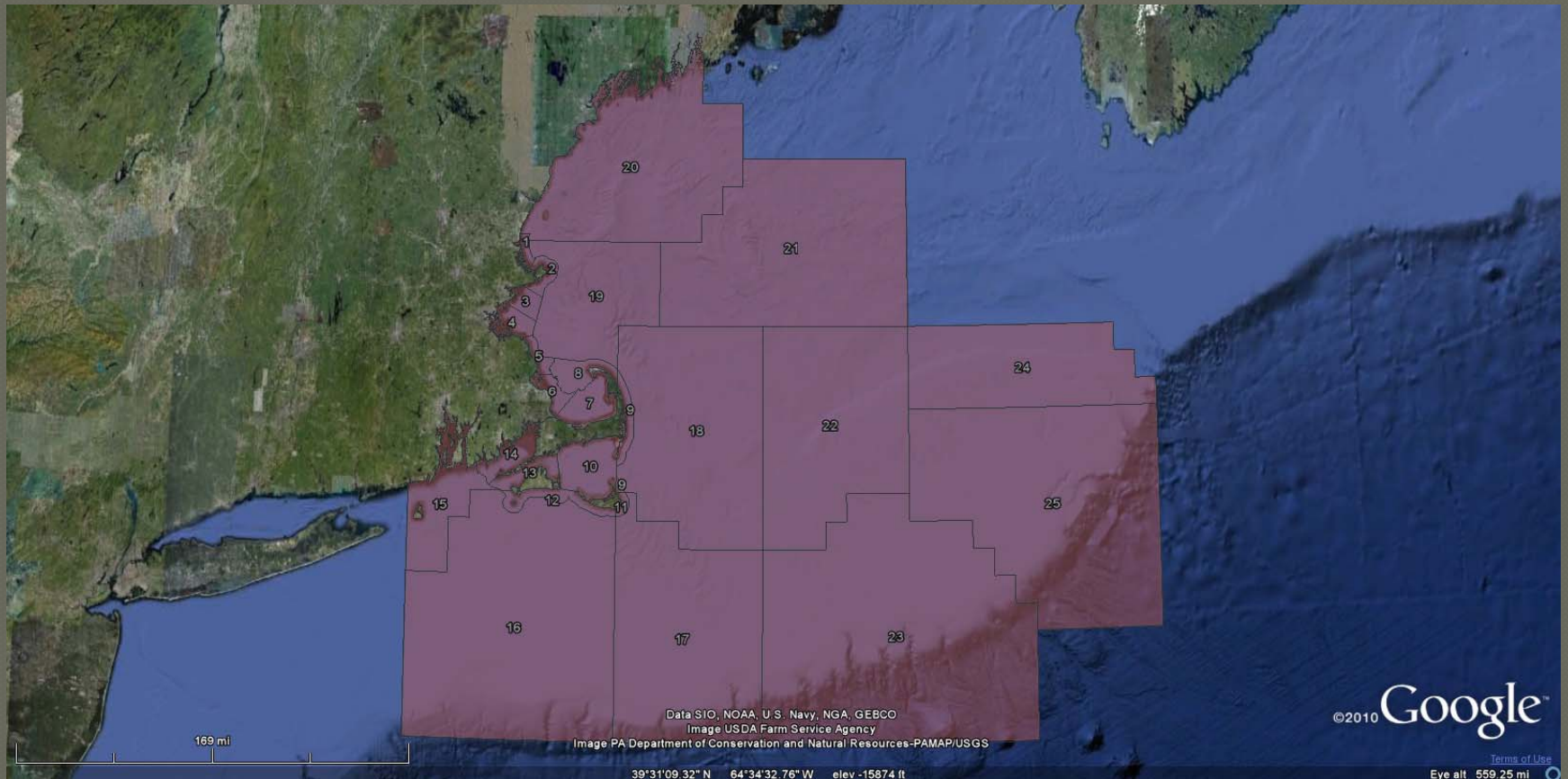


Massachusetts Division of Marine Fisheries IntraMap



Brant McAfee
GPH 903
12/08/10

Background

- MADMF manages all commercial and recreational fisheries occurring within Massachusetts territorial waters.
- Landings of these fisheries are reported on annual catch reports by permit holders and associated with statistical reporting areas and landing ports.
- This data drives management decisions
- Most of this data is best viewed spatially by the statistical reporting where species were caught.

