



## Acquisition of World War II Captured Maps: A Case Study

At the end of World War II, United States Army officers located large troves of maps in Germany and Japan. These materials were shipped back to the United States and deposited with the Army Map Service (AMS). The AMS created a repository service to distribute the captured maps to libraries across the United States eventually sending them to a subset of thirty-five geographically dispersed institutions. While numerous libraries processed these materials, many did not, including the University of Tennessee, Knoxville, who made the decision to donate their maps to Stanford University for cataloging and scanning. The majority of the maps were duplicative, but twenty percent of the corpus were either new sets or missing sheets from existing sets. Analyzing these collections allows librarians and scholars to understand the scope of the mapping carried out by the Germans and Japanese prior to and during the war. It also provides a framework to decide if a library should allocate processing, cataloging, and digitization resources for such unprocessed collections.

[Julie Sweetkind-Singer](#), Stanford University; [Gregory March](#), University of Tennessee-Knoxville

Presentation | Friday, October 29th | 9:25am - 10:15pm PDT

## Building a Shared Archive of Western Canadian Topographic Maps

The Council of Prairie and Pacific University Libraries (COPPUL) [<https://coppul.ca/>] comprises 23 university libraries located in Manitoba, Saskatchewan, Alberta and British Columbia. COPPUL's Shared Print Archive Network (SPAN) [<https://coppul.ca/programs/shared-print>] is a distributed retrospective print repository program. SPAN's main goals are to provide access to shared print archives, create opportunities for the reallocation of library space, and preserve the print record for its members in a cost-effective way. This partnership emphasizes the role of the archived print as part of an optimal copy network that includes other print archiving initiatives. Earlier phases of SPAN have archived highly duplicated



print journals, monographs, Statistics Canada publications and at-risk Western Canadian serials. Phase 6 will build a shared archive of Western Canadian topographic maps. Canadian topographic map series are held within the collections of many libraries across the country and most COPPUL libraries have maps from the 1:25,000 & 1:63,360 NTS (National Topographic System) Series. Few Canadian libraries, however, hold relatively complete collections of these maps and even fewer have these collections fully catalogued. Developing this shared archive aligns with COPPUL's emphasis on ensuring that materials of interest to Western Canada remain available and secure now and in the future. Members of the COPPUL SPAN Phase 6 working group are responsible for supporting the development and implementation of a shared print archive for Western Canadian topographic maps. They have been meeting regularly throughout 2021 to develop an outline for the topographic maps initiative. The group's activities to date have included: selecting topographic maps for inclusion in the archive; developing procedures for the physical validation/inventorying of maps; creating and/or enhancing catalogue records (as required to support the retention commitment data), and; registering the retained materials in the OCLC database. The conference presentation will discuss progress to date on the topographic map shared archive project and the various challenges and opportunities that have been encountered. Attendees considering participating in such an initiative will benefit from the recommendations and advice provided by project team members based on their experiences.

[Doug Brigham](#), COPPUL; [Grace Romund](#), University of Manitoba; [daniel Brendle-Moczuk](#), University of Victoria; [Rhys Stevens](#), University of Lethbridge

Presentation | Thursday, October 28th | 1:15pm - 2:05pm PDT

## **Capturing the Complex Histories of German World War II Captured Maps**

Following the end of World War II the U.S. Army Map Service distributed maps captured from the German military to research libraries across the United States, where they have remained largely hidden collections. Military topographic map series make up the bulk of these collections. Most of these map series were issued by a German military mapping agency established as a back room operation in



1936, then known as the 9th Department, Army Surveying and Military Geography, of the German Army General Staff. This mapping agency greatly expanded in size at the eve of World War II in August 1939, in accordance with German war mobilization plans. It emerged from this reorganization as the Directorate for War Maps and Surveying, still administratively subordinated to the German Army General Staff. One focus of the University of California Berkeley's German World War II Captured Maps Collection digitization & metadata project has been the creation of detailed, data-rich catalog records for these German military map series. The topographic map series reflect the fragmentary nature of German cartographic history, with varying contributing corporate bodies, diverse source material, and a range of sophistication and technique. All of these characteristics evolved between 1936 and 1945. The presenters will discuss the initial Sonderausgabe editions, the introduction of the Deutsche Heereskarte standard, and the importance of source map data and name authority work for related corporate bodies, as well as the relevance these have for map collection managers.

