



## Title 19: Los Osos Groundwater Basin Retrofit-to-Build Requirement

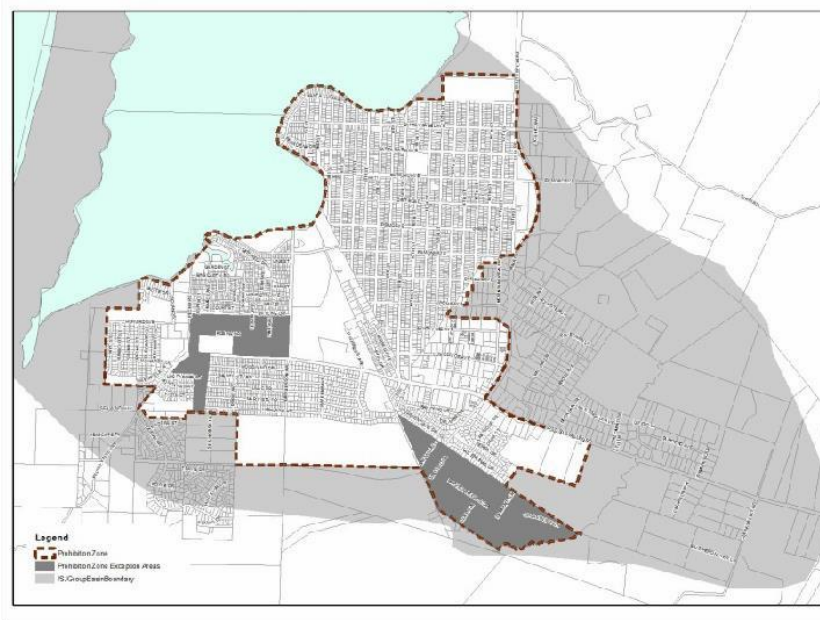
On April 22, 2008, the Board of Supervisors approved two plumbing retrofit ordinances for the Los Osos area. The ordinances address sea water intrusion into the lower aquifer zone of the Los Osos Groundwater Basin. To manage this serious problem, the ordinances require both new and existing development to retrofit older, non-conserving toilets and showerheads with fixtures that are water efficient. The ordinances went into effect May 22, 2008.

The Retrofit-to-Build program (Title 19) requires all new development that uses water from the Los Osos Groundwater Basin to retrofit older plumbing fixtures in existing homes and businesses to save twice the amount of water the new development will use.

Effective March 10<sup>th</sup>, 2014, toilet and showerhead **retrofit credits can no longer come from the Prohibition Zone** (shown in the red area below). To view a larger version of the

Prohibition Zone visit:

[http://www.sloplanning.org/gis/mapimagepdf/Los\\_Osos\\_prohibition\\_zone.pdf](http://www.sloplanning.org/gis/mapimagepdf/Los_Osos_prohibition_zone.pdf).



A retrofit credit table has been developed (Page 6) to calculate the savings of each retrofitted house or business. Please utilize this table to calculate the water saving from each retrofitted fixture. Water savings will be dependent on gallons saved per day based on the existing and retrofitted fixtures. Property owners must obtain at least **300 water credits** to obtain a Water Conservation Certificate and build a single family home.

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## Retrofit-to-Build Process

To obtain a Water Conservation Certificate, a Title 19: Retrofit Verification Table must be submitted to the Department of Planning and Building, including a Title 19: Retrofit Form for each retrofitted property. All sections must be filled out correctly for the Water Conservation Certificate to be issued.

1. **Part 1** of the Retrofit Verification Table must include the following information about the building site:
  - a. Project Address;
  - b. Assessor Parcel Number;
  - c. Required Credits;
  - d. Total Credits Generated through retrofitting;
  - e. Property Owner's First & Last Name;
  - f. Property Owner's Phone Number;
  - g. Agent's First and Last Name; and
  - h. Agent's Phone Number.
  
