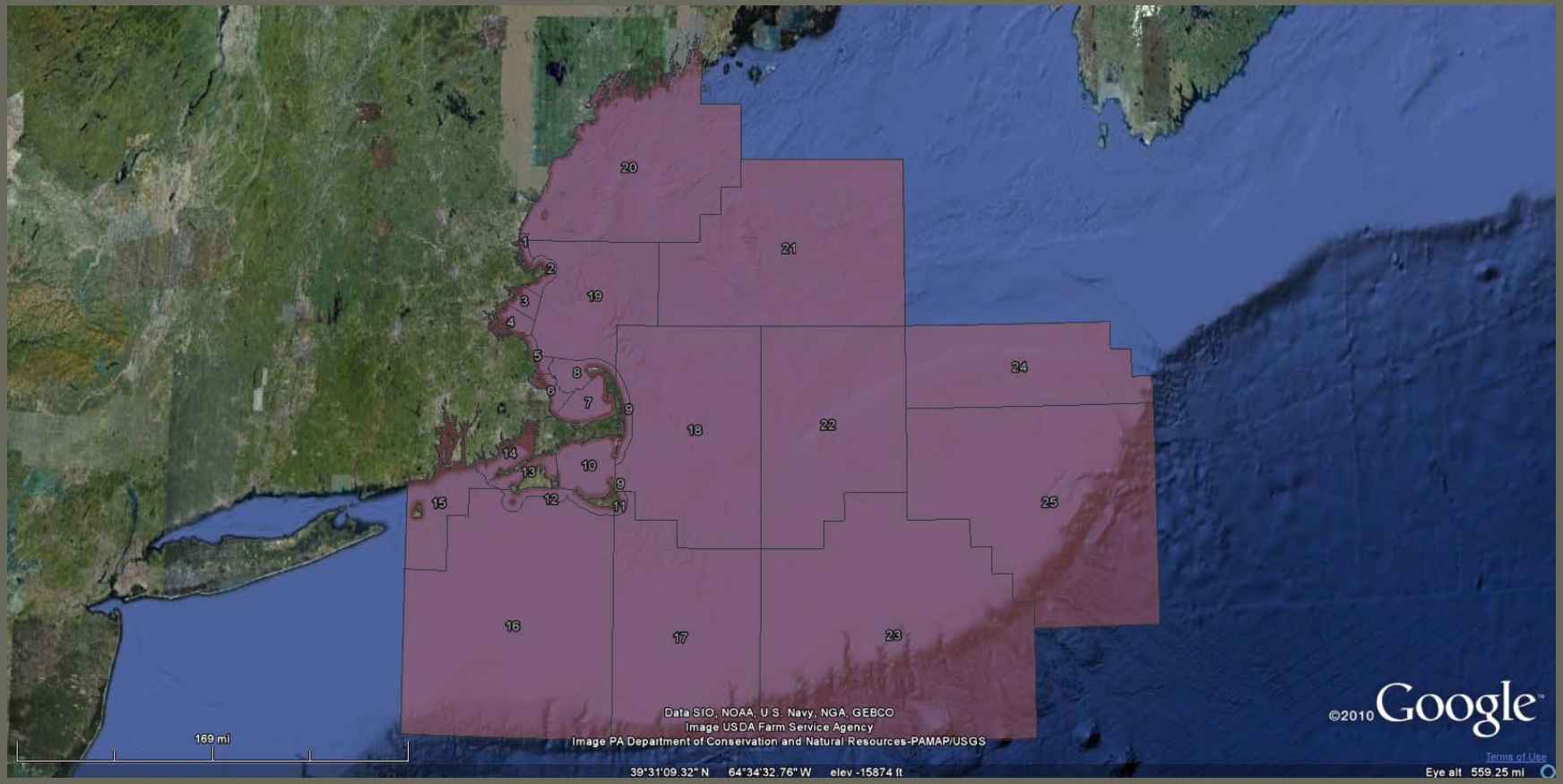
Massachusetts Division of Marine Fisheries IntraMap