[Susan Powell](#) and [Heiko Mühr](#), University of California Berkeley

Presentation | Friday, October 29th | 8:30am - 9:20am PDT

## **Collections, Collaboration, and Crowdsourcing: The BTAA Geoportal's Diverse Collections Working Group**

The Big Ten Academic Alliance (BTAA) Geospatial Data Project is a collective effort of librarians and geospatial specialists from thirteen academic research institutions who share expertise, leverage campus resources, and collaborate on innovative programs. The most visible outcome of this work is the BTAA Geoportal (<https://geo.btaa.org/>), which provides users with a centralized point of discovery and access for digital geospatial resources from multiple clearinghouses and library catalogs. Behind the scenes, project members contribute to various standing committees and shorter-term working groups to continually evaluate and evolve our policies, practices, and platform. This presentation will describe the ongoing efforts of one such group, the Diverse Collections working group. This group was partly motivated by an aspirational goal articulated in the project's collection development policy "to collect and provide access to geospatial resources that represent diverse



perspectives, abilities, and experience levels.” We acknowledged that we did not have a good understanding of the degree to which we were meeting (or not meeting) this aim and charged the group. The original purpose of the group was twofold: 1) to identify a process for defining and assessing diversity in our geoportal collections, and 2) to make recommendations for how diversity can be more purposefully considered and prioritized in future collection development decisions. We have carried out a series of short-term projects with this purpose in mind, which have focused on language representation in map collections across our institutions, a content and format review related to several aspects of the geoportal, and creation of a shared educational resource on critical cartography and geospatial data ethics. We will briefly discuss each of these efforts and their outcomes to date. We will also discuss ideas for how we hope to leverage our preliminary diverse collections work into framing our ongoing work through a lens of inclusion, equity, and social justice. While we have some of our own thoughts, we acknowledge that gathering feedback, ideas, and information about other current projects and practices in this area is vital to advancing our efforts and ensuring they appropriately reflect these values. As part of this presentation, we will share an online crowdsourcing tool so that others can offer feedback on our work and share their own information and ideas on this topic, both during and after our session. We hope this discussion will help to inform our own practices moving forward and also contribute to conversations around diversity, inclusion, equity, and social justice across the map and geospatial librarian community more broadly.

[Joshua Sadvari](#), The Ohio State University; [Daniel Dotson](#), The Ohio State University; [Cecilia Smith](#), The University of Chicago; [Jay Bowen](#), University of Iowa; [Catherine Hodge](#), University of Iowa; [Melinda Kernik](#), University of Minnesota; and [Theresa Quill](#), Indiana University

Presentation | Wednesday, October 27th | 11:00am – 11:50am PDT

## **Compiling and Mapping Police Involved Deaths: Systemic Racism in Canadian Policing**

The Royal Canadian Mounted Police (RCMP) have been a lethal tool in Canada’s genocide of Indigenous peoples since the force’s inception in 1873. This violence continues into present day; the rate of police-involved deaths for Indigenous people