2. **Part 2** of the Retrofit Verification Table must include the following information about the retrofitted properties:
  - a. Retrofitted Property Address;
  - b. Assessor Parcel Number;
  - c. Retrofitted Property Owner First & Last Name;
  - d. Date of Retrofit;
  - e. Gallons per flush (gpf) of toilet removed and installed;
  - f. Gallons per minute (gpm) of showerhead removed and installed;
  - g. Gallons per day of washers removed and installed;
  - h. Gallons saved per day (Credits) per hot water recirculation system install; and
  - i. Gallons per day saved for entire retrofitted property.
  
3. If a property had 2 or more of the same fixtures retrofitted, write in both flow rates under the respective fixture type box.
  
4. If a specific fixture was not retrofitted on a property, place an "X" in the box for the specific fixture type.
  
5. For each property generating credits through **toilet and showerhead retrofits, a Title 19: Retrofit Form (SECTION II)** must be submit and include the following:
  - a. **Part 1: Sending Site**
    - i. Builder or Owner First & Last Name
    - ii. Property Address; and
    - iii. Assessor Parcel Number

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### b. Part 2: Retrofit Information

- i. Date of Inspection;
- ii. Property Address;
- iii. Assessor Parcel Number ;
- iv. Seller's First & Last Name;
- v. Agent Name & Phone Number;
- vi. Inspector's Printed First & Last Name;
- vii. Inspector's Phone Number; and
- viii. Inspector's License # or Certification.

### c. Part 3: Retrofit Details

- i. Write the existing gpf or gpm for the respective toilet and showerhead, and then write the flow rate of the newly installed low flow fixture.
- ii. All retrofitted toilets must have a flow rate of 1.28 gpf or less and all retrofitted showerheads must have a flow rate of 2.0 gpm or less.
- iii. Circle whether a faucet aerator is present on each of the sinks and the respective flow rate. If a faucet aerator is not present or over 1gpm, state the flow rate of the newly installed aerator.
- iv. The Title 19: Retrofit Form must be completed and signed by either a licensed plumber or a licensed home inspector.

6. All Title 19: Retrofit Forms must be submitted with photos of the old and newly installed fixtures in order to be valid for the Retrofit-to-Build Program.
7. To calculate the total water credits generated through plumbing retrofits, use the Los Osos Retrofit Credit Table on page 4.
  - a. The first column shows the possible flow rates of the old fixtures and the second column shows the possible flow rates of the newly installed fixtures.
  - b. Find the Gallons Saved per Day associated with the flow rates of the old and new fixtures, as well as the build type you are retrofitting.
  - c. Total credits for showerheads and toilets are averaged by dividing all of the credits generated by a fixture type divided by the number of fixtures.

Example:  $(\underline{\hspace{2cm}} + \underline{\hspace{2cm}}) / 2 = \underline{\hspace{2cm}}$

(Toilet 1 Gallons Saved/Day) (Toilet 2 Gallons Saved/Day) (Total Credits from Toilets)

8. Email completed forms to [Waterprograms@co.slo.ca.us](mailto:Waterprograms@co.slo.ca.us)

# Title 19: Los Osos Groundwater Basin Retrofit-to-Build Requirement

## TITLE 19: RETROFIT VERIFICATION TABLE (SECTION I)

Part 1: Proposed Building Site:

<b>Project Address:</b>	<b>Assessor Parcel Number (APN):</b>	<b>Required Credits:</b>	<b>Total Credits:</b>
<b>Property Owner Name:</b> (First & Last)	<b>Phone #:</b>	<b>Agent Name:</b> (First & Last)	<b>Phone #:</b>

Part 2: Retrofitted Properties:

	Address	Assessor's Parcel Number (APN)	Property Owner Name (First & Last)	Date of Retrofit	Toilet Removed (gpf)	Toilet Installed (gpf)	Shower-head Removed (gpm)	Shower-head Installed (gpm)	<sup>1</sup> Washer Removed (gpd)	Washer Installed (gpd)	<sup>1</sup> Hot Water Recirc. System (17 Credits per)	Gallons per Day Saved (Credits)
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
											Total	

<sup>1</sup> Washer retrofits and hot water recirculation system installations are allowed within the Los Osos Prohibition Zone.

