

Library Research for the Colorado River Basin - Transcript

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Good afternoon, everyone. Welcome to the F. D.L. P. academy. We have another terrific webinar for you today. And I'm with my colleague GP O., Kelly Sheffield in tech support, and our webinar today is library research for the Colorado river basin. With us is our presenter is Emily wild from princeton university's Lewis science library. Let me read a little bit about Emily. Again, Emily joined as a examine try, Geo sciences environment studies librarian in September of 2018. And Emily has a bachelor of arts in Geology from Harvard College and a master of library information studies from the university . Emvlive was a librarian at the U.S. geological sciences in which she helped librarians find silence anding leapttive materials, provided science and government outreach information, graphic instruction and map instruction as well as develop and present online and in-person training sessions on topics such as chemical and physical properties of the atmosphere, rock, sediment and water, and Geo chemistry and physics and the recent availability of renewable energy and resources. In January of 1996 to July of 2008 she was a U.S. geological survey hydrologist in the New England states where she enjoyed field work modeling writing and outreach while also moonlighting as an academic reference librarian. She referenced citation and data management and data sets and physical and laboratory sampling. So with that I'll turn the virtual microphone over to Emily and we'll take it from here.

great. Thank you, Joe, and thank you, everyone, for joining on this lovely day. As Joe mentioned, I'm Emily wild and I'm at the university of Princeton library, and one of the aspects of helping people # # that I hear a lot, and I have been searching for something that you found in five minutes. So the tone of this present 25EUGS is helping you save time if you're a lie brain or scientist or researcher or public person, it is one of those things that just saving time is what my education is, of course, but it is the time, all of the tricks that save you time. So just I'm using the chat to put the links that I'll be using. The first one is an example, and that is what we use here at Princeton for finding fixtures that are open access. And just to give you an overview, that is the Colorado river basin, the upper and the lower, and this is the surface water and this is an example of the ground water around then this is an example of the oil and gas. These are -- the other three are imams from the U.S. S. G. which I will talk about in a bit.

but this is basically when you're talking about the library usage for the Colorado river basin, everything that I'm helping students with and faculty or anyone from the public or other librarians, it is basically all of the layers of earth, and everything that is going on at the same time. And so that is what makes it quite complicated, but hopefully with these tricks it will save you time and also find the right resources. And so just to give an overview, one reason why I'm able to help the public, even though I'm not longer at the U.S. geological survey is because Princeton is in the nation's service and the service of how many, so they allow me and encourage me to keep working with other librarians across the country and across the world,ing and public librarians, academic librarians, government librarians and so on. And these are the groups that I'm directly affiliated with. The Princeton university library, dueo sciences, and part of Geo sciences is NOAA, and then the high med yous environmental institute and, of course, Princeton university chemistry. And, in addition to that at Princeton, on this specific topic of the Colorado river basin, I help people in energy and environment, and also -- there are a lot of links. And also finance and the writing program.

and so a lot of times people ask who I help the most and what people don't realize and it comes up in my stat reports especially is I help a lot of nonscientists, specifically policy law and other librarians either here at Princeton or across the land.

and so this is a quick photo of the grand canyon, which is what a lot of people think about the Colorado river basin, which originally the grand river ran through the grand canyon, and now it is through a series of-it is a long story. It is now called the Colorado river, and so I'll get to that near the end oh of the presentation.

so this is me, and I'm here in Princeton, around this is the background information of my professional experiences and here at Princeton and also at the U.S. tabi logical survey.

and so I have a lot of information by topic, and the way that I think about it is the layering. And so this is -- here is some information.

and so this is the ecosystem, and then it is everything from the atmosphere, hue maps, fauna, Flora, water chemistry, oh surface and ground water, land and so everything in here from the natural resources aspect and also natural hazards what I do in a snap shot. So anytime -- excuse me.

