

File No. 151251

Committee Item No. 1

Board Item No. 4

### COMMITTEE/BOARD OF SUPERVISORS

#### AGENDA PACKET CONTENTS LIST

Committee: Land Use and Transportation

Date February 1, 2016

Board of Supervisors Meeting

Date February 23, 2016

#### Cmte Board

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|-------------------------------------|-------------------------------------|--|
| <input type="checkbox"/>            | <input type="checkbox"/>            | Motion                                       |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Resolution                                   |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Ordinance                                    |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Legislative Digest                           |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Budget and Legislative Analyst Report        |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Youth Commission Report                      |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Introduction Form                            |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Department/Agency Cover Letter and/or Report |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Memorandum of Understanding (MOU)            |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Grant Information Form                       |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Grant Budget                                 |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Subcontract Budget                           |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Contract/Agreement                           |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Form 126 - Ethics Commission                 |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Award Letter                                 |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Application                                  |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Form 700                                     |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Vacancy Notice                               |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Information Sheet                            |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Public Correspondence                        |

#### OTHER (Use back side if additional space is needed)

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| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <u>CEQA Determination, dtd 1/28/16</u>                               |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <u>Public Utilities Commission Resolution Nos. 15-0221 / 10-0087</u> |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <u>Board of Supervisors Resolution No. 301-10</u>                    |
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Completed by: Alisa Somera

Date January 28, 2016

Completed by: Alisa Somera

Date February 3, 2016

1 [Administrative Code - Water Efficient Irrigation]

2

3 **Ordinance amending the Administrative Code by revising the applicability threshold to**  
4 **500 square feet for requirements for the development and maintenance of landscape**  
5 **irrigation controls for specified new construction landscapes and landscape**  
6 **rehabilitation projects.**

7 NOTE: Additions are single-underline italics Times New Roman;  
8 deletions are ~~strike-through italics Times New Roman~~.  
9 Board amendment additions are double-underlined;  
Board amendment deletions are ~~strikethrough normal~~.

10 Be it ordained by the People of the City and County of San Francisco:

11 Section 1. Environmental Findings. The Planning Department has determined that the  
12 actions contemplated in this ordinance comply with the California Environmental Quality Act  
13 (California Public Resources Code Sections 21000 et seq.). Said determination is on file with  
14 the Clerk of the Board of Supervisors in File No. 151251 and is incorporated herein by  
15 reference. The Board affirms this determination.

16 Section 2. The Administrative Code is hereby amended by revising Sections 63.3, 63.4,  
17 63.5, and 63.6, to read as follows:

18 **SEC. 63.3.DEFINITIONS.**

19 The terms used in this ~~ordinance~~ Chapter 63 have the meanings set forth below:

20 (a) Certificate of landscape completion: the document required under Section 63.6.2.

21 (b) Certified Landscape Irrigation Auditor: a person certified to perform landscape  
22 irrigation audits by an accredited academic institution, a professional trade organization or  
23 other program such as the U.S. Environmental Protection Agency's WaterSense irrigation  
24 auditor certification program and the Irrigation Association's Certified Landscape Irrigation  
25 Auditor program.

1           (e) Ecological restoration project: a project where the site is intentionally altered to  
2 establish a defined, indigenous, historic ecosystem.

3           (d) First certificate of occupancy: either a temporary certificate of occupancy or a  
4 Certificate of Final Completion and Occupancy as defined in San Francisco Building Code  
5 Section 109A, whichever is issued first.

6           (e) First construction document: the first building permit issued for a project or, in the  
7 case of a site permit, the first building permit addendum issued or other document that  
8 authorizes construction of the project. "First construction document" shall not include permits  
9 or addenda for demolition, grading, shoring, pile driving, or site preparation work.

10          (f) General Manager: the General Manager of the Public Utilities Commission, or his or  
11 her designee.

12          (g) Irrigation audit: an in-depth evaluation of the performance of an irrigation system  
13 conducted by a Certified Landscape Irrigation Auditor. An irrigation audit includes, but is not  
14 limited to: inspection, system test with distribution uniformity or emission uniformity,  
15 precipitation rates, reporting deficiencies in the system, reporting overspray or runoff that  
16 causes overland flow, and preparation of an irrigation schedule. An irrigation audit may  
17 include suggested upgrades, current estimated water usage, and suggested system  
18 upgrades.

19          (h) Landscape area: all the planting areas, turf areas, and water features in a  
20 landscape design plan subject to the Maximum Applied Water Allowance calculation,  
21 including any adjacent planted areas in the public right-of-way for which the property owner is  
22 responsible pursuant to ~~the~~ Section 400.1 and Section 805 of the Public Works Code. The  
23 landscape area does not include footprints of buildings or structures unless the footprints  
24 include planted areas such as green roofs. The landscape area also does not include  
5 sidewalks, driveways, parking lots, decks, patios, gravel or stone walks, other pervious or

1 non-pervious hardscapes, and other non-irrigated areas designated for non-development  
2 such as open spaces and existing native vegetation.

3 ~~(f)~~ Landscape documentation deadline: the date by which Tier 1 or Tier 2  
4 documentation must be submitted for approval by the General Manager. This date shall be a  
5 specified number of days after the issuance of the first construction document as determined  
6 by the General Manager ~~and~~ in consultation with the Department of Building Inspection.

7 ~~(f)~~ Landscape rehabilitation project or rehabilitated landscape: includes any  
8 modifications to landscape areas over a 12-month period at a site that cumulatively exceeds  
9 1,000 square feet. A landscape rehabilitation project or rehabilitated landscape does not  
10 include turf replacements on sports fields where the turf replaced provides a playing surface,  
11 routine weeding, brush removal where no new plant materials are installed, or seasonal  
12 plantings in areas dedicated solely to edible plants.

13 ~~(f)~~ Low water use plants or climate appropriate plants: plants, shrubs, groundcovers or  
14 tree species that meet at least one of the following conditions:

15 (1) The species has a water use ranking of "low" or "very low" in Region 1  
16 (North-Central Coast) as established in the California Department of Water Resources  
17 ~~2000~~2014 publication "Water Use Classification of Landscape Species" or subsequent editions  
18 as it may be updated.

19 (2) The species has a water use ranking of "no water," "little water," or "little to  
20 moderate water" in the climate zone for the planting location as established in the Sunset  
21 Western Garden Book, ~~Eighth~~Ninth Edition, published by Oxmoor House on February ~~17~~,  
22 ~~2007~~2012, or subsequent editions as it may be updated.

23 (3) The plantings are part of an engineered stormwater management feature  
24 approved by the General Manager pursuant to the San Francisco Stormwater Management  
25 Requirements and Design Guidelines established by the Public Utilities Commission;

1 (4) The Department of Public Works, the Recreation and Park Department, or  
2 the General Manager has determined that the species, when watered for sufficient plant  
3 health and appearance, is low water use based on the agency's experience with the species,  
4 and the agency has added the species to the Low Water Use and Climate Appropriate Plant  
5 List maintained by the General Manager;

6 (5) The species appears on the San Francisco Street Tree Species List  
7 established by the Department of Public Works Bureau of Urban Forestry;

8 (6) The planting is part of a species test approved by the Department of Public  
9 Works or the Recreation and Park Department; or

10 (7) The species has been permitted at the site by the Department of Public  
11 Works or the General Manager based on wet soil conditions stemming from proximity to  
12 naturally occurring water features such as a high water table, springs, ponds, lakes, creeks,  
13 and wetlands.

14 ~~(f)~~ Maximum Applied Water Allowance: the amount of annual applied water established  
15 by the Public Utilities Commission for a landscaped area, using State mandated formulas and  
16 accounting for local climatic conditions, that serves as an upper limit for lawful water use for  
17 irrigating landscaped areas.

18 ~~(m)~~ New construction landscape project: the total area of landscape in the project as  
19 defined in landscape area, and the modified landscape area for a landscape rehabilitation  
20 project.

21 ~~(n)~~ Project applicant: the person or entity applying for approval of a landscape project  
22 for a new construction project or a landscape rehabilitation project. A project applicant may be  
23 the property owner or his or her designee.

24 ~~(o)~~ Property Owner: the legal owner of a property.

5

1           ~~(p)~~ Special landscape area: an area of the landscape dedicated solely to edible plants,  
2 recreational areas, and water features and irrigated areas using all or in part of with gray water or  
3 harvested rain water non-potable water water features using only harvested rain water, and areas  
4 dedicated to active play such as parks, sports fields, golf courses, and where turf provides a playing  
5 surface.

6           **SEC. 63.4. APPLICABILITY.**

7           (a) This ~~chapter~~ Chapter 63 shall apply to the following:

8                   (1) Tier 1: All public agency, residential, and commercial ~~new construction~~  
9 ~~landscape projects and~~ rehabilitated landscape projects with a modified landscape area equal to  
10 or greater than 1,000 square feet and less than 2,500 square feet;

11                   (2) Tier 2: All public agency, residential and commercial new construction ~~and~~  
12 ~~rehabilitated~~ landscape projects with a landscape area equal to or greater than 500 square feet; and  
13 landscape rehabilitation projects with a modified landscape area equal to or greater than 2,500  
14 square feet;

15                   (3) The irrigation and maintenance of any landscape irrigation system in the City  
16 and County of San Francisco.

17           (b) This ~~ordinance~~ Chapter 63 does not apply to:

18                   (1) Registered local, State, or Federal historical sites where the landscape is  
19 maintained as part of the historical integrity of the site;

20                   (2) Ecological restoration projects that do not require a permanent irrigation  
21 system; and

22                   (3) Plant collections or animal habitat areas, as part of botanical gardens,  
23 zoological gardens, and arboretums, open to the public.

1 (c) The General Manager may waive some or all of the requirements of this ~~chapter~~  
2 Chapter 63 if, based on a site inspection, the General Manager determines that compliance is  
3 not feasible.

4 (d) A process for document submissions and approvals pursuant to Section 63.6.1 will  
5 be developed by the General Manager in conjunction with the Department of Building  
6 Inspection, with the purpose of administrative efficiency and effective customer service.

7 **SEC. 63.5. REGULATION OF LANDSCAPE IRRIGATION EFFICIENCY.**

8 (a) Landscape projects shall be installed, constructed, operated, and maintained in  
9 accordance with this ~~chapter~~ Chapter 63 and the rules and regulations adopted by the Public  
10 Utilities Commission that establish limits on water consumption for the purpose of irrigating  
11 landscape areas that are part of new construction, landscape rehabilitation projects, and  
12 existing landscapes.

13 (b) Landscape projects shall be planted and irrigated efficiently by complying with water  
14 efficient design and operation requirements developed by the General Manager, including but  
15 not limited to the use of low water use plants or climate appropriate plants, restrictions on turf  
16 areas over 25% of the total landscaped area or on steep slopes, irrigation system audits, and  
17 regular irrigation scheduling and maintenance practices.

18 (c) All landscape projects shall not exceed a Maximum Applied Water Allowance using  
19 the formulas developed by the General Manager for local climate conditions within the City  
20 and County of San Francisco.

21 (d) Landscape areas irrigated with ~~graywater or harvested rain~~ non-potable water may  
22 have a Maximum Applied Water Allowance that exceeds those for landscapes irrigated with  
23 potable water.

24 (e) The architectural guidelines of a common interest development, which include  
25 community apartment projects, condominiums, planned developments, and stock

1 cooperatives as defined in Section 1351 of the California Civil Code, shall not prohibit or  
2 include conditions that have the effect of prohibiting the use of low water use plants as a  
3 group.

4 **SEC. 63.6. PROVISIONS FOR WATER EFFICIENT LANDSCAPES FOR NEW**  
5 **CONSTRUCTION AND LANDSCAPE REHABILITATION PROJECTS.**

6 (a) Tier 1: Beginning on the effective date of the amendments to this Chapter 63, January 1,  
7 ~~2011~~, project applicants for all public agency, commercial, and residential ~~new construction~~  
8 ~~landscape projects and~~ landscape rehabilitation projects, with a modified landscape area equal  
9 to or greater than 1,000 square feet and less than 2,500 square feet, shall comply with this  
10 ~~chapter~~ Chapter 63 and the rules and regulations adopted by the Public Utilities Commission.

11 (b) Tier 2: Beginning on the effective date of the amendments to this Chapter 63, January 1,  
12 ~~2011~~, the project applicants for all public agency, commercial, and residential new construction  
13 landscape projects with a landscape area equal to or greater than 500 square feet; ~~and~~ landscape  
14 rehabilitation projects with a modified landscape area equal to or greater than 2,500 square  
15 feet; or a project under Tier 1 with a turf limitation exceeding 25% percent of the landscape  
16 area, shall comply with this ~~chapter~~ Chapter 63 and the rules and regulations adopted by the  
17 Public Utilities Commission.

18 (c) Beginning January 1, ~~2011~~ 2016, property owners maintaining a total irrigated  
19 landscape of 10 acres or greater may submit compliance plans for approval by the General  
20 Manager that support a programmatic approach to compliance with this ~~chapter~~ Chapter 63,  
21 rather than through the review and approval of individual landscape rehabilitation projects.