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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 a 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)

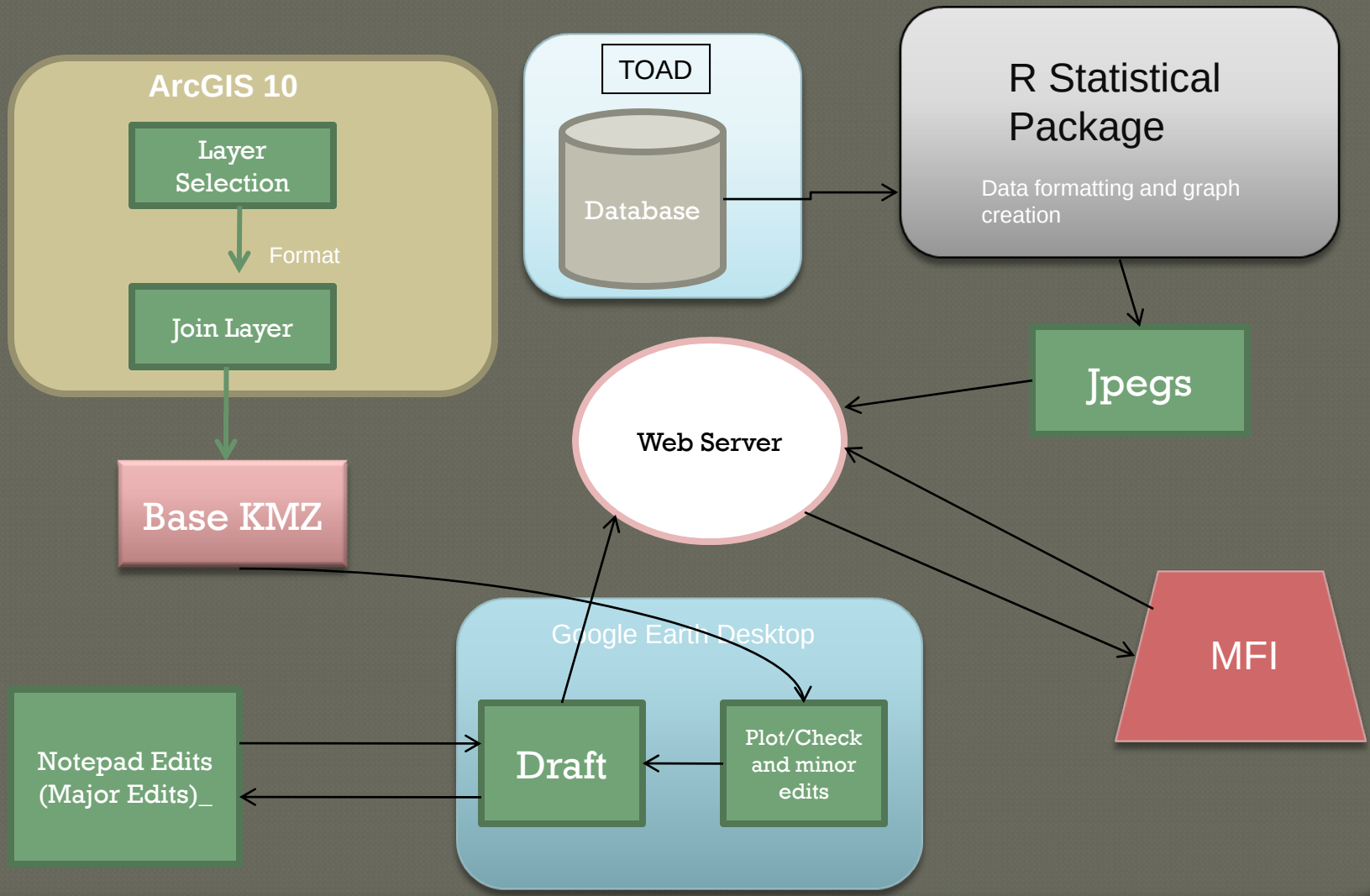
Google Earth API

- 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.

