USING THE DIGITAL INDEX OF NORTH AMERICAN ARCHAEOLOGY FOR RAPID DISASTER RESPONSE AND REPORTING

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Naval Station Norfolk, Va. (Sept. 18, 2003) -- Rain and heavy winds from Hurricane Isabel flooded portions of Fleet Parking at Naval Station Norfolk, Va., today trapping some vehicles in water as high as their windows as the hurricane proceeded inland. Hurricane Isabel, which cost the Navy nearly $130 million in damage in the Mid-Atlantic region of the U.S., made landfall as a category 2 storm near Cape Hatteras, N.C., approximately 100 miles south of Norfolk. U.S. Navy photo by Photographer's Mate 1st Class Michael Pendergrass.

Public Domain (Wikimedia Commons)
NEEDS AND WANTS

- Local government coordinators
- State Historic Preservation Office Staff
- Federal Emergency Responders
- State Emergency Responders
• Efficient Assistance
• Support of the compliance process (Sec. 106 and beyond)
• Distribute information without unnecessary workload
• Quick access to information
• Relevant information
• Straightforward presentation of information
(non-cultural resource professionals)
Open Context is maintained and administered by the [Alexandria Archive Institute](https://www.aai.org), a not-for-profit organization funded by foundation grants and charitable donations. The [California Digital Library](https://caldigitallibrary.org) at the University of California provides data archiving and preservation services.
DINAA
(Digital Index of North American Archaeology)

Google ‘DINAA’
or go to:

http://ux.opencontext.org/blog/archaeology-site-data/
Open Source translational protocols

extensive indexing

URI minting

Powerful, standards-based (GeoJSON, and Linked Data) API, via Open Context web services

Integration of datasets from many different and incompatible data sources in a single interface.
RAPID RESPONSE TOOL

https://aejolene.github.io/disastermap/

Try it!
INFORMATION FLOW

SHPO → DINAA → SHPO → Public
RAPID RESPONSE TOOL

https://aejolene.github.io/disastermap/

Try it!
POTENTIAL

Tailor SHPO data to answer clear and specific questions

Make data available in flexible, open formats allowing other stakeholders, governments to use data from multiple states

Connect humans to humans to foster efficient, complex decision making
## Site and NRHP Property Loss Due to Projected Sea Level Rise

<table>
<thead>
<tr>
<th>ALL Recorded Archaeological Sites</th>
<th>ALL NRHP Eligible Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>mAMSL</strong></td>
<td><strong>VA</strong></td>
</tr>
<tr>
<td>Below 0</td>
<td>1,077</td>
</tr>
<tr>
<td>0 to 1 m</td>
<td>2,220</td>
</tr>
<tr>
<td>&gt;1 to 2 m</td>
<td>354</td>
</tr>
<tr>
<td>&gt;2 to 3 m</td>
<td>632</td>
</tr>
<tr>
<td>&gt;3 to 4 m</td>
<td>262</td>
</tr>
<tr>
<td>&gt;4 to 5m</td>
<td>330</td>
</tr>
<tr>
<td>&gt;5 to 10 m</td>
<td>1,258</td>
</tr>
<tr>
<td>&gt;10 to 15 m</td>
<td>2,792</td>
</tr>
<tr>
<td>&gt;15 to 20 m</td>
<td>646</td>
</tr>
<tr>
<td>&gt;20 to 25 m</td>
<td>521</td>
</tr>
<tr>
<td>&gt;25 to 30 m</td>
<td>3,822</td>
</tr>
<tr>
<td>&gt;30 to 50 m</td>
<td>1,806</td>
</tr>
<tr>
<td>&gt;50 m</td>
<td>16,461</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>32,181</td>
</tr>
</tbody>
</table>

MULTI-STATE SLR SITE IMPACT RISK
ACKNOWLEDGEMENTS

Thanks to the full DINAA team, informal interview subjects, colleagues at the Virginia Department of Historic Resources.

Demonstration map: https://aejolene.github.io/disastermap/
Code and presentation repository: https://github.com/aejolene/disastermap/
Leaflet.js: http://leafletjs.com/
VDEM Storm Surge data: http://arcg.is/2z2icjE
Copernicus EMS: http://emergency.copernicus.eu/