22 Section 3. In amending the effective dates of the amendments stated in Section 63.6  
23 of the Administrative Code, this ordinance does not intend to change the legal obligations  
24 created by Section 63.6 from January 1, 2011 forward, except to the extent that changes in  
25



1 the legal obligations created by this ordinance shall become operative as of the amended  
2 dates stated in Section 63.6.

3 Section 4. Effective Date. This ordinance shall become effective 30 days after  
4 enactment. Enactment occurs when the Mayor signs the ordinance, the Mayor returns the  
5 ordinance unsigned or does not sign the ordinance within ten days of receiving it, or the Board  
6 of Supervisors overrides the Mayor's veto of the ordinance.

7 Section 5. Scope of Ordinance. In enacting this ordinance, the Board of Supervisors  
8 intends to amend only those words, phrases, paragraphs, subsections, sections, articles,  
9 numbers, punctuation marks, charts, diagrams, or any other constituent parts of the Municipal  
10 Code that are explicitly shown in this ordinance as additions, deletions, Board amendment  
11 additions, and Board amendment deletions in accordance with the "Note" that appears under  
12 the official title of the ordinance.

13  
14 APPROVED AS TO FORM:  
15 DENNIS J. HERRERA, City Attorney

16  
17 By: 

18 John Roddy  
19 Deputy City Attorney

20 n:\legana\as2015\1600273\01061691.doc

## LEGISLATIVE DIGEST

[Administrative Code - Water Efficient Irrigation]

**Ordinance amending the Administrative Code by revising the applicability threshold to 500 square feet for requirements for the development and maintenance of landscape irrigation controls for specified new construction landscapes and landscape rehabilitation projects.**

### Existing Law

Chapter 63 of the San Francisco Administrative Code was first enacted in 1991 to ensure compliance with provisions of the California Government Code requiring local agencies to adopt and implement landscape water conservation measures. The purpose of this chapter was to promote efficient water use in new and renovated landscapes by utilizing proper landscape design, management and efficient irrigation equipment and techniques through mandatory requirements for landscapes in new developments and landscape renovations.

### Amendments to Current Law

The ordinance requires that landscape projects be installed, constructed, operated, and maintained in accordance with regulations adopted by the San Francisco Public Utilities Commission (SFPUC) that establish limits on outdoor water consumption. A "Maximum Applied Water Allowance," or water budget, must be established for each landscape project and provides the project applicant with the appropriate amount of water that may be used to irrigate its landscape area.

**Applicability:** The amended requirements apply to all public agency, commercial, and residential new construction landscapes and landscape rehabilitation projects with a landscape area equal to or greater than 500 square feet.

**Tiered Compliance:** The ordinance applies different compliance mechanisms based on the square footage of the new construction or landscape rehabilitated area.

#### Tier 1

Landscape rehabilitation projects with the following attributes are considered Tier 1 projects and are eligible for a simple checklist and self certification compliance.

- Landscape area of 1,000 to 2,500 square feet;
- Turf not exceeding 25% of total landscape area;
- 75% of landscape area consists of low water use or climate appropriate plantings.

The Tier 1 project checklist describes the landscape project, documents the selection of low water use or climate appropriate plants, and confirms the use of water efficient irrigation components and other relevant landscape and irrigation information.

**Tier 2**

New construction landscapes and landscape rehabilitation projects with the following attributes are considered Tier 2 projects and must submit a landscape documentation package for plan review.

- New construction landscape project with 500 square feet or more of landscape area;
- Landscape rehabilitation project with 2,500 square feet or more of landscape area;
- Tier 1 projects exceeding 25% turf requirement;
- Tier 1 projects with less than 75% low water or climate appropriate plantings.

The Tier 2 landscape documentation package mirrors state regulation and includes a planting and irrigation plan, soil analysis, grading plan, and an updated worksheet for calculating the project's estimated annual water use and water budget.

**Background Information**

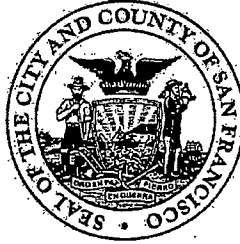
In 2006, Assembly Bill 1881, the Water Conservation in Landscaping Act, was passed into law requiring that local water agencies adopt a water efficient landscape program that meets water conservation standards adopted by the Department of Water Resources (DWR) in 2009. In 2010, Chapter 63 was modified to comply with the requirements of the new model ordinance while addressing San Francisco's smaller lot and landscape sizes. New and rehabilitated landscape projects with over 1,000 square feet of landscape area are required to submit planting and irrigation plans, soil analysis reports, and water budget calculations for City approval prior to issuance of an application for water service.

After four consecutive years of drought in California, on April 1, 2015, Governor Brown issued a Drought Executive Order (EO B-29-15) that directed the DWR to update the state's model ordinance to increase water efficiency standards for new and existing landscapes. The California Water Commission approved the amendments to the model ordinance on July 15, 2015 and local agencies must update their local ordinance to be at least as effective as the state's new model ordinance.

After review of DWR's new efficiency standards and revised model ordinance (California Code of Regulations Title 23, Chapter 2.7, Sections 490-495), SFPUC staff concluded that modifications to San Francisco's Administrative Code Chapter 63 were necessary to ensure compliance with the state's new landscape requirements. The proposed amendments to the ordinance will ensure such compliance. In addition, rules and regulations regarding water efficient irrigation were adopted by the SFPUC to help ensure compliance with the new ordinance among its water service customers.

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BOARD of SUPERVISORS



City Hall  
Dr. Carlton B. Goodlett Place, Room 244  
San Francisco 94102-4689  
Tel. No. 554-5184  
Fax No. 554-5163  
TDD/TTY No. 554-5227

December 23, 2015

File No. 151251

Sarah Jones  
Environmental Review Officer  
Planning Department  
1650 Mission Street, Ste. 400  
San Francisco, CA 94103

Dear Ms. Jones:

On December 15, 2015, the Public Utilities Commission introduced the following proposed legislation:

**File No. 151251**

Ordinance amending the Administrative Code by revising the applicability threshold to 500 square feet for requirements for the development and maintenance of landscape irrigation controls for specified new construction landscapes and landscape rehabilitation projects.

This legislation is being transmitted to you for environmental review.

Angela Calvillo, Clerk of the Board

A handwritten signature in cursive script that reads "Alisa Somera".

By: Alisa Somera, Assistant Clerk  
Land Use and Transportation Committee

Attachment

c: Joy Navarrete, Environmental Planning  
Jeanie Poling, Environmental Planning

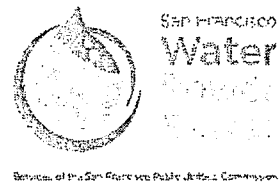
Not defined as a project under CEQA Sections 15378 and 15060(c)(2) because it does not result in a physical change in the environment.

Joy  
Navarrete

Digitally signed by Joy Navarrete  
DN: cn=Joy Navarrete, o=Planning,  
ou=Environmental Planning,  
email=joy.navarrete@sfgov.org,  
c=US  
Date: 2016.01.28 16:07:36 -08'00'

## SECTION F - WATER EFFICIENT IRRIGATION

From the SFPUC Rules and Regulations Governing Water Service to Customers As amended July-October 27, 2015.



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SFPUC Rules and Regulations- Section F- as amended ~~July~~October 2015.

**Purpose**

Section F - Water Efficient Irrigation Rules will:

- a) Promote the values and benefits of landscapes while recognizing the need to invest water and other resources as efficiently as possible;
- b) Establish a structure for planning, designing, installing, maintaining, and managing water efficient landscapes in new construction and rehabilitated projects;
- c) Establish provisions for water management practices and water waste prevention for existing landscapes;
- d) Promote using water efficiently without waste by setting a Maximum Applied Water Allowance, using state mandated formulas and accounting for local climatic conditions, that will serve as an upper limit for water use by irrigated landscapes;
- e) Comply with the requirements of Article 10.8 of the California Government Code, enacted by the State as the Water Conservation in Landscaping Act;
- f) Comply with the requirements of the California Green Building Standards Code (California Code of Regulations, Title 24, Part 11) and the State Model Water Efficient Landscape Ordinance (California Code of Regulations, Title 23, Chapter 2.7); and
- g) Delineate the conditions under which the San Francisco Public Utilities Commission provides water for landscape irrigation uses.

**Rule 1. Applicability**

- a) Section F shall apply to all of the following projects and activities.
  - i. Tier 1: All public agency, residential, and commercial ~~new construction and~~ rehabilitated landscape projects with an aggregate-modified landscape area equal to or greater than 1,000 square feet and less than 2,500 square feet.
  - ii. Tier 2: All public agency, residential, and commercial new construction projects with an aggregate landscape area equal to and greater than 500 square feet and rehabilitated landscape projects with an aggregate modified landscape area equal to or greater than 2,500 square feet.
  - iii. The irrigation and maintenance of any landscape irrigation system.
- b) Section F does not apply to:
  - i. Registered local, state or federal historical sites where the landscape is maintained as part of the historical integrity of the site;
  - ii. Ecological restoration projects that do not require a permanent irrigation system; and

SFPUC Rules and Regulations- Section F- as amended ~~July~~October 2015.

- iii. Plant collections or animal habitat areas, as part of botanical gardens, zoological gardens, and arboretums open to the public.
- c) The General Manager may waive some or all of the requirements of Section F for landscape rehabilitation projects proposed by San Francisco Public Utilities Commission's retail water customers located outside the boundaries of the City and County of San Francisco, if after consultation with the local agency having jurisdiction pursuant to California Government Code sections 65591, et. seq., the General Manager determines that the retail water customer must comply with the local agency's ordinance requirements. If the General Manager determines that the retail water customer is not required to comply with the local agency's ordinance requirements, the retail water customer must comply with Section F of the San Francisco Public Utilities Commission Rules for Water Service Customers.
- d) The General Manager may waive some or all of the requirements of Section F if, after a site inspection, the General Manager determines that compliance is not feasible due to one or more of the following conditions.
  - i. Wet soil conditions stemming from proximity to naturally occurring water features such as a high water table, springs, ponds, lakes, creeks, and wetlands.
  - ii. Substantial health or safety related risk of injury or harm to property owner, users or workers.
  - iii. Disproportionately high costs for achieving minor or minimal water savings.
- e) A process for document submissions and approvals pursuant to Section F will be developed by the General Manager in conjunction with the Department of Building Inspection, with the purpose of administrative efficiency and effective customer service.

**Rule 2. Definitions**

The terms used in this section have the following meanings.

- a) **Applied water:** the portion of water supplied by the irrigation system to the landscape.
- b) **Automatic irrigation controller:** ~~an automatic~~-timing device used to remotely control valves that operate an irrigation system. Automatic irrigation controllers are able to self-adjust and schedule irrigation events using either evapotranspiration (weather-based) or soil moisture data.
- c) **Backflow prevention device:** a safety device used to prevent pollution or contamination of the water supply due to the reverse flow of water from the irrigation system.
- d) **Certificate of Landscape Completion:** the document required under Rule 13.
- e) **Certified irrigation designer:** a person certified to design irrigation systems by an accredited academic institution, a professional trade organization, or other program such as the US Environmental Protection Agency's WaterSense Partners irrigation designer certification program and the Irrigation Association's Certified Irrigation Designer program.

SFPUC Rules and Regulations- Section F- as amended ~~July~~ October 2015.

- f) **Certified landscape irrigation auditor:** a person certified to perform landscape irrigation audits by an accredited academic institution, a professional trade organization, or other program such as the US Environmental Protection Agency's WaterSense irrigation auditor certification program and the Irrigation Association's Certified Landscape Irrigation Auditor program.
- g) **Check valve or anti-drain valve:** a valve located under a bubbler and sprinkler head, or other location in the irrigation system, to hold water in the system to prevent low head drainage from sprinkler heads when the sprinkler is off.
- h) **Common interest developments:** community apartment projects, condominium projects, planned developments, and stock cooperatives per California Civil Code Section 1351.
- ~~h~~i) **Compost:** the safe and stable product of controlled biologic decomposition of organic materials that is beneficial to plant growth.
- j) **Conversion factor of 0.62:** the number that converts acre-inches per year to gallons per square foot per year.
- ~~i~~k) **Distribution uniformity:** the measure of the uniformity of irrigation water over a defined area.
- j)l) **Drip irrigation:** any non-spray low volume irrigation system utilizing emission devices with a flow rate measured in gallons per hour.
- ~~k~~m) **Ecological restoration project:** a project where the site is intentionally altered to establish a defined, indigenous, historic ecosystem.
- ~~l~~n) **Emitter:** a drip irrigation emission device that delivers water slowly from the system to the soil.
- ~~m~~o) **Established landscape:** the point at which plants in the landscape have developed significant root growth into the soil. Typically, most plants are established after 1 or 2 years of growth while native habitat mitigation areas and tree establishment may need 3 to 5 years.
- ~~n~~p) **Estimated Total Water Use (ETWU):** the total water used for the landscape.
- ~~e~~q) **ET adjustment factor (ETAF):** a factor of 0.55 for residential areas and 0.45 for non-residential areas, that, when applied to reference evapotranspiration, adjusts for plant factors and irrigation efficiency, two major influences upon the amount of water that needs to be applied to the landscape. ETAF for a Special Landscape Area shall not exceed 1.0. ETAF for existing non-rehabilitated landscapes is 0.8.
- ~~p~~r) **ET<sub>o</sub> or reference evapotranspiration:** a standard measurement of environmental parameters which affect the water use of plants. ET<sub>o</sub> is expressed in inches per day, month, or year and is an estimate of the evapotranspiration of a large field of four- to seven-inch tall, cool-season grass that is well watered. Reference evapotranspiration is used as the basis of determining the Maximum Applied Water Allowance so that regional differences in climate can be accommodated.



