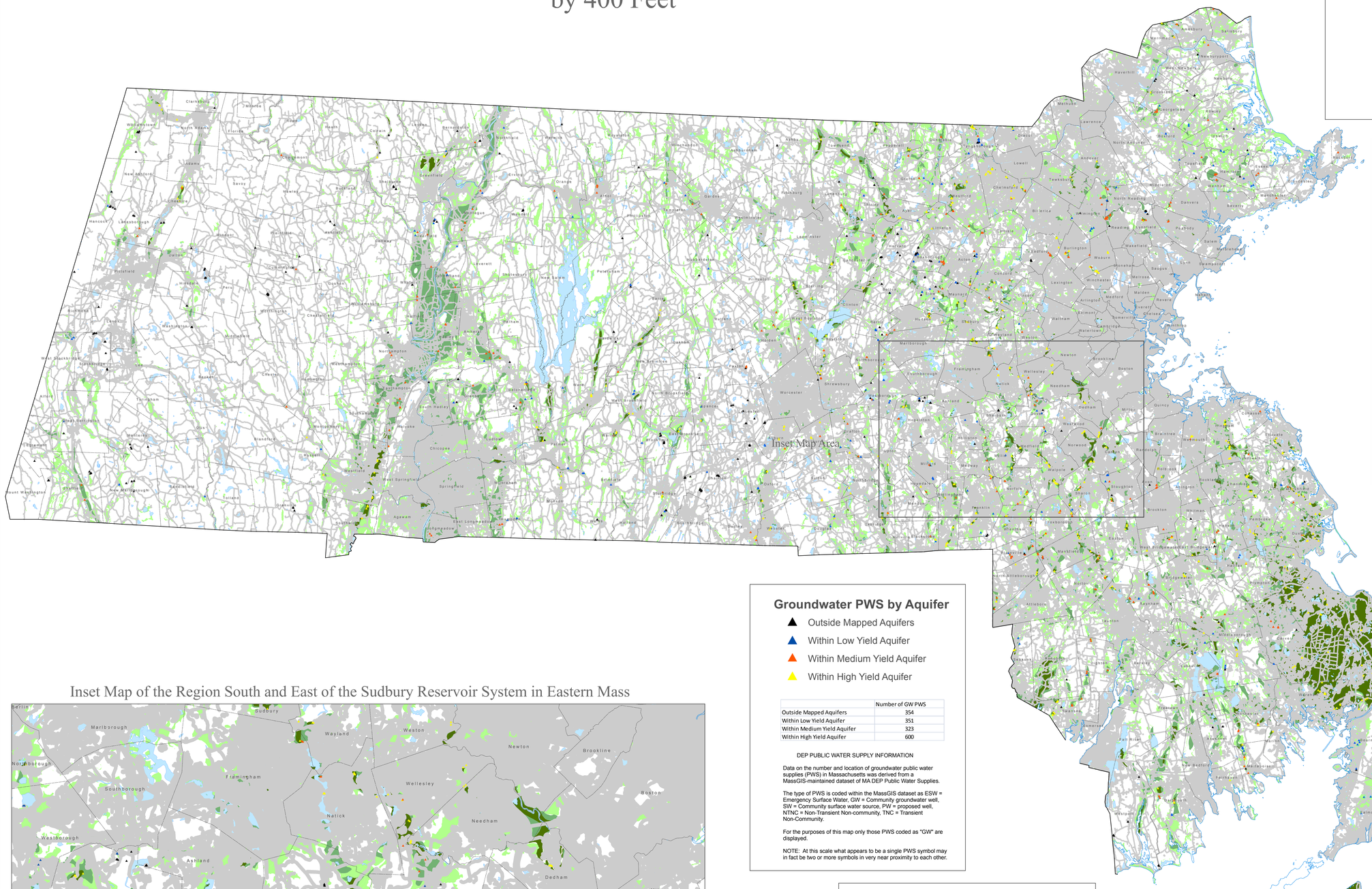
Remaining Aquifer Areas
After Buffering Selected Land Uses and All Road Categories
by 400 Feet