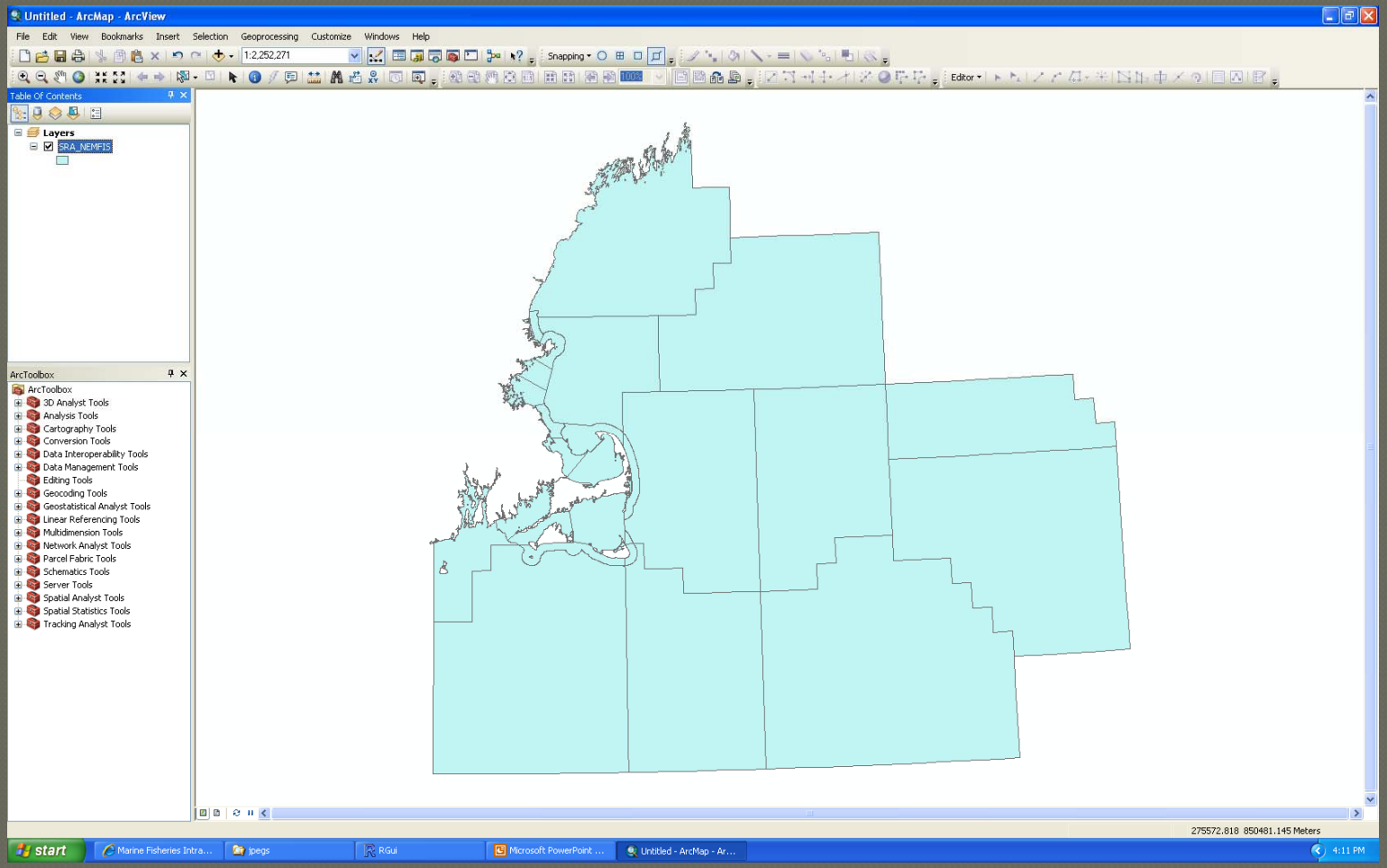
Google Earth API Drawbacks

- 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.