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- q)s) **Evapotranspiration rate:** the quantity of water evaporated from adjacent soil and other surfaces and transpired by plants during a specified time.
- r)t) **Existing landscape area:** a landscape area of any size that has not been rehabilitated or constructed within the previous 12 months.
- s)u) **First construction document:** the first building permit issued for a project or, in the case of a site permit, the first building permit addendum issued or other document that authorizes construction of the project. "First construction document" shall not include permits or addenda for demolition, grading, shoring, pile driving, or site preparation work.
- t)v) **Flow rate:** the rate at which water flows through pipes, valves, and emission devices, measured in gallons per minute, gallons per hour, or cubic feet per second.
- u)w) **Flow sensor:** an inline device installed at the supply point of the irrigation system that produces a repeatable signal proportional to the flow rate. Flow sensors must be connected to an automatic irrigation controller, or flow monitor capable of receiving flow signals and operating master valves.
- v)x) **Friable:** a soil condition that is easily crumbled or loosely compacted down to a minimum depth per planting material requirements, whereby the root structure of newly planted material will be allowed to spread.
- w)y) **General Manager:** the General Manager of the Public Utilities Commission, or his or her designee.
- x)z) **Hardscape:** any durable material (pervious and non-pervious).
- y)aa) **Hydrozone:** a portion of the landscaped area having plants with similar water needs. A hydrozone may be irrigated or non-irrigated.
- z)bb) **Infiltration rate:** the rate of water entry into the soil expressed as a depth of water per unit of time (e.g., inches per hour).
- aa)cc) **Invasive plant species:** species of plants not historically found in California that spread outside cultivated areas and can damage environmental or economic resources. Invasive species may be regulated by county agricultural agencies as noxious species. "Noxious weeds" means any weed designated by the Weed Control Regulations in the Weed Control Act and identified on a Regional District noxious weed control list. Lists of invasive plants are maintained at the California Invasive Plant Inventory and USDA invasive and noxious weeds database.
- bb)dd) **Irrigation audit:** an in-depth evaluation of the performance of an irrigation system conducted by a Certified Landscape Irrigation Auditor. An irrigation audit includes, but is not limited to: inspection, system test with distribution uniformity or emission uniformity, precipitation rates, reporting deficiencies in the system, reporting overspray or runoff that causes overland flow, and preparation of an irrigation schedule. An irrigation audit may include suggested upgrades, current estimated water usage, and suggested system upgrades.
- ee)ee) **Irrigation efficiency (IE):** the measurement of the amount of water beneficially used divided by the amount of water applied. Irrigation efficiency is derived from measurements

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and estimates of irrigation system characteristics and management practices. ~~The minimum average irrigation efficiency for purposes of this ordinance is 0.74~~ is 0.75 for overhead spray devices and 0.81 for drip systems. Greater irrigation efficiency can be expected from well designed and maintained systems.

- ~~dd)~~ff) **Landscape Application:** the documents required under Rule 3 for Tier 1 compliance.
- ~~ee)~~gg) **Landscape architect:** a person who holds a license to practice landscape architecture in the state of California pursuant to California Business and Professions Code.
- ~~ff)~~hh) **Landscape area:** all the planting areas, turf areas, and water features in a landscape design plan subject to the Maximum Applied Water Allowance calculation, including any adjacent planted areas in the public right-of-way for which the property owner is responsible pursuant to the Section 400.1 or Section 805 of the Public Works Code. The landscape area does not include footprints of buildings or structures unless the footprints include planted areas such as living roofs. The landscape area also does not include sidewalks, driveways, parking lots, decks, patios, gravel or stone walks, other pervious or non-pervious hardscapes, and other non-irrigated areas designated for non-development such as open spaces and existing native vegetation.
- ~~gg)~~ii) **Landscape contractor:** a person licensed by the State of California to construct, maintain, repair, install, or subcontract the development of landscape systems.
- ~~hh)~~jj) **Landscape Documentation Deadline:** the date by which Tier 1 or Tier 2 documentation must be submitted for approval by the General Manager. This date shall be not more than 100 days after the issuance of the first construction document, or as determined by the General Manager in consultation with the Director of Department of Building Inspection.
- ~~kk)~~ **Landscape Documentation Package:** the documents required under Rule 8 for Tier 2 compliance.
- ~~ll)~~ ll) **Landscape water meter:** an inline device installed as a separate utility water meter that measures the flow of water into the irrigation system.
- ~~mm)~~ mm) **Landscape rehabilitation project or rehabilitated landscape:** includes any modifications to landscape areas over a 12-month period at a site that cumulatively exceeds 1,000 square feet. A landscape rehabilitation project or rehabilitated landscape does not include turf replacements on sports fields where the turf replaced provides a playing surface, routine weeding, brush removal where no new plant materials are installed, seasonal plantings, and areas dedicated solely to edible plants. A rehabilitated landscape does not include landscape areas where only the irrigation system is retrofitted for the use of recycled water and only plantings that restore areas disturbed by the recycled water retrofits are installed. Recycled water irrigation retrofit projects shall employ best management practices to prevent runoff, ponding and overspray as directed in their recycled water use permit and comply with all applicable local and state regulation.
- ~~nn)~~ nn) **Lateral line:** the water delivery pipeline that supplies water to the emitters or sprinklers from the valve.
- ~~oo)~~ oo) **Low volume irrigation:** the application of irrigation water at low pressure through a system of tubing or lateral lines and low-volume emitters such as drip, drip lines, and

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bubblers. Low volume irrigation systems are specifically designed to apply small volumes of water slowly at or near the root zone of plants.

~~mm)~~pp) **Low water use plants or climate appropriate plants:** plants, shrubs, groundcovers or tree species that meet at least one of the following conditions.

- i. The species has a water use ranking of “low” or “very low” in Region 1 (North-Central Coast) as established in the California Department of Water Resources ~~2000~~ 2014 publication “Water Use Classification of Landscape Species” or subsequent editions as it may be updated.
- ii. The species has a water use ranking of “no water”, “little water,” or “little to moderate water” in the climate zone for the planting location as established in the Sunset Western Garden Book, ~~Eighth-Ninth~~ Edition, published by Oxmoor House on February ~~71, 2007-2012~~ or subsequent editions as it may be updated.
- iii. The plantings are part of an engineered stormwater management feature approved by the General Manager pursuant to the San Francisco Stormwater Design Guidelines established by the Public Utilities Commission.
- iv. The Department of Public Works, the Recreation and Park Department, or the General Manager has determined that the species, when watered for sufficient plant health and appearance, is low water use based on the agency’s experience with the species, and the agency has added the species to the Low Water Use and Climate Appropriate Plant List maintained by the General Manager.
- v. The species appears on the San Francisco Street Tree Species List established by the Department of Public Works Bureau of Urban Forestry.
- vi. The planting is part of a species test approved by the Department of Public Works or the Recreation and Park Department.
- vii. The species has been permitted at the site by the Department Public Works or the General Manager based on wet soil conditions stemming from proximity to naturally occurring water features such as a high water table, springs, ponds, lakes, creeks, and wetlands.

qq) **Master shut-off valve:** is an automatic valve installed at the irrigation supply point which controls water flow into the irrigation system. When this valve is closed, water will not be supplied to the irrigation system, greatly reducing any water loss due to a leaky station valve.

~~nn)~~rr) **Maximum Applied Water Allowance (MAWA):** the amount of annual applied water established by the San Francisco Public Utilities Commission for a landscaped area, using state mandated formulas and accounting for local climatic conditions, that serves as an upper limit for lawful water use for irrigating landscaped areas. The MAWA is based upon the area’s reference evapotranspiration, the ET Adjustment Factor, and the size of the landscape area. The Estimated Total Water Use shall not exceed the Maximum Applied Water Allowance. Special Landscape Areas, including recreation areas, areas permanently and solely dedicated to edible plants such as fruit and nut trees and vegetable gardens, and areas irrigated with ~~gray water or harvested rainwater~~non-potable water, are subject to the MAWA with an ETAF not to exceed 1.0.

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- ~~ee)~~ss) **Mulch or mulching product:** any organic material such as leaves, bark, straw, compost, or inorganic mineral materials such as rocks, gravel, and decomposed granite left loose and applied to the soil surface for the beneficial purposes of reducing evaporation, suppressing weeds, moderating soil temperature, and preventing soil erosion.
- ~~pp)~~tt) **New construction:** a new building or structure with a landscape, or other new landscape, such as a park, playground, median strip, or greenbelt without an associated building or structure.
- uu) **New construction landscape project:** the total area of landscape in the project as defined in "landscape area," and the modified landscape area for a landscape rehabilitation project.
- vv) **Non-potable water:** includes recycled water, blackwater, graywater, foundation drainage, or harvested rain water. Non-potable water is suitable for uses such as landscape irrigation or water features. This water is not intended for human consumption.
- ~~qq)~~ww) **Non-residential landscape:** landscapes in commercial, institutional, industrial, mixed use residential and public settings that may have areas designated for recreation or public assembly.
- ~~ff)~~xx) **Operating pressure:** the pressure at which the parts of an irrigation system are designed by the manufacturer to operate.
- ~~ss)~~yy) **Overhead sprinkler irrigation systems:** systems that deliver water through the air (e.g., spray heads and rotors).
- ~~tt)~~zz) **Overspray:** the irrigation water which is delivered beyond the landscape area.
- ~~uu)~~aaa) **Permit:** an authorizing document issued by the General Manager or Department of Building Inspection.
- ~~vv)~~bbb) **Pervious:** any surface or material that allows the passage of water through the material and into the underlying soil.
- ~~ww)~~ccc) **Plant factor or plant water use factor:** a factor that, when multiplied by ETo, estimates the amount of water needed by plants. The plant factor range for very low water use plants is 0 to 0.1, low water use plants is 0.10 to 0.3, the plant factor range for moderate water use plants is 0.4 to 0.6, and the plant factor range for high water use plants is 0.7 to 1.0. Plant factors for any plant shall be as established in the ~~Department of Water Resources 2000~~ publication "Water Use Classification of Landscape Species" or subsequent additions. Plants used in the landscape project that are not found in WUCOLS shall use the plant factor of a similar species included on WUCOLS.
- ~~xx)~~ **Precipitation rate:** the rate of application of water measured in inches per hour.
- ~~yy)~~ddd) **Project applicant:** the person or entity applying for approval of a landscape project for a new construction project or a landscape rehabilitation project. A project applicant may be the property owner or his or her designee.
- ~~zz)~~eee) **Property owner:** the legal owner of a property.

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~~aaa)fff)~~ fff) **Rain sensor:** a rain sensing shutoff device that automatically suspends an irrigation event when it rains.

~~bbb)ggg)~~ ggg) **Recreational area:** areas dedicated to active play or public assembly such as parks, sports fields, and golf courses where turf provides a playing surface.

~~Recycled water, reclaimed water, gray water, or harvested rain water: non-potable water suitable for uses such as landscape irrigation or water features. This water is not intended for human consumption.~~

~~eee)hhh)~~ hhh) **Residential landscape:** landscape surrounding a single or multi-family home.

~~ddd)iii)~~ iii) **Runoff:** water which is not absorbed by the soil or landscape to which it is applied and flows from the landscape area. For example, runoff may result from water that is applied at too great a rate (application rate exceeds infiltration rate) or when there is a slope.

~~eee)jjj)~~ jjj) **Soil moisture sensor:** a device that measures the amount of water in the soil. The device may also suspend or initiate an irrigation event.

~~fff)kkk)~~ kkk) **Soil texture:** the classification of soil based on its percentage of sand, silt, and clay.

~~ggg)lll)~~ lll) **Special Landscape Area (SLA):** an area of the landscape dedicated solely to edible plants, recreational areas, and water features and irrigated areas ~~irrigated using all or in-part with of gray water or harvested rain water~~ non-potable water, water features using only harvested rain water, and areas dedicated to active play such as parks, sports fields, golf courses, and where turf provides a playing surface.

~~hhh)mmm)~~ mmm) **Sprinkler head:** a device which delivers water through a nozzle.

~~iii)nnn)~~ nnn) **Static water pressure:** the pipeline or municipal water supply pressure when water is not flowing.

~~ooo)~~ **Station:** an area served by one valve or by a set of valves that operate simultaneously.

~~jjj)ppp)~~ ppp) **Submeter:** a metering device to measure water applied to the landscape that is installed after the primary utility water meter.

~~kkk)qqq)~~ qqq) **Swing joint:** an irrigation component that provides a flexible, leak-free connection between the emission device and lateral pipeline to allow movement in any direction and to prevent equipment damage.

~~lll)rrr)~~ rrr) **Turf:** a ground cover surface of mowed grass, including but not limited to Annual bluegrass, Kentucky bluegrass, Perennial ryegrass, Red fescue, Tall fescue, Bermudagrass, Kikuyugrass, Seashore Paspalum, St. Augustinegrass, Zoysiagrass, and Buffalo grass.

