Table 1: Web Mapping Workshop Series- Learning Objectives, Geospatial Information Literacies, and the ACRL Framework

	Learning Objectives	Geospatial Information Literacies	The ACRL Framework
Intro to Web Mapping	 Understand a few key basic concepts of web mapping, and why web maps are useful/not useful; Understand the geospatial data creation process has undergone drastic changes over the past two decades, and what this means to you in terms of creating, using, and communicating geospatial information. create an interactive web map on AGOL and publish it; Understand the limitations to using AGOL for creating a web map. 	The BoK: Identify examples of static, animated, and interactive web maps; Explain client-server architecture; Design, construct and publish an interactive web map.	Authority is contextual and constructed Information creation as process
Web Mapping with R	 Understand a few basic concepts of web mapping: map tiles, pop-up, web mapping APIs; Create a simple interactive web map using Leaflet for R; Create a R Markdown file and publish it as a Github page; Become more conscious about the decisions in publishing a web map: who the target audience is, and what is the most suitable format for communicating the map with them? 	cyberliteracy for GIScience: computational thinking interdisciplinary communication The BoK: Explain Client-server architecture Explain how a tiled map mashup is created Design, construct and publish an interactive web map	Information creation as a process scholarship as conversation
Storytelling with ArcGIS StoryMaps	 Create a story with integration of various multimedia and map elements. 		Information creation as a process

M A	Approaches to adding maps: using Express Map and creating/adding maps from ArcGIS Online; Actively think about the best way to use mmersive Templates for telling stories		conversation
Field data collection with ArcGIS Collector	vith map elements Understand a few key concepts and the connections between them: Feature layer, nosted feature layer(web feature service), web map be able to use ArcGIS Collector for field data collection, including: Publish a feature layer on ArcGIS online, change the settings to enable editing, set up attributes Create a web map which will serve as the interface for adding data Use Collector to add data in the field	The BoK: Explain client-server architecture Design, construct and publish an interactive web map	Authority is constructed and contextual Information creation as a process