in Canada is higher than any other demographic group in either Canada or the United States. Both Indigenous and Black individuals in Canada are multiple times more likely to die during interactions with the police than White individuals. Yet Brenda Lucki, the commissioner of the RCMP, has been quoted denying the existence of systemic racism in Canadian policing as recently as June 2020. Many Canadians share this misinformed viewpoint. Canadian police institutions have relied on secrecy and a lack of information to construct a narrative that police violence and systemic racism are “just American issues” and that Canada is “better”. This is patently untrue. However, there is little information available in the public sphere to counter their narrative because police departments are not mandated to collect or release death records to the public. Further, what little information that does make it into the news, is nearly always from the perspective of the police, using phrases like “unknown man”, “20-year-old female”, “suspect”, “drug addict”, and “excited delirium” to paint a non-descript victim in a negative light. The most complete, publicly available record of deaths at the hands of police in Canada was published by the by the CBC in 2018, and updated in July 2020. This dataset has many missing and incomplete record, and sever under-represents the pervasiveness of police violence in Canada over the last two decades. Another source, Killercopscanada, a WordPress blog started in 2015 and run by an anonymous has 600+ posts pertaining to 400+ incidents of police-involved deaths, more than 200 of which are missing from the CBC data. Here we present the most comprehensive accounting of police-involved deaths in Canada to date, created by combining the CBC data with records form Killercopscanada and multiple other sources. This dataset is a work in progress as there are records still to be added from other sources including news reports and government documents. This project aims to highlight the pervasiveness of violence and systemic racism in Canadian policing through the collection, visualization, and dissemination of data. The data is being hosted publicly on github in the hopes that others can work with it as well to further discussions of systemic racism in Canadian Policing and work to hold Canadian police institutions accountable. In this talk we will present details on how the dataset has been created and some of the work that is being done using it as a teaching tool in the UBC Library Research Commons and UBC Geography department.

[June Skeeter](#), University of British Columbia

Presentation | Friday, October 29th | 10:20am - 11:10am PDT



## **Digital Mapping Interfaces to Empower Users in Self-Help Tools**

Map collections take large spaces in academic libraries. With a general trend toward shrinking print resources, analog map collections are under vast examination. Using the examples of digital mapping projects developed and implemented in a large academic library, this lightning talk will present how spatial and temporal data visualization can be employed to tell stories, promote, and inform about cartographic resources of relevance to scholars, and provide self-help tools to empower users.

[Maria Jankowska](#), UCLA Charles E. Young Research Library

Lightning Talk | Thursday, October 28th | 10:15am – 10:25am PDT

## **Discovery and Access to Historical Maps at the Regional Level: the case of Lehigh Valley Historical Maps Consortium**

Organized by Lafayette College, this consortium includes over a dozen educational and cultural institutions from the Allentown-Bethlehem-Easton region of Pennsylvania – aka the Lehigh Valley. These range from large Special Collection departments to small local historical societies holding historical maps covering the region over the past four centuries. Using this as a use-case, some lessons learned are presented concerning the challenges for creating web-access to historical maps among small and often under-resourced institutions.

[John H. Clark](#), Lafayette College

Lightning Talk | Wednesday, October 27th | 1:00pm – 1:10pm PDT



## Doing More with Less: Launching GeoBlacklight at UMass Amherst

In Spring 2021, UMass Amherst Libraries became one of the newest institutions to join the GeoBlacklight community and one of the only institutions (so far) to use the recently released Aardvark metadata schema. Like many of our peers, our budget, staffing, and knowledge base have limitations that make deploying open-source software a real challenge. The process wasn't easy, but we learned a lot along the way! In this talk, we'll share our perspectives on the minimum requirements needed for an institution to deploy GeoBlacklight, from server equipment to coding expertise. Our goal is to document and share the lessons we learned to help other institutions adopt the software, too.

[Rebecca Seifried](#), [Aaron Addison](#), [Camille Barchers](#), and [Forrest Bowlick](#), University of Massachusetts Amherst; [Eric Larson](#), Big Ten Academic Alliance

Presentation | Thursday, October 28th | 10:35am - 11:25am PDT

## Expanding Library GIS Instruction to New Audiences: Web Mapping in the Age of Neogeography

The past two decades witnessed the flourishing of the GeoWeb, a web infused with geospatial services and applications, which has given rise to a trend that non-experts are increasingly involved in creating digital maps, collecting spatial data, and developing mapping mashups or applications, known as neogeography. In light of that, the general public and researchers/students in higher education institutions are becoming increasingly interested in these technologies. However, a gap exists between the GIS educational programs offered by public/academic libraries and the fast developing web mapping technologies as well as the shifting needs of users. This talk will discuss examples of web mapping workshop initiatives at the public /academic libraries the presenters are working at or have collaborated with, highlighting the opportunities and challenges for expanding library GIS education to web mapping.