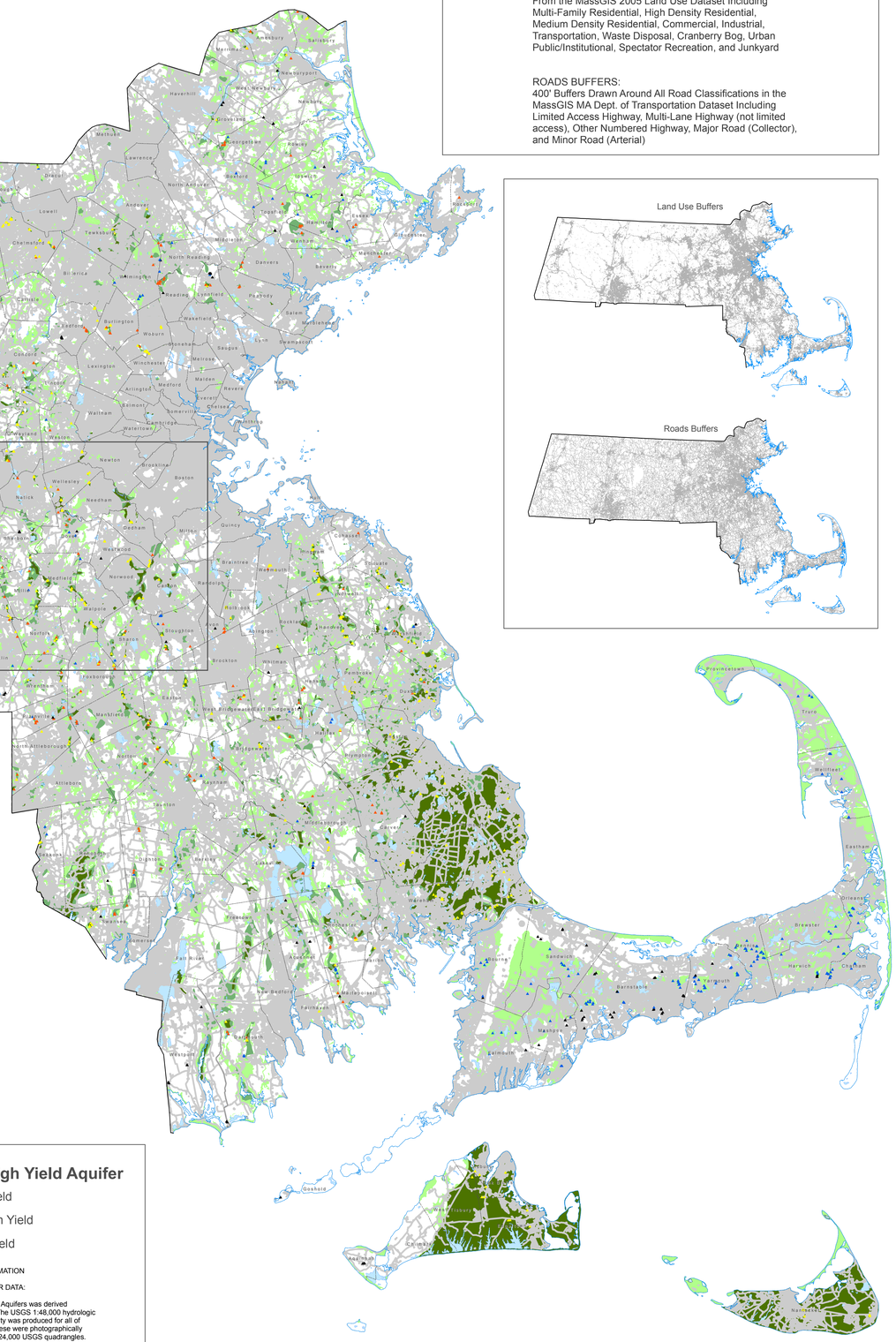


Combined 400' Buffers Around Selected Land Uses and All Categories of Roads in Light Gray

BUFFERING INFORMATION

LAND USE BUFFERS:
400' Buffers Drawn Around Selected Land Use Categories From the MassGIS 2005 Land Use Dataset Including Multi-Family Residential, High Density Residential, Medium Density Residential, Commercial, Industrial, Transportation, Waste Disposal, Cranberry Bog, Urban Public/Institutional, Spectator Recreation, and Junkyard

ROADS BUFFERS:
400' Buffers Drawn Around All Road Classifications in the MassGIS MA Dept. of Transportation Dataset Including Limited Access Highway, Multi-Lane Highway (not limited access), Other Numbered Highway, Major Road (Collector), and Minor Road (Arterial)



Groundwater PWS by Aquifer

- Outside Mapped Aquifers
- Within Low Yield Aquifer
- Within Medium Yield Aquifer
- Within High Yield Aquifer

	Number of GW PWS
Outside Mapped Aquifers	354
Within Low Yield Aquifer	351
Within Medium Yield Aquifer	323
Within High Yield Aquifer	600

