

Vulnerable Wetlands in Massachusetts

MassDEP's Vulnerable Wetlands Video for Stormwater Management Planning

August 8, 2015

Vulnerable Wetland Maps – Disclaimer

The MassDEP wetland and waterway boundaries shown on the maps are for planning purposes only. They have been interpreted from stereo color-infrared (CIR) photography by staff at UMASS Amherst with selected field verification by MassDEP. They do not represent, and should not be used as, wetlands delineations under the Massachusetts Wetlands Protection Act (WPA), M.G.L. c.131, §40 and its regulations. Wetland boundary delineation for permitting under the WPA must use ground surveys and follow the procedures and criteria defined in the WPA regulations at 310 CMR 10.00.

The wetland and other data on these maps represent the best data available at the time of printing. These maps include the NHESP Certified and NHESP Potential Vernal Pool data layers. Please note that NHESP Potential Vernal Pools are not equivalent to Certified Vernal Pools.

Questions regarding the maps should be directed to the MassDEP Wetlands Program at (617) 292-5500. Also see the Data Sources for Vulnerable Wetlands section for information on specific data layers.

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Data Sources for Vulnerable Wetlands Maps

Questions regarding these maps should be directed to the MassDEP Wetlands Program at (617) 292-5500. Also see below for information on specific data layers.

Data Distributed through MassGIS (<http://www.mass.gov/itd>)

List of Impaired Waters *MassDEP 2010 Integrated List of Waters (305(b)/303(d)) – November 2011* <http://www.mass.gov/itd/wbs2010>.

The MassDEP Division of Watershed Management 2010 Integrated List of Waters data layer represents the combined reporting elements required under the Federal Clean Water Act, sections 305(b) and 303(d). Under that Act, each state must administer a program to monitor and assess the quality of its surface waters and provide periodic status reports to the U.S. Congress, the U.S. Environmental Protection Agency, and the public. For questions regarding the programmatic content of these data contact Arthur Johnson (508-767-2873) or Richard McVoy (508-767-2877) in the MassDEP Watershed Planning Program.

MassDEP Wetlands *MassDEP Wetlands (1:12,000) – January 2009* <http://www.mass.gov/itd/wetdep>. Wetlands are interpreted from 1:12,000 scale, stereo color-infrared photography by staff at UMASS Amherst, with selected field verification by the MassDEP Wetlands Conservancy Program (WCP). This data is developed by the MassDEP GIS Program and the WCP. Questions may be directed to the WCP at 617-292-5907.

MassDEP Hydrography (USGS-based) *MassDEP Hydrography (1:25,000) – March 2010* <http://www.mass.gov/itd/hydro25k>. This layer is an enhanced version of the older U.S. Geological survey 1:25,000 Hydrography datalayer. It is a hybrid of data from USGS Digital Line Graphs (DLGs), scanned mylar separates obtained from the USGS, digitized hydrographic features from paper USGS 1:25,000 Topographic Quadrangle maps and data extracted from the MassDEP Wetlands datalayer. It is maintained by the MassDEP GIS Program.

Subwatersheds *Drainage Sub-basins – December 2007* <http://www.mass.gov/itd/subbas>. MassGIS produced a statewide datalayer of the approximately 2500 sub-basins as defined and used by the USGS Water Resources Division and the Mass Water Resources Commission, and as modified by Executive Office of Environmental Affairs (EOEA) agencies. These sub-basins were aggregated together to make the 28 basins of the Major Basins Datalayer. This datalayer is maintained by MassGIS and the MassDEP GIS Program. For information regarding this data layer, contact the MassDEP GIS Program at (617) 292-5500.

NHESP Certified Vernal Pools *NHESP Certified Vernal Pools – updated continually* <http://www.mass.gov/itd/cvp>. This datalayer contains points for all vernal pools that have been certified by the [Natural Heritage & Endangered Species Program](#) (NHESP) according to the Guidelines for [Certification of Vernal Pool Habitat](#) (MA Division of Fisheries & Wildlife, 2009). Questions about the creation of this datalayer should be directed to NHESP at 508-389-6375. For questions relating to the certification of Vernal Pools, please call 508-389-6373.

