

DETERMINING YOUR PUMPOUT NEEDS

Given the availability of boat length information gathered during boat registration, assumptions can be made regarding the type of onboard sanitation equipment.

<u>Boat Length</u>	<u>Number of boats with toilets (percentage)</u>	<u>Type of system</u>
16'-26'	20 %	Portable toilets
26'-40'	50 %	Holding tanks
40'+	100 %	Holding tanks

It is assumed every boat which is occupied will require service once a weekend and that the occupancy rate during peak periods is 40% (Ross, N. Auto Parking in Marinas, IMI, Wickford, RI, 1989)

Dump Stations:

Dump Stations are stations where boaters with portable toilets, usually found on boats that are 16' to 26' in length, can dump their collected waste.

The calculation for Estimating Need for Dump Stations						
No. of Boats 16' - 26'	x	Number With Portable Toilets (20%)	x	Peak Occupancy Rate (40%)	=	BOATS REQUIRING DUMPING STATIONS
	X	0.2	x	0.4	=	

Boats Served Per Hour Facility (12)	x	Number of Hours of Operation Per Weekend. (24 - 12 for Saturday and 12 for Sunday)	=	Boats served Per weekend (288)
	x		=	

Now take the “Boats Requiring Dumping stations” and divide it by the “Boats served Per weekend” to get your estimated need for a dump station.

Pumpout Stations/Facilities:

Pumpout Stations/Facilities are stations where boaters with holding tanks, usually found on boats that are 16' or greater in length, can dump their collected waste.

The calculation for Estimating Need for Pumpout Stations						
No. of Boats 26' - 40'	x	Number With Holding Tanks (20%)	x	Peak Occupancy Rate (40%)	=	BOATS REQUIRING PUMPOUT STATIONS
	X	0.5	x	0.4	=	

Boats Served Per Hour Facility (4)	x	Number of Hours of Operation Per Weekend. (24 - 12 for Saturday and 12 for Sunday)	x	Boats served Per weekend (96)

Now take the “Boats Requiring Pumpout Stations” and divide it by the “Boats served Per weekend” to determine how many pumpout stations you will need. This could be used for portable pumpout carts or permanently installed pumpout stations.

Pumpout Vessels:

Pumpout vessels give the marina or facility that provides the services a greater area of coverage. Multiple boats can service several areas during the same time which may include mooring fields or boats that may be at anchor in the area of service.

How many pumpout vessels will be needed per the number of boats served per day/week?

Pumpout station holding tanks: Holding tanks should be sized appropriately for the volume of sewage generated and the frequency of removal of material from the holding tank. State and local requirements may govern the size of holding tanks. Generally, a 1,500-gallon holding tank can serve up to 100 boats with holding tanks. In terms of the number of boats serviced with a normal removal schedule, the following minimum sizes are suggested:

Recommended Total number of boats serviced with holding tanks	Recommended holding tank volume aboard the pumpout vessel (s)
1 to 20	300
21 to 40	600
41-60	900
61-80	1200
81-100	1500
100+	2000

Boats can have different sizes of holding tanks and if your boats service a larger area then you may require multiple vessels to meet the daily/weekly service needs. We cannot recommend any specific boat/model but there are multiple manufacturers that make varying sizes and models to meet your need. You can determine if one or more vessels will be needed and the size of the pumpout vessels holding tanks.

*This guidance is just an estimated recommendation. It is up to you to determine your need. If you have any questions, please contact us at CleanVessel.Act@dep.state.fl.us.