

Environmental Dashboard Project Scope Changes

October 1, 2021

Original proposal pieces led by Esri:

1. Dashboard Development
 - a. Storyboarding session with Esri
 - i. Define user requirements
 - ii. Determine overall hierarchy of information and look-feel of dashboard
- The expected deliverable from Esri was the creation of custom template(s) based upon the storyboarding session with a partial population of one Dashboard element and continued technical support throughout the build and implementation of the Dashboard.

Esri current commitment:

- 1 year of complimentary software
 - Hub Premium Subscription with 1000 credits
 - 1 Creator Named User for ArcGIS Online
 - 2 Viewer Named Users for ArcGIS Online
 - 1 additional Creator license for 90 days, for Hayley Miller to provide SE support/guidance for the Environmental Dashboard configuration in Hub
- Up to 20 hours of Hayley's time over the next few months to assist

Impacts to project scope:

- Moved storyboarding session internal to Environmental Dashboard team
 - Outcome of storyboarding session:
 - During the internal storyboarding session, led by CWC staff, it became very clear that building the Environmental Dashboard completely within the ArcGIS Hub framework would be very limiting and require many custom work arounds to achieve the functionality goals of the Environmental Dashboard. It was determined that it would be more cost effective, streamlined, and improve flexibility to build the website inhouse using more traditional web technologies (i.e customized WordPress¹ template) with embedded mapping and graphing components instead of the reverse (i.e. customizing a mapping platform to include traditional and expected web functionality).
 - In addition, we discovered the potential to embed the off-the-shelf Tableau² software functionality into the website instead of having

¹ WordPress: <https://wordpress.com/>

² Tableau: <https://www.tableau.com/>

to customize all of the interactive graphing components using R shiny apps or similar technology.

- Using Tableau allows us to use proven and reliable software without customizing all functionality. This will reduce the maintenance and long term costs associated with customization.
 - CWC has partnered with Sageland Collaborative to use the Tableau software for a nominal cost each year.
- Overall, the shift from relying completely on ArcGIS Hub to a more traditional website platform, on which the CWC already hosts their website, allows more flexibility in terms of functionality and the ability to embed other technologies.
 - Additional development costs are still involved with this approach compared to the original proposal since the components that Esri originally agreed to develop are still needed to be developed by the CWC Environmental Dashboard team.
 - The software approach has been changed based on research and keeping in mind the long term maintenance costs.
- The development of the WordPress Environmental Dashboard site will take place in house on a DIGIT Lab server
 - Developing inhouse will minimize the potential impacts on existing production websites and provide a true development area free of any unintentional implications to other sites.
 - The website will be ported over to the CWC at the conclusion of the beta testing site.
- Walk through various use case scenarios to identify needs requirements
 - Identify existing “components/widgets” that meet Dashboard needs requirements
 - Identify “components/widgets” that will need to be customized/created
- Design “look and feel” of the CWC Environmental Dashboard
 - Landing page
 - Element measures page
 - Sub element pages
 - Indicators, sub indicators, etc.
- Create WordPress template with embedded frames from ArcGIS Hub, Tableau, and other software and sites
- Populate template for each element and its respective sub components

Note: DIGIT Lab has the technical expertise to take on these added tasks with support from the Environmental Dashboard team. Additional resources are needed to implement this scope increase.

Impacts to project schedule:

Schedule for Phase II :

- Data and metric methodologies completed by ***March 1, 2021***
- Storyboarding session with Esri completed by ***May 15, 2021 - updated to Sept. 30, 2021***
 - Esri providing an overview of ArcGIS Hub
 - No longer conducting the Storyboarding session
 - Increased time needed to go through storyboarding and design of custom template(s)
 - Storyboarding session will be fully conducted by the CWC Environmental Dashboard team
 - The Environmental Dashboard team will design the dashboard using A customized WordPress site with additional embedded frames
- Beta Environmental Dashboard completed by ***July 1, 2021 - updated to February 15, 2022***
 - Increased time need to build the Dashboard
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- Public engagement meetings completed by ***September 30, 2021 - updated to April 15, 2022***
- Environmental Dashboard presented for final approval completed by ***December 31, 2021 - updated to June 1, 2022***

Impacts to project budget:

	<u>Original</u>	<u>Updated</u>
Data and metric methodologies	\$67,210	\$67,210
Metric communication design	\$27,500	\$27,500
Storyboarding and beta environmental dashboard	\$37,213	\$88,077*
Public engagement meetings	\$13,316	\$13,316
Environmental Dashboard presented for final approval	\$31,069	\$31,069

* There are still many unknowns and this is our best educated estimate based on our understanding of the complexities of the 5 dashboard elements and our review of the technical needs to create the Environmental Dashboard using the identified softwares.