

U.S. Army Corps of Engineers Information Resources – Transcript of audio

Welcome to today's last talk for day one of the 2022 false federal library deposit conference. My name is Helen Deremedjiev and I'm a library and that the U.S. government processing office GPO. GPO uses support librarians Donald Sensabaugh is available support if you need assistance. The title of our next talk is U.S. Army Corps of Engineers information resources. In the Q&A please add your questions and send them either to all participants or all panels. I will monitor and facilitate questions at the end of the talk. This presentation is being recorded and will be made available shortly thereafter. Okay, Bert. The room is yours.

Thank you very much, Helen, and good afternoon, everyone. I would like to introduce you to the vast array of information resources produced by an agency whose significance we may not realize, but which likely has a physical presence very close to our neighborhood and this is the U.S. Army Corps of Engineers. The Army Corps of Engineers website is located at the top of the screen. I will give you an idea of how I was introduced to the Army Corps of engineers. I grew up in Marion, Indiana, 75 miles or so northeast of West Lafayette where Purdue University is. About 20 some miles northwest of Marion were a couple of reservoirs. These reservoirs were built by and remain maintained by the Army Corps of Engineers. Let me give you a partial idea of how significance this agency's scope is. It is the number one federal provider of outdoor recreation and also serves as a national environmental engineer. They own and operate over 600 dams. They have huge responsibilities for various commercial inland navigation channels and coastal waters. They do an incredible amount of restoration and supply matters concerning core lakes. They are involved with wetlands and provide technical support to over 100 countries globally. They are a major player in the U.S. is hydropower and a somewhat significant player in U.S. electric capacity and they also research and development technology is on a variety of environmental issues. This is a collection of the Army Corps's governing legal authority. The laws and regulations which govern the Army Corps of Engineers. You will notice this takes up a significant swath of the United States coast in the code of regulations. On June 16th, 1775, the Continental Congress established provisions for a chief engineer in the Continental Army. 27 years later, during the Jefferson administration, the Army Corps was established as a separate branch and engineers were given the responsibility for founding and operating what we now know is the U.S. military Academy at West Point, New York. In 1866, and Army Corps engineer was the Academy superintendent. Between 1838 and 1863 the topographical engineers supervised coastal fortification constructions and mapped much of the American West. They were also responsible for building lighthouses, developing piers and jetties and mapping navigation channels. Later as the 19th century progressed, they did a diesel project which we now know as U.S. 40 and the Panama Canal. They were active in the Mexican and civil wars. They constructed numerous projects in and around Washington D.C. area, various flood control projects, particularly incising the Ohio and Mississippi rivers and national parks such as Yellowstone. The first 40 years of U.S. national parks were not run by the national Parks service, which did not start until 1916, but by the Army. They also did extensive construction projects in France during World War I and various Hydro projects in the American West such as the Missouri River project as well as projects on the Columbia and snake rivers. As the 20th century progressed, they did work on various domestic and international military bases during World War II and subsequent conflicts as well as building missile sites and Nassau facilities. Starting in the 1960s, the Corps became increasingly responsive to natural disasters and they have a strong record of accomplishments in mapping, hydrology, cold regions research topography, erosion and other fields. Their motto is the French word for lettuce try. These are just a few examples of the course organizational structure covering multiple different areas. This is a map of the cores geographic structure or geographic arrangement. They are arranged somewhat loosely by geographic rivers and lakes and regions, but here is the northern U.S. geographic structure and here