~~mmm)sss)~~ sss) **Valve:** a device used to control the flow of water in the irrigation system.

~~nnn)ttt)~~ ttt) **Water feature:** a design element where open water performs an aesthetic or recreational function. Water features include artificial ponds, lakes, waterfalls, and streams, and fountains, spas, and swimming pools. The surface area of water features is included in the high water use hydrozone of the landscape area. Constructed wetlands used for on-site wastewater

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treatment or stormwater best management practices that are not irrigated and used solely for water treatment or stormwater retention are not water features and, therefore, are not subject to the water budget calculation.

~~eee)uuu)~~ **WUCOLS:** the Water Use Classification of Landscape Species published by the University of California Cooperative Extension, the Department of Water Resources and the Bureau of Reclamation, ~~2000~~2014, or subsequent editions as it may be updated.

**Rule 3. Tier 1 - ~~New Construction and~~ Landscape Rehabilitation Projects with 1,000 – 2,500 square feet of landscape area**

Beginning January 1, ~~2011~~2016, project applicants for all public agency, commercial, and residential ~~new construction landscape projects and~~ landscape rehabilitation projects, with a modified landscape area equal to or greater than 1,000 square feet and less than 2,500 square feet, shall comply with the following.

- a) Landscape irrigation shall not exceed the applicable Maximum Applied Water Allowance (MAWA) established in Rule 7:
- b) Any turf area, planned or installed, shall not exceed 25 percent of the landscape area. Landscape projects exceeding the 25 percent turf limit shall be considered a Tier 2 landscape project and must follow the requirements for Tier 2 as described in Rule 4.
- c) At least 75 percent of the landscape area shall consist of low water use plants or climate appropriate plants as defined in Rule 2. Landscape projects with less than 75 percent of the landscape area consisting of low water use plants or climate appropriate plants shall be considered a Tier 2 landscape project and must follow the requirements for Tier 2 as described in Rule 4.
- d) Prior to commencing installation or modification of landscape that is not an edible plant, and prior to the issuance of the first construction document, if applicable, the project applicant shall:
  - i. Submit and have approved by the General Manager a Tier 1 Landscape Application including:
    - A. Tier 1 landscape project checklist, which serves as a preliminary summation of selected landscape components to determine whether a proposed landscape is consistent with the applicable MAWA established in Rule 7; and
    - B. List of plants, trees, shrubs, or other vegetation that are to remain or be installed in the landscape area.
  - ii. For landscape projects installed as part of the construction or renovation of a building, the Tier 1 Landscape Application shall be submitted prior to the Landscape Documentation Deadline; and
  - iii. In the case of project applicants or property owners that are not required to obtain permits and approvals from the City's Department of Building Inspection, a Tier

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1 Landscape Application shall be submitted to and approved by the General Manager prior to commencing installation or modification of landscape.

- e) Following the installation of the landscape and any irrigation system, the project applicant shall submit a Certificate of Landscape Completion which certifies that the installed landscape and/or irrigation area does not consume water at a rate that exceeds the applicable MAWA established in Rule 7.
- f) Landscape areas that are part of a compliance plan pursuant to Rule 5 shall be required to provide Tier 1 compliance documents as set forth in the provisions of the compliance plan.
- g) If complete documentation for Tier 1 compliance has not been submitted to the General Manager on or before the Landscape Documentation Deadline, the General Manager shall request to the Director of Department of Building Inspection that an address restriction shall be placed on the property such that no further construction permits or addenda shall be issued and no further inspections by the Department of Building Inspection shall occur, unless and until all landscape documentation, developed in accordance with the provisions of this chapter and the Public Utilities Commission's rules and regulations has been submitted to the General Manager for approval.

**Rule 4. Tier 2 - New construction projects with 500 square feet or more of landscape area and rehabilitation landscape projects with more than 2,500 square feet of landscape area**

Beginning January 1, ~~2011~~ 2016, the project applicants for all public agency, commercial, and residential new construction landscape projects with a landscape area equal to or greater than 500 square feet; and landscape rehabilitation projects; with a modified landscape area equal to or greater than 2,500 square feet; or a project under Tier 1 with a turf limitation exceeding 25 percent of the landscape area or with less than 75 percent of the landscape area consisting of low water use plants or climate appropriate plants, shall comply with the following.

- a) Prior to commencing installation or modification of landscape, the project applicant shall submit and have approved by the General Manager, a Landscape Documentation Package consistent with the Water Efficient Design and Operation Elements in Rule 6.
- b) For landscape projects installed as part of the construction or renovation of a building, the Tier 2 Landscape Documentation Package shall be submitted prior to the Landscape Documentation Deadline.
- c) In the case of project applicants or property owners that are not required to obtain permits and approvals from the City's Department of Building Inspection, a Tier 2 Landscape Documentation Package shall be submitted to and approved by the General Manager prior to commencing installation or modification of landscape.
- d) Submit and have approved by the General Manager, prior to the submittal date of a first certificate of occupancy or prior to sign off on a landscape project authorization, the Landscape Documentation Package and a Certificate of Landscape Completion. The General Manager may authorize issuance of a first certificate of occupancy prior to approval of a Certificate of Landscape Completion, subject to conditions determined by the General Manager.

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- e) Landscape areas that are part of a compliance plan pursuant to Rule 5 shall be required to provide Tier 2 compliance documents as set forth in the provisions of the compliance plan.
- f) If complete documentation for Tier 2 compliance has not been submitted to the General Manager on or before the Landscape Documentation Deadline, the General Manager shall request to the Director of Department of Building Inspection that an address restriction shall be placed on the property such that no further construction permits or addenda shall be issued and no further inspections by the Department of Building Inspection shall occur, unless and until all landscape documentation, developed in accordance with the provisions of this chapter and the Public Utilities Commission's rules and regulations has been submitted to the General Manager for approval.

**Rule 5. Compliance Plans for Large Irrigated Landscapes**

Property owners maintaining a total irrigated landscape of 10 acres or greater may submit compliance plans for approval by the General Manager that support a programmatic approach to compliance with Section F, rather than through the review and approval of individual landscape rehabilitation projects.

- a) The General Manager shall establish a deadline for each property owner to develop and submit a compliance plan, which shall not exceed 3 years following the date of the property owner's initial request for review and approval of a compliance plan.
- b) The property owner shall comply with all the terms of the approved compliance plan. The property owner's failure to comply with provisions of the compliance plan is a violation of Section F and subject to enforcement under the provisions of these rules or any other remedy available to the General Manager.
- c) The compliance plan shall prioritize the phased implementation of landscape projects, beginning with the projects with the greatest water savings, to the extent feasible when balanced with other project objectives.
- d) The compliance plan, if authorized by the General Manager, supersedes the process and procedures set forth in Rules 3 and 4.
- e) The compliance plan shall ensure compliance with the requirements of Rule 6 and shall include a date or dates by which the components of the compliance plan shall be completed.

**Rule 6. Water Efficient Design and Operation Elements**

The elements of a landscape shall be designed to achieve water efficiency. Tier 1 projects ~~with a landscape area greater than 1,000 square feet but less than 2,500 square feet~~ shall demonstrate water efficiency and compliance with this rule by providing appropriate responses to specific checklist items and certification pursuant to Rule 3.

Tier 2 projects ~~with a landscape area greater than 2,500 square feet~~ require a complete Landscape Documentation Package and shall comply with all applicable criteria of this rule.

- a) Plant Material



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- i. Plants shall be chosen and arranged appropriately based upon the site's climate, soil characteristics, sun exposure, wildfire susceptibility and other factors. Plants with similar water needs shall be grouped within hydrozones.
- ii. Turf is not allowed on slopes greater than 25 percent.
- iii. Turf areas shall not be less than ~~eight~~ 10 feet wide.
- iv. The turf grass limitation excludes parklands or public recreation areas, sports fields, golf courses, cemeteries, or public areas, and areas irrigated with ~~gray water or harvested rain water~~ non-potable water.
- v. The use of invasive plant species or noxious weeds is prohibited.
- vi. The use of local California native plant species is encouraged in order to reduce water use and promote wildlife habitat.
- vii. The architectural guidelines of a common interest development, which include community apartment projects, condominiums, planned developments, and stock cooperatives, shall not prohibit or include conditions that have the effect of prohibiting the use of low-water use plants as a group.

b) Irrigation System

- i. ~~Dedicated~~ Landscape water meters are required ~~for~~ landscape areas greater than 51,000 square feet to facilitate water management.
  - A. Non-residential projects with 1,000 to 5,000 square feet of landscape area shall install a privately owned submeter or a utility landscape water meter.
  - ~~A.B.~~ Any project with a landscape area greater than 5,000 square feet shall install a utility landscape water meter.
- ii. Automatic irrigation controllers utilizing either evapotranspiration or soil moisture sensor data utilizing non-volatile memory shall be required.
- iii. Rain sensors either integral or auxiliary, which suspend or alter irrigation operation during unfavorable weather conditions, shall be required on all irrigation systems.
- iv. Master shut-off valves are required on all projects except landscapes that make use of technologies that allow for the individual control of sprinklers that are individually pressurized in a system equipped with low pressure shut down features.
- ~~iii.v.~~ Flow sensors are required for all non-residential landscapes and residential landscapes 5,000 square feet or larger.
- ~~iv.vi.~~ The irrigation hardware for each hydrozone shall include a separate valve.

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- v.vii. The irrigation systems shall be designed to prevent runoff, low head drainage, overspray and other similar conditions.
- vi.viii. Low volume irrigation shall be required in mulched areas, in areas with slope greater than 25 percent, within 24 inches of a non-permeable surface or in any irregularly shaped areas that are less than eight (8) feet in width. These restrictions do not apply if:
  - A. The landscape area is adjacent to permeable surfacing and no runoff occurs; or
  - B. The adjacent non-permeable surfaces are designed and constructed to drain entirely to landscaping.
- viii. ~~vii.~~ Irrigation systems shall be designed, maintained, and managed to meet or exceed an average landscape irrigation efficiency of ~~70 percent~~ 81 percent for drip irrigation and 75 percent for overhead spray.
- viii.ix. Irrigation emission devices must meet the requirements set in the American National Standards Institute (ANSI) standards, American Society of Agricultural Biological Engineers'/International Code Council's (ASABE/ICC) 802-2014 "Landscape Irrigation Sprinkler and Emitter Standard," All sprinklers in the landscape must document a distribution uniformity low quarter of 0.65 or higher using the protocol defined in ASABE/ICC 802-2014.

c) Hydrozones

- i. Each valve shall irrigate only hydrozones with similar plant factors or site conditions such as: slope, sun exposure, and soil conditions.
- ii. Sprinkler heads and other emission devices shall be selected based on what is appropriate for the plant type within that hydrozone.
- iii. Where feasible, trees shall be placed on separate valves from shrubs, groundcovers, and turf.
- iv. Individual hydrozones that mix plants of moderate and low water use shall use the higher water using plant factor. High water use plants shall not be mixed with low or moderate water use plants.
- v. On the landscape design plan and irrigation design plan, hydrozone areas shall be designated by number, letter, or other designation. On the irrigation design plan, designate the areas irrigated by each valve, and assign a number to each valve.

d) Soil Preparation, Mulch and Amendments

- i. Prior to the planting of any materials, compacted soils shall be transformed to a friable condition. On engineered slopes, only amended planting holes need to meet this requirement.

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- ii. A minimum ~~threetwo~~-inch (23") layer of mulch shall be applied on all exposed soil surfaces of planting areas except in direct seeding applications (i.e. hydro-seed).
- ~~ii~~-iii. Compost at a rate of a minimum of four cubic yards per 1,000 square feet of permeable area shall be incorporated to a depth of six inches (6") into the soil for planting areas. Soils with greater than 6 percent organic matter in the top six inches (6") of soil are exempt from adding compost and tilling.
- ~~iii~~-iv. Stabilizing mulching products shall be used on slopes.
- ~~iv~~-v. Soil amendments shall be incorporated according to recommendations of the soil report and what is appropriate for the plants selected.

e) Water Features

- i. Recirculating water systems shall be used for water features.
- ii. Where available, ~~recycled water or harvested rain~~ non-potable water shall be used as a source for decorative water features.
- iii. Surface area of a water feature shall be included in the high water use hydrozone area of the water budget calculation.

f) Irrigation Scheduling

Irrigation schedules shall be developed, managed, and evaluated to utilize the minimum amount of water required to maintain plant health. Irrigation schedules shall meet the following criteria.

- i. Irrigation scheduling shall be regulated by automatic irrigation controllers.
- ii. Overhead irrigation shall be scheduled between 8:00 p.m. and 10:00 a.m. unless weather conditions prevent it.
- iii. Irrigation schedules for each station shall consider:
  - A. Irrigation interval (days between irrigation);
  - B. Irrigation run times (time period per irrigation event to avoid runoff);
  - C. Number of cycle starts required for each irrigation event to avoid runoff;
  - D. Application rate setting;
  - E. Plant type setting;
  - F. Soil type; and
  - G. Slope factor setting.

g) Landscape and Irrigation Maintenance Schedule

Landscapes shall be maintained to ensure water use efficiency. A regular maintenance schedule shall be submitted with the Certificate of Landscape Completion and shall include the following.