Objective

- Optimize spatial data sharing and visualization within the Massachusetts Division of Marine Fisheries (MADMF).
- Facilitate more user access to spatial data within MADMF.
- Utilize data automation features to decrease redundant data requests.

Resolution

- Create web mapping application capable of serving all MADMF internal users and public.
- Application must support data visualization procedures and be updateable.
- Next steps.....
 - Research all web mapping applications for suitability and implement design.

Research

● Multiple platforms available for web mapping

- MassGIS provides links and support to multiple web mapping platforms
- Primary platform was MapBuilder, But.....
 - MapBuilder platform no longer supported.
 - This scenario was common while doing research....and I began to notice that this 2nd tier applications may not be the best choice because:
 - Web applications seem to come and go, and most are dated and not supported
 - Interface was not intuitive
 - Editing and adding data was difficult

Research cont.

- Did not use ArcGIS server because it was expensive and required license.
- Final Selection: Google!!!!
 - Google platform is readily available
 - Well documented and supported
 - Multiple mapping applications to choose from
 - Already used by many corporations and agencies
 - High quality platform
 - AND ITS FREE!!

Google Mapping

- Two options:

- Google Earth API
- Google Maps API
- Both support FLASH and Javascript
- Very well documented online on Google code website, blogs and public forums
- Both support KML/KMZ (IMPORTANT)

