



CARIBBEAN SEA



CARIBBEAN SEA

**Karstifiable rocks
(potential karst aquifer)**

Continuous carbonate rocks

WOKAM database;
©BGR, IAH, KIT and UNESCO 2017



0 40 80 Km

Country	MIKAS springs	Coordinates / Nearby City	Spring discharge (Q in l/s,min/av/max) / tapped or not	Criteria* in order / Main justification */ H-historic, A-aesthetic, S-scientific, E-Economic, Ec-ecologic	Data collected by
Jamaica	1. Dornoch Head (Dornock) Blue Hole	18°23'47.14"N 77°26'38.64"W Z = 133 m asl St. Ann Parish, Rio Bueno	575/7487/175000 Stream dammed 6km downstream, Consumptive: 388 l/s Non-Consumptive (Hydropower): 10168 l/s	E, S, Ec, H, A <i>The Dornoch Head Blue Hole is considered the largest karst resurgence on the island that maintains the base flow of the Rio Bueno, a major river on the northern coast of Jamaica. The Dornoch Head Blue Hole, located on an old sugar plantation, has great economic significance. It provides potable water supply, irrigation supply and hydropower. Electricity is generated by two hydroelectric power plants (Rio Bueno A & B) that supplies 2.5 and 1.1 MW to the power grid, respectively. It should be noted that this spring also supports the local eco-tourism sector as the Rio Bueno River hosts various touristic activities such as river tubing, and rafting. This blue hole has a distinct blue hue with its steep sided limestone slopes and overhanging green vegetation creating a tranquil and serene atmosphere for visitors. During peak floods there is high turbidity.</i>	Shavel Watson, Geoffrey Marshall
	2. Roaring River Blue Hole	18°17'13.65"N 78°2'48.25"W Z = 82-106 m asl Westmoreland Cabarita HG basin	481/10107/ 30070 The river is dammed downstream and abstracted for public supply by the National Water Commission/ (575 l/s).	E, H, A, Ec, S <i>The two springs - blue holes feed the Roaring River. These are quiet upwellings of large volumes of water under considerable hydrostatic head, over 30 m deep in white Eocene limestones (Sweeting 1958). There is also a complex the Roaring River Cave system interconnected with the springs, with speleothems. The Roaring River Blue Holes are located on an old colonial plantation produced sugar, rum and cattle. The cave system was thought to be used as an escape for slaves during the 17 Ct. The blue holes and cave system drive the localized economy through agricultural and various tourism activities. The springs produce enough water to supply potable domestic water to over 100,000 residents in the parish of Westmoreland, Jamaica.</i>	Shavel Watson, Geoffrey Marshall

MIKAS – Dornoch Head (Dornock) Blue Hole



Dornoch Blue Hole in low water season (Photo by G. Marshal)



Dornoch Blue Hole in high water season, when water becomes very turbine

MIKAS – Roaring River Blue Hole (Springs)



Roaring River Blue Hole #1 in Botanical Garden (Photo: G. Marshall)



Roaring River Blue Hole #2 (Photo: S. Watson)



Roaring River Dam (Photo: S. Watson)



Roaring River Cave (Photo: S. Watson)