

CTA-223A-How to Share your Observations?

Be Part of the New Approach

 The World Federation for Coral Reef Conservation
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The **Collaborative Beach and Coral Reef Registry** is a free, user-friendly GIS application and a ArcGIS online portal that allows its users access to both, the GIS location of coral reefs on a GIS interactive map and access to the science of coral reefs plus how and when we impose on reef environments like oil, chemical spills and other contaminations, or accidental issues etc., all from user's cell phones while on the beach or while in the board room. The digital twin we create here is an effort to <u>"see it before it's gone"</u> methodology for capturing relevant local marine material for current reference and for historical value by providing coastal and situational awareness. All without an expensive GIS software package and/or a learning curve and all from a single screen.

REGISTRY FEATURES:

1. Accessibility: The application provides users with easy access to GIS data relative to coral reefs and marine environments. This is especially beneficial for people who might not have access to expensive GIS software packages and/or expertise.

- 2. **Mobile Convenience**: The fact that users can access the application from their cell phones while on the beach or in a boardroom adds to its usability and convenience. This mobile functionality allows users to engage with the data and information wherever they are and share it broadly.
- 3. Comprehensive Information: The Registry offers a comprehensive range of information, including the GIS locations of coral reefs, scientific data about coral reefs, and insights into how human activities impact reef environments. See Document Gallery for This comprehensive approach allows users to better understand the complex dynamics of coral reefs and their ecosystems over time.
- 4. Environmental Awareness: The application's focus on coastal and *situational awareness* is crucial for promoting the preservation and conservation of coral reefs. By providing data on human-induced impacts like chemical spills, the application encourages a proactive approach to environmental protection.
- 5. **Historical Reference**: The concept of creating a digital twin to capture historical data and material for reference is valuable for tracking changes over time. This historical perspective can be essential for research, conservation efforts, policymaking and planning.
- 6. User-Friendly Interface: The user-friendly nature of the application is a key selling point. By reducing the learning curve associated with GIS software, the application opens opportunities for a wider range of users to engage with and contribute to coral reef-related data.
- 7. Data Collection and Analysis: The integration with ArcGIS Survey123 as a data delivery vehicle suggests a well-structured approach to data collection and analysis. This can help ensure the accuracy and reliability of the information being collected and shared.
- 8. Other Related Interactive Digital Data: The <u>WFCRC Hub Site</u> is a WFCRC collection of easy-toconfigure community engagement platform that organizes people, data, and tools through information-driven initiatives. All content is downloadable free of charge for our end users to make maps! Lots of maps! It is not required but let us know if and how you use the downloaded data. i

Storytelling:

When communicating about environmental issues takes on an even more important role. To persuade

an audience to truly care about an issue that's not part of their daily experience, we *can* do a few things:

Make it visual: Using Ocean plastic as an example, it's hard to actually visualize what 8 million metric tons of plastic looks like. Photos and videos help tell the whole story in a more approachable way.

Make it actionable: People feel more connected to things that they can physically get involved in — whether it's participating in a *local* beach cleanup or recycling or reusing plastic products. Giving the audience a way to connect with the issue in a more substantial way, <u>via action</u>, will make sure that it sticks.

Make it shareable: crafting communications that are inherently interesting and visually compelling raises the chances that the audience will share content online — expanding overall awareness. Even in today's messy, politicized climate, there's still room to connect your audience with an issue — wherever they are in the world — through a little bit of a smart narrative.