and people ask about a river basin like the Colorado river, this is basically everything that I grab for them. And then depending on how they want to focus it, then we kind of dive a little bit deeper into the data maps and the publication. And so this is dwell a paper that I wrote for a government documents class I took when I was a graduate stupid that turned into a journal article. And so I was able to, with the support of the O.P.S., do an independent study, because I was working by day as a hydrologist and by night as a library student and this is what I came up with and it is the indexing trends, specifically in hydraulics, but it encompasses biological,s geography, and Geology, in addition to high controlling or water resources.

and this is the water cycle that I use pretty mucher day.

and so every day when I'm helping people here at Princeton I'm using all of the USGS publications. And so I'll show you another trick.

and so this is a bigger blow-up picture. And so when I'm helping scientists, we start out with the raw data, real-time, continue use, recent partial records, historical and then there is the calculated data, equations, software results, lab results and model results. There is also map data which is specific location information by Ghee sciences topic and then citation data. So when I'm helping scientists, it is this direction that I'm helping them.

nonscientists tend to be the other way, and so most of the presentation is kind of going up this way with the citation data, and also -- excuse me. When you're looking at the information, especially in Geo sciences, the national and global level type of information that is in the different types of data bases like Geo and web science doesn't encompass the information that you might see -- that you might need or might be looking for. And so it is west to start at the local or state left m level. The indexes, bibliography or just the website from the state or local entities.

and so to start with, one of the things that I like to show people is the free maps that are available through the USGS and some of that is the historical information like when the history of the country

itself. And so this is an example of the map of the United States from 1857. And just to point out that within the Colorado river basin, all of these states, this is when the states became states. Before that they were territories. And so this is something that sometimes people forget, especially when I'm helping them on to east coast because everything is a lot older out here along the east coast. And so everything is usually around the 1700s,ish. And so -- so this is the pre-USGS information. And my favorite is 222, sorry. Three twos. And it will just take a moment. And this is -- here we go. So this is the catalog and index of the publications of the Hayden, King and Powell survey. So this is kind of -- it is an older graphic. I need to update it. But it is kind -- it kind of shows the extent of the original survey, and this has the original biology, geography and water resources for the pre-USGS surveys that were done. And, as you can see, it kind of looks -- it is almost the exact footprint within this area. And so if you're looking for the Colorado river basin historical information, there is tons and tons of information in these old publications, which there are plenty of them. And the four great surveys of the west, that is a great link just to kind of get you started if you're new to this. If you know, on Mar 3, 1879 # legislation to rename the coast and Geo debtic survey and transfer it to the department of the interior and establish the U.S. geological survey for classification of the public lands and examination of the geological structure, mineral resources and products oh of the national domain. And this used to come up more quickly when I was with the U. G. G. S. because I was there for so long.

and moving on, this is something that expeditiously when you're starting to do any type of scientific research, one of the things that a lot of people don't utilize is that the -- for example, the bureau of reclamation is actually a spin-off agency from the USGS, and so there are multiple spin-off agencies, and then this is an example of the bureau of reclamation. And this is the head waters here in Colorado. There is in rocky mountain national park, which is up along here, just outside of Denver. And so this is the actual Colorado river all the way extended here. So this is kind of looking down . , and all of my colleagues know I came from the USGS and they also know the history of the government. And so, if anything is relevant to here of bureau land management or reclamation, they just send them to me and they tell oh oh, she works for USGS, she'll know how to find exactly what you want. And it is because it is the USGS is considered the mother of bureaus, which is a lot of so many different agencies. We call them spin-off agencies when I was in the USGS. And so in addition to the reclamation, there's also the bureau of lands, which the bureau of land management. And so depending upon how far back you want to go for the research and the publications, in some cases, even if it is something you think the bureau of land management might have, it might actually be a USGS publication. And in addition to that, there are many, many different projects and publications that are co-published by USGS and all of the other Department of Interior entities, and so that is why it should be officially if somebody is looking for policy or law, it is really easy for me to find the data.

when I started at the USGS -- let me put this in here. So when I started at the USGS, it was geography, Geology and water and biology wasn't necessarily a formal group yet. And then they joined us in 1998, even though there was biology research that had been going back to the 1,800s or 1879.

