

Bedrock Water Quality Map

GEORGETOWN

Arsenic Probability

This map is intended to compliment 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%	1788.9	21.2
5.0% to 10.0%	1493	17.8
10.0% to 25.0%	5133.1	61
No Data	0	0
Total	8410.2	

MAP LEGEND

- Pond, Lake or Ocean

Reservoir

Fresh Water Wetlands

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

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

Hospital with ER

Hospital

Nursing Home

Major Road, Collector

Minor Road, Ramp

MA Town Boundary

MA Interstate Boundary

County Boundaries

DEP Region Boundary

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

Public Pool

Shopping Center

Ski Area

Sports Facility

Theater

Tower

Contour Interval 3 Meters

Mass StatePlane NAD83 Coordinates shown in RED

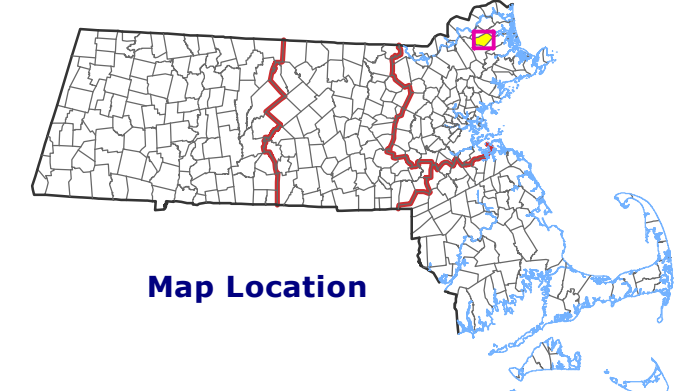
Map Created March, 2011

**GEORGETOWN
FALLS WITHIN THE
MassDEP NORTHEAST Region**

Deval Patrick
Governor
Richard K. Sullivan Jr.
Secretary of Energy and
Environmental Affairs

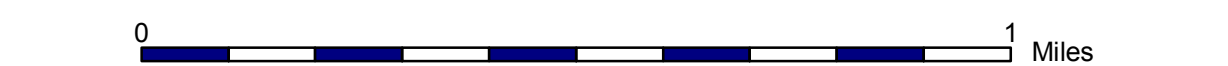
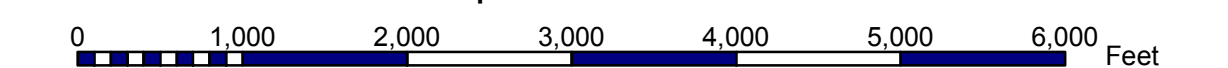


Massachusetts Department of
Environmental Protection



Map Location

Map Scale 1:14000



1 inch = 1,167 feet 1 inch = 356 meters

DATA SOURCES

TOPOGRAPHIC CONTOURS: MassGIS, 1:5,000, 3 Meter contour elevations, generated from digital ortho MDTs.

WETLANDS: USACE Resource Mapping Project (RMP)/USGS/NA DEP/MassGIS, Source Scale 1:12,000 to 1:40,000. Wetland information shown on this map consists of several wetlands datasets, including the 88 Orthophoto Wetlands (1:12,000) and USGS Hydrology Wetlands (1:25,000).

GEOGRAPHIC FEATURES: USGS/MassGIS/USGS Geographic Names Information System (GNIS) features matched to parcel data or orthophoto. Hydrography names taken from USGS NFD features and placed using Nexcel.

HYDROGRAPHY: USGS/MassGIS, 1:25,000 or less. Hydrography from the USGS National Hydrography Database except within public water supply watersheds where the resolution is approximately 1:100,000.

POLITICAL BOUNDARIES: MassGIS. This political boundary data layer has been created from latitude and longitude coordinates found in the 88 volume harbor and Lands Commission Town Boundary Atlas (1:25,000).

ROADS: Mass Department of Transportation 1:50,000. Road centerlines aligned with 1:50,000 Orthophoto. Attributes from DOT roads database.

TRAINS AND TRAILLINES: Mass Department of Transportation. Trains @ 1:50,000. Pipelines and Powerlines @ 1:250,000.

This map is for illustrative purposes only. It represents the best statewide data available at the date of printing. There are other important natural resources that are not shown on this map because the digital spatial data do not exist.

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