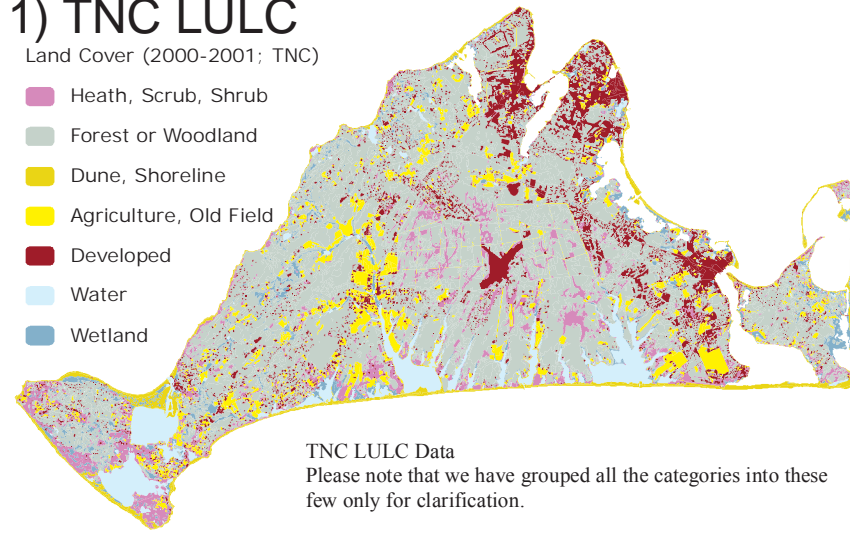


How HF Made The Nature Map LULC Layer From TNC, MassGIS, and Their Own Edits.

1) TNC LULC

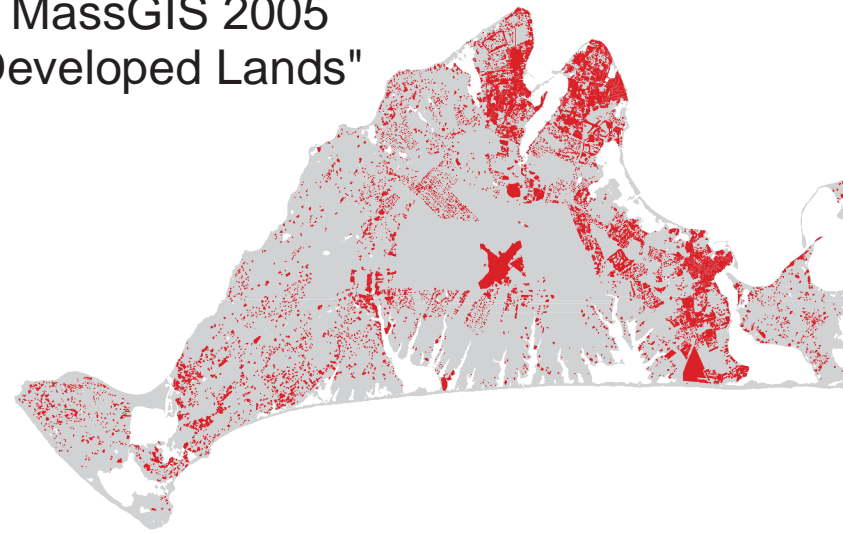
Land Cover (2000-2001; TNC)

- Heath, Scrub, Shrub
- Forest or Woodland
- Dune, Shoreline
- Agriculture, Old Field
- Developed
- Water
- Wetland

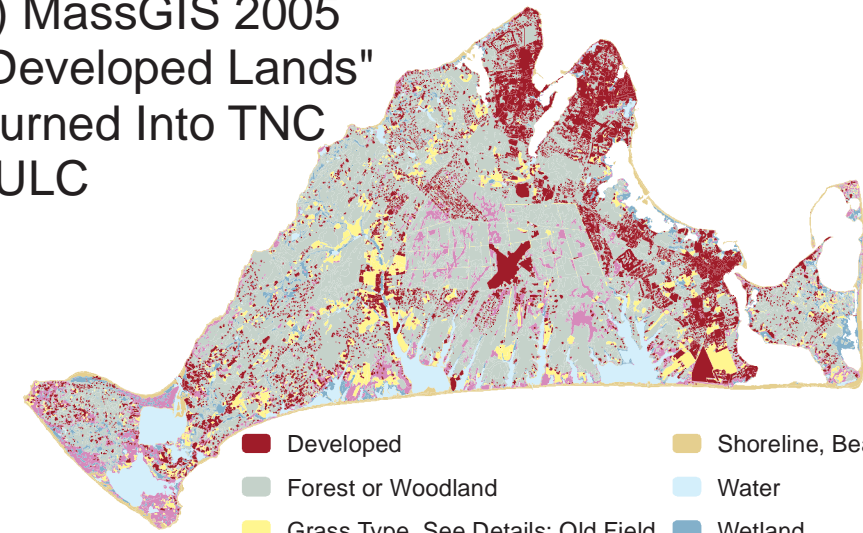


TNC LULC Data
Please note that we have grouped all the categories into these few only for clarification.