- i. Routine inspection; adjustment and repair of the irrigation system and its components; aerating and de-thatching turf areas; replenishing mulch; fertilizing;

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pruning; weeding in all landscape areas; replacement of failed plants with same or equivalent plants; and removing obstruction to emission devices.

- ii. Repair of all irrigation equipment shall be done with the originally installed components or their equivalents.

h) Irrigation Audits

Landscape and irrigation assessments for new or rehabilitated landscapes shall be conducted after the landscaping and irrigation system have been installed. The findings of the assessment shall be consolidated into the Certificate of Completion submittal and may include, but are not limited to inspection, system tune-up, system test with distribution uniformity, reporting overspray or runoff that causes overland flow, and preparation of an irrigation schedule.

- i. For Tier 1 projects, the audit shall be conducted by the project applicant, a designated PUC water service inspector, or by a certified landscape irrigation auditor.
- ii. For Tier 2 projects, the irrigation audit shall be conducted by a PUC water service inspector or by a certified landscape irrigation auditor.
- iii. The General Manager shall administer programs that may include, but not be limited to, irrigation water use analysis, irrigation audits, and irrigation surveys for compliance with the Maximum Applied Water Allowance.

**Rule 7. Maximum Applied Water Allowance (MAWA)**

The operation of irrigation systems in new construction landscapes and landscape rehabilitation projects subject to Rules 3, 4, and 5 shall adhere to a Maximum Applied Water Allowance which shall be the upper limit of water that may be lawfully applied through the irrigation system. The MAWA for an irrigation system installed for a new construction landscape or landscape rehabilitation project shall be calculated using the following equation and the corresponding ET Adjustment Factor (ETAF) of 0.55 for residential areas and 0.45 for non-residential areas.

$$MAWA = (35.1) (0.62) [(ETAF \times LA)] + [(1-ETAF) \times SLA]$$

Where:

- MAWA \_\_\_\_\_ = Maximum Applied Water Allowance (gallons per year)
- 35.1 \_\_\_\_\_ = ETo or Reference Evapotranspiration for San Francisco (inches per year)
- 0.62 \_\_\_\_\_ = Conversion Factor (to gallons)
- ETAF \_\_\_\_\_ = ET Adjustment Factor (ETAF) for ~~new or modified~~ residential (0.55) or non-residential (0.45) landscapes
- LA \_\_\_\_\_ = Landscape Area including SLA (square feet)
- 1-ETAF \_\_\_\_\_ = Additional Water Allowance for SLA for new or modified landscapes
- SLA \_\_\_\_\_ = Special Landscape Area (square feet)

**Rule 8. Landscape Documentation Package**

Tier 2 projects applications shall include at a minimum:

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- a) Project information sheet;
- b) Water Efficient Landscape Worksheets which establish the project's MAWA and ETWU;
- c) Soil management report;
- d) Landscape design plan;
- e) Irrigation design plan; and
- f) Grading design plan.

**Rule 9. Soil Management Report**

- a) In order to reduce runoff and encourage healthy plant growth, a soil management report shall be completed by all Tier 2 project applicants where significant mass grading is planned. The soil management report or other documentation approved by the General Manager, shall document the various soil characteristics such as:
  - i. Soil texture;
  - ii. Infiltration rate determined by laboratory test or soil texture infiltration rate table;
  - iii. pH;
  - iv. Total soluble salts;
  - v. Sodium;
  - vi. Percent organic matter; and
  - vii. Recommendations.
- b) The project applicant shall comply with one of the following:
  - i. If project includes podium plantings using all imported soil, the project applicant shall submit a copy of the soil specification as part of the Landscape Documentation Package; or
  - ii. If significant mass grading is not planned, the soil analysis shall be submitted as part of the Landscape Documentation Package; or
  - iii. If significant mass grading is planned, the soil analysis report shall be submitted as part of the Certificate of Landscape Completion.

The soil analysis report shall be made available, in a timely manner, to the designers preparing the landscape design plans and irrigation design plans to make any necessary adjustments to the design plans.

The project applicant shall submit documentation verifying implementation of soil analysis report recommendations to the General Manager with the Certificate of Landscape Completion.

**Rule 10. Landscape Design Plan**

Tier 2 landscapes shall be carefully designed for the intended function of the project. A landscape design plan shall meet the following design criteria and shall be submitted as part of the Landscape Documentation Package. The landscape design plan, at a minimum, shall:

- a) Include all applicable elements of Rule 6: Water Efficient Landscape Design and Operation Elements;
- b) Identify all plants to be installed as part of the landscape project including: common name, botanical name, quantity, type (e.g. grass, succulent, vine, shrub, and tree), and plant factor as defined in Rule 2;
- c) Delineate and label each hydrozone by number, letter, or other method;
- d) Identify each hydrozone as low, moderate, high water, or mixed (low/moderate) water use, as defined by WUCOLS;
- e) Include temporarily irrigated areas of the landscape in a low water use hydrozone for the purpose of water budget calculation;
- f) Identify recreational areas;
- g) Identify areas permanently and solely dedicated to edible plants or edible fruit or nut trees;
- h) Identify areas irrigated with gray water or harvested rain water;
- i) Identify type of mulch and application depth;
- j) Identify soil amendments, type, and quantity;
- k) Identify type and surface area of water features;
- l) Identify hardscapes (pervious and non-pervious);
- m) Identify location and installation details of any applicable stormwater best management practices that demonstrate compliance with the San Francisco Stormwater Design Guidelines for on-site retention and infiltration of stormwater. Examples include, but are not limited to: rain gardens, bioretention areas, infiltration basins, constructed wetlands, pervious pavements, and rain water harvesting systems;
- n) Contain the following statement: "I have complied with the requirements of the Water Efficient Irrigation Ordinance and Section F of the San Francisco Public Utilities Commission Rules and Regulations Governing Water Service Customers, and I have applied the requirements for the efficient use of water in this landscape design plan;" and
- o) Bear the signature of a licensed landscape architect, licensed landscape contractor, or other person authorized by the General Manager.

**Rule 11. Irrigation Design Plan**

Irrigation systems shall meet all the requirements listed in this section and the manufacturers' recommendations. The irrigation system and its related components shall be planned and designed to allow for proper installation, management, and maintenance. An irrigation design plan meeting the following design criteria shall be submitted as part of the Landscape Documentation Package. The irrigation design plan, at a minimum, shall contain:

- a) Include all applicable elements of Rule 6: Water Efficient Landscape Design and Operation Elements;
- b) Location and size of separate water meters for landscape (if applicable);
- c) Location, type and size of all components of the irrigation system, including controllers, main and lateral lines, valves, sprinkler heads, moisture or rain sensing devices, ~~rain switches~~, quick couplers, pressure regulators, and backflow prevention devices;
- d) Static water pressure at the point of connection to the public water supply. If a booster pump is used, include the operating pressure downstream from the pump;
- e) Flow rate (gallons per minute), application rate (inches per hour), and design operating pressure (pressure per square inch) for each station;
- f) Indication of where any ~~non-potable recycled water, gray water, or harvested rain water~~ irrigation systems are used;
- g) The following statement: "I have complied with the requirements of the Water Efficient Irrigation Ordinance and Section F of the San Francisco Public Utilities Commission Rules and Regulations Governing Water Service Customers, and I have applied the requirements for the efficient use of water in this landscape design plan;" and
- h) The signature of a licensed landscape architect, certified irrigation designer, licensed landscape contractor, or other person authorized by the General Manager to design an irrigation system.

**Rule 12. Grading Design Plan**

If the Tier 2 landscape project area will be graded, the grading shall be designed to minimize soil erosion, runoff, and water waste; and a grading plan shall be submitted as part of the Landscape Documentation Package.

The project applicant shall submit a landscape grading plan that indicates finished configurations and elevations of the landscape area including:

- a) Height of graded slopes;
- b) Drainage patterns;
- c) Pad elevations;
- d) Finish grade; and

SFPUC Rules and Regulations- Section F- as amended ~~July~~ October 2015.

- e) Stormwater retention improvements, if applicable.

The grading design plan shall contain the following statement: "I have complied with the requirements of the Water Efficient Irrigation Ordinance and Section F of the San Francisco Public Utilities Commission Rules and Regulations Governing Water Service Customers, and I have applied the requirements for the efficient use of water in this landscape design plan;" and shall bear the signature of a licensed civil engineer or landscape architect as authorized by law.

**Rule 13. Certificate of Landscape Completion**

For all Tier 1 and Tier 2 projects, the project applicant shall submit to the General Manager the Certificate of Landscape Completion. The Certificate of Landscape Completion shall include the following elements.

- a) For Tier 1, certification by the project applicant that the landscape project has been installed per the approved Tier 1 Landscape Application. For Tier 2, certification by the signer of the landscape design plan, the signer of the irrigation design plan, or the licensed landscape contractor that landscape project has been installed per the Landscape Documentation Package.
- b) Irrigation scheduling parameters used to set the controller.
- c) Landscape and irrigation maintenance schedule.
- d) For Tier 2, irrigation audit report.

**Rule 14: Irrigation Audits for Landscape Areas**

The General Manager may require irrigation audits to evaluate water use on landscape areas. Such audits may be initiated as a coordinated effort between the General Manager and the water service customer as part of the General Manager's Landscape Conservation Program, or if violation is reported to or discovered by the General Manager. When such audit is required, it must be completed by a certified landscape irrigation auditor.

- a) Following the findings and recommendations of the certified landscape irrigation auditor, the General Manager may require adjustments to the irrigation usage, irrigation hardware, and/or landscape materials to reduce irrigation water use.
- b) The landscape shall comply with the Maximum Applied Water Allowance for landscapes. The ET Adjustment Factor for existing landscapes is 0.8 and the ET Adjustment Factor for new construction landscapes and rehabilitated landscapes is 0.55 for residential areas and 0.45 for non-residential areas.
- c) The MAWA for an irrigation system for an existing landscape area of any size shall be calculated using the following equation.



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$$\text{MAWA} = (35.1) (0.62) [(0.8 \times \text{LA}) + (0.2 \times \text{SLA})]$$

Where: MAWA = Maximum Applied Water Allowance (gallons per year)  
35.1 = ETo or Reference Evapotranspiration (inches per year)  
0.62 = Conversion Factor (to gallons)  
0.8 = ET Adjustment Factor (ETAF) for existing landscapes  
LA = Landscape Area including SLA (square feet)  
0.2 = Additional Water Allowance for SLA for existing landscapes  
SLA = Special Landscape Area (square feet)

- d) The MAWA for an irrigation system for a new construction landscape or rehabilitated landscape shall be as defined in Rule 7.

**Rule 15. ~~Recycled Water, Gray Water, Harvested Rain Water~~ Non-Potable Water**

- a) For purposes of Section F, a rehabilitated landscape does not include landscape areas where only the irrigation system is retrofitted for the use of recycled water and only plantings that restore areas disturbed by the recycled water retrofits are installed. Recycled water irrigation retrofit projects shall employ best management practices to prevent runoff, ponding and overspray as directed in their recycled water use permit and comply with all applicable local and state regulation. The installation of recycled water irrigation systems shall be required if the General Manager finds that recycled water meeting all applicable requirements is available for irrigation uses.
- b) The San Francisco Public Utilities Commission encourages the installation of ~~gray water or harvested rain~~ non-potable water irrigation systems for current and future use. New, rehabilitated and existing landscapes using ~~gray water and harvested rain~~ non-potable water shall be considered Special Landscape Areas. An ET Adjustment Factor for the total landscape shall not exceed 1.0. Existing Special Landscape Areas shall be allowed more water by using an ET Adjustment Factor of 0.8 and additional water allowance of 0.2 or 20 percent%. New or rehabilitated Special Landscape Areas shall be allowed more water by using an ET Adjustment Factor of 0.55 for residential areas and 0.45 for non-residential areas and additional water allowances of 0.45 or 45 percent% and 0.55 or 55 percent respectively.
- c) Landscapes using ~~gray water and harvested rain~~ non-potable water are exempt from the turf limitations subject to Rule 6, but shall comply with the Maximum Applied Water Allowance of the landscape.
- d) Irrigation systems and decorative water features shall use ~~recycled water~~ non-potable water as permitted by local regulations, codes and standards. ~~if the General Manager finds that recycled water meeting all public health codes and standards is available and will be available for the foreseeable future. Use of gray water in irrigation systems and use of harvested rain water in irrigation systems and decorative water features, are strongly encouraged.~~
- e) All ~~recycled water, gray water and harvested rain water~~ non-potable water systems shall be designed and operated in accordance with all applicable local and State laws.

**Rule 16. Water Waste Prevention**

- a) For landscaped areas of any size in the City and County of San Francisco, water runoff leaving the landscape area due to low head drainage, overspray, broken irrigation hardware, or other similar conditions where water flows onto adjacent property, walks, roadways, parking lots, structures, or non-irrigated areas, is prohibited.
- b) In the event this rule or any other rule is violated, the General Manager may issue a written warning, entered on the user's water service record and delivered to customer via mail, personal service, or other reasonable means. The letter will include information regarding the violation, education information on the restrictions, resources available from the General Manager to assist in complying with regulations, and a deadline for correcting the violation.
- c) If the violations are not corrected to the satisfaction of the General Manager, the property owner, and project applicant where appropriate, shall be subject to enforcement in accordance with San Francisco Public Utilities Commission rules for limitation or termination of service, Chapter 100 of the San Francisco Administrative Code with respect to administrative penalties, and any other available legal remedies, at the sole discretion of the General Manager.