[Andrzej Rutkowski](#), University of Southern California; [Sarah Zhang](#), Simon Fraser University

Presentation | Thursday, October 28th | 9:00am – 9:50am PDT

## **Exploring the Unreal: Cartographic Literacy and Social Justice**

At the most basic level, a map is a representation of space. When teaching with maps it is essential to have a holistic understanding that maps are created by people as tools, they represent the ideas and views of their makers, are used to exert control and power, and act as snapshots of the period in which they were produced. This presentation will discuss how we use a library's map collection focused on imaginary and unreal locations in cartographic literacy instruction. We will address three points through a social justice lens: (1) maps as constructs and reinforcers of colonialism, (2) the importance of identifying who, why, and when a map was created, and (3) the subversive power of intellectual and allegorical mapping.

[Sierra Laddusaw](#) and [Shelby Hebert](#), Texas A&M University Libraries

Presentation | Wednesday, October 27th | 12:05pm – 12:55pm PDT

## **Fire Insurance Maps Finding Aids: A case study in cross institution collaboration**

While working on an interactive webmap finding aid for the Philadelphia area Sanborn fire insurance maps at Penn State University Libraries, I connected with the curator of the Map Collection at the Free Library of Philadelphia for some feedback on usability. We quickly realized that many of the Free Library's collections could be easily added to the finding aid. By adding several of the Free Library's collections to the webmap, we created a more comprehensive and seamless product that points to these collections. Leveraging our skillsets and expertise in our institutional holdings, we completed a project that enhances access to both of these free



collections and gives users tools needed to find the valuable resources on their own.

[Heather Ross](#), Penn State University; [Megan MacCall](#), Free Library of Philadelphia

Lightning Talk | Thursday, October 28th | 10:05am - 10:15am PDT

## **From anonymous website feedback to donation and beyond**

A chance email encounter with an owner of a website eight years ago lead to the largest private donation to Penn State University Libraries' Donald W. Hamer Center for Maps and Geospatial Information. The Historical maps of Pennsylvania (MapsofPA.com) website is owned by Harold. J. Cramer, a PSU alumnus and private collector of Pennsylvania maps of all kinds. His simple offer to let us scan some Sanborn maps that we did not own lead to conversations about the long-term plans for his collection and an offer to take his collection in stages. The costs and benefits of accepting gifts will be discussed as well as some of the steps we have undertaken to highlight the collection.

[Heather Ross](#), Penn State University

Lightning Talk | Thursday, October 28th | 11:50am - 12:00pm PDT

## **Indoor Space Modeling with 3D Web GIS for Library Asset Management, Discovery, Visualization, and More**

The utility of geographic information systems (GIS) for asset and space management is generally acknowledged across the library sector. However, documented applications of library-based asset management with GIS are sparse. We present a live prototype of a 3D web GIS application that models the physical premises and collections of a specialized library unit. (Not coincidentally, the unit in



question is a modern map/GIS library dedicated to cartographic and geospatial resources.) The application is public-facing and serves multiple purposes, for both library staff and patrons. These include collection management and analysis, physical and digital resource discovery and access, visualization and virtual touring of the indoor space, and patron-staff engagement. Features and functionality include simple and advanced search, dynamic visualization of queried asset location, a viewer for asset images, a viewer for 360-degree panorama photos of the interior space, and others. The application carries certain shortcomings, with significant potential to improve and scale to other library spaces and collections. We contextualize the application in terms of existing precedents and use cases, while elaborating on the institutionally-specific impetuses and rationale for the project. The application's software stack comprises a combination of proprietary (ArcGIS Online) and open source (HTML, CSS, JavaScript) applications and packages that are commonly available across academic library institutions. Its web scene interface is underpinned by a 3D model constructed in a desktop GIS environment (ArcGIS Pro). For clarity and replicability, the application's source code, along with robust documentation, are available on GitHub. Libraries equipped with adequate GIS resources can deploy, quite inexpensively and with low technical barriers, similar 3D web GIS applications for library asset management, discovery, visualization, and more.