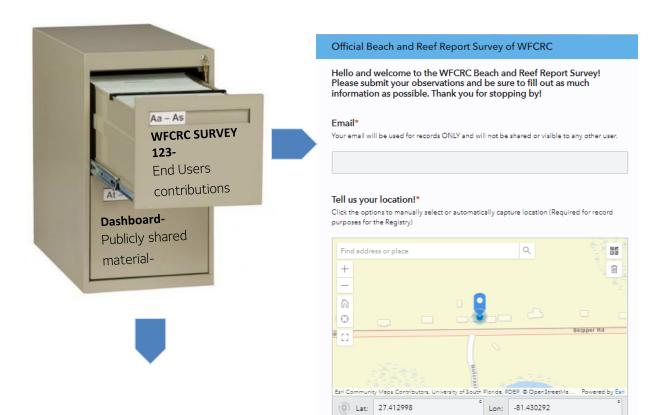
Overall, the Collaborative Beach and Coral Reef Registry application addresses several important needs in the field of marine monitoring, conservation, and education. Its user-friendly interface, mobile accessibility, and comprehensive data coverage make it a powerful tool for individuals, researchers, organizations, and policymakers who are dedicated to understanding and preserving coral reefs and marine ecosystems.

HOW To Share Your Observations:

Step #1

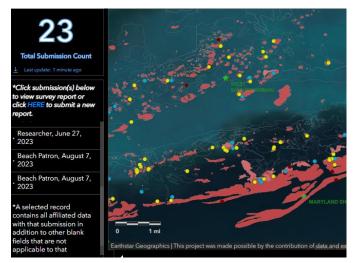
How to make marine observations.

Think of the Registry as a two-drawer filing cabinet. Input from each reef hugger (*end users*) is obtained from a short sequence of questions pertaining to events in coastal environments. WFCRC Survey123. (All digital maps here are completely interactive and contain large volumes of relevant data, so be sure to zoom in and move around and explore the map.)



When the Survey application, is opened, move the blue map symbol to the location of your observation and answer the questions. and provide as much information as you can.

Step 2



How to view your marine observations in an <u>ArcGIS</u> interactive digital map.

Once the observation is submitted, a pin is dropped on a user defined, variety of base maps, instantly. At this point the data captured via Survey123 can be exported to a spread sheet for any additional study. Use the Scroll Bar at the bottom of the map to move left and right to see relevant additional GIS maps. This is one of the real valued added aspects of open architecture.

Below is an observation of a current fish kill in Cape Coral.

This is a very effective way of alerting coastal stakeholders to health and safety or environmental issues. This is a valuable method of sharing the marine situational awareness.

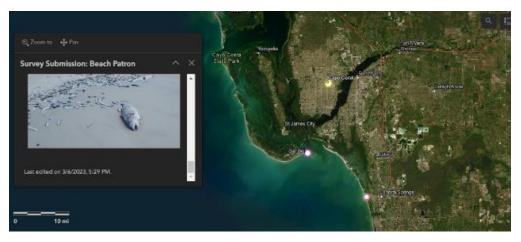


Figure 1 WFCRC Observation of a fish kill, in Cape Coral

The ability to return to the same location over time provides a real time value. This is the classic example of the value of the location component associated with other relevant data.





Making the REGISTRY a win-win geo-platform. This data management aspect is supported and driven by data from the ArcGIS Survey 123 application which is the delivery vehicle or the pipeline for delivering data and information to the Registry. ArcGIS Survey123 is a complete, form-centric solution for creating, sharing, and analyzing data. Seamlessly adding GIS data to web maps and to the digital twin, which *could* be..... all that is left.

We just cannot be the generation that allows coral reefs to die off for good. Over the decades, we have produced great science and research to enhance the <u>life</u> of coral reefs all over the world'. Without balancing the science, with a possible scenario of total loss. No one wants to be right about the end result, but we do need to look beyond our nose....

No one wants to be faced with these questions.....

What did we have, What did it look like,

Where was it, can we recreate it?

The registry was designed to answer these questions, and has "long term" written all over it.

"To me the sea is a continual miracle; the fishes that swim, the rocks, the motion of the waves, the ships with men in them. What stranger miracles are there?" – *Walt Whitman*

Support your local coral reef conservation organization.

Thank You Vic Ferguson The World Federation for Coral Reef Conservation <u>vferguson001@gmail.com</u> <u>vferguson@wfcrc.org</u> *1 512.986.1902