



Welcome to the second edition of the **MassGIS GISette**, a bi-monthly newsletter emailed to our users and partner agencies to keep them informed of data updates and on-going technology developments. Our first issue was a great success, with no one opting out, several opting in and a marked increase in our website traffic. So that we can continue to deliver a useful and informative newsletter, we have decided to go to a bi-monthly (every other month) schedule. You may “opt-out” of receiving this newsletter by replying to this e-mail with “No Thanks.” in the subject header. This newsletter will not replace more focused emails that many of you currently receive.

Message from the Director:

Good news dept.: We’re really pleased about being ready to test OLIVER (see Aleda’s note) and about version 2 of the ArcView 8 Viewer that will be going out in May (Susan Brunton’s excellent work.) We’re kicking off development of an enhanced system for data download (Automated Data Distribution or ADD) that will allow users on the Arc8 platform to incrementally update copies of MassGIS data so stay tuned for news on that one.

Other news dept.: Those of you following the budget debates might have noticed that the House Ways and Means Committee budget cut our program significantly, from \$385,000 to \$278,000 - we are waiting to see what the Senate will do.

As always, send us your comments and suggestions – Christian.jacqz@state.ma.us

Imagery

Color Orthophotos for the Islands

Late last year, MassGIS designated capital funding to complete the color orthophoto project so that it included Marthas Vineyard, Nantucket, and the Elizabeth Islands. This work will be performed by one of the current orthophoto contractors, Chas. H. Sells. The photography was flown earlier this month, and the project schedule calls for the images to be delivered by late summer 2003.

Interactive Online Mapping

MassGIS has been working on additional interactive **online mapping initiatives**.

A recent addition using a combination of ArcIMS with a new architecture called OpenGIS web map services is the [Census 2000 Demographic Viewer focusing on Municipalities](#). This new Census Viewer focuses on municipal boundaries instead of legislative districts, providing an online viewer more geared to the public instead of to legislators.

The user is able to view 63 demographic themes in 6 categories: Population/Age, Housing, Language, Income, Citizenship, Race

Comments, Criticism, and Suggestions

MassGIS welcomes feedback and suggestions on its products and services. This month we'd like to focus on Online Mapping. [MassGIS's Online Mapping page](#) currently contains 9 ArcIMS HTML viewers and 5 Web Map Services viewers, showcasing such data as color aerial photos, topographic maps, census data, wetlands, and community preservation. If you have any comments, questions or problems with the map viewers on this page please let [Aleda Freeman](#) know. Tell us which viewer you are using, and if you are experiencing problems - tell us also the type of browser (e.g. Internet Explorer or Netscape, etc), the version of the browser, information on your internet connection (e.g. service provider, type of connection - dial up modem, cable, T1) and a description of the problem including the wording of any error message. Hopefully with your feedback we can expand and improve our Online Mapping products and services.

"Please, Sir, may I have more--data"

We are soliciting volunteers who would be willing to participate in the testing of our latest Online Data Viewer, named **OLIVER**. This Java application will allow the user to view all of the MassGIS data organized into folders much as with our ArcView viewers. Users can identify features, create custom maps and download clipped shapefiles for use in their GIS. We need to assemble a diverse group of testers on a variety of computing platforms, such as: Windows 95, 98, NT, 2000, ME & XP; Macintosh users; UNIX users; computers with low RAM or slower Internet connections, users with firewalls or proxy servers, etc. We are trying to determine the minimum requirements necessary to run the application, and to understand some of the common installation and setup issues before announcing the application to the public. If you can participate, please email: [Aleda Freeman](#) and include your operating system type and version, web browser type and version, amount of RAM (computer

memory), Internet connection type and speed, and whether you are running a firewall or proxy server (this may alter the setup a bit).

How do I save my map as a digital image?

Many Internet users are used to saving images they see on web pages by right clicking on the image and then selecting the "Save Picture As..." menu choice. However this procedure will not work with the online map viewers on [MassGIS's Online Mapping page](#) right clicking on the map will not produce the menu with the "Save Picture As..." option. It is possible to save the map as an image by going through an extra step. Click the "Print the Map" button at the bottom of the vertical set of tools on the right. Enter a title for your map and click "Create Print Page". A new browser window will pop up with a layout of your map, a legend, and the overview window. Each of these 3 items is an image that can be saved if you wish by right clicking on the item and choosing "Save Picture As..." The maps are served as JPG format if there is an image in the map (such as a USGS topographic map or an aerial photo) or as PNG format if there is no image. These options produce the best looking maps and the smallest file sizes.

