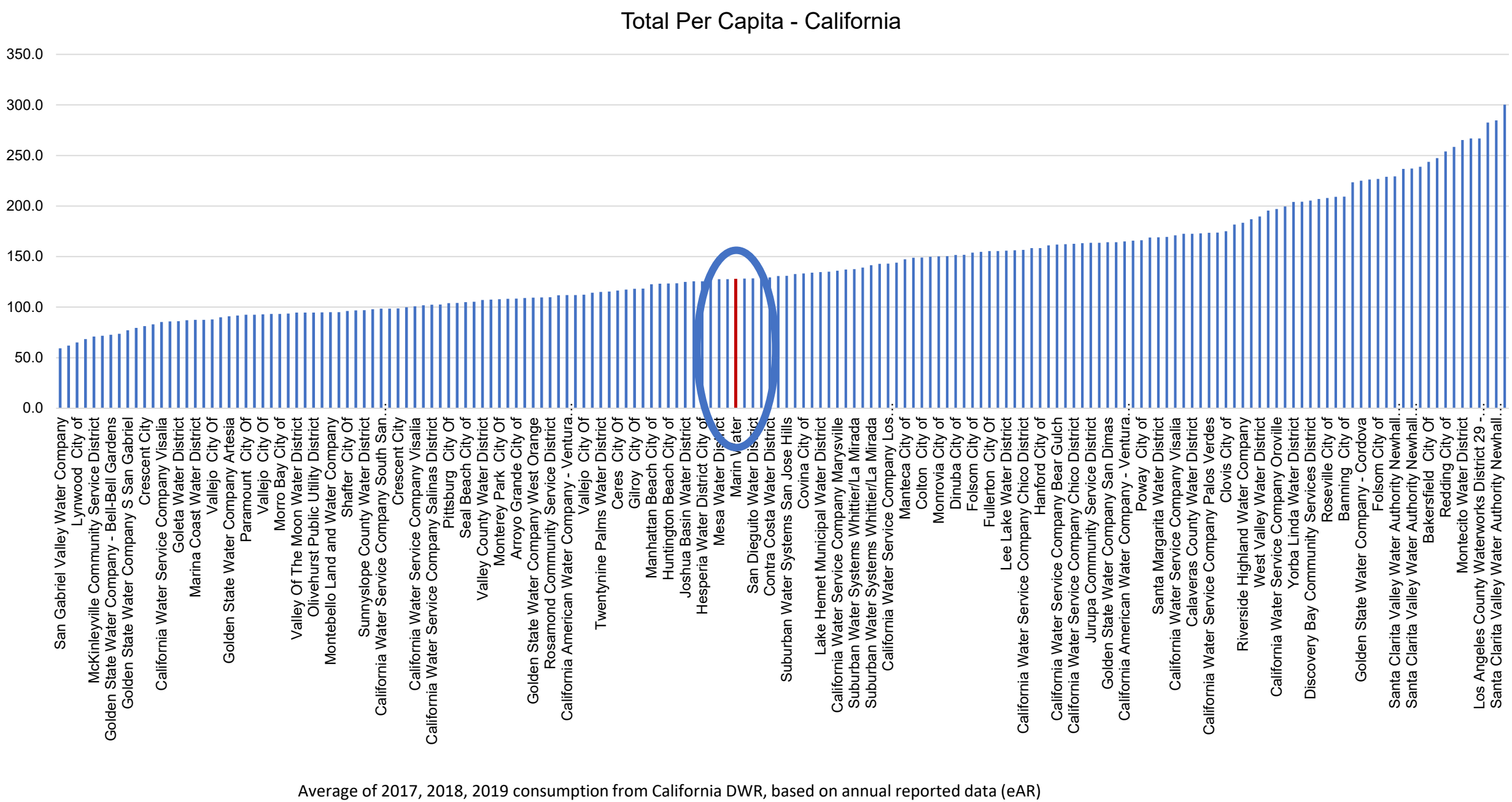
# Overview

- Tracking Per Capita Water Use
- Evaluating Long term Water Use Targets
- Prioritizing Long Term Demand Reductions
- Shift outreach from immediate drought response to establishing new sustainable water use practices

# System Wide per Capita Water Use 2000-2020




Regional Demand Comparison
2020 GPCD
Total GPCD
113
128
119
107
95
99
166
103
119
113
COTATI
MMWD
NMWD
PETALUMA
ROHNERT PARK
SANTA ROSA
SONOMA
VOMWD
WINDSOR
REGIONAL AVERAGE
Cotati
MMWD
NMWD
Petaluma
Rohnert Park
Santa Rosa
Sonoma
VOMWD
Windsor
Regional Average