NHESP Potential Vernal Pools *NHESP Potential Vernal Pools – December 2000* <http://www.mass.gov/itd/pvp>. This datalayer identifies the locations of potential, unverified, vernal pool habitats. Questions on this datalayer should be directed to NHESP at 508-389-6375.

Public Water Supplies – April 2012 <http://www.mass.gov/itd/pws>. The Public Water Supply (PWS) datalayer contains the locations of public community surface and groundwater supply sources and public non-community supply sources as defined in 310 CMR 22.00. The MassDEP GIS Program, in cooperation with MassDEP Drinking Water Program (DWP) maintains this datalayer.

Zone II and Interim Wellhead Protection Areas *MassDEP Wellhead Protection Areas (Zone II, IWPA) – April 2012*

<http://www.mass.gov/itd/groundwater-wspa>. A Zone II is a wellhead protection area that has been determined by hydro-geologic modeling and approved by MassDEP's Drinking Water Program (DWP). In cases where hydro-geologic modeling studies have not been performed and there is no approved Zone II, an Interim Wellhead Protection Area (IWPA) is established based on well pumping rates or default values. These data layers are maintained by the MassDEP GIS Program in cooperation with the MassDEP DWP Technical Services group.

Surface Water Supply Protection Areas *Zone A,B,C – April 2012* <http://www.mass.gov/itd/surfacewater-wspa>. Surface Water Supply Protection Areas delineate those areas included in 310 CMR 22.00, the Massachusetts Drinking Water Regulations, as Surface Water Supply Protection Zones. The MassDEP GIS Program maintains this datalayer.

Areas of Critical Environmental Concern & Public Water Supply Watersheds both are found in *Outstanding Resource Waters – March 2010* <http://www.mass.gov/itd/orw>. This datalayer delineates areas in which certain waters are afforded Outstanding Resource Water protection under the Massachusetts Surface Water Quality Standards. The MassDEP GIS Program maintains this datalayer.

Land Use 2005 *Land Use (2005) – June 2009* <http://www.mass.gov/itd/lus2005>. The Land Use (2005) datalayer is a Massachusetts statewide, seamless digital dataset of land cover/land use, created using semi-automated methods, and based on 0.5 meter resolution digital ortho imagery captured in April 2005. MassGIS maintains this layer. For more information contact Philip John at philip.john@state.ma.us.

Soils *NRCS SSURGO-Certified Soils – November 2012* <http://www.mass.gov/itd/soils>. The Soils datalayer was automated from published soils surveys provided by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). All soils data released by MassGIS have been "SSURGO-certified," which means they have been reviewed and approved by the NRCS and meet all standards and requirements for inclusion in the national release of county-level digital soils data. These datalayers are maintained by NRCS.

USGS Topographic Maps *USGS Topographic Quadrangle Images – December 1995, June 2001* <http://www.mass.gov/itd/imquad>.

Data Not Distributed through MassGIS

Massachusetts Index of Ecological Integrity Conservation Assessment and Prioritization System (CAPS) Maps, March 2011. Developed by UMASS Amherst, Mass Landscape Ecology Lab, www.masscaps.org with participation by MassDEP. CAPS has been adopted by MassDEP for use in wetland monitoring and assessment. For questions on the CAPS results please contact Scott Jackson (sjackson@umext.umass.edu).

DigitalGlobe 2011 Ortho Imagery MassGIS does not own this imagery. MassGIS, on behalf of the Commonwealth of Massachusetts, has licensed this product for use by employees of the Commonwealth and all its branches, boards, commissions, agencies, authorities, municipalities and other political subdivisions and other public entities created by the Legislature. This data can be viewed publicly using BING. It can also be used as a basemap in MassGIS' online data-viewer [OLIVER](#).

Mapped Stormwater Outfalls The towns of Canton, Sharon, and Walpole mapped drainage data and provided it to MassDEP for this project. Questions on the creation of the data should be directed to the towns.

Vernal Pool Clusters were developed by MassDEP Wetlands and Waterways staff for this project, using the criteria listed in the text.