and so this is my trick of the publications the upper Colorado basin and the lower and I highly recommend that if you're looking for any detailed data a, that you go to the state geological -- the state U.S. G. website, and these are an example of each state in the Colorado river basin and all of them are studying the Colorado river in some capacity and they have gauges for the Colorado river basin. And so also the ground water. There is information on oil and gas. There's tons of information there. And then, again, I'm also a (CHA2DS2-VAS)ser hydrologist, and start with water first and then you will find everything you need. But it is actually true.

and so another aspect is to -- so all of the state geological surveys work in collaboration with the U.S. geological survey. And so here are some examples I will put in my chat. And here is a great trick. When I was in Colorado, the bibliography from the Arizona geological survey and also the publication repository. And Utah has a great interface as well. That is really nice. And easy to find stuff.

and so if you look at that triangle that I had from that publication, as you look down to the state level, you find so much more information than science or other information . So here is another group .

this is why I received so many questions, especially from people from California because they didn't always realize that their water was coming from the Colorado, particularly the Colorado river. And so this is a good website that showed the metropolitan water district of southern California and how it is -- how long it has been going on and how long it is the demand, what has been happening with the resource itself and what the future holds. And so that is a good place to start and, of course, one of my favorites is again, this Geology along trail Ridge Road and to use this streamer. And so especially if a student or someone that I'm helping doesn't know where a river goes, as far as the starting point and the end point, this is an example of a down stream trace. And so I picked this spot here and then this is all of the river -- it is a -- surface water drains. And this is where it goes. And so that's a good educational tool. And likewise if you were to click on this at the end, the next slide. This goes, it is a reverse, so it is an upstream trace and so it basically shows all of the communities that are within this area. If you go up stream and then there is a quick report. There is also a detailed report that has the gauges and the streaming and a whole bunch of other information. And so it is pretty good .

so if the person doesn't know the details of how this water drains, this is the best tool just to get them started.

and so another aspect is of the inquiries that I receive are just start with the atmosphere,ing and so there are two different aspects that -- the students are interested when I'm helping them .

there we go. Sorry. There is air now. Which we have been having air problems in New Jersey because of the wildfires out west, but I'm sure that everyone is aware of that, especially out west. So this air data shows what is happening with the air quality and, of course, there is also an example of Colorado air quality. And another aspect is the air temperature and these are using the U.S. Geo dash bard. The water dashboard or it has the air temperature and also the rape gauges, and rain information. So this is kind of another snap shot when I'm helping people they're interested in. Snoop and then for humans -- sorry. For the humans, one of the things that comes up a lot is the aspect of mining, and there is an example -- sorry. The Colorado heritage travel within Colorado and one example is the town of marble, which, of course, they have marble. And the other group that I helped a lot with and also about is the -- so the coalition. And it is this intertribal coalition of the hoppy, Navaho, Ute, pueblo -- sorry are, there are two Utes, the Ute mountains and the Ute tribe, where they're looking at the preservation of their landscape. And this comes up a lot, and this is pretty much every semester I have been helping students understand this and they have been writing papers about it, and in some cases they have been doing independent study work and flying out to -- excuse me, out to Utah, Colorado, to do field work. And collect data. And so this is a long-term ongoing project that we have at Princeton and also working with Navaho and other communities. In this area. And so I have been working with them even when I was at USGS. And in this area I have been helping people with what has been happening with the over lap of the human heritage and the aspects of how the land should be used and other aspects. And so another aspect of how the humans are using land is the recreation, and so a lot of people don't necessarily -- don't know about this website, but it is one of the best to understand all of the recreation that is

happening in this area. And so it is a one-stop shopping and you can get maps. You can see the different types of land versus -- within this whole area. It is always a concern as well because herbally as oil, gas and other activities are happening, it is good to know what is -- just to see what the overlap of the fun part of oh enjoying land versus the economic aspects . And moving along. The other layer that I helped with is the tuna, which is the wildlife. So this is an example of the Arizona state park wildlife information. And the other hot topic that I helped a lot of students with, especially when they're writing papers is the wildlife feature.

and so these are USGS wildlife help center and then this is whispers from USGS. And so this is all of the health issues within wildlife over the past year and the Colorado river basin, in the Colorado river basin.