is the southern geographic structure covering divisions and this is a global map of their military division such as South Park Palm and various other regions including the Indo Pacific region. This is a more detailed breakdown of their geographic arrangement. Since I live in the Midwestern or Great Lakes and Ohio River division, this will tell districts included here include Buffalo, Chicago, Detroit, Huntington, Louisville, Nashville and Pittsburgh and then the next couple of screens will probably get to some of your geographic areas. This also includes some of the Atlantic district. Obviously, the Afghanistan district is no longer in service. This is a picture showing the Army cores transatlantic division doing design and construction related work for central command within the activities of the U.S. Central command's area of responsibility which consist of the Mideast. The corp has numerous centers of expertise such as aircraft hangars, fire protection, and Army geospatial center, automated monitoring of dams, a research lab I will be covering later on, and this is dealing with -- the coal regions lab will be dealing with various climate challenges such as permafrost impacts on shorelines, see ice processes and rivers and lakes. Then they also curate and manage significant archaeological collections. They have multifaceted environmental categories as well. There is an inland navigation and design center that works with designing and reviewing locks, navigation dams and inland waterways. There is an Institute for water resources which provides a detailed analysis of water transportation. This is the homepage for the cold regions research and engineering laboratory. This facility is located near Dartmouth University in Hanover, New Hampshire, and then they also have some operations in Alaska. This has just a brief description of some of the types of research they do. They have a cold rooms complex, they do the effects of frost research, and a permafrost station. This is an example of some of the research. This is a permafrost tunnel research facility, and so they have detailed diagrams. This is a picture of some cold regions lab scientists detecting sound in the Arctic. This is just a brief bio of one of these scientists, and then this is an actual report they did. It was an international conference on snow hydrology done in the late 1990s. The Institute for water resources within the Corps of Engineers was established to provide cutting-edge methodologies and innovative tools to help their civil works program. They deal with water resource related activities including planning operations and civil engineering. Here are some of the most faceted mission areas. Here is what the navigation and civil work support department does. There is some information on dredging because many times you have to build deeper ports for purposes such as allowing navigable ships to transport through on various waters and changing just the direction of waterways and so a particularly important area of the corp's operations is waterborne commerce statistics. A lot of the questions in the last couple of years have been about the supply chain and obviously, that can influence airborne and oceanic craft, but it also includes domestic water carriers, as well. This is a three volume publication the corp comes out with each year called waterborne transportation lines of the United States. This was the October 21, 2020 issue. They may have come out with the 2021 edition by now. You will notice you have 2268 pages of reading for the 2020 edition. This is the table of contents. They have breakdowns by U.S. flagged vessels, by region vessels, age, horsepower and various other categories. This is another example. You can find things such as self-propelled vessels by region, all vessels by region, and non-self-propelled vessels by region. This is a more detailed summary of these types of ships broken down by different geographic regions. The Atlantic, Gulf, and Pacific coast, the Mississippi River system and the Gulf intercoastal waterway in the Great Lakes system so you can find information such as the number of vessels, their horsepower and their cargo capacity. There will also be breakdowns of how many ships are registered by fleet for U.S. states and territories and you can obviously see your own state here and for Indiana, we have 3286 ships that were registered in 2020. This is an example of one shipping company that is registered in Indiana. It is called Central Marine logistics incorporated. It is located just southeast of Chicago and it gives a sense of the facilities it operates at Indiana then they go to Minnesota and Michigan. Here are the kinds of names of the ships that they have. They will tell you what year they started operating. One of them, the STR Wilfred Sykes dates back to 1949. They will have the size of the ship, length, breadth, and various other

factors. This is a section from the library. They have a lot of fulltext materials and various other resources. Incidentally, SuDoc is D103. Here is an example of resources on the history of the U.S. Army Corps of Engineers engineers from the U.S. Congress and the national archives and you can also see the Army Corps logo in the right-hand corner. There are a number of unique treasures you can find on various sections of the Army Corps website. This is a map the Army Corps did of the U.S. Civil War at Cold Harbor Virginia. This battle occurred just a little bit north, northeast of Richmond, Virginia, and it was a particularly significant and bloodied battle. Here is a detailed map of this battle done at that time. Some other archival details on the website this is an example of soldiers filling sandbags on June 3rd, 1948. The Army Corps has also documented formerly used defense sites through various GIS coverage, and so this is a map of some formerly used defense sites within the U.S. And then, this is a detailed entry on the formerly used defense site at an Air Force base in Maine. There are virtual exhibits the Army Corps has done which are available online through the image collection or through other federal entities. This is a World War I exhibit on Army engineers in the great war between 1917 and 1918, and this is a section of their mapping activity. You can see a photo inside the exhibits of their maps and they were particularly incorporating new technology such as aerial photography into their mapmaking process at this time. This is one of the multiple histories of the course activity, which you can find on the website. This is called getting the lights back on, the U.S. Army Corps of Engineers response to Hurricane Maria. Here is the table of contents and it is about Puerto Rico's relationship with the U.S., past responses to hurricanes which hit Puerto Rico, and responses to how the corp responded in 2017 and 18 to Hurricane Maria. And then here is a more detailed timeline of Hurricane Maria, and will also include various stages in the recovery operation. They mentioned that by October 20th, one month past the initial effort, they had just restored 19% of peak power to Puerto Rico. There are a lot of historical works you can find on the course website. This one is called engineers of independence, a documentary history of the engineers in the American Revolution between 1775 and 1783. Here is the table of contents. There will be lots of letters and correspondence. An important figure in the founding of the U.S. Army Corps of Engineers was a 19th century French engineer. He created a lot of military stagecraft and fortifications in France during this time period, and he had a very significant influence on Army Corps practice. The Army Corps was also significantly influenced by British corp engineering. These are a couple examples of Vauban's fortifications in France. These are world heritage sites. Here is an example of an agreement between an early U.S. military figure and this French military figure named Du Coudray and then after World War II the course activities continued. This covers the Army's activities in Europe from the end of World War II to the end of the Cold War. Here is some information about postwar reconstruction in Germany, and there are different tables of contents including information on the first Berlin crisis, the Berlin airlift. This is a map of the Army military districts, and what, by that time, would eventually become southern West Germany. That is where the U.S. Army was headquartered in the postwar occupation period. This is telling information about the construction of military airlift capacity at the airport in Berlin, which was used to conduct operations for the Berlin airlift in 1948 and 1949. Annual reports are also great sources of resources on historical American exploration and engineering activity. These are reports from the corp of topographical engineers from 1840 to 1850. They are referring to the developments in the Mexican war. And then, they have different breakdowns on how much money was spent on military surveys in Oregon, California, New Mexico, and in other areas. There is a website I like to use from the University of Illinois, Chicago called measuringworth.com, which is a great resource for converting historical dollars to current dollars. For instance, let's talk about the 1850 military surveys in Oregon. The \$10,000 spent in 1850 would now be around 350, 4000 per day and this was a search that I did just about a month ago, so it is probably more expensive now. Here they are talking about lighthouses in Boston harbor and you will note the considerable detail they go into and documenting this because they are reporting to Congress for congressional oversight. There also will be histories of corp regions around the country. This is one on the Great Lakes and Ohio River division. One division

