

How to Get Help Adopting Water-Saving Measures — Without Paying For It

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Energy Solutions



Agenda

- What is the Statewide Reach Codes Program?
- What does it have to offer?
- Helpful water saving ordinance examples.
- How we can help you.



Who We Are

Utility-funded statewide program with the goal of providing jurisdictions **free support** to adopt **water conservation ordinances**.

What is a 'Reach Code'?

Ordinances adopted at the **local level** by individual municipalities and jurisdictions to facilitate water and/or energy savings beyond California mandates.

- Reach codes are voluntary for jurisdictions to adopt.
- May reference or interact with Title 24, CALGreen, California Plumbing Code regulatory bodies.
- Can be tailored to the specific needs of the jurisdiction.



Statewide Reach Codes Program Areas

Area of Scope	Measure Examples
Energy Efficiency/Renewables	<ul style="list-style-type: none">• Whole building performance-based codes• Nonresidential Solar PV Systems
Energy Plus Water	<ul style="list-style-type: none">• Graywater systems• Commercial Kitchen Water Efficiency• Water neutral development
Electric-Ready	<ul style="list-style-type: none">• Electric vehicle charging
Process Loads	<ul style="list-style-type: none">• Elevators (regenerative drive system)• Escalators (variable frequency motors)
Information Disclosure	<ul style="list-style-type: none">• Audits at time-of-retrofit or time-of-sale• Benchmarking

Our Objective: **Facilitate Reach Code Adoption**

- Preparation cost-effectiveness analyses
- Development model language
- Creation of staff resources
- Attendance at workshops/presentations
- Attendance at Council/Board meetings
- Newsletter content



Reach Code Uptake



- Various types of codes.
- Municipalities becoming increasingly interested in water-oriented codes.