**APPENDIX - SAMPLE CALCULATIONS OF MAWA AND ETWU**

**MAXIMUM APPLIED WATER ALLOWANCE (MAWA):** The example calculations below are hypothetical to demonstrate proper use of the MAWA equation pursuant to Rule 7 and required water budget calculations.

**Example 1:** A hypothetical residential landscape rehabilitation project in San Francisco, with a modified landscape area of 2,500 square feet without any Special Landscape Area (SLA= 0, no edible plants, recreational areas, or use of ~~gray water, or harvested rain~~ non-potable water). To calculate MAWA, the annual reference evapotranspiration for San Francisco is 35.1 inches.

The ETAF for a residential landscape project is 0.55.

$$\text{MAWA} = (35.1) (0.62) [(0.55 \times \text{LA}) + (0.45 \times \text{SLA})]$$

$$\text{MAWA} = (35.1) (0.62) [(0.55 \times 2,500 \text{ square feet}) + (0.45 \times 0)] = 29,920 \text{ gallons per year}$$

To convert from gallons per year to gallons per day:  $29,920/365 = 82$  gallons per day

Water meters measure flow in hundred-cubic-feet (CCF). 1 CCF = 748 gallons so in this example the MAWA is 40 CCF per year

**Example 2:** A new construction project to build a recreation center in San Francisco has a total landscape area of 100,000 square feet. Within the 100,000 square foot project, there is a 75,000 square foot area to be planted with turf for a soccer field. This 75,000 square foot area is considered to be a Special Landscape Area. The ETAF for a non-residential landscape project is 0.45.

$$\begin{aligned} \text{MAWA} &= (35.1) (0.62) [(0.55 \times \text{LA}) + (0.45 \times \text{SLA})] \\ \text{MAWA} &= (35.1) (0.62) [(0.55 \times 100,000 \text{ square feet}) + (0.45 \times 75,000 \text{ square feet})] \\ &= 21.76 \times [55,000 + 33,750] \\ &= 21.76 \times 88,750 \\ &= 1,931,200 \text{ gallons per year or } 5,291 \text{ gallons per day or } 2,582 \text{ CCF per year} \end{aligned}$$

$$\begin{aligned} \text{MAWA} &= (35.1) (0.62) [(0.45 \times \text{LA}) + (0.55 \times \text{SLA})] \\ \text{MAWA} &= (35.1) (0.62) [(0.45 \times 100,000 \text{ square feet}) + (0.55 \times 75,000 \text{ square feet})] \\ &= 21.76 \times [45,000 + 41,250] \\ &= 21.76 \times 86,250 \\ &= 1,876,800 \text{ gallons per year or } 5,142 \text{ gallons per day or } 2,509 \text{ CCF per year} \end{aligned}$$

**ESTIMATED TOTAL WATER USE (ETWU):** The example calculations below are hypothetical to demonstrate proper use of the Estimated Total Water Use. The sum of the ETWU calculated for all hydrozones shall not exceed the MAWA.

$$\text{ETWU} = (35.1)(0.62) \left( \frac{\text{PF} \times \text{HA}}{\text{IE}} + \text{SLA} \right)$$

Where:

- ETWU = Estimated Total Water Use per year (gallons)
- 35.1 = ETo or Reference Evapotranspiration (inches per year)
- 0.62 = Conversion Factor
- PF = Plant Factor from WUCOLS

SFPUC Rules and Regulations- Section F- as amended July-October 2015.

- HA = Hydrozone Area [high, medium, and low water use areas] (square feet)  
 (PFxHA) = The sum of the Plant Factor multiplied by the Hydrozone Area for all hydrozones  
 IE = Irrigation Efficiency (minimum 0.71-0.75 for overhead spray and 0.81 for drip systems)  
 PF/IE = ET Adjustment Factor (ETAF)  
 SLA = Special Landscape Area (square feet)

**Example 1:** A new construction residential landscape project has area is 50,000 square feet of landscape area; the plant water use type, irrigation type, plant factor, and hydrozone area are shown in the table below. In San Francisco, the ETo value is 35.1 inches per year. There are no Special Landscape Areas (recreational area, area permanently and solely dedicated to edible plants, or area irrigated with gray water or harvested rain water non-potable water) in this example.

<b>Regular Landscape Areas</b>								
Hydro-zone	Water Use Type(s)	Plant Factor (PF)	Irrigation Method	Irrigation Efficiency (IE)	ETAF (PF/IE)	Hydrozone Area (HA)	ETAF x HA	Est. Total Water Use (ETWU)
1	High	0.8	Spray	0.75	1.07	6,000	6,400	139,277
2	High	0.7	Spray	0.75	0.93	7,000	6,533	142,178
3	Medium	0.5	Drip	0.81	0.62	13,000	8,025	174,633
4	Low	0.3	Drip	0.81	0.37	10,000	3,704	80,600
5	Low	0.2	Drip	0.81	0.25	14,000	3,457	75,227
<b>Sum</b>						<b>50,000</b>	<b>28,119</b>	<b>-</b>
<b>Special Landscape Areas</b>								
==					1	==	==	==
==					1	==	==	==
<b>Sum</b>						<b>-</b>	<b>-</b>	<b>-</b>
<b>ETWU Total</b>								<b>611,915</b>
<b>MAWA Total</b>								<b>598,455</b>

Hydro zone	Plant Water Use Type(s)	Plant Factor (PF)*				Hydrozone Area (HA) (square feet)	PF x HA (square feet)
1	High	0.8				7,000	5,600
2	High	0.7				10,000	7,000
3	Medium	0.5				16,000	8,000
4	Low	0.3				7,000	2,100
5	Low	0.2				10,000	2,000
<b>Sum</b>						<b>24,700</b>	<b>24,700</b>

\*Plant Factor from WUCOLS

SFPUC Rules and Regulations- Section F- as amended ~~July~~ October 2015.

$$ETWU = 35.1 \times 0.62 \times \left( \frac{24,700}{IE} + 0 \right) = 757,072 \text{ gallons per year}$$

Compare ETWU with MAWA for this example:

$$MAWA = (35.1) (0.62) [(0.55 \times 50,000) + (0.45 \times 0)] = 598,400.55 \text{ gallons per year.}$$

ETWU (757,072 ~~611,915~~ gallons per year) is more than MAWA (598,400.55 ~~400,455~~ gallons per year).

For this example, the project's estimated water use ~~water budget~~ does not comply with the MAWA.

**Example 2:** ~~ETWU calculation:~~ A new construction non-residential landscape area is project has 5032,000 square feet of landscape area, with 2,000 square feet of which is planted with edible plants. The edible plant area is considered a Special Landscape Area (SLA). In San Francisco, ETo is 35.1 inches per year. The plant type, plant factor, irrigation type, and hydrozone areas are shown in the table below.

<b>Regular Landscape Areas</b>								
Hydro-zone	Water Use Type(s)	Plant Factor (PF)	Irrigation Method	Irrigation Efficiency (IE)	ETAF (PF/IE)	Hydrozone Area (HA)	ETAF x HA	Est. Total Water Use (ETWU)
1	High	0.8	Spray	0.75	1.07	2,500	2,667	58,032
2	High	0.7	Spray	0.75	0.93	3,000	2,800	60,934
3	Medium	0.5	Spray	0.75	0.67	6,500	4,333	94,302
4	Low	0.3	Drip	0.81	0.37	10,000	3,704	80,600
5	Low	0.2	Drip	0.81	0.25	10,000	2,469	53,733
Sum						32,000	15,973	
<b>Special Landscape Areas</b>								
6					1	2,000	2,000	43,524
Sum						2,000	2,000	
<b>ETWU Total</b>								<b>391,125</b>
<b>MAWA Total</b>								<b>402,597</b>

Hydrozone	Plant Water Use Type (s)	Plant Factor (PF)*	Hydrozone Area (HA) (square feet)	PF x HA (square feet)
1	High	0.8	5,000	4,000
2	Medium	0.5	7,000	3,500
3	Medium	0.5	5,000	2,500
4	Low	0.3	16,000	4,800
5	Low	0.2	17,000	3,400
Sum				18,200
6	SLA	1.0	2,000	2,000

\*Plant Factor from WUCOLS

SFPUC Rules and Regulations- Section F- as amended July-October 2015.

$$\begin{aligned} ETWU &= 35.1 \times 0.62 \times \left( \frac{18,200}{IE} + 2,000 \right) \\ &= (21.76) (25,634 + 2,000) \\ &= 601,312 \text{ gallons per year} \end{aligned}$$

Compare ETWU with MAWA. For this example:

$$\begin{aligned} MAWA &= (35.1) (0.62) [(0.55 \times 50,000) + (0.45 \times 2,000)] \\ &= 21.76 \times [27,500 + 900] \\ &= 21.76 \times 28,400 \\ &= 617,984 \text{ gallons per year} \end{aligned}$$

$$MAWA = (35.1) (0.62) [(0.45 \times 32,000) + (0.55 \times 2,000)] = 337,311 \text{ gallons per year.}$$

The ETWU (319,125 gallons per year) is less than MAWA (337,311 gallons per year).

For this example, the project's estimated water use~~water budget~~ complies with the MAWA.

## **PUBLIC UTILITIES COMMISSION**

City and County of San Francisco

RESOLUTION NO. 15-0221

WHEREAS, Irrigated landscapes contribute significantly to the quality of life of the people of San Francisco by providing areas for active and passive recreation and as an enhancement to the environment by cleaning air and water, preventing erosion, and adding to the natural beauty of our commercial, industrial, and residential neighborhoods; and

WHEREAS, San Francisco has been a leader in water conservation policy in California and currently has one of the lowest per capita uses of water in the state; and

WHEREAS, Our potable water supply is a vital public resource that faces ever increasing demands; and landscape design, installation, maintenance, and management can and should be water efficient; and

WHEREAS, In 2006, the California Legislature passed and the Governor signed Assembly Bill 1881, the Water Conservation in Landscaping Act, which enacted Article 10.8 of the California Government Code requiring that local agencies adopt a water efficient landscape program that meets water conservation criteria and standards adopted by the California Department of Water Resources; and

WHEREAS, The adoption of the Water Efficient Irrigation Ordinance by the Board of Supervisors of the City and County of San Francisco on November 23, 2010, and the adoption of the Rules for Water Efficient Irrigation by this Commission on May 25, 2010 improve the effectiveness of the City's landscape water efficiency program and ensure compliance with the requirements of the State's Water Conservation in Landscaping Act; and

WHEREAS, On April 1, 2015 Governor Brown issued Drought Executive Order B-29-15 directing the California Department of Water Resource to update the state Model Water Efficient Landscape Ordinance to increase water efficiency standards for new and existing landscapes to reduce potable water use for landscape irrigation; and

WHEREAS, On July 15, 2015 the California Water Commission approved the state's revisions to the Model Water Efficient Landscape Ordinance and local agencies have until December 2015 to adopt amendments to their local ordinances and regulations; and

WHEREAS, Adoption of the amended Ordinance and Rules and Regulations Governing Water Service to Customers will continue to promote the values and benefits of landscapes while recognizing the need to invest water and other resources as efficiently as possible; and

WHEREAS, The SFPUC caused a notice of public hearing on the proposed amendments to Section F, Water Efficient Irrigation, of the Rules and Regulations Governing Water Service to Customers and the proposed amendments were publicly noticed in accordance with the Charter; and

WHEREAS, On May 20, 2010 the San Francisco Planning Department Environmental Review Officer determined the Water Efficient Irrigation Ordinance and the Rules for Water Efficient Irrigation were categorically exempt under the California Environmental Quality Act (CEQA) Guidelines Section 15308, Class 8, Actions by Regulatory Agencies for Protection of the Environment. Said determination is on file with the Secretary of the Commission and is incorporated herein by reference; now, therefore, be it

RESOLVED, That the Commission, pursuant to its Charter authority to adopt rules and regulations, hereby amends Section F of the Rules and Regulations Governing Water Service to Customers, as provided in the copy of draft amendments to Section F on file with the Secretary of the Commission, effective January 1, 2016; and be it

FURTHER RESOLVED, the Public Utilities Commission urges the Board of Supervisors of the City and County of San Francisco to pass, and urges Mayor Edwin M. Lee to sign, the amended Water Efficient Irrigation Ordinance.