Average of 2017, 2018, 2019 consumption from California DWR, based on annual reported data (eAR)

| | Albuquerque Bernalillo County Water Utility Authority | Colorado Springs Utilities | El Paso Water | City of Grand Junction | City of Phoenix Water Services Department | Salt Lake City Department of Public Utilities | Southern Nevada Water Authority | Tucson Water | Washington County Water Conservancy District | **Marin Municipal Water District** |
|---|---|---|---|---|---|---|---|---|---|---|
| **Annual Conservation Budget** | $1,615,000 | $850,000 | $1,188,600 | $13,500 | $915,5333 | $346,700 | $15,831,200 | $4,000,000 | $643,543 | $2,000,000 ($8,000,000) |
| **Conservation Spending ($/capita)** | $2.45 | $1.81 | $1.51 | $0.48 | $0.56 | $0.62 | $7.00 | $5.33 | $3.88 | **$10.47 ($41.88)** |
| **Full-time Equivalent Conservation Staff** | 8.5 | 6.25 | 10 | 0.5 | 5 | 1 | 20 | 4 | 5.75 | 6 (11) |
| **Approx. total gpcd** | 132.9 | 167.1 | 130.0 | 187.8 | 167.4 | 193.1 | 201.1 | 119.1 | 286.3 | **128.1** |
| **Data Year** | 2015 | 2015 | 2013 | 2018 | 2017 | 2016 | 2017 | 2017 | 2015 | 2020 |
| **Approx. Population Served** | 658,238 | 470,513 | 787,208 | 28,215 | 1,648,611 | 316,402 | 2,262,962 | 750,000 | 153,000 | 191,000 |

# Marin Water's Conservation Spending Compares Favorably

# Establishing Long Term Water Use Targets

| Reduction from 2020 GPCD | Per Capita Potable Water Use (GPCD) | Annual Potable Water Use (AFY) | | | Cost ($/AF) |
|---|---|---|---|---|---|
| | | 2020 | 2025 | 2030 | |
| 0% | 124 | 26,567 | 27,493 | 28,056 | $745 |
| 10% | 112 | | 24,744 | 25,250 | ~$2,200 |
| 20% | 99 | | 21,995 | 22,444 | ~$3,500 |

# Prioritizing Long Term Demand Reductions

## Currently Underway

- Prohibition on Non-Functional Turf (Nov 2021)
- System-wide AMI
  - Projecting 6 – 9 months for implementation contracts

## Additional Opportunities

- Establishing water use goals
- Leak Detection
  - Customer side intervention
  - District infrastructure (Enhanced leak detection, meter change program, pipe replacement, upgrade water supply meters, pressure management)
- Establish Water Budgets
  - Targeted mailers to single-family residential customers
  - Informational mailers to all other customers
  - Evaluate Water Budget Based Billing (2023)
- Implementation of Innovative Incentives Program
- New Development Codes

# Update Residential Development Code

- **New Standards**
  - Showerhead: 1.5gpm → (currently 2.0gpm)
  - Pressure regulators: 50psi → (currently 60psi)
  - Lavatory Faucet: 0.5gpm → (currently 1.0gpm)
  - Clothes Washer: ENERGY STAR certified, integrated water factor of no greater than 4.3 → (currently "highest water efficiency standard")
  - Dishwasher: ENERGY STAR certified, up to 3.5 gallons per cycle → (currently no standard)
  - Hose Bid: anti siphon valve, max flow of 4gpm → (currently no standard)
  - Non-Potable Irrigation System: non-potable irrigation water cisterns with a specified minimum capacity (TBD), reduced-pressure backflow preventer, installation of native, drought-tolerant plants → (currently a graywater system is required)
  - Front Yard Landscaping: Native and low water use plants → (currently limited to 25% of landscape area)
- Implementation through Retrofit on Resale

# Continued Outreach

- Community Conversations (webinars) → as needed
- Amplifying ally voices through social and traditional media
- Engaging grassroots groups
- Increase video content – second PSA, testimonials, trusted voices
- Direct-to-customer mailers (bills and standalone)
- Additional phases of comprehensive advertising
  - Print, digital, bus backs, bus shelters, mall posters
- Cultural shift towards sustainable water use:
  - Rethinking landscape aesthetic
  - Community norms of water-saving behavior

# Next Steps

- Monitor and Report Per Capita Water Use
- Prioritize Long Term Demand Reductions based on board feedback