



GULF RESEARCH PROGRAM

Project Title: Multidisciplinary Knowledge Integration to Support Louisiana Coastal Indigenous Communities' Response to Natural and Technological Disasters and Adaptation to Climate Change

Award Amount: \$312,283

Awardee: University of New Orleans Center for Hazard Assessment, Response and Technology

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I. PROJECT SUMMARY (from proposal)

The United Houma Nation (UHN) resides in six parishes across Southeast Louisiana. As ecosystem users, the tribe is intricately connected to their environment, and affected by the disasters that occur. The oil and gas industry is also located in Southeast Louisiana, and impacts the environment and economy across the coast. The natural and human-induced effects on the environment, including hurricanes, storm surge, sea level rise, land loss and oil spills, impact the UHN's livelihoods, and force them to adapt and develop measures to better protect their tribal land. The subsidence and sea level rise in the area combined result in the highest rate of relative sea level rise in the world. By collaborating with the tribe to learn their traditional ecological knowledge (TEK), it is possible to better understand the environmental stressors they face, the ways they have adapted to these stressors, and the ways they will adapt in the future. This will enhance the capacity of other indigenous communities to adapt to ecosystem changes and challenges in the future.

UNO-CHART and Louisiana Sea Grant (LSG) will build upon a process developed by Bethel et al. (2014), Sci-TEK, which uses Remote Sensing (RS), science-based datasets, and GIS analyses to produce mapping products that represent collaborating local ecosystem users' TEK. The team uses the method to collaborate with coastal Louisiana communities on mitigation and adaptation planning strategies. The method was designed for state coastal restoration project prioritization, and involves collaborating with ecosystem users to gain their TEK about an environmental issue, while promoting transfer of the science and technology related to that issue - facilitating a two-way knowledge transfer. The blending of this

knowledge results in a mapping and planning tool that communities can use to adapt to hazards and disasters. The team has worked with coastal ecosystem users in the Barataria Basin, Plaquemines and Terrebonne parishes. These collaborations resulted in mitigation and adaptation planning efforts, and increased communication between coastal communities and local, regional and state policymakers.

Through tribal interviews, the team will evolve the method to aid tribal planning efforts, and identify the characteristics of adaptive capacity that the tribe can use to plan for the future. Using oral histories and documents, the team, in collaboration with the tribe, will create a historical timeline of the tribe's community and history of hurricanes, oil spills, and extraction activities. This will allow the tribe to understand their history in relation to the development of extractive industries in their area.

The team will document the current local plans, and the implementation of mitigation efforts included and not included in those plans. These efforts will result in a matrix that will aid future adaptation planning, and be transferrable to other indigenous communities facing similar issues.

Because of the tightly integrated multidisciplinary methodology proposed, the team anticipates choosing two communities to pilot the evolution of the method, working with graduate students from the UHN, who will work with the research team in all aspects of the project in order to learn about the method, and aid in the transfer of knowledge.

II. PROJECT SUMMARY (from final report)

The United Houma Nation (UHN) resides in six parishes across Southeast Louisiana. As ecosystem users, the tribe is intricately connected to their environment, and affected by the disasters that occur. The natural and human-induced effects on the environment, including hurricanes, storm surge, sea level rise, land loss and oil spills, impact the UHN's livelihoods, and force them to adapt and develop measures to better protect their tribal land. The subsidence and sea level rise in the area combined result in the highest rate of relative sea level rise in the world.

This project was a collaboration between the UHN and researchers at Louisiana Sea Grant and the University of New Orleans. The collaborative team documented how environmental stressors impacted two United Houma Nation communities in coastal Louisiana. The team documented how the environmental stressors affected the livelihoods of these communities and shaped the mitigation strategies they use to protect their coastal lands. The project team made use of traditional ecological knowledge to understand the vulnerabilities and sustainabilities that emerged from these environmental stressors, in order to understand the tribe's adaptive capacity now and into the future.