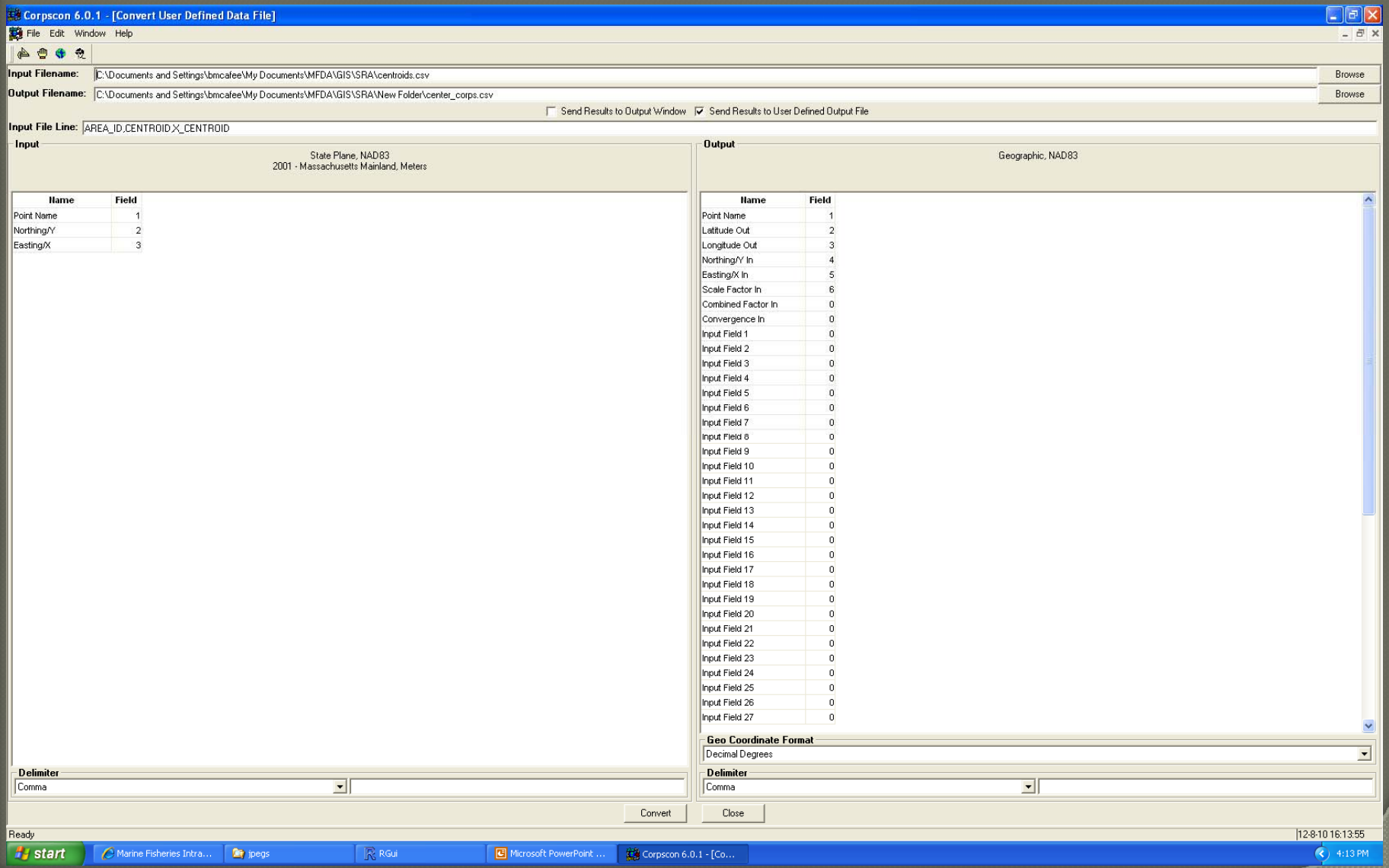
Project Work Flow



Base Layer in ArcGIS



Corpscon Conversion



Final Look At Application Before Going Live to Internet