and then for Flora, the most commonly asked question I have been receiving both when I was at USGS and I still receive while I'm at Princeton is sage brush, and so this is a newer report by the USGS in collaboration with the western association of fish and wildlife. The bureau land management and the fish and wildlife service.

and so one of the things that I also show students is that, you know, where these development reports are cited. And so there is an exercise I do with them in class to see if they can find it using the traditional tools that they're taught in other classes versus what I show them . And so this is another example of using the dashboard. And what is happening with wildfires today.

and so this is a common question that will come up where a student will be interested in learning more about a specific wildfire and then they'll want to look at the different layers of earth, so they'll want to see where the data is and what the data says about if it is obviously wet or dry, and then whether the -- what are the ground water levels.

likewise we have the high flow streams. And so this is an example of high flow and in is actually the Colorado river in glenwood springs. And an example of a recent mudslide. And so sometimes the students are writing papers or they're looking at projects to do for their independent study or their thesis or their junior papers, or dissertations. Sometimes they find an idea through the news, and it starts to kind of -- they think about it more and then, you know, this is a question that a student had, you know, when you were looking -- they came in my office one day, and this is back when people could come into my office in 2018 or 2019, and said how many times do you remember this -- having this happen? And I would go back and you look, oh, yeah, I remember us trying to go to a conference in grand junction and we couldn't go because they just had a rock fall. And so this is something that actually happens quite often near glenwood springs. And so you can go through time and look at the rock falls or the landslide hazards.

and a rot of times, I think this particular one was because of the wildfires that happened along the landscape. So every time a wildfire happens, the -- everything burns, and then when the water comes through and it rains, it just -- it can't handle the load of the water. And so -- yes. -- thank you for posting that. It happens quite' often .

and another aspect, speaking of soils, this is for wildfires as well. Sometimes when people are looking for soils think are looking for soils, however, the chemistry of the soils are available through USGS, and so these are different tools that you can use. And one of the aspects is that as you have the floods or the mudslides or the rock slides, you also have the chemistry and the water quality aspects of what is going out into the landscape or, in this case, it is going to go back -- sorry. This went right into the require. So

what was the meme industry of the soil or the soil quality of this that is now in the river? Another aspect is the oil and gas. And these are outreach tools I use. If you have seen them in my presentation before, you have probably seen them before, but I like to put them in just to remind everybody that the place to move around through time, and that back in the day, there was this western interior seaway, and that's what created -- helped for a wonderful environment to create oil, gas and coal. So these diagnoses are from the North Dakota and this is the Colorado upper and lower basin . So within the surface water is not overlapping with the ground water. The ground water tends to follow the Geology, and so if you look back here, because of all of this that has happened in the geologic time scale or the geologic events, processes, it created a different place for the water to go or that was there already. And so through time and so these are the sources that I use to explain it and to show it. And so this is the ground water information . And this this is specifically from Colorado. So these are from the Colorado geologic survey which I will put in the chat in one minute.

there we go. So this is very common. If row are in the Colorado river basin, I highly recommend the old print version as well as the newer version from 2020. 2021 that is Inter-AC Ty. It is because this ground water atlas, this older one, it is just a good visual, and sometimes people for learning purposes they have something tangible to flip through, if that is something that is possible. And then on the next slide, this is the San Juan basis . Whenever I receive an inquiry of a province that is oil or gas, I use all of these sources. And one of the reasons why is because this is basically -- there is a difference between where the oil and gas exists and then where the oil and gas is being extracted. And so the USGS has a lot of information of where it exists, but it doesn't necessarily have exactly where it is being extracted right now. And a lot of times it would be -- or it is available through the state agencies. So this is an example, especially if I'm looking for the amount of he legal yum that is being extracted in a well, because that detailed data is in this type of information. And then on the other side of it, a lot of times people are looking to invest in land. And also invest in purchasing the mineral rights to extract. And so this is the well cat alog and one of the records I put in h here is an example of what it looks like and the detailed information and you can get the information from the library. And you can actually access the sample and rerun the results.