The team produced a comprehensive timeline and story map, which is a resource that the United Houma Nation can use to adapt to environmental stressors in the future. This work may encourage other mitigation and adaptation planning efforts and increase communication between communities and policymakers. This will enhance the capacity of other indigenous communities to adapt to ecosystem changes and challenges in the future.

III. PROJECT RESULTS

Accomplishments

The issue this project worked to address was to understand how the United Houma Nation (UHN) adapts to natural and human-induced impacts on the environment across the coast. This project was a collaboration between the UHN, and researchers from Louisiana State University (LSU) and the University of New Orleans (UNO) that used interdisciplinary methods and traditional ecological knowledge (TEK) to understand the environmental stressors, the adaptations to those stressors, and how the tribe will adapt to the future.

The team addressed this problem by working together to identify two UHN students to participate in all aspects of the research and interview five tribal members identified as TEK experts by the Tribal Council. These experts relayed information to the researchers related to adaptation to environmental stressors over time. These experts reside in two communities in coastal Louisiana chosen by the tribe. The communities are located in parishes with the greatest UHN population – Lafourche and Terrebonne parishes. The communities chosen by the tribe were Golden Meadow, located in Lafourche Parish, and Dulac, located in Terrebonne Parish. Three of the experts were from Dulac, and two of the experts were from Golden Meadow.

The team analyzed the TEK expert interviews using qualitative data analysis. Utilizing Dedoose software, the researchers analyzed the interviews by identifying common emergent codes (ideas) related to the adaptive capacity of the tribe. The researchers categorized the data into codes and sub codes that unveiled key themes identified by the TEK experts.

The main themes that emerged from the interviews included environmental and climate stressors, living off the land while dealing with policy impacts, and adapting to all of these natural and man-made stressors over time.

The environmental changes include land loss, rising water, and the resulting saltwater intrusion. All of these changes contribute to reduced resources in tribal communities. The climate impacts included hurricanes Andrew, Gustav, Ike, Juan, Katrina and Rita. The climate impacts also involved general flooding as well as the loss of belongings. The experts also detailed extractive industry impacts, including the BP oil spill, the dead zone, dredging, oil spills in general, pipelines and platforms, and sulphur mining.

Historically, the tribe has lived off the land, farming, hunting, trapping, fishing, shrimping, and exchanging resources. Through all of the environmental impacts and changes, the tribe has worked to support the continuity of their culture, through generational occupations, traditional knowledge and language, medicinal practices, and self-sufficiency. Even so, many of these cultural traits are being lost, as historic communities disappear. In addition, tribal members suffer from health problems such as diabetes and cancer, and work-related injuries, all resulting in the need for more health care.

Beyond environmental stressors, the tribe has also had to deal with policy impacts, from lack of educational opportunities to regulations to protection and restoration projects. Natives were not

allowed to attend school in Terrebonne Parish until 1963, nearly a decade after Brown vs. Board of Education (1954). Being denied an education meant that many tribal members could not read or write, and this is still evident in the older generations today. Furthermore, fishing regulations and licenses and permits, in addition to insurance requirements and land regulations, have made it difficult for tribal members to continue to support themselves by living off the land. The implementation of numerous protection and restoration projects, while important for coastal restoration, has caused changes to the ecosystem that forced further adaptation by the interviewed tribe members.

Therefore, the tribe has been forced to significantly adapt over time. The adaptations include environmental adaptations, such as adaptations to climate, land loss, hurricanes, oil spills, and rising water, occupational adaptations, such as career changes, changes in business practices, changes in capabilities, equipment adaptations, and adapting by taking on different forms of work depending on the season. The adaptations also involve population migration from vulnerable locations to higher land. The project team counted the number of times each theme emerged, as well as the number of experts that voiced each theme, in order to identify the TEK factor for each theme. This TEK factor, along with the locations that each expert pointed out, helped the team create maps of the most significant vulnerability and sustainability factors in the two study areas.