# Title 19: Los Osos Groundwater Basin Retrofit-to-Build Requirement

## TITLE 19: RETROFIT FORM (SECTION II)

### PART 1-SENDING SITE

<b>Builder/Owner Name:</b> (Printed First & Last)	<b>Address:</b>	<b>APN:</b>
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### PART 2-RETROFIT INFORMATION

<b>Date of Retrofit:</b>	<b>Seller's Name:</b> (Printed First & Last)
<b>Property Address:</b>	<b>Assessor's Parcel Number:</b>
<b>Agent's Name:</b> (Printed First & Last)	<b>Agent's Phone Number:</b>
<b>Inspector's Name:</b> (Printed First & Last)	<b>Inspector's Phone Number:</b>
<b>Inspector Type:</b> Plumber / Home Inspector (Circle One)	<b>License #:</b>

### PART 3-RETROFIT DETAILS

Bathroom #1			
<b>Existing Toilet Low Flow?</b> YES / NO	_____gpf (Greater than 1.6)	<b>New Toilet</b>	_____gpf (Must be 1.28 or less)
<b>Existing Showerhead Low Flow?</b> YES / NO	_____gpm (Greater than 2.5)	<b>New Showerhead</b>	_____gpm (Must be 2.0 or less)
<b>Faucet Aerator Present?</b> YES / NO	_____gpm ( 1.0 or less)	<b>New Faucet Aerator</b>	_____gpm ( 1.0 or less)
Bathroom #2			
<b>Existing Toilet Low Flow?</b> YES / NO	_____gpf (Greater than 1.6)	<b>New Toilet</b>	_____gpf (Must be 1.28 or less)
<b>Existing Showerhead Low Flow?</b> YES / NO	_____gpm (Greater than 2.5)	<b>New Showerhead</b>	_____gpm (Must be 2.0 or less)
<b>Faucet Aerator Present?</b> YES / NO	_____gpm ( 1.0 or less)	<b>New Faucet Aerator</b>	_____gpm ( 1.0 or less)

## Title 19: Los Osos Groundwater Basin Retrofit-to-Build Requirement

### TITLE 19: LOS OSOS RETROFIT CREDIT TABLE

		Single-Family Residential	Multi-Family Residential <sup>1</sup>	Mobile Home <sup>2</sup>
Existing Toilet (gpf)	Replacement Toilet (gpf)	Gallons Saved Per Day (Credits)	Credits	Credits
6	1.28	52	39	26
	1.1	54	41	27
	0.8	57	43	29
3.5	1.28	24	18	12
	1.1	26	20	13
	0.8	30	22	15
1.6	1.28	4	3	2
	1.1	5	4	3
	0.8	9	7	5
<sup>1</sup> Multi-Family Residential (MFR) is 75% of Single-Family Residential Water Use <sup>2</sup> Mobile Home is 50% of Single-Family Residential Water Use				
		Single-Family Residential	Multi-Family Residential <sup>1</sup>	Mobile Home <sup>2</sup>
Existing Shower (gpm)	Replacement Shower (gpm)	Gallons Saved Per Day (Credits)	Credits	Credits
5	2.5	9	7	5
	2.0	11	8	5
	1.5	13	9	6
	1.0	14	11	7
2.5	2.0	4	3	2
	1.5	7	5	4
	1.0	11	8	5
Other Retrofits		Gallons Saved Per Day (Credits)		
Washing Machine Replacement		Gallons Saved per Day based on Washer Application		
Hot Water Recirculation System Installation		17		
<b>Total retrofit credits needed for a new single family home is 300 gallons</b>				



**TITLE 19: WASHER RETROFIT VERIFICATION FORM**

**How to Count Washer Replacement Savings in Los Osos**

1. This form must be completed by the individual or professional who performs the installation. It must be signed by the property owner.
2. New washers must be on the list of [Energy Star Water Efficient Washers and have an Integrated Water Factor \(IWF\) of no more than 3.2.](#)
3. Water savings will be based on 392 loads per year, or 8 loads per week.
4. Retrofits must save at least **15 gallons** per washer.
5. Water credits will be directly correlated to the number of gallons saved per day.
6. Properties receiving the new washing machines must be located within the Los Osos Groundwater Basin.