Database News

All of the [Environmental Affairs agencies](#), other state agencies and partners are continually collecting new data and updating their GIS information, some of which we are serving up. Many of the [datalayers](#) are updated more frequently than others. Here are some of our most recent datalayer additions and updates:

New Data

Priority Natural Vegetation Communities – September 2002 & Ongoing

MassGIS staff has been creating a new data layer for conservation planning, called the " Priority Natural Vegetation Communities". This datalayer depicts the distribution of the eight natural community systems identified by the [Massachusetts Natural Heritage and Endangered Species Program \(NHESP\)](#) as most critical to the conservation of the Commonwealth's biological diversity (Barbour et al. 1998). These eight systems are: Coastal, Coastal Plain Pond, Acidic Peatland, Riverine, Maritime Sandplain, Pine Barrens, Calcareous, and Vernal Pool. This data was created through aerial photo interpretation of large scale CIR photography, and is now available for Southeastern Massachusetts

through the MassGIS website Northeastern Massachusetts will soon be available as well.

Data Updates

1:5,000 3-Meter Topographic Contours

Data development is now complete for the mainland part of the state. Please see the current Status Map at http://www.state.ma.us/mgis/st_hp.htm Data for the Islands will be available in about a month.

DEP Datalayers and Hydrographic Layers

The DEP GIS Group has updated the following layers:

- Public Water Supplies - <http://www.state.ma.us/mgis/pws.htm>
- Zone IIs, IWPA, IWPACOM - <http://www.state.ma.us/mgis/ziis.htm>
- Surface Water Protection Areas (Zone A, B, C) - <http://www.state.ma.us/mgis/swp.htm>
- Hydrography (1:25,000) - <http://www.state.ma.us/mgis/hd.htm>
- Ground Water Discharge Permits - <http://www.state.ma.us/mgis/gwp.htm>
- Sub-basins - Tiles 1,3,5,6,7,8,9 - <http://www.state.ma.us/mgis/subbas.htm> - Major Basins - http://www.state.ma.us/mgis/maj_bas.htm
- Tier Classified Chapter 21E Sites - <http://www.state.ma.us/mgis/c21e.htm>

Title 5 Setback Areas

All 1:5,000 Wetlands buffers within Zone C's were modified, resulting in updates to 162 tiles in Jan. Also 11 tiles updated in March. Tiles 173_se, 188_se, 32, 93 and 99 updated in April. See <http://www.state.ma.us/mgis/t5.htm>

Protected and Recreational Open Space

Various updates to several towns. See details on the Open Space Recent Updates page at http://www.state.ma.us/mgis/osp_updates.htm

1:5,000 DEP Orthophoto Wetlands and Streams Data New and updated tiles. For the areas now covered please see the most current Status Map at http://www.state.ma.us/mgis/st_wet.htm

Census 2000 Data - Blocks Related Table, Blocks Shapefiles

Now available is a related demographics table that may be linked to the Census 2000 Blocks layer. In addition, four items were added to the polygon attribute table:

- DRY_PCT - Percentage of non-water area for the block
- DRY_ACRES - Non-water area, in Acres
- DRY_SQMI - Non-water area, in Square Miles
- DRY_SQKM - Non-water area, in Square Kilometers See the datalayer

description for details

These four items facilitate proper display of population density (normalize POP_2000 by any of the last three items).

Also, a small number of polygons had miscodings in some of the MassGIS-added fields (TOWN_ID, REPDISTNUM, and SENDISTNUM).

For details see http://www.state.ma.us/mgis/cen2000_blocks.htm

National Wetlands Inventory Data Update

NWI data is now available for an additional 53 quads, and data for 19 others have been updated. For details please see the NWI Status Map at

http://www.state.ma.us/mgis/st_nwi.htm

New on the Website

Updated Municipal GIS and Digital Parcel Development Status Map Updated April 1, 2003

The [GIS Status and Parcel Development map](#) updated from various sources.

If you notice any towns that have not been updated, please provide updates to [Neil MacGaffey](#)

GISette on the Website

We are developing an area of our website devoted to the GISette newsletter. Soon, back issues will be available. Currently, we've posted an [online subscription](#) form for people who are interested in receiving the email newsletter.

Open Space Corner

Our Openspace Assistant, Paula Jasset, has left MassGIS Paula is now working in the Capital Programs Office at MassPort. We appreciate all of her good work at MassGIS and wish her well in her new position.

Since the last newsletter, I have been busy updating Open Space all over Massachusetts. With the loss of Paula to MassPort (Good Luck!), I have quite the long list of things to get into Open Space now!

Some recent large changes in the data are the addition of the Massachusetts Military Reservation on Cape Cod and the Southeastern Massachusetts Bioreserve. Major revisions were also completed in the region of the new Petapawag and Squannassit Areas of Critical Environmental Concern, with much assistance provided by the local and

regional groups involved.