The created maps include land loss from 1932 to the present, which shows the loss of historical communities and population migration from vulnerable locations. As one expert said, “the old people died and the young ones just moved out.” Another map depicts the impacts of the extractive industries in the areas, particularly the BP oil spill. This map shows the oiling footprint of the spill, echoing the impacts on the tribe’s way of life: “they made us miss a whole season.” Still another map details the hurricane tracks in the study areas over time, and the relationship between hurricanes, land loss, and the deterioration of the barrier islands, all of which make both study areas more vulnerable. Importantly, the experts also spoke of the protection and restoration projects in their areas, and what has worked and not worked for them.

Another finding was the combination of policy impacts and occupational adaptations. As the cost of fuel and the cost of living increased, the cost of shrimp decreased, causing the tribal members to have to change their occupations in order to survive. Environmental changes, particularly land loss, caused tribal members to have to adapt too, by getting larger boats to navigate additional water, or changing their occupations seasonally to diversify their incomes, such as fishing during part of the year and working in the oil field for the other part.

All of these maps and findings were shared on an online story map. The story map included a timeline of the tribe’s history and the environmental and man-made stressors over time. The tribe can use this online tool to make adaptation decisions in the future, as well as help communicate their needs and issues with policymakers and other external groups who may provide support to implement future adaptation strategies.

Implications

As stated above, the tribe and researchers can use the project findings to communicate with policymakers around restoration and protection projects, make decisions for future resilience, and

participate in future resilience projects. In fact, this spring, the team collaborated with the Water Institute of the Gulf (TWIG) on a workshop to identify restoration solutions in the study areas. In addition, the team collaborated with Tulane University and other researchers on a proposal to the Gulf Research Program's most recent Thriving Communities grant opportunity. The proposal aims to leverage the results of this project to further understand adaptation and migration decisions the tribe has made and will make in the future across all six tribal parishes.

Applications of this proposed work include improved protection of communities and natural ecosystems in the Gulf Coastal Zone via enhanced detection capability of acute and chronic hazards, and widespread utilization and implementation of technical visualization tools by indigenous communities for coastal hazard mitigation and planning activities. Relationships fostered with the UHN key personnel and TEK experts, the UHN students, locals, university scientists, State agencies related to the oil and gas industry, TWIG, and regional Sea Grant programs allow for method and data sharing, and make it possible for this cooperative activity to continue after the completion of the project. The results of this case study provide a framework and methodology for improving coordination and partnership between indigenous tribes and local, state, and federal agency personnel concerned with addressing risks throughout the region, which will help the tribe to plan and participate in planning efforts well after the project ends.

The Sci-TEK method is an ever-evolving method for use in local decision-making, and can be adapted to other communities to aid in understanding adaptation capacity, as well as coastal hazards mitigation from a local perspective. The results of the study provides insight on how other coastal communities, particularly communities made up of indigenous ecosystem users, can adapt to chronic and episodic natural and human-induced hazards utilizing traditional ecological knowledge (TEK) gained from the deep connection they have to the surrounding landscape and marine environment. This knowledge, born from sea and shore, and knowledge gained via modern scientific methods, are different—and often complementary and parallel—ways of knowing. TEK includes information about the biological, physical, social, cultural, and spiritual worlds that knowledge bearers inhabit and engage with. Such place-based knowledge can inform science by providing local ecological information and narrative histories of local ecosystems, as well as best practices and rules about how to live within and care for the natural world that is our shared home.

The methods developed for this case study enhance the development of mitigation planning through a community-based risk and vulnerability assessment that integrates TEK in a meaningful and complementary way with both social and mapping sciences. The resulting methods provide significant opportunity for increased university/public engagement in understanding, managing, and adapting to coastal risks associated with vulnerable, underrepresented, and underserved indigenous coastal communities.

