

Trump National Golf Club Colts Neck

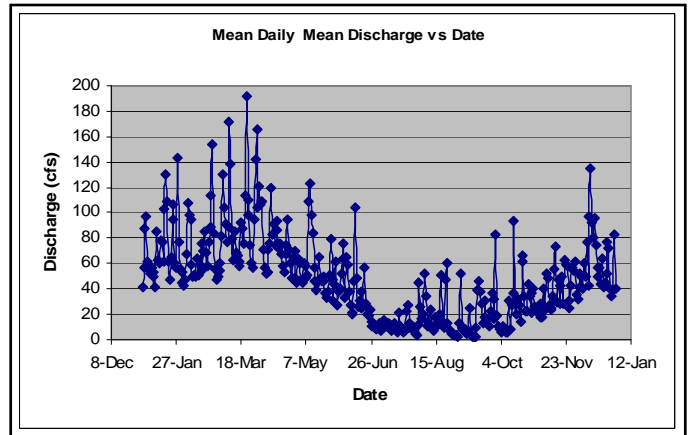
Water Allocation Assessment

Colts Neck Township, NJ

Trump National Colts Neck Golf Course is an 18-hole course located in Colts Neck, NJ that operates an irrigation system under an existing New Jersey Department of Environmental Protection (NJDEP) permit. The former landowner, Shadow Isle Golf Club, violated the terms of its water diversion authorization and faced enforcement actions from the NJDEP. Princeton Hydro was hired to expand the golf course water supply threshold by selective removal of excess stream flow during periods of storm events and high flow. Princeton Hydro assisted in the coordination of hydrologic data collection, modeling, and interpretation. Princeton Hydro also assisted the Shadow Isle Golf Course in the development of minimum passing flow statistical data and the interpretation of surface water monitoring data collected through the utilization of installed continuous recording flow monitoring equipment.



Our scope entailed a detailed assessment of local water resources, including the compilation and analysis of existing data and reports pertaining to the various water resources available for use by the golf course. Data sources included GIS data, published maps, local and regional hydrogeologic reports, and data on local well yields. Site topography and stormwater plans were also reviewed to assess the extent of available stormwater resources and the feasibility of redesigning the course ponds to improve runoff reclamation.



Princeton Hydro prepared a site-specific water balance that included rates of groundwater recharge, stormwater runoff, and water losses due to evapotranspiration. The water budget analysis provided quantified estimates of the rates and total volumes of water entering and leaving the site and the rates and volumes of surface sources that could be safely captured and used without inducing adverse impacts to others or adjacent natural systems. The results of these analyses were provided to the client in a report that included recommendations of ways to better conserve, use, and plan irrigation water usage for the golf course.

	Calculated Discharge, cfs		
	Mine Brook	Marl Brook	Total
Watershed (miles ²)	3.73	1.51	5.24
January	7.12	2.89	10.01
February	7.49	3.04	10.53
March	8.86	3.60	12.46
April	8.22	3.34	11.56
May	6.20	2.51	8.71
June	4.84	1.96	6.81
July	4.01	1.63	5.64
August	4.00	1.62	5.62
September	3.96	1.61	5.56
October	4.07	1.65	5.73
November	5.62	2.28	7.90
December	7.10	2.88	9.97
Annual Average	5.96	2.42	8.37

The resulting data demonstrated that the diversion and storage of stormwater runoff during set times of the year would have no impact of the safe yield and replenishment of the Swimming River Potable Water Reservoir located downstream of the site and would not impact the minimum passing flow, the hydrology, and the ecology of the adjacent Marl and Mine Brooks and their associate wetland environs.