

**Division of Drinking Water – Water System Capacity Calculation Sheet** (Last Update 3/30/2017)

\*Enter the green cells only\*

System Name **Terakee Farms Water Company** System Number **New**

**1.1 Indoor Water Use**

Convert "Number of other connections" (Cell E9) to ERCs here. [ERCs of other connections = peak day demand of other connections in gal per day / 800 gpd]

Number of residential connections ----->>> **206**

Number of other connections --->>> **0** ERCs of other connections **0.0**

Enter number of non-residential connections, e.g., 2 industrial connections.

**Total Equivalent Residential Connections (ERCs) 206.0**

Example: water use of 2 factories equals to water use of 55 homes.)

MIN. REQUIREMENTS FOR INDOOR WATER USE			
Source		Storage	
gpd/ERC	Total (gpm)	Gallons/ERC	Total (gallons)
800	114.4	400	82,400

**1.2 Outdoor Water Use**

Is the drinking water used for outdoor irrigation?  Yes  No

Residential ERCs using drinking water for irrigation ----->>> **0**

Percentage of Residential ERCs using DW for irrigation ----->>> **0%**

Average irrigated acreage per residential connection ----->>> **0.00**

Total irrigated acreage of other connections (park, school, etc.) ----->>> **0.00**

Enter estimated irrigated acre per residential lot here.

Enter total irrigated acres of other connections here.

Irrigation zone **4**

(Enter notes here regarding whether and what % of irrigation water is supplied by PWS.)

Select Irrigated Zone # from the pick list. See "Irrigation Demands & Map" tab on the bottom of the screen or WaterLink.

MIN. REQUIREMENTS FOR IRRIGATION USE			
Source		Storage	
gpd/ERC	Total (gpm)	Gallons/ERC	Total (gallons)
0	0.0	0	0

**1.3 Fire Flow Water Use**

Does the water system provide fire protection?  Yes  No

Maximum fire flow demand (in gpm) for water system or pressure zone **1,000**

Maximum fire suppression duration (in hours) for water system or pressure zone **2**

Required Fire Suppression Storage (in gallons) ----->>> **120,000**

Enter fire flow in gpm.

Enter duration in hours.

(\*Verify req'd fire flow and duration with local fire code officials.\* Enter notes here, e.g. fire official contact info or comments.)

**2. Summary of Water System Capacity Requirements**

MINIMUM REQUIREMENTS FOR WATER SYSTEM			
Source (indoor + outdoor)		Storage (indoor + outdoor + fire)	
gpd/ERC	Total (gpm)	Gallons/ERC	Total (gallons)
800	114.4	400	202,400

**2.1 Does this system have adequate source capacity (per R309-510-7)?**

This source capacity assessment is a general overall system calculation. It may not reflect the variations in individual areas or pressure zones.

<b>Required Source Capacity</b>	114.4	gpm	Autolink to 2 "Total Source" cell above.
<b>Existing Source Capacity</b>	0.0	gpm	Autolink to 4.2 "Total Existing Source Capacity" cell below.
<b>Source Capacity Deficit</b>	114.4	gpm	Source deficit indicates that: (1) additional source capacity is needed, and (2) source deficiency should be assessed.
<b>Existing % of Total Req'd</b>	0.0%		Less than 100% indicates: (1) additional source capacity is needed, and (2) source deficiency should be assessed.

**2.2 Does this system have adequate storage capacity (per R309-510-8)?**

This storage capacity assessment is a general overall system calculation. It may not reflect the variations in individual areas or pressure zones.

<b>Total Required Storage</b>	202,400	gal	Autolink to 2 "Total Storage" cell above.
<b>Existing Storage Capacity</b>	0	gal	Autolink to 4.3 "Total Existing Storage Capacity" cell below.
<b>Storage Capacity Deficit</b>	202,400	gal	Storage deficit indicates that: (1) additional storage volume is needed, and (2) storage deficiency should be assessed.
<b>Required Fire Storage</b>	120,000	gal	
<b>Is storage deficiency solely due to fire storage?</b>	NO		If NO, answer one of question set 2.01 to 2.05 in ESS. If YES, answer one of question set 2.06 to 2.10 in ESS.
<b>Existing % of Total Req'd</b>	0.0%		Less than 100% indicates: (1) additional storage capacity is needed, and (2) storage deficiency should be assessed.

**3. Transient PWS Indoor Water Use – ERC Calculation** (See R309-510, Tables 510-1, 2, & 4 for other facility types.)

Facility Type	MINIMUM REQUIREMENTS FOR INDOOR USE						
	Source		Storage			ERC/site or pad	Total # of sites/pads
	GPD/person*	GPD/site or pad	Gallons/person	Gallon/site or pad			
<b>Modern Recreation Camp</b>	60	0	30	0	<b>0.00</b>		<b>0.0</b>
<b>Semi-Developed Camp w/ flush toilets</b>	20	0	10	0	<b>0.00</b>		<b>0.0</b>
<b>Semi-Developed Camp w/o flush toilets</b>	5	0	2.5	0	<b>0.00</b>		<b>0.0</b>
<b>RV Park</b>	N/A	100	N/A	50	<b>0.13</b>		<b>0.0</b>
<i>Number of people per camp site</i>							
<b>Roadway Rest Stop w/ flushometer valves</b>	7	3.5	8.8		<b>0.0</b>		

If applicable, enter number of people per camp site here.

If applicable, use this number in cell I8 or cell I9 on Page 1.

**4. Data Input for Calculating ERCs, Source and Storage**

Terakee Farms Water Company

**4.1 Projected ERCs Calculation (optional)**

Total Projected ERCs	47
Existing Residential Connections	0
Obligated Future ERCs (enter below)	47
Terakee Farms PRUD	206

Use this number in Cell I8 ("Number of residential connections") on Page 1 to calculate PROJECTED demand & req'ts (including both existing & future connections).

Diaphragm or air pressure tanks shall NOT be considered effective storage volume for (1) community systems, or (2) NTNC with significant demand UNLESS an exception has been granted.

Terakee Farms, Inc. currently owns and operates 508.04 acre feet of water in the area where the residential units will be located.

**4.2 Summary - Existing Sources** (enter in green cells below)

<b>Total Existing Source Capacity (in gpm)</b>	<b>0</b>
Maximum ERCs (assuming indoor use only)	0

**4.3 Summary - Existing Storage Tanks** (enter below)

<b>Total Existing Storage Cap. (in gallons)</b>	<b>0</b>
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