this are some data that is available online, the chemistry data as well. But this is something that -- especially if it is an investment type aspect, it is what people are looking for. And this is not just government wellses that are corporate as well. So a lot of them donate their logs to this -- to this core library. So it is a physical core library.

when I worked a the Denver federal center, I worked in the book library. That is how I would explain it because think had so many different types of libraries on campus.

and this is an example that I worked through with students that are interested in the San Juan basin and oil and gas invest. And so I have them go through all of these different sources and then say which one is the most useful because it is something -- and I didn't include the science or focus in here because a lot of times I think it is -- most people know the answer. This raw data and information is available in development reports. And the information is just not indexed in these other science data bases, but it is available in the science world and Microsoft, google and scholar, and a lot of times the students will say, oh, No. My faculty member says I have to get a peer review journal, and sometimes what they're looking for is actually USGS reports or a state tabi logical survey report. And so this is something that comes up all the time. And also just as a footnote,ing whenever people are -- a lot of people don't realize that a the USGS does a lot of assessments and it is worldwide as well. It is not just in the U.S . They tend to go to the administration and that is actually what is being mined right now or the reports. It is not

necessarily the up discovered oil and gas, which is what most people that are coming to me and asking me questions about what they're looking for is the undiscovered or the new basin. And,ing in in case, sometimes the well logs that are here, have the data and can -- it is sometimes how energy companies find new oil and gas. Areas. So that is just something to keep in mind as well as a tool .

and with coal, this is another example of what I might receive or you might receive as well. So here are all of the coal sources that I use. And the one that I use the most is this them industry of coal. This national coal research data system. And there's also the U.S. coal resources and reservoirs assessment. And, again, there is the U.S. energy information administration coal data. And this is an example of the -- this is the Colorado plateau. L and the San Juan basin within that along the four corners. And this is a new report that came out, they call it coal Geology and assessment of resources, and the reserves in the little snake river coal field and red desert assessment area, greater green river basin, Wyoming so this is actually a new report. And if you're searching in web of science, you won't find this. And so this is an example of what I do in teaching classes is this is this USGS report findable in sources? And it is not available in Geo science world or the A. AP G. data pages but it is freely available in indexes like Microsoft academic and google scholar.

' and another topic that is coming up in and pretty much every day is the critical minerals. And this is on land. There is another -- there is a whole bunch of other information for critical minerals and extracts in the ocean, but this is because of the Colorado river basin, I'm sticking to just the rand information. And so this is happening when I was still at the USGS. And it is just the topic that is pretty much every day. And so critical min rams are basically everything that the minerals that we need for technology and for renewable energy and just smart phones, many other things. And so this is basically one of the assess. S looking at maps, where these are located and what is the viability of mining them.

and this is one of the new -- if you haven't used it, I highly recommend it. It is the new critical min corrals map. And in addition to using the map, people have been wondering about the historical environmental aspects, and so this is an example of the mining and water quality. And the old pollution and interstate water support for the Colorado river and tributaries. And so if you don't have access to these or if your ear interested, just let me know, and I think I still have some of them available digitally.

and also one of the things that comes up a lot, because people are really interested in this moving out away from fuel, the oil and gas, but they don't always necessarily realize how much petroleum products and minerals are in their every day life. And so these are some of the tools I use just as an FYI, especially when I'm helping students because they -- sometimes students think that if we move away from oil, especially like in cars or for heating and only use renewable energy that we won't have any oil and gas extraction. But these are examples of we still use oil and gas in many other products. And so it is kind of it is just a good tool if it comes up in your library at all. And also, of course, how many minerals go into a smart phone . And then -- I think I still have time. I only have a couple more slides.

so these are the last two slides, and these are questions that I receive quite often. Excuse me. About geographic names. And so this is the board on geographic names, the web page.

