

Sea Grant Week
App Development Presentation
Monday, October 10

Sea Grant Program Apps

- **Connecticut Sea Grant** funded UConn CLEAR to create a popular free rain garden app for Apple and Android phones, now used in 12 states. It helps conserve water and prevent pollution. Georgia Sea Grant helped adapt for that region.
- **Illinois-Indiana Sea Grant** has an app called Chicago Water Walk.
<http://www.iiseagrant.org/chicagowaterwalk/>

IISG developed the app and a companion website two years ago. The app is designed for tourists and residents of Chicago who are walking along the beautiful downtown lakefront and are interested in an informal tour. It has facts about Chicago history, water resource issues, and lots more.

- **Oregon Sea Grant** currently has one app, "Oregon's Working Waterfronts," available from iTunes and Google Play:
<http://seagrant.oregonstate.edu/sgpubs/oregons-working-waterfronts-mobile-app>

It was developed through our university's in-house mobile application development group, the Center for Applied Systems and Software (<http://cass.oregonstate.edu/>), which employs students through the OSU Open Source Lab to do the coding, at a cost of around \$20,000.

We previously had a couple of other apps (Paddle Beaver Creek, a nature guide to a popular coastal kayaking river, and Firewood Buddy, which attempted to connect coastal campers with local sources for firewood in order to slow the introduction of invasive pests when people bring or buy firewood from non-local sources). Both were developed by private contractors who were not paid to keep the apps up to date with changes in iOS and Android operating systems, so they were deleted from the app stores when they got outdated. Lesson learned: It's not enough to build an app, you need to budget money to see that they get updated regularly.

A cheaper alternative to formal apps: Making sure our websites are mobile-friendly by using responsive design techniques. We host ours on the university's Drupal content management system, which offers design themes which work seamlessly on computers, tablets and smartphones.

- **Rhode Island Sea Grant** recently launched a web app, "Discovering the Rhode Island Shore" at <https://www.shoreline-ri.com/>, that was a update to our printed guide to shoreline access points, http://seagrant.gso.uri.edu/wp-content/uploads/2014/04/access_guide.pdf. This wayfinding app provides a photograph of each site, a brief description, information about amenities, tides, and weather, and routable directions. This app was developed for us by the "afterpaper" division of Meridian Printing. See <http://www.after-paper.com/>.

- **South Carolina Sea Grant** has only poked a toe in the app development pool. Here is the result: <https://scgis.maps.arcgis.com/apps/webappviewer/index.html?id=e4a2832ece69424fb89ccb22bb7d06a9>

My impression is that we gathered the information and most of the app development work was done by grad students at the College of Charleston. We have two more app projects in the works, both spearheaded by a recent post-graduate with a strong GIS background.

- **USC Sea Grant** has a citizen science program called the Urban Tides Community Science Initiative. Its focus is for community members to photo document high tides, coastal flooding and erosion - then scientists use the data to help calibrate models that project sea level rise. We worked with developers to design a mobile app to collect photos and associated data and a web database where participants can also upload data and view others' entries. We launched the website and app late last fall and it's been working great, with a few hiccups here and there. Here is a link to our program page: <http://dornsife.usc.edu/uscseagrant/urban-tides-initiative/> and the web database: <https://getliquid.io/>