Unexpected Results

The project team found that members of the UHN face lost culture and communities, reduced resources, severe land changes, and impacts from the oil industry, hurricane impacts, and land loss. While their livelihood, which has existed for generations, depends upon the environment, that very environment they depend on is changing and disappearing. One such environmental loss that emerged in multiple interviews is Catfish Lake. In the past, the tribe made use of the lake to catch catfish. Through

research, the project team learned that dredging caused the salinity in the lake to change, altering the ecosystem, and making the habitat no longer healthy for catfish. This forced the tribe to switch from catfishing to shrimping. While tribal adaptation to environmental change was not unexpected, the emergence of Catfish Lake as a microcosm of how environmental change exacerbated by the oil and gas industry forced the tribe to adapt their livelihoods to continue to survive in their coastal home, was a quintessential example of this adaptation.

Project Relevance

The following audiences would be most interested in the results of this project:

- Researchers
- Educators
- Community Leaders
- Local Government Officials

As stated above, the project provides a methodology for collaborative community adaptation and decision-making, that is useful to researchers. It is also useful to community leaders who are looking to participate in local adaptation and decision-making. The results of the study are useful to both local and state government officials, as they provide planning and policy recommendations relevant to the local indigenous community.

More and more decision-makers are recognizing the value inherent in including local voices in resource management and education—indeed it is a fundamental and unique part of our project. The NAS GRP, through this project (and others like it), is therefore able to promote and facilitate this understanding more broadly by supporting Gulf of Mexico communities in their efforts to manage the resources and ecosystems upon which their livelihoods depend. Using their own knowledge systems to ensure the continuity of their way of life, communities can adapt to social and environmental change. Being more inclusive—respecting and incorporating communities’ ways of knowing in planning, research, and decisions—broadens support for science, education, and community projects, while also allowing for community-based leadership of projects and programs now and in the future. Government agency decision-makers are few, and communities are many, so supporting local knowledge holders and including them in projects such as this and related programs will increase the likelihood for success in achieving the State’s (or agency’s) mission, while at the same time create rich partnerships between agency staff and researchers, and members of local communities.

Education and Training

Number of students, postdoctoral scholars, or educational components involved in the project:

- Undergraduate students: 3
- Graduate students: 2
- Postdoctoral scholars: 0
- Other educational components: 0

IV. DATA AND INFORMATION PRODUCTS

This project produced data and information products of the following types:

- Data
- Information Products
- Scholarly publications, reports or monographs, workshop summaries or conference proceedings
- Websites or data portals
- GIS applications

DATA

Data Management Report:

See attached Data Management Report.

Relationships between Data Sets:

The text data includes notes and transcripts from interviews. The image files are photographs taken during the interviews. The spreadsheets are databases of codes that emerged from the interviews. The geospatial data are maps created based on the codes and themes that emerged from the interviews with the experts.

Additional Documentation Produced to Describe Data:

N/A

Other Activities to Make Data Discoverable:

The project team uploaded the story map, which is the adaptive capacity online tool, to the University of New Orleans' ArcGIS Online website, which is visible to the public (<https://unola.maps.arcgis.com>). The project team also stored all of the final project documents at Louisiana State University, the University of New Orleans, and the United Houma Nation office.

Sensitive, Confidential, or Proprietary Data:

Any proprietary data used or collected was defined by the UHN. The proprietary data identified by the UHN was password protected, and participants kept anonymous. The team, in conjunction with the UHN, drafted a data agreement after the tribe consulted with their data committee and made recommendations to the Tribal Council. The data agreement went through the tribe's established process in order to receive support from the entire tribe. The agreement was drafted and signed in March 2017.

INFORMATION PRODUCTS

Information Products Report:

See attached Information Products Report.

Citations for Project Publications, Reports and Monographs, and Workshop and Conference Proceedings:

Lambeth, T, Bethel, B., Parfait, J., & Clay, K. January 2019. Multidisciplinary Knowledge Integration to Support Louisiana Coastal Indigenous Communities' Response to Natural and Technological Disasters

and Adaptation to Climate Change. Presented at the Fifteenth International Conference on Environmental, Cultural, Economic & Social Sustainability in Vancouver, Canada.