with two distinct watersheds. This was just published in 2020. This is the table of contents and you will have information about the different activities including an increasing emphasis on environmental factors beginning at page 141, so this is an example of their restoring some of Lake Michigan, the shoreline area in Chicago. You can see the John Hancock building in the background and I think the Willis Tower is a bit further in the background. It looks like a nice place to walk. This is a map of the various military construction programs in different areas in this geographic region. For instance, in Indiana they mentioned a some air reserve base in north central Indiana, the Newport Army chemical facility in western Indiana and in southern Indiana, the Crane Naval Depot. The corp website also has loads of policy manuals. This is one called a containment evaluation. It documents a former Nebraska ordinance plant, and the focus of it is determining whether a hydraulic containment system is capturing certain types of contaminants and groundwater. This is a more detailed map of this site and the region surrounding it. Here is a risk assessment handbook of human health evaluation that was published in 1999, and you notice the manuals are arranged by numeric series. Here is a more detailed information on human health evaluation from the same 1999 manual. They are explaining various legal requirements the manual is supposed to provide public information about. Here is an example of the table of contents within this document, and here is more information about base realignment and closure. Periodically, during the post-Cold War period, the U.S. military has formed base realignment and closure commissions, to recommend closure of various military bases. Here is some information about this, and this can be a very complicated and controversial process because no base in a particular congressional or state district thinks it should be closed. This is another safety manual on radiation protection, which was published over nine years ago. Here's the table of contents for it, and you can learn things about the laser safety officer or the lit radiation safety officer. And here is information about radioactive decay. Here are just some title examples of other Army Corps manuals. You can find information on and architectural walk foundation, and numerous other topics. There have been numerous controversies of the Army Corps is experienced during its history and even today. The corp has been accused of adverse environmental impacts in areas ranging from dam construction, water quality, American Indian trading rights and so on. They have also been criticized for being excessively responsive to pork barrel projects. In recent years the corp increasingly needed to account for the impact of its projects. They have also had to consider nonstructural projects to solve water problems. They have been criticized for New Orleans levee systems both before and after hurricane Katrina. The corp has been ruled to have violated the national environmental policy act in constructing the Dakota access pipeline by one U.S. District Court and they often are subject to litigation in various areas of the country. If you're familiar with the Christian him, what a friend we have in Jesus, this is a parody of this called what a friend we have in Congress and it shows the Army Corps was in Congress for providing them with bountiful appropriations. There are numerous works with Chad have been produced on the Army Corps of Engineers throughout its history with all kinds of different perspectives. The University of Texas, Austin wrote a book called structures in the stream, published by a Boise State historian in 1994. I recently read it. The work goes up through the later 1800s, but it is very informative and I think it weighs in around 300 pages. There are tons of congressional committees that get involved in Army Corps oversight. As best as I can determine, these include the house of appropriations committees, military constructions Veterans Affairs and related committees subcommittee, the same house appropriations subcommittee on energy, water development and related agencies. The house services committee, the house transportation committee, the same subcommittee on energy and water development, Senate armed services committee and the Senate environment and Public Works committee. You can also find some Army Corps publications in GovInfo's document series. These documents weigh in at 2135 pages, and I hope you can have them read by Friday. Here is what the first page of one of these documents is, and this is the second volume and it mentions it is from the assistant secretary of the Army civil works department, and so there will be lots of different resources in here, scientific analysis telling about

