

Lavatory faucets are considered low flow by the EPA when rates are 1.5 gpm or less, and showerheads are considered low flow when rates are 2.0 gpm or less. The ability to install a CEE rated clothes washer allowed the largest reduction from a single fixture in the proposed homes. Based on evaluation of the estimated fixture flow rates, the proposed homes are planned to have specific low-flow toilets, showerheads, faucets and CEE rated clothes washers installed as part of the proposed low-flow design for the residences.

Proposed Low Flow Fixture Design Specifications

Fixtures that contribute flow to the proposed septic system are to be installed based on the following, or equal specifications:

- Toilets – Niagara brand, EPA WaterSense certified toilet at 0.8 GPF
- Lavatory Faucets – Niagara brand, EPA WaterSense certified aerator fittings at 0.5 gpm
- Kitchen Faucets – Niagara brand, EPA WaterSense certified aerator fittings at 1.5 gpm
- Bath Showerheads – Delta brand showerhead at 2.0 gpm
- Clothes Washers – CEE Rated unit with a WF of 3.2 or lower

Table 4. Proposed Low Flow Fixture Use Savings

Type & Quantity Replaced	Total Flow from Fixture (gpd per bedroom)	Conventional Fixture Use Rate	Proposed Fixture Standard Use	% Saved from Use	Total Flow Saved (gpd per bedroom)
Toilets (3)	28.8	4.8 gpf	2.4 gpf	50.0	14.4
Faucets (5)	24.0	8.0 gpm	3.5 gpm	56.3	13.5
Showerheads (2)	24.0	5.0 gpm	4.0 gpm	20.0	4.8
Clothes Washer (1)	19.2	7.0 WF	3.2 WF	54.3	10.4
				Total	43.1

Proposed Low Flow Fixture Design Summary

All of the faucets, toilets, showerheads and clothes washers at the Bridge Point Townhomes are planned to be installed with the above low flow specifications. Based on the peak daily flow of 120.0 gpd per bedroom for each proposed 1,350 gpd Presby system, it can be expected that the proposed low flow fixtures would save an additional 43.1 gpd per bedroom compared to conventional fixtures for a 3 bedroom home. This brings the peak design flow down to 76.9 gpd per bedroom with the proposed 15 bedrooms per system. This leaves an additional peaking factor of 1.17, and is also a conservative figure considering the 2,500 gpd septic tank is still sized for normal flows.