[Matthew Toro](#), [Robert Cowling](#), [Eric Friesenhahn](#), and [Jill Sherwood](#), Arizona State University Library Map and Geospatial Hub

Presentation | Thursday, October 28th | 12:10pm - 1:00pm PDT

## **Learning How to Write Better Documentation for your Spatial Research through Pokémon: A Train-the-Trainer Workshop**

What do Pokémon and spatial data management have in common? Come to this preconference workshop to find out! The Pokémon franchise encompasses video games, playing card games, manga, television shows, and toys, and revolves around a world where humans become trainers for Pokémon, creatures who battle each other and gain new skills and power as they progress in their training, evolving



into new physical forms as they grow. There are over 900 distinct Pokémon, each having their own unique appearance which widely varies, from fantasy-like features (such as Ho-Oh, who resembles a mythical phoenix) to anthropomorphic features (such as Machoke, who resembles a human wrestler/fighter). Describing to others how to draw a certain Pokémon through step-by-step instructions can help learners develop good documentation habits that they can apply to their own research process. Documenting the steps taken to complete a research project is important for ensuring transparency and reproducibility of the research, and is crucial for spatial research which often uses highly complex data and methods.

Using a train-the-trainer technique, this 1.5 hour preconference workshop will employ a lesson plan that outlines a blueprint for librarians to teach proper documentation techniques for spatial research through describing and drawing Pokémon. Participants will not only learn useful documentation techniques to enhance their research process, but will also learn recommended practices for how to facilitate the learning experience in their own teaching environments. Participants should come prepared to actively engage with other workshop participants and the instructor in a virtual setting. No prior knowledge of Pokémon is needed to participate, and advanced artistic skills are not necessary!

#### Learning Objectives:

- Describe why it is important to document all steps of a research process
- Identify the key physical characteristics of a Pokémon that can help signal their appearance to another person
- Develop step-by-step instructions for drawing a Pokémon which provide enough detail for how to recreate the Pokémon without knowing their name
- Communicate specific documentation habits to apply to your own research
- Apply the concept of documentation to the broader principles of data management for spatial research
- Learn how to facilitate this same activity in various data management education settings and with different topics

[Hannah Gunderman](#), Carnegie Mellon University

Workshop | Tuesday, October 26th | 8:30am - 10:00am PDT



## **Managing digital georeferenced aerial imagery collections**

This presentation will discuss the University of Idaho Library's approach, over the past two decades, to managing digital georeferenced aerial imagery collections. We will review our greatest challenges and successes, also highlighting key decision points over the years: these include methods for file storage, GIS server options, web service types, and best practices for developing partnerships.

[Bruce Godfrey](#), University of Idaho

Lightning Talk | Thursday, October 28th | 8:40am – 8:50am PDT

## **Modern remote sensing methods and learning resources**

Imagery and remote sensing technologies have advanced rapidly. New data sources, software tools, and analysis methods make working with remote sensing data faster and easier, both on the desktop and in the cloud. We will cover imagery workflows, ready-to-use data, apps, and other resources to support research and teaching in a variety of disciplines. Participants will learn how imagery can be used for tasks such as gathering information for maps, analyzing landscape changes, evaluating the health of vegetation, and responding to disasters. Participants also will learn about software tools and sources of imagery data available from Esri. Finally, participants will learn about several free learning resources designed to introduce concepts and methods for visualizing and analyzing imagery.