and if you search for the feature, Colorado river or grand river, you're -- you'll see this I.D. That is the 457 positive. And one of the examples I show students is how this is the variant and all of the different variant names for just the Colorado river. And so it is all of these. And then, of course, there is a little information about the Colorado river itself. And then if you are on this record in the geographic names data base, you can see all of the maps the Colorado river is extended on. And so if you wanted to do

them all together you could as well. And the other aspect that I help students with a lot is -- especially now there is a lot of -- people are aware of names, and there's a lot more suggestions to the board on geographic names. And so this is an example of the quarterly list of 443. And I know it is hard to see, but there are several name change recommendations that are within the Colorado river basin. And even though this is not in the Colorado river basin, it is more of just an FYI. If you happen to be in Colorado, that this--this shall the suggested name change from mount Evans to mount Cheyenne Arapahoe and it lists why, and then it list as whole bunch of other information. It actually goes on for 12 pages.

but this is the type of thing that -- it's not just in the Colorado river basin. It is also in Alaska. And there's more of these. This is -- the more quarterly review list. And there is more information of what the voting was and when approved, and it is probably the most -- the topic that I help students with the most that they never expected I could help them with, because it is just -- and so I highly recommend it, especially if this is a topic of -- especially if there is anyone doing an dig nows studies type of research, this is incredibly helpful because it has the original indigenous names of the different features in the United States, and also additional geographic names across the world.

and so I think I did it within like 45 minutes. So if you have any questions, I'd be happy to answer them.

thank you, Emily. Another great presentation. Really terrific. Any questions for Emily? Let's see.

we were talking about the webinar a couple of days ago, and some of you may have seen this show on TV. How many cities depend on the Colorado river basin, the Colorado river, the new big cities.

yeah, it is actually -- it is not just people that are researching it. The people from all over the world that are researching the Colorado river basin. So it is interesting that it is my number one basin question.

it is definitely in the news. Here we go. Joseph says -- oh. He mentions that a report that was only findable in h google scholar and Microsoft academic, is that because it is too new to be indexed in those other indexes?

No. It is because they don't index the USGS reports, and that is actually something that when I worked at USGS, it came up all the time, and I used to say, oh, but this is peer reviewed. And even my own USGS report when I was in office, they just were with day they bases. It is not worth the money for them to index the government report. And one company when we canned, they said it would cost us money. And we were like, but it is freely available. And that is why it is interesting because there is this push for open access, but the exception is if it is open access and freely available from the government. And so that is why I'm not -- my big mission is to make sure that everyone is aware of all of the research that they -- that is clearly available, freely available.

I'm not familiar with Microsoft academic. Is that from bing, something like that?

it is very similar to google scholar, but there's actually more information, so they have it categorized. It is organized. And so you can do a search -- like you can search Colorado river basin, and then it will have the left side, so it is kind of like a data base in a way where you can kind of drill down the information.

and so you just do a search, just add Microsoft academic and it should pull up that one.

yeah. Yes. So it is -- yes. So we have -- yes, so we for Princeton university there is a web page and there is also one in Microsoft academic and one for U.S. Ghee localing call survey for -- or NOAA. There's tons of information. Interesting. Conner says you might have mentioned this, but USGS reports will be starting to be indexed, scopists now starting --

I sure hope so. Starting in 2021.

okay.

I sure hope so.

what is the scopist?

yeah, it is -- yeah. It is -- yes. I hope -- my goal is that eventually they just will be because people will realize that -- that the commercial vendors will actually realize that this is open access information, and so -- every time they have meetings with any of the commercial vendors, they're like, oh, well, it is open access except for government reports. So that's -- if that is happening, that is fabulous because I have been pushing for that for over 20 years.

and what scopist, a special data base?

yeah, it's -- no, they're not --

that is another question from Joseph.

sorry.

yeah. It is actually -- and I have been doing this citation analysis since 1996, and the one reason I know this is because I have authored over 65 government peer review reports, and I know where my -- it is actually something I do in all of the classes that I teach is I have the students find me, and then they go through and try to find Paul of my reports. And so oh, any god. Like, I know! So it is just -- so I just -- I always use myself as an example. And that's where my -- that is kind of my litmus test and then I use some of my friends at the USGS. But, yeah, it is just fascinating because there is so much government information available for free.

all right.

and Kelly just put the satisfaction survey in the chat, so please check that out. And if you can put those links to the other webinar archive, I'd appreciate that. You can find Emily's prior webinars of which there are many. And three years old and newer. Conner made the comment that took verification process with scopist. The reports process. I'm not supposed to read the chat. Sorry.

okay.