Lambeth, T, Bethel, B., Parfait, J., & Clay, K. February 2019. Multidisciplinary Knowledge Integration to Support Louisiana Coastal Indigenous Communities' Response to Natural and Technological Disasters and Adaptation to Climate Change. Presented at the Coastal Geotools Conference in Myrtle Beach, South Carolina.

Lambeth, T, Bethel, B., Parfait, J., & Clay, K. May 2019. Multidisciplinary Knowledge Integration to Support Louisiana Coastal Indigenous Communities' Response to Natural and Technological Disasters and Adaptation to Climate Change. Presented at the Challenges of Natural Resources Economics and Policy Conference in New Orleans, Louisiana.

Websites and Data Portals:

The story map includes relevant quotes from the conducted interviews, the corresponding maps, and a detailed timeline of the tribe's history. The researchers uploaded the story map to ArcGIS Online, which is publicly accessible. Members of the tribe, researchers, decision makers, and the public can all access the story map by visiting:

<https://unola.maps.arcgis.com/apps/MapJournal/index.html?appid=cb825dccc9ba4c969f6cf21e9bc57725>.

The story map will remain on the University of New Orleans GIS Online system in perpetuity. The project team will also save each page of the story map in pdf format and store it on UNO's secure drive.

Additional Documentation Produced to Describe Information Products:

N/A

Other Activities to Make Information Products Accessible and Discoverable:

The story map includes relevant quotes from the conducted interviews, the corresponding maps, and a detailed timeline of the tribe's history. The researchers uploaded the story map to ArcGIS Online, which is publicly accessible. Members of the tribe, researchers, decision makers, and the public can all access the story map by visiting

<https://unola.maps.arcgis.com/apps/MapJournal/index.html?appid=cb825dccc9ba4c969f6cf21e9bc57725>.

Confidential, Proprietary, Specially Licensed Information Products:

Yes.

V. PUBLIC INTEREST AND COMMUNICATIONS

Most Unique or Innovative Aspect of the Project

This project builds upon a process developed by Bethel et al. (2014), Sci-TEK, which uses Remote Sensing (RS), science-based datasets, and GIS analyses to produce mapping products that represent collaborating local ecosystem users' TEK. The method was designed for state coastal restoration project

prioritization, and involves collaborating with ecosystem users to gain their TEK about an environmental issue, while promoting transfer of the science and technology related to that issue – facilitating a two-way knowledge transfer. The blending of this knowledge results in a mapping and planning tool that communities can use to adapt to hazards and disasters. For example, the project team found that the combination of land loss and population migration resulted in the loss of historical communities. This, in turn, has reduced the tribe’s traditional knowledge that was historically passed down from elders in the community. Additionally, the rising cost of shrimping, combined with the lowered cost of shrimp, has influenced many tribal members to move away from traditional ecological livelihoods. Understanding these impacts resulted in collaborative mitigation and adaptation planning efforts, and increased communication between coastal communities and local, regional and state policymakers.

Most Exciting or Surprising Thing Learned During the Project

So far, the project team has discovered that members of the UHN are faced with lost communities, reduced resources, severe land changes, and impacts from both the oil industry and hurricane impacts. While their livelihood, which has existed for generations, depends upon the environment, that very environment they depend on is changing and disappearing. One such environmental loss that has emerged in multiple interviews is Catfish Lake. In the past, the tribe made use of the lake to catch catfish. Through research, the project team learned that dredging caused the salinity in the lake to change, changing the ecosystem, and making the habitat no longer healthy for catfish. This forced the tribe to switch from catfishing to shrimping. Catfish Lake is a microcosm of how environmental change exacerbated by the oil and gas industry has forced the tribe to adapt their livelihoods to continue to survive in their coastal home.