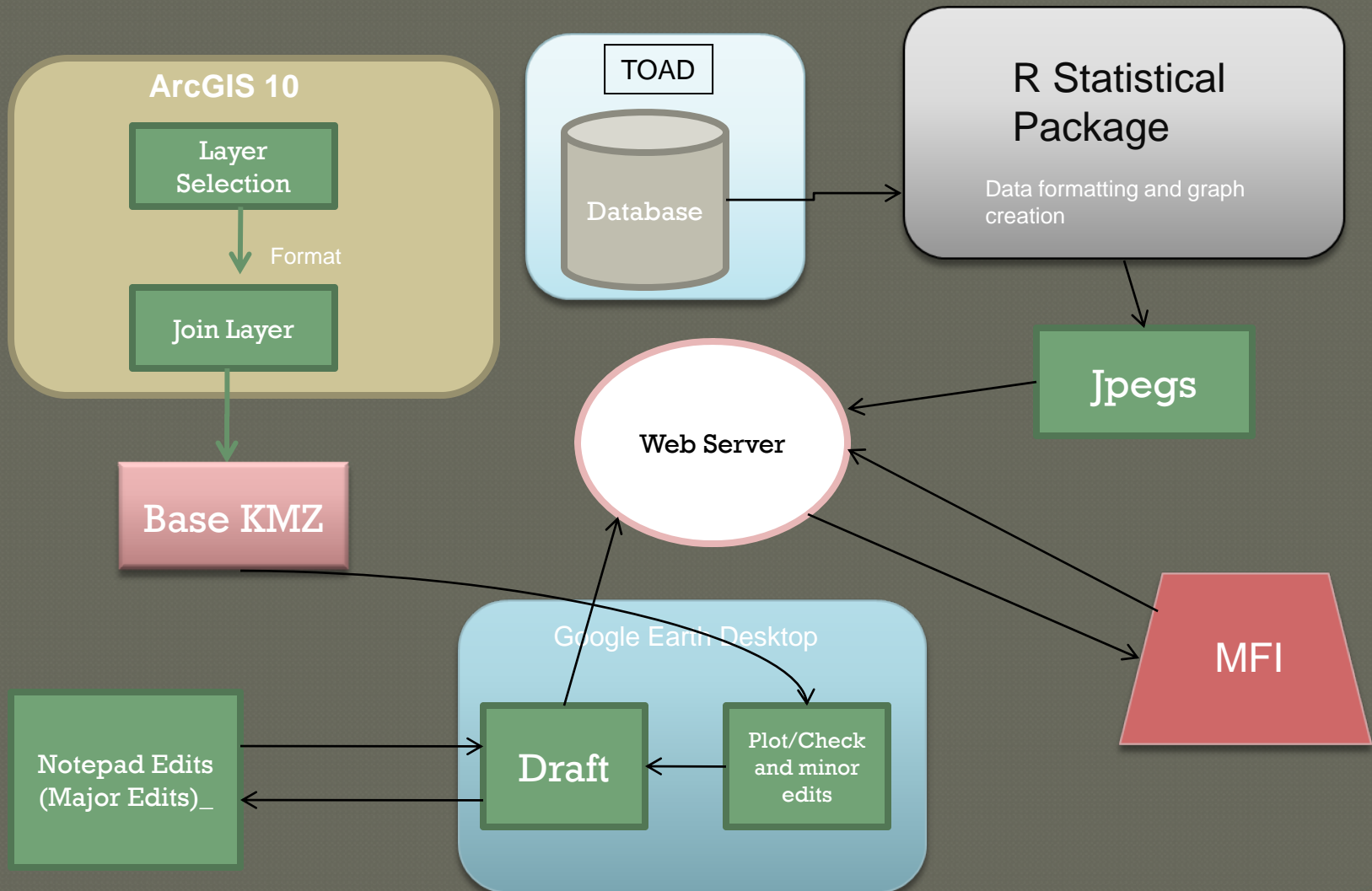
Google Earth API

- In the end I selected the Google Earth API because it supported the service of larger KMZ files than the Google Maps application
- It also has better toolbars like: latitude and longitude, scale bar, and elevation icons
- Google Earth API also interfaced better with the Google Earth Desktop, which is where most editing takes place.