[Angela Lee](#), [Canserina Kurnia](#), and [Delphine Khanna](#), Esri

Workshop | Tuesday, October 26th | 10:30am – 12:30pm PDT



## **New equipment in the Donald W. Hamer Center for Maps and Geospatial Information**

This talk will highlight our process for acquiring new equipment for the Donald W. Hamer Center for Maps and Geospatial Information at Penn State University Libraries. New equipment includes a large format Contex scanner, a Bad Elf Flex GPS unit and related accessories, a free standing digital display kiosk from Boyd Sign Systems, and touch screen interactive display. This talk will discuss our process for reviewing vendor information and ordering coordination. Additional plans will be discussed for embedding these new items into our Maps and GIS operations for engagement with users. Suggestions for timeframes needed for review of possible new equipment options, along with additional suggestions in terms of set-up and incorporation into unit offerings will be highlighted.

[Tara Anthony](#), Penn State University Libraries

Lightning Talk | Thursday, October 28th | 8:30am – 8:40am PDT

## **Re-building the Map Librarians' Toolbox**

WAML's Map Librarians' Toolbox is used as a reference resource by map librarians all over the world. In recent years, the Toolbox moved from static web pages, to MediaWiki, and now to a WordPress-based knowledge base. This workshop session will collaboratively design and apply new top-level organizing scheme for the ToolBox. Participants will then update the knowledge base with institutional information and favorite map librarianship resources. Bring your bookmark files!

[Kevin Dyke](#), Oklahoma State University and [Jon Jablonski](#), University of California – Santa Barbara

Workshop | Tuesday, October 26th | 12:45pm – 2:45pm PDT



## Recent Trends in Map and Geospatial Academic Library Position Descriptions

Map librarian? GIS librarian? Both? Neither? Kim Plassche began her role as map librarian at the University at Buffalo in 2019. The job she interviewed for, however, was Science Librarian. Ultimately, the UB Libraries hired two new science librarians. Thanks to her minor in Geography and interest in cartography, she was tasked with management of the map collection. During her first year in the world of map librarianship, Kim met curators, GIS specialists, map experts and other “accidental” map librarians like herself. It seemed everybody had a different education and career background. As she delved back into the world of GIS she left behind in undergrad, she marveled at the fact that other institutions have actual librarians dedicated to supporting GIS projects. In this presentation, Kim will share the methodology and results of a job advertisement review conducted in January 2021. Kim examined map and geospatial academic library positions in the United States announced to the MAPS-L listserv from 2015 to 2020. The goal was to observe trends in position titles, degree and experience requirements, and specific job duties listed for the roles. In addition to sharing key findings, the presentation will explore the prevalence of GIS professionals in academic libraries, the role of library school programs in the training of map and GIS librarians, and the value of post-graduate certifications and training. This discussion is based on a research article that is currently under review for publication. If the article is published prior to the conference, I will share the citation in the presentation.

[Kim Plassche](#), University at Buffalo

Presentation | Friday, October 29th | 1:40pm - 2:30pm PDT

## Role of Libraries in Geography and GIS Education Update

In 2019, the Authors received a grant from National Center for Research in Geography Education to develop a community of practice for GIS and Geography librarians to discuss GIS Pedagogy, how we deal with challenges in librarianship,



and where our field should be going. This community of practice is the Role of Libraries in Geography and GIS Education (ROLGGE). The project had three objectives: (1) gather a research network of interested people, (2) create a repository of reusable pedagogical materials and (3) build an understanding of the landscape of informal education happening in libraries and other informal learning spaces. This lightning talk will cover the last two years of the ROLGGE project and the community's future steps, which could include you!