**Required Attachments:**

- Receipt of purchase for new washer
- Photos of old washer prior to removal
- Photos of new washer after installation

**PART 1-SENDING SITE**

<b>Builder/Owner Name:</b> (Printed First & Last)	<b>Address:</b>	<b>APN:</b>
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**PART 2-RETROFIT INFORMATION**

<b>Property Owner Name:</b> (Printed First & Last)	<b>Address:</b>	<b>APN:</b>
<b>Property Owner Phone Number:</b>	<b>Date Retrofitted:</b>	<b>Credits Generated:</b>

## TITLE 19: WASHER RETROFIT VERIFICATION FORM

### Old Washer

Make: \_\_\_\_\_ Model: \_\_\_\_\_ Serial Number: \_\_\_\_\_

Volume of Tub (ft<sup>3</sup>): \_\_\_\_\_ x 7.48 = \_\_\_\_\_ (Gallons/Cycle)

Average Number of Wash and Rinse Cycles: \_\_\_\_\_

$$\frac{\text{Gallons}}{\text{Day}} = \left( \frac{\text{Gallons}}{\text{Cycle}} \right) \left( \frac{\# \text{ of Cycles}}{\text{Load}} \right) \left( \frac{392 \text{ Loads}}{\text{Year}} \right) \left( \frac{1 \text{ Year}}{365 \text{ Days}} \right)$$

Gallons Used per Day (calculate with formula above) = \_\_\_\_\_

### Installed (New) Washer

**\*Must be on [Energy Star List](#)\***

Make: \_\_\_\_\_ Model: \_\_\_\_\_ Serial Number: \_\_\_\_\_

Integrated Water Factor (IWF): \_\_\_\_\_ Annual Water Use: \_\_\_\_\_

$$\frac{\text{Gallons}}{\text{Day}} = \left( \frac{\text{Annual Water Use in Gallons}}{365 \text{ Days}} \right)$$

Gallons Used per Day (calculated with formula above) = \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ =    
**Gallons per day old washer      Gallons per day new washer      Savings per Day**

### Property Owner Information

*To be completed by the person receiving the new washer*

*By signing below I certify that:*

- *I am the owner of the property above.*
- *The specifications listed above accurately represent the existing washing machine and the new washing machine that I have received and installed.*
- *I understand that the new washing machine must remain with the property if my house is sold, unless it is replaced with a model that is at least as efficient.*
- *I understand that I will be contacted and asked to verify that the information is correct.*

Property Owner Signature: \_\_\_\_\_ Date: \_\_\_\_\_





**TITLE 19: HOT WATER RECIRCULATION SYSTEM  
INSTALLATION VERIFICATION FORM**

**How to Count Hot Water Recirculation System Savings in Los Osos**

1. This form must be completed by the individual or professional who performs the installation. It must be signed by the property owner.
2. Water credits earned are limited to 17 credits per install.
3. Properties receiving the hot water recirculation system must be located within the Los Osos Groundwater Basin.

**Required Attachments:**

- Receipt of purchase for hot water recirculation system
- Photos of hot water recirculation system after installation

**PART 1-SENDING SITE**

<b>Builder/Owner Name:</b> (Printed First & Last)	<b>Address:</b>	<b>APN:</b>
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**PART 2-RETROFIT INFORMATION**

<b>Property Owner Name:</b> (Printed First & Last)	<b>Address:</b>	<b>APN:</b>
<b>Property Owner Phone Number:</b>	<b>Date Retrofitted:</b>	<b>Credits Generated:</b>