Additionally, the research team experienced several ‘ah-ha’ moments in working on this project. Examples are included in the following:

- that the most significant storm impact of memory for those we interviewed was Juan – barely a Category 1 storm at the time of landfall; but other factors not related to wind speed were emphasized as to why that resonated with most as a stressor event they had to adapt to
- how the codes were interrelated/and which codes/themes were related – some were connected in ways the team did not anticipate at first, but the connections emerged through the qualitative data analyses process
- how this type of study is necessary to complement standard SCAT sampling for oil spill impacts to better understand the broader impacts to fishing communities.

Most Important Outcome or Benefit of Project

Analyzing the methods the UHN use to make planning decisions will help the tribe to make future planning decisions and more robust adaptation plans. This will enhance the tribe’s agency, their knowledge, and their understanding of how their adaptive capacity will help them plan into the future. The project will also aid the tribe in their application for federal recognition, as the timelines produced by the project team, in collaboration with the tribe, will help the tribe establish and document their unique tribal history for the federal recognition process as well as identify culturally significant areas in need of protection. The Sci-TEK method is an ever-evolving method for use in local decision-making, and can be adapted to other communities to aid in understanding adaptation from a local perspective. The results of the study will provide insight on how other coastal communities, particularly communities

made up of indigenous ecosystem users, can adapt to chronic and episodic natural and human-induced hazards.

The methods developed for this case study will enhance the development of mitigation planning through a community-based risk and vulnerability assessment, and provide significant opportunity for increased university/public engagement in understanding, managing, and adapting to coastal risks associated with vulnerable, underrepresented, and underserved indigenous coastal communities. Applications of this proposed work include: 1) improved protection of communities and natural ecosystems in the Gulf Coastal Zone via enhanced detection capability of acute and chronic hazards; and 2) widespread utilization and implementation of technical visualization tools by indigenous communities for coastal hazard mitigation and planning activities. Relationships fostered with the UHN key personnel and TEK experts, the UHN students, locals, university scientists, the oil and gas industry, and regional Sea Grant programs will allow for method and data sharing, and will make it possible for this cooperative activity to continue after the completion of the project. The results of this case study will provide a framework and methodology for improving coordination and partnership between indigenous tribes and local, state, and federal agency personnel concerned with addressing risks throughout the region, which will help the tribe to plan and participate in planning efforts well after the project ends.

As the tribe is intricately tied to the ecosystem, environmental changes have a huge impact on members of the tribe. The culture and homeland of the tribe are disappearing as the tribe's land is eaten away. The project team took a holistic approach to this project, considered all components of what makes up the delicate ecosystems of Louisiana, and consulted with the TEK experts in order to find ways to continue to adapt and preserve the tribe's culture, land and livelihood.

The training that the UHN students gained by being involved with this project is one of the most important outcomes of the project – this training included mapping/GIS/Remote Sensing techniques and applications, qualitative data analyses, working together on a transdisciplinary research team, presenting research findings, etc. The experience and expertise gained by the students represent capacity building within the tribe. These students will be able to provide needed resources, such as mapping and data analyses expertise, to the tribe long after the end of this project. This also relates back to the original identified needs that the UHN expressed in their visit to LSU – “Providing opportunity for scholarships and support for UHN undergraduate and graduate student assistantships.”

Communications, Outreach, and Dissemination Activities of Project

The University of New Orleans issued a press release about this project when the money was first awarded. Additionally, Nola.com/The Times Picayune wrote an article describing this project and another NAS funded project awarded to UNO researchers.

The team used the United Houma Nation's Facebook page to advertise graduate assistantships when the project first started (<https://www.facebook.com/United-Houma-Nation-190278573408/>).