Find our Local Ordinance Map on localenergycodes.com

General Reach Code Adoption Process

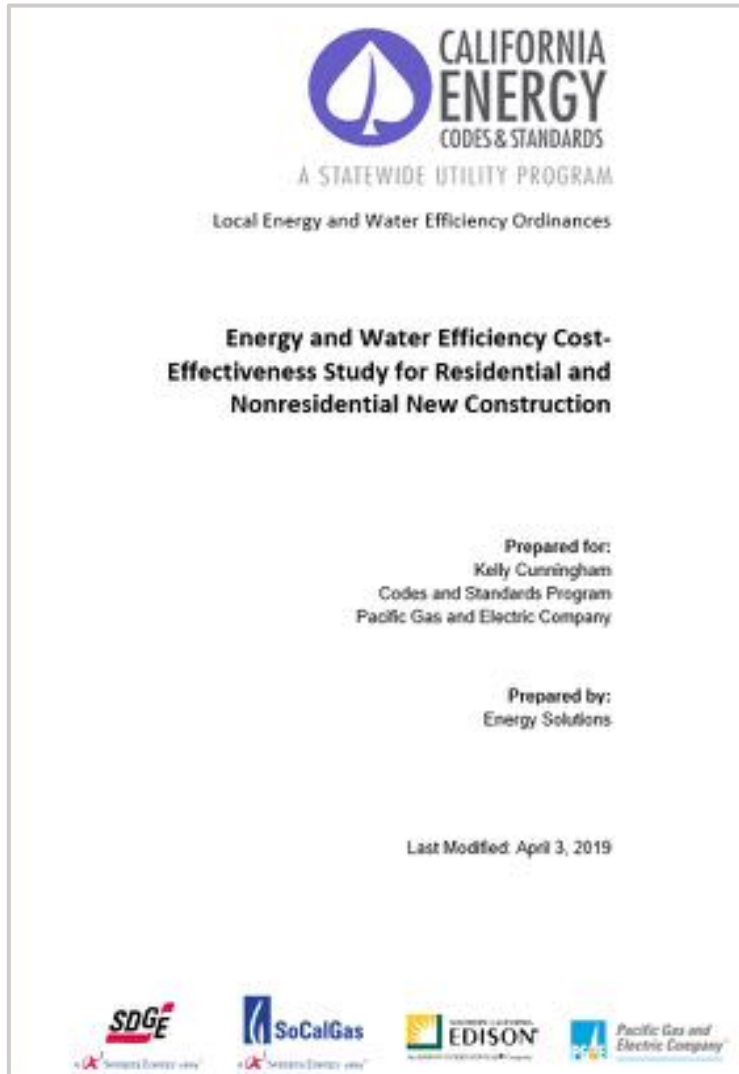
LOCAL REACH CODE PROCESS





Program Resources

Cost Effectiveness Analyses



- 17 measures included.
- Nonresidential, multifamily, and single-family building types represented.
- Both indoor and outdoor water use applications.
- Measures may be adopted in entirety, in parts, or modified.

Model Code Language



ORDINANCE NO. 15715

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF DENVER, COLORADO, ADOPTING A NEW CHAPTER 12 WATER EFFICIENT NEW DEVELOPMENT TO TITLE 12 OF THE CITY OF DENVER LOCAL CODE, WITH RELATED TO REQUIREMENTS FOR NEW DEVELOPMENT PROJECTS BASED ON EFFICIENCY AND THE DEVELOPMENT OF ALTERNATE SOURCES OF WATER SUPPLY

WHEREAS, all citizens have an obligation to make effective use of the available water resources; and

WHEREAS, water is a public resource and the California Sustainable Growth Act and Sustainable Growth Act;

WHEREAS, growing populations, climate change, and the need to protect and grow the City's economic, make it essential for the City to manage its water resources as efficiently as possible; and

WHEREAS, reduced water use through conservation provides significant energy reduction and associated environmental benefits, and can help protect water quality, protect and improve stream flows, and reduce greenhouse gas emissions; and

WHEREAS, improvements in technology and management practices offer the potential for increasing water efficiency in California from home providing an essential water management tool to meet the need for water for other, agricultural and environmental uses; and

WHEREAS, the City has determined that the energy standards in this ordinance are cost-effective and require buildings to be designed to conserve the maximum energy that permitted by Part 11 of Title 11 of the California Code of Regulations; and

WHEREAS, the development of efficient Water Usage Systems will assist in meeting future water requirements of the City and lessen the impacts of future development on the City's existing water system; and

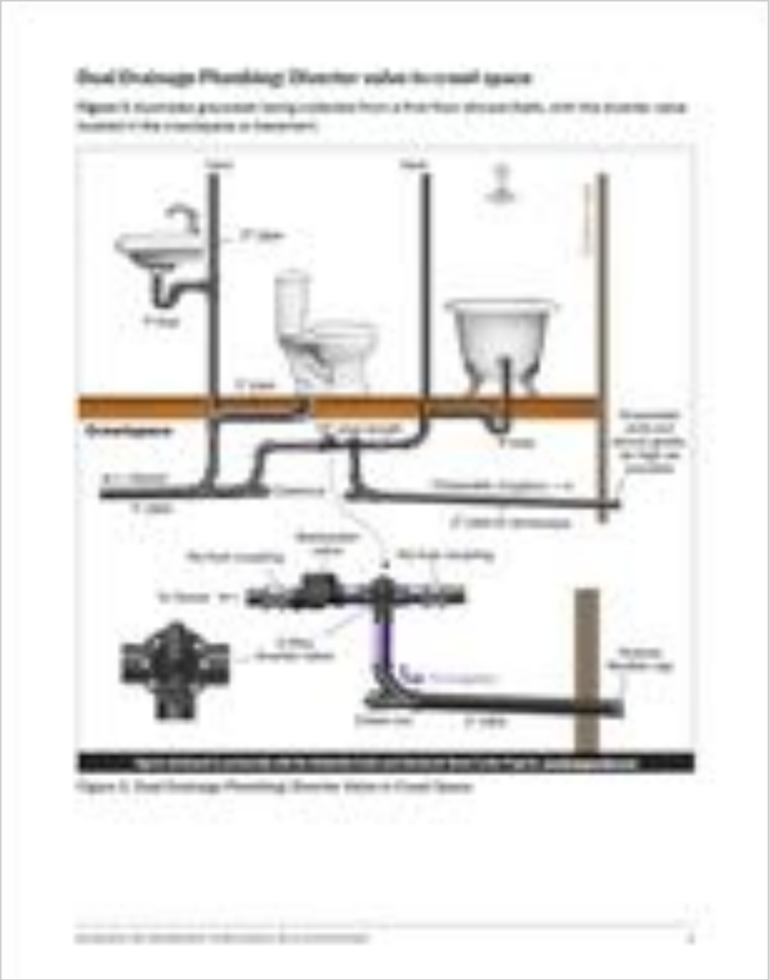
WHEREAS, the application of water-based water quality standards in Storm Water Management Plans to protect public health, safety, and welfare; and