[Jessica Benner](#) and [Emma Slayton](#), Carnegie Mellon University Libraries

Lightning Talk | Wednesday, October 27th | 1:10pm - 1:20pm PDT

## **The 6th Eviction: Shining a Light on the Dark Side of 'Vancouverism'**

Renters play an important role as policy actors in urban structure. This article calls for a closer examination of renters as policy actors in Kitsilano, Vancouver, a gentrified neighbourhood with a critical housing shortage. With the continual demolition or conversion of affordable housing and the attendant displacement of existing Kitsilano residents, many renters stave off "renoviction" by mobilizing social reproductive labour—sweat equity—to maintain the few unrenovated, circa-1960 apartments that are still affordable. In the context of resilience research, this article recognizes the creative resilience of these renters and aims to collect and integrate their knowledge into Vancouver's housing policy. Their uncompensated work has slowed or modified the deterioration-redevelopment cycle and preserved communities by reducing displacement. We argue that resilience research could apply advanced urban analytical skills to the creation of a citizen-renter map that addresses renters' actions, motivations and visions for the future. In the present study, it takes a first step by analyzing relevant census data to confirm a relationship between household income and Vancouver renter/homeowner status visualized through Crowdsourced citizen participatory GIS mapping.

[Cheryl-lee Madden](#), University of British Columbia



Presentation | Thursday, October 28th | 2:05pm -  
2:55pm PDT

## **The Digital Gallery: What is it and how can it be helpful to librarians?**

The Digital Gallery is a website whose mission is to help people learn and engage through the power of maps, images and stories. University librarians have used The Digital Gallery to host collections of their high res images (mostly maps) that are then viewed by students in conjunction with particular classes. In a 10-minute presentation, founder Tom Paper will describe the impetus for creating the website, how the site works and who and how he hopes to attract people to use the site for presentation of collections of high res images. The site can be viewed at [www.thedigitalgallery.org](http://www.thedigitalgallery.org). Two exhibits already created by librarians Naomi Heiser and Ilene Raynes at the University of Colorado can be found at <https://www.thedigitalgallery.org/exhibits/view?id=141> and <https://www.thedigitalgallery.org/exhibits/view?id=61>.

[Thomas Paper](#), The Digital Gallery

Lightning Talk | Thursday, October 28th | 11:40am -  
11:50am PDT

## **The Relationship between Indigenous and Euro-American Maps Over Time**

Indigenous maps are important to understand the historic and current land tenure of Indigenous groups. Moreover, Indigenous claims to land can be seen in their connections via toponymy. European concepts of territory and political boundaries did not coincide with First Nation/American Indian views, resulting in the mistaken view that Natives did not have formal concepts of their territories. Additionally, First Nations and Tribes with cross-border territory have special jurisdictional problems. This presentation illustrates how many Native residents were very spatially aware of their own lands, as well as neighboring nations' lands, overlaps between groups, hunting territories, populations, and trade networks. We conclude portraying the



Sinixt First Nation serve as an excellent example of a case study on how an Aboriginal people are currently inputting and using a GIS representation of their territory with proper toponymy and use areas.

[Daniel Cole](#), Smithsonian Institution

Presentation | Wednesday, October 27th | 10:05am – 10:55am PDT

## **Visualizing the Survey: Plans and Profiles of the Colorado River**

Between 1902 and 1923, teams from the United States Geological Survey surveyed long sections of the Colorado River. They produced a series of technical sheets containing plan maps and profile charts. Plans and Profiles of the Colorado River masterfully visualize the hydrography of the Colorado River and the topography of its surrounding canyonlands. They were the first large-scale surveys of the river, motivated by early-20th century imperatives of environmental modernization and hydrological control. The prevailing sentiment of the era was that the “unruly” Colorado River needed to be tamed. As the world’s first government agency created for the pursuit of science, the USGS oversaw these detailed river surveys. Their primary motivation was to locate and assess sites suitable for hydroelectric dam development. USGS chief topographic engineer Claude H. Birdseye led the most well-known of these early Colorado River surveys, the 1923 expedition through Grand Canyon. In this dynamic multimedia session, we’ll visually dissect the mechanics of these beautiful survey sheets while contextualizing their historical and geographical significance.

[Remi Tuijl-Goode](#) and [Matthew Toro](#), Arizona State University

Presentation | Friday, October 29th | 11:40am – 12:30pm PDT