where some construction areas of impact may be. Here is some more detailed information about working on the Gulf of Mexico, and trying to estimate storm surge damage for Southwest coastal Louisiana. You will also be able to find information on economic impact, so for instance, they're focusing on three parishes in southwestern Louisiana, and they're putting what the population developments have been over 2 1/2 decades as well as per capita income. There are numerous additional resources you can find on the Army Corps of Engineers from U.S. government. The Congressional Budget Office will examine congressional reports on legislation, cost implications of legislation dealing with the Army Corps, the congressional research service, the Defense Department Inspector General, Governor accountability officer, Library of Congress, the national academies of science engineering and medicine, national archives record group. 77 is where Army Corps of Engineers resources are and you will find things from the Smithsonian Institution, as well. Then in fiscal year 2023, the Biden Administration's congressional budget request for the Corps of Engineers was 6.6 billion, which was down from 8.3 billion for the 2022 budget and the military construction request from fiscal year 2023 was 7.6 billion, the estimated request for the 2022 budget was 8.149 billion. You would have to check and see what the status of that request is now, and weather events such as the recent hurricane in Florida, Hurricane Ian may impact that. One of the things that surprised me when doing research on the corp is that their employees are overwhelmingly civilian. 98% of the corp's 35,000 employees were civilian as of December of 2021. The top five sectors of employment included operation and maintenance, engineering, administration, construction, and programs and project management. So, I think there are numerous benefits you can garner from using the Army Corps of Engineers resources. These include learning about the history of the agency's activities, gaining an enhanced understanding of their civil works engineering and military engineering, learning about reservoirs and recreational facilities they maintain, historical contemporary and emergent controversies including litigation, gaining enhanced awareness of multiple stakeholders trying to influence corp activities, understanding the multifaceted environmental impacts of the corp and their works, learning how the corp has operated in civilian and military operation environments. I also think another possible area is exploring future contemporary military contingency operations the corp might participate in. These include areas such as the South China Sea, the East China Sea, Taiwan, the yellow Sea, Russia, Ukraine, Iran and elsewhere. Learning how the corp is addressing climate related activities and finally, gaining enhanced act understanding of how they can influence the economic supply chain.

We have a handful of questions and I will read them a little bit out of order because they are grouped by topic. The first two are relatively similar. Are any of the documents that you referenced in trail?

I think some are. You would have to double check, and some of them may also be in the Defense technical information Center, as well.

The next one is also, the documents that you have referenced, are they all in the FDLC?

A significant number of them are, but I would not guarantee that. If you see ones that are not, let us know.

Next ones are relatively similar. The first one is how to find documents on older projects. I get a lot of questions about them.

There are different resources you can check. You can find many resources to the catalog of government publications. Many of them will also be available through the Congressional serial set. You might find some through the Internet archives. Obviously, check the Army course website. Some may be available through the Defense technical information Center. Some may be through trail.

What about older maps in a serial set?

The serial set will contain a number of different maps from the Corps of Engineers. The quality of the maps will depend on the physical storage conditions of the library or the electronics access to those publications.

I get asked sometimes by people doing legal research and kneading older manuals, are older policy manuals available?

Very good question. Sometimes they can be on an agency's website. Sometimes they are not. The Army Corps has a library of print publications. You can check the catalogs, as well, and you may also want to contact them directly because unfortunately, sometimes with technical manuals, they may think only the most recent version is valid for current use but in actuality, if you're looking at scientific, technical or historical lead legal research, you need to know what the standard was in 1905, or 1863.

Of this is in reference to your slides early on. Do you have a link to the online maps that you reference? Just what is available through these slides. Some may be available from the American memory project, the national archives, the Corps of Engineers website or other sources.

Any suggestions of how to get on a mailing list for current titles from the corp?

If you are not selecting them already through your depository selection profile, I would contact the cores library to see if you could get on the mailing list. You might want to just focus on materials from your immediate geographic region because the cores publication scope is so enormous you could get overwhelmed.

Okay. I am going to start wrapping up this presentation, but if there is a last-minute question, go ahead and ask before I do the wrap up. Thank you for great talk, Bert. For those of you with questions, you are welcome to chat with us right now on the chat for the presentation or follow up with us by email and we will reach out to Bert Chapman. This presentation has been recorded and will be made available soon. This talk concludes today's session of the 2022 fall federal library conference. We look forward to seeing you tomorrow for day two. Thank you.