WHEREAS, adoption of this ordinance and related rules and regulations by the City will help achieve the City's goals for water supply use and preservation by:

- (1) Promoting the value and benefits of Sustainable Water use while recognizing the need to conserve water and other resources as efficiently as possible;
- (2) Encouraging the use of Sustainable Water for appropriate applications; and

- Code language can be edited to include municipality-specific requirements.

Implementation Guide



- For graywater installations in single- and multifamily applications.
- Illustrative representations of installation steps.
- Ability to develop additional Guides and modify for each municipality.

Program Offerings

Reach Code Paths

CALIFORNIA ENERGY CENTER

BUILDING EFFICIENCY/RENEWABLES
Whole Building
Equipment Specific

ELECTRIC READY
Pre-Wiring
Panel Upgrade
EV-Readiness
EV Charging

ENERGY PLUS WATER
Hot Water
Distribution
Indoor Water
Outdoor Water

INFORMATION DISCLOSURE
Audits
Benchmarking

PROCESS LOADS
Commercial Kitchens
Elevators
Escalators
Controlled Environment
Horticulture

FILTER OPTIONS:

- Whole Building Efficiency
- Whole Building Electrification
- Solar Photovoltaic (PV) Systems
- Individual Measures
- Rental Properties

REQUIREMENT

▼ Photovoltaic (PV) System on major high-rise multifamily or nonresidential projects. Small minimum system capacity

Examples include: Minimum capacity: 3 kW if < 10,000 sf and 5 kW if > 10,000 sf. Minimum capacity: 50 required solar zone on rooftop (~15% of area)

PRICE

- Stand alone or combine with energy efficiency measures for greater savings
- Small minimum system size allows flexibility to size appropriately for project
- PV is cost-effective under most major project scenarios
- Tax Credit

CODE

- Requires external documents and/or calculations
- If install minimum only, offsets small percentage of total usage

ADOPTED CITY

- Berkeley, Burbank, Hayward, Merced Park, Milpitas, Pacifica, Redwood City, Richmond, San Luis Obispo, San Mateo

Our [website](#) houses our code recommendations.



Examples of Water Saving Ordinances

Graywater Ready Dwellings



Portola Valley and Encinitas

Ordinance
Type

Graywater Ready Dwellings
Portola Valley first adopted in
2010, Encinitas - in 2015

