

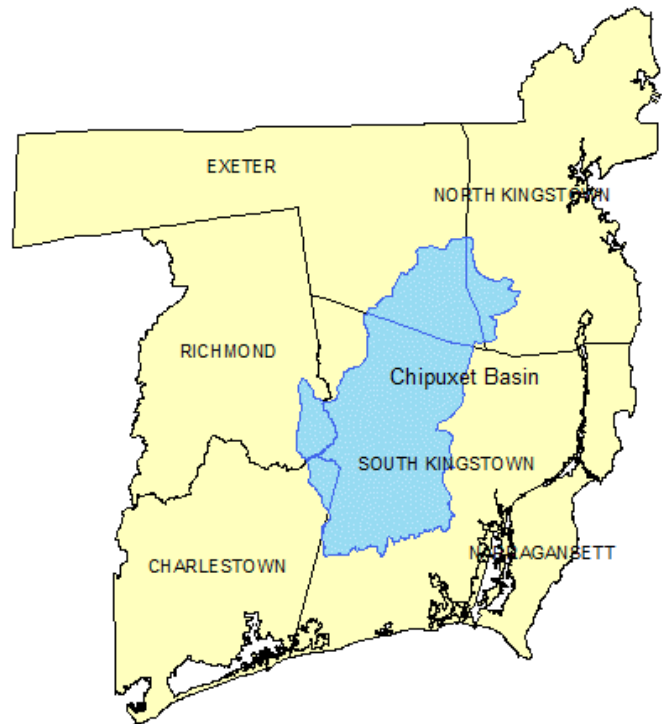
The Chipuxet Basin

The Chipuxet drainage basin land area totals 36.93 square miles in the Towns of South Kingstown, Exeter, North Kingstown, Richmond, and Charlestown. The basin supports public water supplies, agriculture, a recreational use (Yagoo), and private wells. The Chipuxet provides most of the public water supply of two towns-Narragansett and South Kingstown.

Local land use decisions impact the Chipuxet for the Towns that overlay the basin and Towns that rely on water from the basin. Density and type of supply impact recharge and runoff characteristics affecting both water quantity and quality.

Currently, peak water demands exceed state resource protection goals. The Water Resources Board is pursuing several initiatives in this basin to satisfy and manage peak water demands and improve the health of the Chipuxet watershed. The program seeks to:

- Reduce peak withdrawals during low flow periods (July – September)
- Reduce peak demands during low flow periods (July – September)
- Develop new or alternate sources to alleviate summer supply issues.
- Explore other techniques (aquifer recharge, dam management, desalination)



Southern Rhode Island

The Southern Region is characterized by its extensive (and concentrated) use of groundwater, seasonal population peaks, no storage (reservoirs), and important agricultural uses. Groundwater systems are inherently vulnerable as they do not contain storage that mitigates short and long term drought to provide protection for the environment. WRB analysis shows that the existing water supplies are not adequate to meet the current average or peak summer demands when the Resource Protection Goal is applied. Intermediate demand projections and build out scenarios demonstrate a clear need for not just conservation, but also new sources of water. The magnitude of the demands is much larger than what we expect to achieve through conservation, therefore while we advance our conservation programs, new sources must be planned and eventually developed. The table below shows the estimated demands compared to the Resource Protection Goal.

Water Supply Average Day Demand (ADD) with Resource Protection Goal, Southern Region

Surplus/Deficit (MGD)	2005	2025 65 GPCD	Buildout 65 GPCD
Average	-2.0	-6.6	-14.3
Summer	-12.3	-19.8	-32.0

Short and long term strategies are contemplated to ensure reliable water supplies in the short and long term. For more information visit the [WRB Strategic Plan](#).