Open Space Attribute Focus: *Level of Protection*

This is probably the most used field in the dataset and still not fully appreciated. We have divided this field into 4 categories – P (Perpetuity), L (Limited), T (Temporary), and N (None). These are used as a metric for how hard it is to develop a parcel. No Protection means that there are no impediments to the development of the parcel. On the other end, Protected in Perpetuity means that the parcel can *never* be developed. In between, things get fuzzy. Limited Protection implies that the land is loosely protected – it can be developed, but there are hoops to be jumped through. Limited Protection can be provided by means not specifying a particular parcel such as zoning or some other means, e.g. the Berkshire Scenic Mountains Act that protects lands above a town determined altitude. Temporary Protection is time-limited, that is the land is protected now, but will not be in the future. This is for Term Conservation Restrictions, Term Deed Restrictions and all Chapter 61 land. If you have any questions about our coding of Open Space data, please contact me!

Did you see something in our Open Space data that isn't quite right? Let me know so I can fix it! If you need help in submitting a revision and/or addition, I'll aid you any way I can. I have been striving to clean up the data one parcel at a time and the improvements are showing.

Happy Arbor Day!

[Scott Costello](#), MassGIS Open Space Coordinator, 617-626-1076

MassGIS Training Opportunities

During the past several years, free computer based training has been provided by staff for hundreds of novice GIS users using the free MassGIS Data Viewer. Due to the recent and imminent introduction of new products and data, MassGIS intends to resume regional training sessions for municipal officials, State employees and members of non-profit resource protection groups. Trainees will receive the free Data Viewer, training on how to use it, and instruction on how to download updates and new data from our website and insert these new files into their existing Data Viewer.

More free trainings will be scheduled in Boston, Millville, the South & North Shores, the Southeast, Greenfield and Berkshire County. If you have an interest in obtaining training for a group, please contact [Paul Nutting](#). A for fee training has been scheduled for members of [MACC](#) (Massachusetts Association of Conservation Commissions) in late June.

Data Order Fulfillment Desk

ArcGIS 8.x MassGIS DataViewer Update

If you ordered a statewide or regional set of data CDs this year, and are using the ArcGIS 8.x Data Viewer, the newest DataViewer - Version 2 will be distributed on statewide and regional CDs beginning in May. The new version includes fixes to version 1, the ability to add your own data to the viewer within a separate table, and zooming to a coordinate that you enter. If you would like to upgrade to the new version, email [Susan Brunton](#), please include the invoice number from your original CD order.

Upcoming Events

May MGIC Massachusetts Geographic Information Council

The next [MGIC](#) meeting will be held on May 9, 2003 from 10 AM to Noon on the 21st Floor of the McCormack State Office Building, adjacent to the rear of the State House.

The topic is: ***Crossing Paths, What the GIS Professional Should Know About Surveying and Engineering***

Our speakers will be:

Curt Crow, Geodetic Advisor to Massachusetts and New Hampshire, National Geodetic Survey

Alf Berry, Town Surveyor, Town of Wayland

Chip Fontaine, Town Engineer, Town of Weymouth

May/June MassGIS Continues to Support Biodiversity Days

EOEA Biodiversity Days, to be held May 31 - June 8, 2003 is in its fourth year. Biodiversity Days is an effort to send the citizens of Massachusetts outside with expert naturalists to explore the biodiversity of Massachusetts. The data collected is input into a database that can be queried over the web. In the beginning, MassGIS helped develop the species checklist database and web site, and continues to maintain both. Citizens can participate in field trips that are listed by town and trip focus, as well as other parameters. The project contains links to online mapping viewers such as the topographic map viewer so that citizens can have a better understanding of the geography of their field trip locations. Field trip leaders can also use an interactive map to draw a polygon of their trip location on top of a topo map. New this year will be an interactive map to find the nearest BioBlitz (there will be approximately 15 large BioBlitz events around the state) to an entered address. Visit the [Biodiversity Days web site](#) and database.

May [Advisory Committee](#)

Statewide Geographic Information Advisory Committee Meeting

The next meeting of the Advisory Committee is scheduled for 12:30 on May 20 at MEMA Headquarters in Framingham. The Committee membership and contact information can be viewed at <http://www.state.ma.us/mgis/mgiac.htm> Contact [Neil MacGaffey](#) for more details.

Any comments or suggestions about the GISette are welcomed
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MassGIS-The Commonwealth's Office of Geographic and Environmental Information is located within the Executive Office of Environmental Affairs and is charged with the collection, enhancement, storage and dissemination of the Commonwealth's geographic data.

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