Scope

New construction residential

Onsite Non-potable Water Reuse

City and County of San Francisco and
San Francisco Public Utilities
Commission

Ordinance
Type

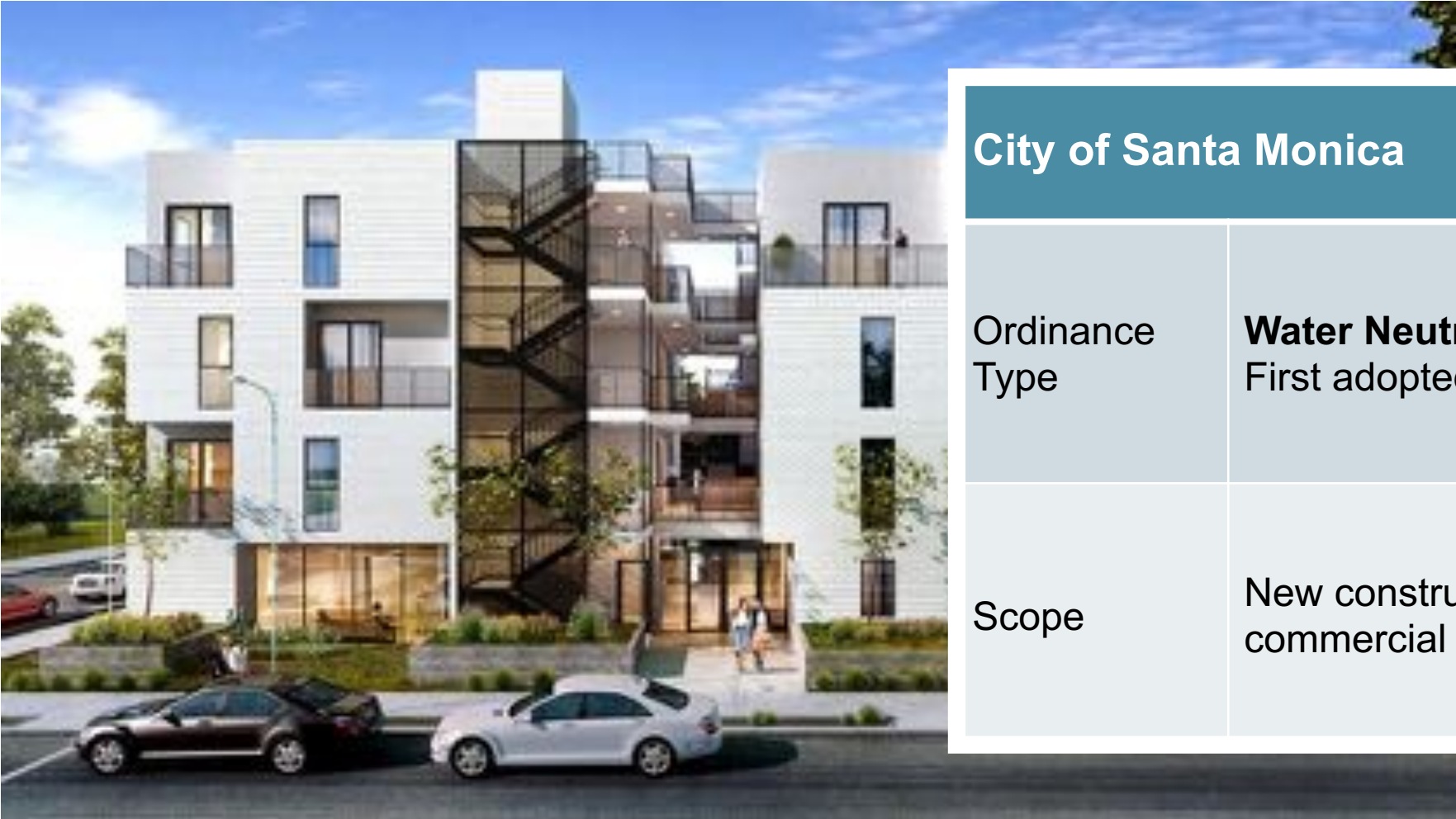
**Onsite Non-potable Water
Reuse**
First adopted in 2012

Scope

Nonresidential new development
with $\geq 250,000$ gross square feet



Water Neutral New Development



City of Santa Monica

Ordinance Type

Water Neutral New Development
First adopted in 2017

Scope

New construction residential and commercial

Energy and Water Benchmarking

City of Los Angeles and City of San Jose

Ordinance Type	Energy and Water Benchmarking Los Angeles first adopted in 2016, San Jose in 2018
Scope	≥ 20,000-square foot commercial and multifamily buildings (vs. > 50,000 gross square feet per AB 802 for energy use benchmarking)





Getting Help with Adoption

Considering Reaching Out?

- Our services are paid for through ratepayer funds and are provided at **no cost** to jurisdictions.
 - Engineering expertise
 - Codes and standards expertise
- Adoption of the code change is not required to ask for assistance.
- Resources are not limited to our current offerings, let us know if you have other ideas!



Getting assistance from our program is as easy as emailing us!

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REACHING BEYOND

Thank you for your time!

Visit our website: localenergycodes.com