2) MassGIS 2005 "Developed Lands"



3) MassGIS 2005 "Developed Lands" Burned Into TNC LULC

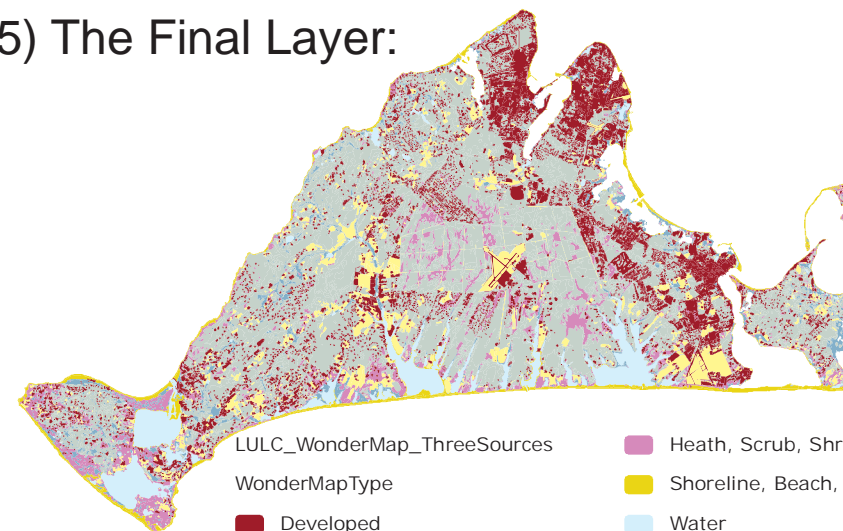


- Developed
- Forest or Woodland
- Grass Type, See Details; Old Field
- Heath, Scrub, Shrub
- Shoreline, Beach, Dune
- Water
- Wetland

4) Areas we considered to be missclassified as developed, so reclassified as a natural type



5) The Final Layer:



- LULC_WonderMap_ThreeSources
- WonderMapType
- Developed
 - Forest or Woodland
 - Grass Type, See Details; Old Field
 - Heath, Scrub, Shrub
 - Shoreline, Beach, Dune
 - Water
 - Wetland

Brian Hall; 3/5/2014
DRAFT!

Purpose - to create an accurate landcover layer for the MV Nature Map and for the MV Book

Problem - The TNC LULC layer has the finest level of landcover type classification, especially for natural types such as forest, shrublands, scrublands, heathlands, etc. However the data set is quite old and was missing many newly developed areas as shown on the MassGIS 2005 LULC dataset.

General Approach was to:

1) Start with the TNC LULC layer

2) From the MassGIS 2005 LULC layer extract all "developed" types.

a. These were defined as the following MassGIS types: "LU05_DESC" = 'Cemetery' OR "LU05_DESC" = 'Commercial' OR "LU05_DESC" = 'Golf Course' OR "LU05_DESC" = 'High Density Residential' OR "LU05_DESC" = 'Industrial' OR "LU05_DESC" = 'Junkyard' OR "LU05_DESC" = 'Low Density Residential' OR "LU05_DESC" = 'Marina' OR "LU05_DESC" = 'Medium Density Residential' OR "LU05_DESC" = 'Mining' OR "LU05_DESC" = 'Multi-Family Residential' OR "LU05_DESC" = 'Participation Recreation' OR

"LU05_DESC" = 'Powerline/Utility' OR "LU05_DESC" = 'Spectator Recreation' OR "LU05_DESC" = 'Transportation' OR "LU05_DESC" = 'Urban Public/Institutional' OR "LU05_DESC" = 'Very Low Density Residential' OR "LU05_DESC" = 'Waste Disposal'

3) "Burn" the MassGIS developed types into the TNC LULC layer (i.e. having the MassGIS Developed types replace the TNC landcover type wherever a MassGIS Developed type occurred.

4) There were a few areas that we believe were missclassified on either the MassGIS Developed (ones that MassGIS called developed that we consider natural such as grasslands around the airports) or on The TNC (usually what TNC called developed that is more like a rough grassland on 2009 aerial photos). We made a GIS file of the polygons that we felt were missclassified along with the correct classification; this layer was then burned into the layer made in step #3.

5) The finished LULC layer:

Notes:

All geoprocessing was done in ModelBuilder with the "WonderMapLULCMergeMassGISDevWithTNCVeg" model in the 1_MV_Nature_Map_Landcover_POS_Tools toolbox.