I'm supposed to just ask the questions. Anyway, anymore questions of Emily here? [No response]

you can see the links to our past webinars . Getting some shout outs. Let me add a couple of comments about the upcoming webinars. Keep those questions coming in, please. I'd like to thank Emily for a

terrific webinar, as always, it is fantastic and we really appreciate it. And there's more coming. So watch your calendar. I would like to thank Kelly Seifert who worked the technology. And don't forget our upcoming webinars. We have one more scheduled for July. Actually one tomorrow, the U.S. coast guard academy, contemporary and historical resources. And a bunch coming up in August. And I am give you notice of all of our webinars, when you sign up for our app, news and events at view the calendar which is linked to at the bottom of the home page. You can view a calendar of the upcoming webinars and other events, access past webinars, and you can also volunteer to present a webinar. And give that some serious thought. Let's see. If there are anymore questions.

a shout out. Thanks. Thanks, thanks . Senator questions for Emily. A lot of good information in the chat. Check the chat information.

and the slide decks will be available probably tomorrow. The slide deck and the recording of the webinar, if you need to tell somebody about it or look through it again or download the slide deck in a PDF format. Joyce asks some questions . Joseph says when do you think mount Evans' name change will happen?

it will be on the web page for the board on geographic names because they have to vote on it, and then two true a long process. But that usually makes the news. There is usually an announcement.

why are they changing the name?

oh, it is all documented in that --

oh, okay.

it is documented in that slide.

oh, okay. Okay.

and Joyce writes a question, Emily, what is a typical day for you? I imagine --

it is very busy. I never -- a typical day, I wake up with an idea of what I think I might do during the day, and then it changes because of a natural hazard or a natural information request, either from faculty or students. So my day never ends, really or the way I thought it would end, if that makes sense. But I like it. I mean, I'm really lucky that I was able to continue doing what I do as a science librarian, because I almost lost the profession completely. So I'm happy to still be in the profession.

great. That is terrific.

any last -- minute questions for Emily. A we have a little bit of time. I am supposed to end at 3:00. We're not supposed to go over if I can help it.

and I'm saving this chat. So much information here . You're welcome .

yeah, the other thing if you're looking for ideas for teaching, I tend to take different holidays and have students search for different geographic names based on a holiday or an event. So around Halloween, I

used to have students search for anything Halloweeny that was in the geographic name, like the mummy range in Colorado. And so you can also do that with the geologic map data base . --

we're getting close to 3:00. If anyone out there wants to present a webinar on maps -- [Inaudible]

yeah, I should actually, since we have a minute, if anyone is interested in doing a presentation.

a maps 101 or maps in 2021. I know things have changed over the years and a lot of the depository maps.

yeah.

and less --

exactly. Yeah, there are so many topics that can be done, and I just don't have the time and I'm happy to share the information if somebody is looking to do these types the of webinars. I'd be happy to pass the torch. So --

let me --

let me put my e-mail in the chat. If you want to do a webinar, anyone out there, I know there are a lot of experts, especially on maps and so maps in general. Anyway, we have a few more minutes. Maybe I should get people -- I'm supposed to go over at 3:00, so maybe I can close things out. You were a fantastic webinar, Emily. We really appreciate it. And there is more to come.

and thanks for having me. I did a lot -- I get a lot of out these because it is fun to collaborate and hear from other lie braverrians and people across the country.

yeah. It is a great experience. And we have some -- I know there are probably some people from other countries in this webinar. That has been the case in past webinars.

that is even better.

yes. And thank you, thanks, Emily. Thank you, Kelly, for great tech support. And thank you, audience, and piece come back do the academy again. Come on back tomorrow. We have another great webinar tomorrow, and more to come. So have a great rest of the day. Thank you! [Event concluded]

thank you, Joe.

bye-bye. [Event concluded] # [Event Concluded]