DEP PUBLIC WATER SUPPLY INFORMATION

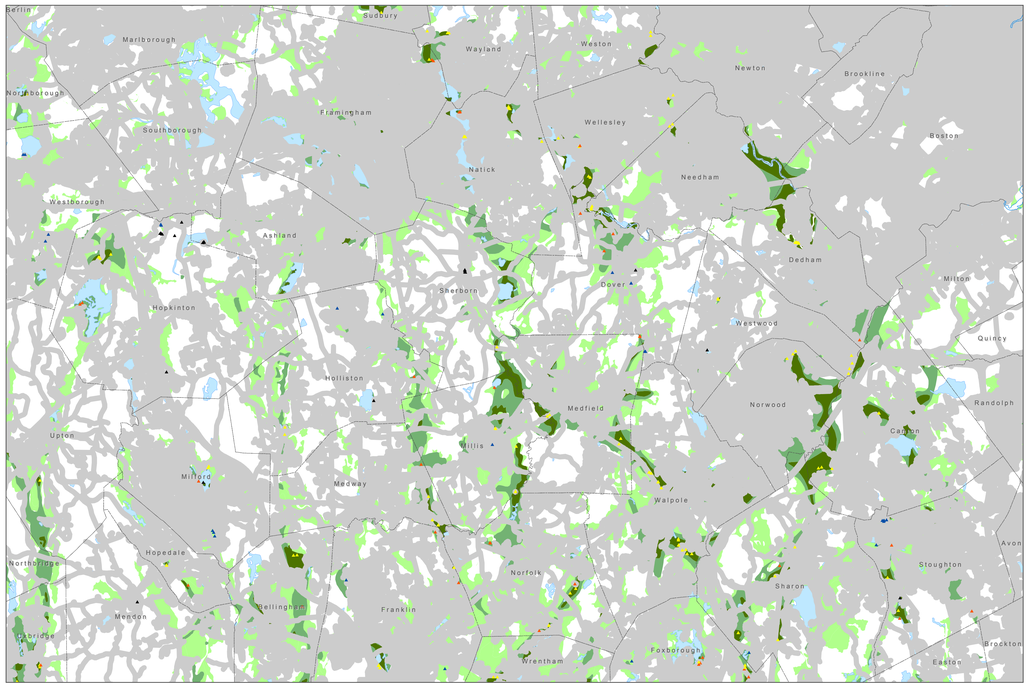
Data on the number and location of groundwater public water supplies (PWS) in Massachusetts was derived from a MassGIS-maintained dataset of MA DEP Public Water Supplies.

The type of PWS is coded within the MassGIS dataset as ESW = Emergency Surface Water, GW = Community groundwater well, SW = Community surface water source, PW = proposed well, NTNC = Non-Transient Non-community, TNC = Transient Non-Community.

For the purposes of this map only those PWS coded as "GW" are displayed.

NOTE: At this scale what appears to be a single PWS symbol may in fact be two or more symbols in very near proximity to each other.

Inset Map of the Region South and East of the Sudbury Reservoir System in Eastern Mass



Low, Medium, and High Yield Aquifer

- Low Yield
- Medium Yield
- High Yield

AQUIFER INFORMATION

MEDIUM AND HIGH YIELD AQUIFER DATA:

The extent of Medium and High Yield Aquifers was derived from the MassGIS Aquifer Dataset. The USGS 1:48,000 hydrologic atlas series on groundwater favorability was produced for all of Massachusetts. The basemaps for these were photographically reduced and spliced together from 1:24,000 USGS quadrangles. Each manuscript covers one of the major drainage basins. They have been individually researched and published by the USGS-WRD starting in the 1960s and continuing to the present. Several have been compiled but not yet published. In these cases the draft manuscripts were automated.

The definition of high and medium yield varies between panels, as it does on the source manuscripts. While the medium yield for most basins is between 100 and 300 gpm (gallons per minute), this range may vary greatly from basin to basin. High yield definitions vary from basin to basin as well.

LOW YIELD AQUIFER DATA:

A Low Yield Aquifer delineation is not available within the MassGIS Aquifer dataset described above and the detailed USGS 25k surficial geology data is currently only available for a small portion of Massachusetts. In the absence of these two data sources the "Sand and Grave Depositsl" classification within the USGS 250k Surficial Geology dataset was used to delineate the approximate extemt of low yield recharge areas.

prp @ DCR DWSP OWR 1/6/11