*I hereby certify that the foregoing resolution was adopted by the Public Utilities Commission at its meeting of October 27, 2015.*

  
Secretary, Public Utilities Commission



**PUBLIC UTILITIES COMMISSION**  
City and County of San Francisco

RESOLUTION NO. 10-0087

WHEREAS, irrigated landscapes contribute significantly to the quality of life of the people of San Francisco by providing areas for active and passive recreation and as an enhancement to the environment by cleaning air and water, preventing erosion, and adding to the natural beauty of our commercial, industrial, and residential neighborhoods; and

WHEREAS, San Francisco has been a leader in water conservation policy in California and currently has the lowest per capita use of water in the state; and

WHEREAS, our potable water supply is a vital public resource that faces ever increasing demands; and landscape design, installation, maintenance, and management can and should be water efficient; and

WHEREAS, in 2006, the California Legislature passed and the Governor signed Assembly Bill 1881, the Water Conservation in Landscaping Act, which enacted Article 10.8 of the California Government Code requiring that local agencies adopt a water efficient landscape program that meets water conservation criteria and standards adopted by the California Department of Water Resources; and

WHEREAS, the San Francisco's Administrative Code, Chapter 63, Limitations on Water Use for Landscaping in New Developments and Landscaping Renovations, does not meet the water conservation criteria and standards adopted by the California Department of Water Resources; and

WHEREAS, the adoption of the proposed Water Efficient Irrigation Ordinance by the Board of Supervisors of the City and County of San Francisco, and the adoption of the Rules for Water Efficient Irrigation by this Commission will improve the effectiveness of the City's landscape water efficiency program and ensure compliance with the requirements of the State's Water Conservation in Landscaping Act; and

WHEREAS, adoption of the Ordinance and Rules will promote the values and benefits of landscapes while recognizing the need to invest water and other resources as efficiently as possible; and

WHEREAS, adoption of the Ordinance and Rules will establish a structure for planning, designing, installing, maintaining, and managing water efficient landscapes in new construction and rehabilitated projects as required by state law;

WHEREAS, the Citizens Advisory Committee of the Public Utilities Commission of the City and County of San Francisco on April 27, 2010, adopted a resolution urging

this Commission to approve the Water Efficient Irrigation Ordinance for forwarding to the Board of Supervisors and to adopt the companion Rules, and urged the Board of Supervisors of the City and County of San Francisco to pass and the Mayor to sign the Water Efficient Irrigation Ordinance; and

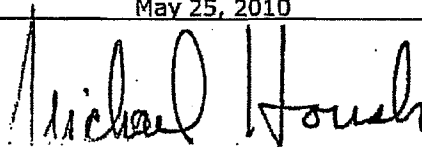
WHEREAS, The Planning Department has determined that the actions contemplated in this resolution are in compliance with the California Environmental Quality Act (California Public Resources Code sections 21000 et seq.). Said determination is on file with the Secretary of the Commission and is incorporated herein by reference; now, therefore, be it

RESOLVED, That the Commission, pursuant to its Charter authority to adopt rules and regulations, hereby amends the Rules and Regulations Governing Water Service to Customers by adding Section F – Water Efficient Irrigation; and be it

FURTHER RESOLVED, the Public Utilities Commission urges the Board of Supervisors of the City and County of San Francisco to pass, and urges Mayor Gavin Newsom to sign, the proposed Water Efficient Irrigation Ordinance.

*I hereby certify that the foregoing resolution was adopted by the Public Utilities Commission at its meeting of*

May 25, 2010



*Secretary, Public Utilities Commission*

1 [Water Efficient Irrigation]

2  
3 Ordinance amending the San Francisco Administrative Code by repealing Chapter 63 in  
4 its entirety and adding Chapter 63, requiring the development and maintenance of  
5 landscape irrigation controls for specified new construction landscapes and landscape  
6 rehabilitation projects.

7 NOTE: Additions are *single-underline italics Times New Roman*;  
8 deletions are *strike-through italics Times New Roman*.  
9 Board amendment additions are double-underlined;  
Board amendment deletions are ~~strike-through normal~~.

10 Be it ordained by the People of the City and County of San Francisco:

11 Section 1. Environmental Findings. The Planning Department has determined that the  
12 actions contemplated in this Ordinance are in compliance with the California Environmental  
13 Quality Act (California Public Resources Code sections 21000 et seq.). Said determination is  
14 on file with the Clerk of the Board of Supervisors in File No. 101079 and is  
15 incorporated herein by reference.

16 Section 2. The San Francisco Administrative Code is hereby amended by repealing  
17 Chapter 63 in its entirety and adding a new Chapter 63, to read as follows:

18 SEC. 63.1. TITLE.

19 This chapter shall be known as the Water Efficient Irrigation Ordinance.

20 SEC. 63.2. INTENT.

21 The Board of Supervisors finds that:

22 (a) Irrigated landscapes contribute significantly to the quality of life of the people of San  
23 Francisco by providing areas for active and passive recreation and as an enhancement to the  
24 environment by cleaning air and water, and adding to the natural beauty of our commercial,  
25 industrial, and residential neighborhoods.

1 (b) San Francisco has been a leader in water conservation policy in California and  
2 currently has the lowest per capita use of water in the state. Our potable water supply is a vital  
3 public resource that faces ever increasing demands; and landscape design, installation,  
4 maintenance, and management can and should be water efficient.

5 (c) In 2006, the California Legislature passed and the Governor signed Assembly Bill  
6 1881, the Water Conservation in Landscaping Act, which enacted Article 10.8 of the California  
7 Government Code requiring that local agencies adopt a water efficient landscape ordinance  
8 that meets water conservation criteria and standards adopted by the California Department of  
9 Water Resources.

10 (d) Adoption of this ordinance by the Board of Supervisors and adoption of regulations  
11 by the Public Utilities Commission will improve the effectiveness of the City's landscape water  
12 efficiency program and ensure compliance with the requirements of the State's Water  
13 Conservation in Landscaping Act.

14 (e) Consistent with these legislative findings, this ordinance will:

15 (1) Promote the values and benefits of landscapes while recognizing the need to  
16 invest water and other resources as efficiently as possible;

17 (2) Encourage the use of climate appropriate and local California native plant  
18 species.

19 (3) Establish a structure for planning, designing, installing, maintaining, and  
20 managing water efficient landscapes in new construction and rehabilitated projects;

21 (4) Establish provisions for water management practices and water waste  
22 prevention for existing landscapes;

23 (5) Use water efficiently without waste by setting a Maximum Applied Water  
24 Allowance, using state mandated formulas and accounting for local climatic conditions, that  
25 will serve as an upper limit for water use by irrigated landscapes; and

1 (6) Comply with the requirements of Article 10.8 of the California Government  
2 Code, enacted by the State as the Water Conservation in Landscaping Act.

3 SEC. 63.3. Definitions.

4 The terms used in this ordinance have the meaning set forth below:

5 (a) Certificate of landscape completion: the document required under Section 63.6.2.

6 (b) Certified Landscape Irrigation Auditor: a person certified to perform landscape  
7 irrigation audits by an accredited academic institution, a professional trade organization or  
8 other program such as the US Environmental Protection Agency's WaterSense irrigation  
9 auditor certification program and the Irrigation Association's Certified Landscape Irrigation  
10 Auditor program.

11 (c) Ecological restoration project: a project where the site is intentionally altered to  
12 establish a defined, indigenous, historic ecosystem.

13 (d) First certificate of occupancy: either a temporary certificate of occupancy or a  
14 Certificate of Final Completion and Occupancy as defined in San Francisco Building Code  
15 Section 109A, whichever is issued first.

16 (e) First construction document: the first building permit issued for a project or, in the  
17 case of a site permit, the first building permit addendum issued or other document that  
18 authorizes construction of the project. "First construction document" shall not include permits  
19 or addenda for demolition, grading, shoring, pile driving, or site preparation work.

20 (f) General Manager: the General Manager of the Public Utilities Commission, or his or  
21 her designee.

22 (g) Irrigation audit: an in-depth evaluation of the performance of an irrigation system  
23 conducted by a Certified Landscape Irrigation Auditor. An irrigation audit includes, but is not  
24 limited to: inspection, system test with distribution uniformity or emission uniformity,  
25 precipitation rates, reporting deficiencies in the system, reporting overspray or runoff that

1 causes overland flow, and preparation of an irrigation schedule. An irrigation audit may  
2 include suggested upgrades, current estimated water usage, and suggested system  
3 upgrades.

4 (h) Landscape area: all the planting areas, turf areas, and water features in a  
5 landscape design plan subject to the Maximum Applied Water Allowance calculation,  
6 including any adjacent planted areas in the public right-of-way for which the property owner is  
7 responsible pursuant to the Section 400.1 and Section 805 of the Public Works Code. The  
8 landscape area does not include footprints of buildings or structures unless the footprints  
9 include planted areas such as green roofs. The landscape area also does not include  
10 sidewalks, driveways, parking lots, decks, patios, gravel or stone walks, other pervious or  
11 non-pervious hardscapes, and other non-irrigated areas designated for non-development  
12 such as open spaces and existing native vegetation.

13 (i) Landscape documentation deadline: the date by which Tier 1 or Tier 2  
14 documentation must be submitted for approval by the General Manager. This date shall be a  
15 specified number of days after the issuance of the first construction document as determined  
16 by the General Manager and in consultation with the Department of Building Inspection.

17 (j) Landscape rehabilitation project or rehabilitated landscape: includes any  
18 modifications to landscape areas over a 12-month period at a site that cumulatively exceeds  
19 1,000 square feet. A landscape rehabilitation project or rehabilitated landscape does not  
20 include turf replacements on sports fields where the turf replaced provides a playing surface,  
21 routine weeding, brush removal where no new plant materials are installed, or seasonal  
22 plantings in areas dedicated solely to edible plants.

23 (k) Low water use plants or climate appropriate plants: plants, shrubs, groundcovers or  
24 tree species that meet at least one of the following conditions:  
25

1 (1) The species has a water use ranking of "low" or "very low" in Region 1  
2 (North-Central Coast) as established in the California Department of Water Resources 2000  
3 publication "Water Use Classification of Landscape Species" or subsequent editions as it may  
4 be updated.

5 (2) The species has a water use ranking of "no water", "little water," or "little to  
6 moderate water" in the climate zone for the planting location as established in the Sunset  
7 Western Garden Book, Eighth Edition, published by Oxmoor House on February 1, 2007 or  
8 subsequent editions as it may be updated.

9 (3) The plantings are part of an engineered stormwater management feature  
10 approved by the General Manager pursuant to the San Francisco Stormwater Design  
11 Guidelines established by the Public Utilities Commission;

12 (4) The Department of Public Works, the Recreation and Park Department, or  
13 the General Manager has determined that the species, when watered for sufficient plant  
14 health and appearance, is low water use based on the agency's experience with the species,  
15 and the agency has added the species to the Low Water Use and Climate Appropriate Plant  
16 List maintained by the General Manager;

17 (5) The species appears on the San Francisco Street Tree Species List  
18 established by the Department of Public Works Bureau of Urban Forestry;

19 (6) The planting is part of a species test approved by the Department of Public  
20 Works or the Recreation and Park Department; or

21 (7) The species has been permitted at the site by the Department Public Works  
22 or the General Manager based on wet soil conditions stemming from proximity to naturally  
23 occurring water features such as a high water table, springs, ponds, lakes, creeks, and  
24 wetlands.

1 (l) Maximum Applied Water Allowance: the amount of annual applied water established  
2 by the Public Utilities Commission for a landscaped area, using state mandated formulas and  
3 accounting for local climatic conditions, that serves as an upper limit for lawful water use for  
4 irrigating landscaped areas.

5 (m) New construction landscape project: the total area of landscape in the project as  
6 defined in landscape area, and the modified landscape area for a landscape rehabilitation  
7 project.

8 (n) Project applicant: the person or entity applying for approval of a landscape project  
9 for a new construction project or a landscape rehabilitation project. A project applicant may be  
10 the property owner or his or her designee.

11 (o) Property Owner: the legal owner of a property.

12 (p) Special landscape area: an area of the landscape dedicated solely to edible plants,  
13 areas irrigated all or in part with gray water or harvested rain water, water features using only  
14 harvested rain water, and areas dedicated to active play such as parks, sports fields, golf  
15 courses, and where turf provides a playing surface.

#### 16 SEC. 63.4. Applicability

17 (a) This chapter shall apply to the following:

18 (1) Tier 1: All public agency, residential, and commercial new construction  
19 landscape projects and rehabilitated landscape projects with a modified landscape area equal  
20 to or greater than 1,000 square feet and less than 2,500 square feet;

21 (2) Tier 2: All public agency, residential and commercial new construction and  
22 rehabilitated landscape projects with a modified landscape area equal to or greater than 2,500  
23 square feet;

24 (3) The irrigation and maintenance of any landscape irrigation system in the  
25 City and County of San Francisco.



1 (b) This ordinance does not apply to:

2 (1) Registered local, state or federal historical sites where the landscape is  
3 maintained as part of the historical integrity of the site;

4 (2) Ecological restoration projects that do not require a permanent irrigation  
5 system;

6 (3) Plant collections or animal habitat areas, as part of botanical gardens,  
7 zoological gardens, and arboretums open to the public.

8 (c) The General Manager may waive some or all of the requirements of this chapter if,  
9 based on a site inspection, the General Manager determines that compliance is not feasible.

10 (d) A process for document submissions and approvals pursuant to Section 63.6.1 will  
11 be developed by the General Manager in conjunction with the Department of Building  
12 Inspection, with the purpose of administrative efficiency and effective customer service.

13 SEC. 63.5. Regulation of Landscape Irrigation Efficiency

14 (a) Landscape projects shall be installed, constructed, operated, and maintained in  
15 accordance with this chapter and the rules and regulations adopted by the Public Utilities  
16 Commission that establish limits on water consumption for the purpose of irrigating landscape  
17 areas that are part of new construction, landscape rehabilitation projects, and existing  
18 landscapes.

