

## RO pretreatment options

Water Source	Critical Water Parameter	Suggested Treatment Equipment
River	NTU > 25 <sup>†</sup>	Clarifier <sup>†</sup> + MMF or UF/MF
	NTU 10-25	MMF or UF or MF with Coagulant
	NTU < 10	MMF or UF or MF (Coagulant may be needed)
Surface water Lake	Hard water and TOC	Lime softener + Clarifier MMF
	NTU > 25 <sup>†</sup>	Clarifier <sup>†</sup> + MMF or UF/MF
	NTU < 25	MMF or UF/MF
Well Water	Iron and manganese	Chlorination + MMF Greensand Filter
	NTU < 10	MMF or UF/MF
Brackish Water	NTU > 10	MMF
	NTU < 10	UF/MF or MMF
Sea or Ocean	NTU > 50	Clarifier <sup>†</sup> + MMF
	NTU < 50	UF or MF - Check with MF supplier
	NTU < 25	UF/MF

TOC= Organics, MF= Micro filtration, UF= Ultrafiltration, MMF= Multimedia Filters

<sup>†</sup>Total suspended solids greater than 100 mg/L require clarification.