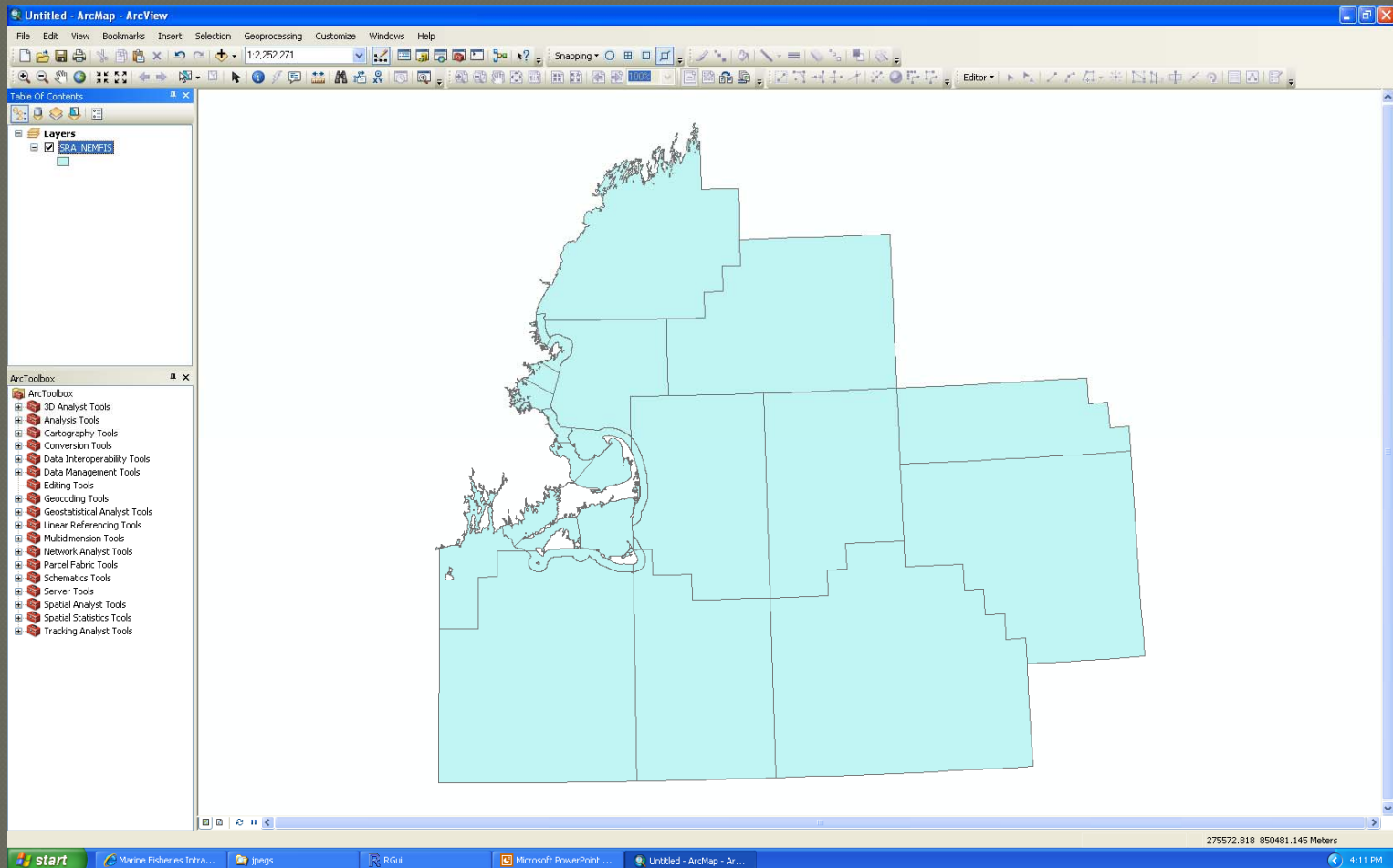
Google Earth API Drawbacks

- ◉ Doesn't have native roads and map layers that Google Maps has.
- ◉ 3D orientation can be difficult for some users.
- ◉ KML formatting appears differently than in Google Maps.

Project Work Flow



Base Layer in ArcGIS



Corpscon Conversion

Corpscon 6.0.1 - [Convert User Defined Data File]

File Edit Window Help

Input Filename: C:\Documents and Settings\bmcafee\My Documents\MFDA\GIS\SRA\centroids.csv Browse

Output Filename: C:\Documents and Settings\bmcafee\My Documents\MFDA\GIS\SRA\New Folder\center_corps.csv Browse

☐ Send Results to Output Window ☒ Send Results to User Defined Output File

Input File Line: AREA_ID,CENTROID_X,CENTROID

Input State Plane, NAD83
2001 - Massachusetts Mainland, Meters

Name	Field
Point Name	1
Northing/Y	2
Easting/X	3

Output Geographic, NAD83

Name	Field
Point Name	1
Latitude Out	2
Longitude Out	3
Northing/Y In	4
Easting/X In	5
Scale Factor In	6
Combined Factor In	0
Convergence In	0
Input Field 1	0
Input Field 2	0
Input Field 3	0
Input Field 4	0
Input Field 5	0
Input Field 6	0
Input Field 7	0
Input Field 8	0
Input Field 9	0
Input Field 10	0
Input Field 11	0
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Input Field 20	0
Input Field 21	0
Input Field 22	0
Input Field 23	0
Input Field 24	0
Input Field 25	0
Input Field 26	0
Input Field 27	0

Geo Coordinate Format
Decimal Degrees

Delimiter
Comma

Convert Close

Ready

12/8/10 16:13:55



Marine Fisheries Intra...

pegs

R/GUI

Microsoft PowerPoint ...

Corpscon 6.0.1 - [Co...

4:13 PM

Final Look At Application Before Going Live to Internet

