



Effects from Water Level Rise in Lynn

GGR320

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Introduction

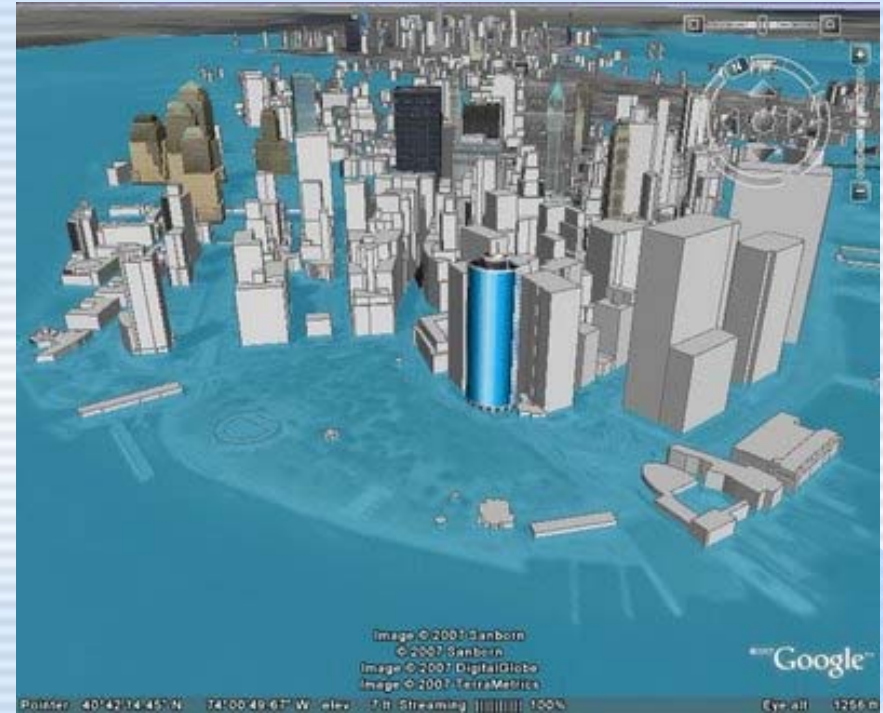
- I am interested in analyzing the impact of different sea level rise in Lynn because Lynn is one of my favorite town and I want to know what would happen if the sea level rises.
- It is important because the sea level rise is now huge concern.



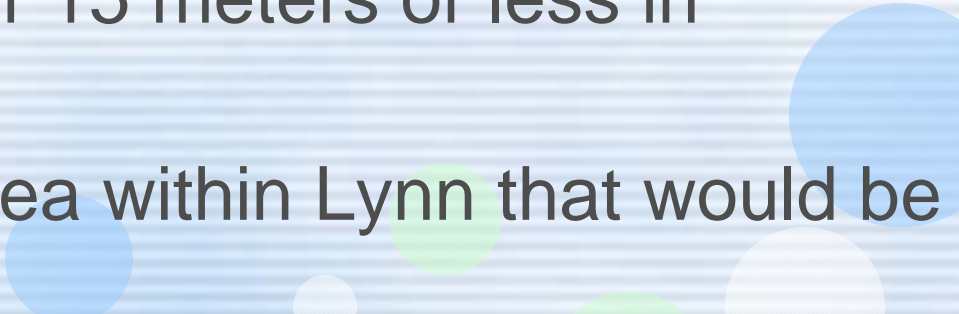
Lynn Shore Drive

Objective

- To produce a map showing which area would be inundated under 3 different scenarios of sea level rise (1, 5, 15 meters).
- To know how much area would be inundated.
- To know who would be affected.



Methods

- Download the data from MassGIS website.
 - Color Ortho Imagery, Digital Terrain Model (DTM), Community Boundaries
 - Make the DTM data to be available for ArcMap.
 - Work in ArcMap with the data I got.
 - Identify areas that meet my elevation criteria; areas that are 1, 5, or 15 meters or less in elevation.
 - Calculate the total area within Lynn that would be inundated.
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- A decorative graphic in the bottom right corner consisting of several overlapping circles in light blue, light green, and white.

Results: 1 meter

- 0.095027 sq. kilometers (0.3% of Lynn)
- Only a little area near to water would be inundated.
- It would not be a big damage.



Lynn; 1 meter sea level rise



Results: 5 meters

- 3.966893 sq. kilometers (11.4% of Lynn)
- Most area near to the water would be inundated.
- Half of Route 1A in Lynn would be under the water; the road to Nahant would be gone.
- General Electric Industrial Complex would be all inundated.
- Many residents, stores, and industries are affected.

Lynn; 5 meter sea level rise



Results: 15 meters

- 10.561897 sq. kilometers (30% of Lynn)
- About 1/3 of the town would be inundated.
- Route 1A in Lynn would be completely covered by water.
- A lot of residents, stores, industries would be inundated; a lot of people would be affected.

Lynn; 15 meter sea level rise



Conclusion

- Water level rise is really serious problem for us.
- This project made me think about it very much by analyzing a familiar town because it was easy to imagine.
- We need to think about global warming and try to protect our world from such an awful result I got in this project.



References

- MassGIS

<http://www.mass.gov/mgis/>

- Google Maps

<http://maps.google.com/>

- Live Search Maps

<http://maps.live.com/Default.aspx?FORM=MSNH&mkt=ja-JP&enc=0>

