

Bedrock Water Quality Map TYNGSBOROUGH Arsenic Probability

This map is intended to complement the USGS Scientific Investigations Report 2011-5013, Arsenic and Uranium in Water from Private Wells Completed in Bedrock of East-Central Massachusetts: Concentrations, Correlations with Bedrock Units, and Estimated Probability Maps. That report presents the results of a statistical study of bedrock water quality based primarily on 478 samples from private wells. This is a relatively small number of samples for such a large and diverse study area. The confidence intervals around probabilities used here are broad. Users are urged to carefully read the original report.

The geologic map underlying this work is at a scale of 1:250,000 or about 4 miles per inch. Although presented on a two dimensional map, bedrock geology is a three dimensional phenomenon. Contact zones almost never go straight down. Because this town map is at a much larger scale than the original, the necessity of presenting 3D geology in only two dimensions, and the wide confidence intervals in the statistical analysis, users should interpret this map as a general indicator of expected water quality. The only way to be sure of the quality of water in any given well is to have that water tested.

% Probability of Exceeding the Public Drinking Water Standard of 10 Micrograms per liter (10 PPB)	City/Town Statistics Acres	Percent
< 1.0%	0	0
1.0% to 4.0%	0	0
5.0% to 10.0%	0	0
10.0% to 25.0%	11204.4	96.7
No Data	376.7	3.3
Total	11581.1	

MAP LEGEND

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| <ul style="list-style-type: none"> Pond, Lake or Ocean Reservoir Fresh Water Wetlands Cranberry Bog Salt Water Wetlands Perennial Stream; Shoreline Intermittent Stream Intermittent Shoreline Ditch/Canal Aqueduct Dam Pipeline Powerline Active Rail Lines Limited Access Highway Multi-lane Hwy, Not Limited Access Other Numbered Highway Major Road, Collector Minor Road, Ramp MA Town Boundary MA Interstate Boundary County Boundaries DEP Region Boundary | <ul style="list-style-type: none"> Town Halls Fire Stations Local Police Station State Police Station County Sheriff Station Public School Private School Charter School Collaborative Program School Special Education School Private College Public College Libraries Hospital with ER Hospital Nursing Home Rest Home MBTA Station Airports Prison Camp Campground Cemetery Convention Center Court House Field - Playground Fish Hatchery Golf Course Industrial Park Lighthouse Marina Monument Museum Park Parking Lot Pier - Wharf Places of Worship Post Office Rest Home Shopping Center Ski Area Sports Facility Theater Tower |
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Contour Interval 3 Meters
Mass StatePlane NAD83 Coordinates shown in RED

Map Created March, 2011
Deval Patrick
Governor
Richard K. Sullivan Jr.
Environmental Affairs



Map Scale 1:20000
0 2,000 4,000 6,000 8,000 Feet
0 1 2 Miles
0 1 2 Kilometers
1 inch = 1,667 feet 1 inch = 508 meters

DATA SOURCES
TOPOGRAPHIC CONTOURS: MASSGIS, 1:5,000, 3 Meter contour elevations, generated from digital ortho. DTMs.
WETLANDS: USACE National Wetlands Inventory (NWI) 1:50,000, 1:250,000, 1:500,000, 1:1,000,000, 1:2,500,000, 1:5,000,000, 1:10,000,000, 1:25,000,000, 1:50,000,000, 1:100,000,000, 1:250,000,000, 1:500,000,000, 1:1,000,000,000, 1:2,500,000,000, 1:5,000,000,000, 1:10,000,000,000, 1:25,000,000,000, 1:50,000,000,000, 1:100,000,000,000, 1:250,000,000,000, 1:500,000,000,000, 1:1,000,000,000,000, 1:2,500,000,000,000, 1:5,000,000,000,000, 1:10,000,000,000,000, 1:25,000,000,000,000, 1:50,000,000,000,000, 1:100,000,000,000,000, 1:250,000,000,000,000, 1:500,000,000,000,000, 1:1,000,000,000,000,000, 1:2,500,000,000,000,000, 1:5,000,000,000,000,000, 1:10,000,000,000,000,000, 1:25,000,000,000,000,000, 1:50,000,000,000,000,000, 1:100,000,000,000,000,000, 1:250,000,000,000,000,000, 1:500,000,000,000,000,000, 1:1,000,000,000,000,000,000, 1:2,500,000,000,000,000,000, 1:5,000,000,000,000,000,000, 1:10,000,000,000,000,000,000, 1:25,000,000,000,000,000,000, 1:50,000,000,000,000,000,000, 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