19 (b) Landscape projects shall be planted and irrigated efficiently by complying with water  
20 efficient design and operation requirements developed by the General Manager, including but  
21 not limited to the use of low water use plants or climate appropriate plants, restrictions on turf  
22 areas over 25% of the total landscaped area or on steep slopes, irrigation system audits,  
23 regular irrigation scheduling and maintenance practices.

1 (c) All landscape projects shall not exceed a Maximum Applied Water Allowance using  
2 the formulas developed by the General Manager for local climate conditions within the City  
3 and County of San Francisco.

4 (d) Landscape areas irrigated with graywater or harvested rain water may have a  
5 Maximum Applied Water Allowance that exceeds those for landscapes irrigated with potable  
6 water.

7 (e) The architectural guidelines of a common interest development, which include  
8 community apartment projects, condominiums, planned developments, and stock  
9 cooperatives as defined in Section 1351 of the California Civil Code, shall not prohibit or  
10 include conditions that have the effect of prohibiting the use of low water use plants as a  
11 group.

12 SEC. 63.6. Provisions for Water Efficient Landscapes for New Construction and  
13 Landscape Rehabilitation Projects

14 (a) Tier 1: Beginning January 1, 2011, project applicants for all public agency,  
15 commercial, and residential new construction landscape projects and landscape rehabilitation  
16 projects, with a modified landscape area equal to or greater than 1,000 square feet and less  
17 than 2,500 square feet, shall comply with this chapter and the rules and regulations adopted  
18 by the Public Utilities Commission.

19 (b) Tier 2: Beginning January 1, 2011, the project applicant for all public agency,  
20 commercial, and residential new construction landscape projects and landscape rehabilitation  
21 projects, with a modified landscape area equal to or greater than 2,500 square feet, or a  
22 project under Tier 1 with a turf limitation exceeding 25 percent of the landscape area, shall  
23 comply with this chapter and the rules and regulations adopted by the Public Utilities  
24 Commission.

1 (c) Beginning January 1, 2011, property owners maintaining a total irrigated landscape  
2 of 10 acres or greater may submit compliance plans for approval by the General Manager that  
3 support a programmatic approach to compliance with this chapter, rather than through the  
4 review and approval of individual landscape rehabilitation projects.

5 63.6.1. Landscape Documentation.

6 (a) Tier 1 project applicants' documentation shall be submitted for approval to the  
7 General Manager not later than the landscape documentation deadline. Tier 1 documentation  
8 shall include a project checklist describing the proposed landscape project, the selection of  
9 low water use plants or climate appropriate plants, water efficient irrigation system  
10 components, and other applicable project information as determined by the General Manager.

11 (b) Tier 2 project applicants' documentation shall be submitted for approval to the  
12 General Manager not later than the landscape documentation deadline. Tier 2 documentation  
13 shall include a Landscape Documentation Package describing the proposed landscape  
14 project that includes a landscape plan, irrigation plan, soil management report, grading plan,  
15 the calculation of the Maximum Applied Water Allowance, and other applicable project  
16 information as determined by the General Manager.

17 (c) If complete documentation for Tier 1 or Tier 2 compliance has not been submitted  
18 to the General Manager on or before the landscape documentation deadline, an address  
19 restriction shall be placed on the property such that no further construction permits or  
20 addenda shall be issued and no further inspections by the Department of Building Inspection  
21 shall occur, unless and until all landscape documentation, developed in accordance with the  
22 provisions of this chapter and the Public Utilities Commission's rules and regulations has been  
23 submitted to the General Manager for approval.

24 ///

25 ///

1           SEC. 63.6.2. Certificate of Landscape Completion.

2           (a) Upon completion of a new construction landscape project or rehabilitated landscape  
3 project that requires the submittal of landscape documentation pursuant to Section 63.6.1, the  
4 project applicant shall submit a Certificate of Landscape Completion for review and approval  
5 by the General Manager.

6           (b) No City department shall approve or issue a first certificate of occupancy or  
7 landscape project completion authorization or approval for any site where Tier 1 or Tier 2  
8 compliance is required, unless and until the landscape documentation pursuant to Section  
9 63.6.1 and a Certificate of Landscape Completion, developed in accordance with the  
10 provisions of this chapter and the Public Utilities Commission's rules and regulations, has  
11 been approved by the General Manager. The General Manager may authorize issuance of a  
12 first certificate of occupancy prior to approval of a Certificate of Landscape Completion,  
13 subject to conditions determined by the General Manager.

14           SEC. 63.7. Water Waste Prevention.

15           (a) This section shall apply to all landscaped areas in the City and County of San  
16 Francisco.

17           (b) Water runoff leaving the landscape area due to low head drainage, overspray,  
18 broken irrigation hardware, or other similar conditions where water flows onto adjacent  
19 property, walks, roadways, parking lots, structures, or non-irrigated areas designated for non-  
20 development such as open spaces and existing native vegetation, is prohibited.

21           SEC. 63.7.1. Irrigation Audits for Landscape Areas.

22           (a) When required by the General Manager, the project applicant or property owner,  
23 whichever is deemed appropriate by the General Manager, shall conduct an irrigation audit  
24 through a certified landscape irrigation auditor.

1 (1) Following the findings and recommendations of the certified landscape  
2 irrigation auditor, the project applicant or property owner shall perform adjustments to the  
3 irrigation usage, irrigation hardware, or landscape materials to reduce irrigation water use and  
4 to bring the irrigation systems in compliance with the applicable Maximum Applied Water  
5 Allowance, as directed by the General Manager.

6 SEC 63.8. Enforcement.

7 The property owner or project applicant, where appropriate, shall be subject to  
8 enforcement for violation of any provision of this chapter, in accordance with Chapter 100 of  
9 the San Francisco Administrative Code, and any other available legal remedies, at the sole  
10 discretion of the General Manager.

11  
12  
13 APPROVED AS TO FORM:  
14 DENNIS J. HERRERA, City Attorney

15 By:

16   
17 John Roddy  
18 Deputy City Attorney  
19  
20  
21  
22  
23  
24  
25



City and County of San Francisco  
Tails  
Ordinance

City Hall  
1 Dr. Carlton B. Goodlett Place  
San Francisco, CA 94102-4689

File Number: 101079

Date Passed: November 23, 2010

Ordinance amending the San Francisco Administrative Code by repealing Chapter 63 in its entirety and adding a new Chapter 63, requiring the development and maintenance of landscape irrigation controls for specified new construction landscapes and landscape rehabilitation projects.

November 08, 2010 Land Use and Economic Development Committee - RECOMMENDED

November 16, 2010 Board of Supervisors - PASSED ON FIRST READING

Ayes: 10 - Alioto-Pier, Avalos, Campos, Chiu, Chu, Daly, Dufty, Mar, Maxwell and Mirkarimi

Noes: 1 - Elsbernd

November 23, 2010 Board of Supervisors - FINALLY PASSED

Ayes: 10 - Alioto-Pier, Avalos, Campos, Chiu, Chu, Daly, Dufty, Mar, Maxwell and Mirkarimi

Noes: 1 - Elsbernd

File No. 101079

I hereby certify that the foregoing Ordinance was FINALLY PASSED on 11/23/2010 by the Board of Supervisors of the City and County of San Francisco.

Angela Calvillo  
Clerk of the Board

Mayor Gavin Newsom

December 3, 2010

Date Approved

BOARD of SUPERVISORS



City Hall  
Dr. Carlton B. Goodlett Place, Room 244  
San Francisco 94102-4689  
Tel. No. 554-5184  
Fax No. 554-5163  
TDD/TTY No. 554-5227

December 23, 2015

**File No. 151251**

Sarah Jones  
Environmental Review Officer  
Planning Department  
1650 Mission Street, Ste. 400  
San Francisco, CA 94103

Dear Ms. Jones:

On December 15, 2015, the Public Utilities Commission introduced the following proposed legislation:

**File No. 151251**

Ordinance amending the Administrative Code by revising the applicability threshold to 500 square feet for requirements for the development and maintenance of landscape irrigation controls for specified new construction landscapes and landscape rehabilitation projects.

This legislation is being transmitted to you for environmental review.

Angela Calvillo, Clerk of the Board

A handwritten signature in cursive script that reads "Alisa Somera".

By: Alisa Somera, Assistant Clerk  
Land Use and Transportation Committee

Attachment

c: Joy Navarrete, Environmental Planning  
Jeanie Poling, Environmental Planning


BOARD of SUPERVISORS



City Hall  
Dr. Carlton B. Goodlett Place, Room 244  
San Francisco 94102-4689  
Tel. No. 554-5184  
Fax No. 554-5163  
TDD/TTY No. 554-5227

## MEMORANDUM

TO: John Rahaim, Director, Planning Department  
Jonas Ionin, Secretary, Planning Commission

FROM:  Alisa Somera, Assistant Clerk  
Land Use and Economic Development Committee, Board of Supervisors

DATE: December 23, 2015

SUBJECT: LEGISLATION INTRODUCED

---

The Board of Supervisors' Land Use and Economic Development Committee has received the following proposed legislation, introduced by the Public Utilities Commission on December 15, 2015:

**File No. 151251**

Ordinance amending the Administrative Code by revising the applicability threshold to 500 square feet for requirements for the development and maintenance of landscape irrigation controls for specified new construction landscapes and landscape rehabilitation projects.

The proposed ordinance is being transmitted pursuant to Board Rule 5.41 for review and recommendation.

If you wish to submit any reports or documentation to be included as part of the file, please send those to me at the Board of Supervisors, City Hall, Room 244, 1 Dr. Carlton B. Goodlett Place, San Francisco, CA 94102.

c: Scott Sanchez, Planning Department  
Aaron Starr, Planning Department  
AnMarie Rodgers, Planning Department




BOARD of SUPERVISORS



City Hall  
1 Dr. Carlton B. Goodlett Place, Room 244  
San Francisco 94102-4689  
Tel. No. 554-5184  
Fax No. 554-5163  
TDD/TTY No. 554-5227

## MEMORANDUM

TO: Tom Hui, Director, Department of Building Inspection  
Phil Ginsburg, General Manager, Recreation and Park Department

FROM:  Alisa Somera, Assistant Clerk, Board of Supervisors

DATE: December 16, 2015

SUBJECT: LEGISLATION INTRODUCED

---

The Board of Supervisors' Land Use and Transportation Committee has received the following legislation, introduced by the Public Utilities Commission on December 15, 2015:

**File No. 151251**

Ordinance amending the Administrative Code by revising the applicability threshold to 500 square feet for requirements for the development and maintenance of landscape irrigation controls for specified new construction landscapes and landscape rehabilitation projects.

If you have any comments or reports to be included with the file, please forward them to me at the Board of Supervisors, City Hall, Room 244, 1 Dr. Carlton B. Goodlett Place, San Francisco, CA 94102.

c: William Strawn, Department of Building Inspection  
Carolyn Jayin, Department of Building Inspection  
Sarah Ballard, Recreation and Park Department

**Somera, Alisa (BOS)**

---

**From:** Power, Andres  
**Sent:** Monday, February 01, 2016 9:40 AM  
**To:** Somera, Alisa (BOS)  
**Cc:** Ellis, Juliet (PUC); Lam, Emily; Kay, Grace  
**Subject:** BF 151251

Hi Alisa,

Supervisor Wiener would like to take over sponsorship of Board File 151251 – Water Efficient Irrigation, scheduled to be considered today at the Land Use Committee.

Thanks,  
Andres

Andres Power  
Office of Supervisor Scott Wiener  
415.554.6968



**San Francisco  
Water Power Sewer**

Services of the San Francisco Public Utilities Commission

525 Golden Gate Avenue, 13th Floor  
San Francisco, CA 94102  
T 415.554.3155  
F 415.554.3161  
TTY 415.554.3488

181251

**TO: Angela Calvillo, Clerk of the Board**  
**FROM: Patrick Cacerès, Policy and Government Affairs Manager**  
**DATE: December 7, 2015**  
**SUBJECT: Administrative Code - Water Efficient Irrigation**

---

Attached please find an original and one copy of a proposed ordinance amending the Administrative Code by revising the applicability threshold to 500 square feet for requirements for the development and maintenance of landscape irrigation for specified new construction landscapes and landscape rehabilitation projects.

The following is a list of accompanying documents (2 sets):

1. Board of Supervisors Ordinance
2. Legislative Digest
3. BOS Ordinance No. 301-10
4. SFPUC Resolution No. 15-0221
5. SFPUC Resolution No. 10-0087
6. Section F – Water Efficient Irrigation from the SFPUC Rules and Regulations Governing Water Service to Customers as amended October 27, 2015

RECEIVED  
 BOARD OF SUPERVISORS  
 SAN FRANCISCO  
 2015 DEC -7 AM 10:50

Please contact Patrick Caceres at 554-0706 if you need any additional information on these items.

- Edwin M. Lee**  
Mayor
- Ann Moller Caen**  
President
- Francesca Vietor**  
Vice President
- Vince Courtney**  
Commissioner
- Anson Moran**  
Commissioner
- Ike Kwon**  
Commissioner
- Harlan L. Kelly, Jr.**  
General Manager



