after it has passed through turbine generators. Approximately 75 percent of our thermal steam generating capacity in 2019 used closed-cycle cooling systems that evaporate water in a recirculating tower or a dedicated pond to achieve cooling (consumptive use). The balance of our thermal steam plants used open-cycle cooling systems where water is drawn from a waterbody and returned directly to source, or dry cooling technologies that use little or no water in the cooling process. In the case of open-cycle cooling systems, the only consumption is a small percentage of evaporative loss in the source water body due to the increased temperature of the cooling water discharge.

Each year, we report our water use and conservation activities in our response to the CDP water disclosure questionnaire. In 2019, we participated in the CDP Water Questionnaire and received a management level score of B- which recognizes Exelon's implementation of management actions to address water security. For information on the types of cooling systems used at each of our generating stations, please see the Generation Station Appendix and our 2019 CDP Water Response.

Addressing Water Availability Risks

Climate change poses a threat to water supplies that are critical to our business, communities and wildlife. We closely monitor drought risk and changing precipitation patterns that have the potential to impact electricity production. Water-related climate change risks may affect our generation fleet by disrupting cooling water supplies and by restricting cooling water. These conditions can limit production levels at certain times for facilities in water-scarce areas.

Exelon addresses these risks in a variety of ways. By helping customers manage and reduce their energy demand, we reduce our impacts on local water resources and improve our resiliency. We evaluate and use new cooling technologies and thermal monitoring systems to better respond to higher ambient air and water temperatures in the future. We engage with organizations that are on the cutting-edge of research on potential water impacts from climate change.

EXELON GENERATION 2019 WATER USE BY WATERSHED

Watershed Zone	Consumptive Use	Non-consumptive Use	Total Water Use
Boston Harbor	101	7,624	7,725
Delaware River Basin	12,495	114,283	126,777
Chesapeake Bay	163,313	1,218,587	1,381,900
Susquehanna	34,215	10,927,326	10,961,541
Upper Mississippi	31,291	2,648,059	2,679,350
Texas-Gulf	1,583	154,074	155,657
Lake Ontario	5,064	518,743	523,807
Southern California[1]	52	0	52
Total (million gallons)	**248,114**	**15,588,696**	**15,836,810**
Total Fresh Water	248,114	14,362,516	14,610,630
Total Salt/Brackish Water	0	1,226,180	1,226,180

1 Includes the Antelope-Freemont Valley and Fall River basins of Southern California.

In 2019, we continued work on our climate change vulnerability assessment as part of the DOE Partnership for Energy Sector Climate Resilience. This assessment reviewed the climate-related risks to all our operating companies and in all geographical areas where we operate. We already began addressing many of these risks to improve the resilience of our operations. In the coming years, we will continue to identify and implement best practices within the industry so we can minimize impacts to watersheds and have enough water available to continue to provide low-carbon electricity to our customers.