The team made the story map available on UNO's ArcGIS Online page:

<https://unola.maps.arcgis.com/apps/MapJournal/index.html?appid=cb825dccc9ba4c969f6cf21e9bc577>

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Data Report

DataType	DigitalResourceType	Title	FileName	Creators	PointofContact	PublicationYear	RepositoryName	DOIorPersistentURL	Keywords	Publications
Social/Cultural	Text	Interview Schedule								
Social/Cultural	Text	Notes	Interview Schedule Notes.docx	Lambeth, Tara		2017	UNO Shared Drive			
Social/Cultural	Text	TEK Interview Questions	TEK Interview Questions.docx	Lambeth, Tara		2017	UNO Shared Drive			
Social/Cultural	Text	Mapping Exercise								
Social/Cultural	Text	Questions	Mapping Exercise Questions.docx	Lambeth, Tara		2017	UNO Shared Drive			
Social/Cultural	Text	Mapping Activity Sign in	Mapping Activity Sign in.pdf	Parfait, Jessica		2017	UNO Shared Drive			
Social/Cultural	Text	Powwow Mapping								
Social/Cultural	Text	Activity Notes	Powwow Mapping Activity Notes.docx	Lambeth, Tara		2017	UNO Shared Drive			
Social/Cultural	Text	Powwow Mapping								
Social/Cultural	Text	Activity Transcript	Powwow Mapping Activity Transcript.docx	Lambeth, Tara		2017				
Social/Cultural	Text	TEK1 Interview	TEK1 Interview Transcript							
Social/Cultural	Text	Transcript Summary	Summary.docx	Lambeth, Tara		2017	UNO Shared Drive			
Social/Cultural	Text	TEK1 Interview Notes	TEK1 Interview Notes.docx	Lambeth, Tara		2017	UNO Shared Drive			
Social/Cultural	Text	TEK1 Transcript	TEK1 Transcript.docx	Clay, Kasha		2017	UNO Shared Drive			
Social/Cultural	Text	TEK2 and TEK3 Transcript	TEK2 and TEK3 Transcript.docx	Trahan, Zachary		2017	UNO Shared Drive			
Social/Cultural	Text	TEK2 and TEK3 Pseudonyms	TEK2 and TEK3 Pseudonyms.docx	Trahan, Zachary		2017				
Social/Cultural	Text	UHNTimeline	UHNTimeline.docx	Trahan, Zachary		2017	UNO Shared Drive			
Social/Cultural	Text	TEK4 Transcript	TEK4 Transcript.docx	Clay, Kasha		2017	UNO Shared Drive			
Social/Cultural	Text	TEK4 Interview Notes	TEK4 Interview Notes.docx	Lambeth, Tara		2017				
Social/Cultural	Text	TEK1 Interview 2								
Social/Cultural	Text	Transcript	TEK1 Interview 2 Transcript.docx	Clay, Kasha		2017	UNO Shared Drive			
Social/Cultural	Text	TEK2 and TEK3 Interview								
Social/Cultural	Text	Notes	TEK2 and TEK3 Interview Summary.docx	Lambeth, Tara		2017				
Social/Cultural	Text	TEK2 and TEK3 Transcript								
Social/Cultural	Text	Part 2	TEK2 and TEK3 Transcript Part 2	Clay, Kasha		2018				
Social/Cultural	Text	TEK2 and TEK3 Pseudonyms								
Social/Cultural	Text	Pseudonyms Part 2	TEK2 and TEK3 Pseudonyms Part 2.docx	Clay, Kasha		2018				
Social/Cultural	Text	TEK5 Interview 1 Notes	TEK5 Interview 1 Notes.docx	Lambeth, Tara		2018				
Social/Cultural	Text	TEK4 Location Notes	TEK4 Location Notes.docx	Parfait, Jessica		2018				
Social/Cultural	Text	TEK4 Interview 2 Notes	TEK4 Interview 2 Notes.docx	Lambeth, Tara		2018				
Social/Cultural	Text	TEK4 Interview 2								
Social/Cultural	Text	Transcript	TEK4 Interview 2 Transcript.docx	Clay, Kasha		2018				
Social/Cultural	Text	TEK5 Interview 1								
Social/Cultural	Text	Transcript	TEK5 Interview 1 Transcript.docx	Clay, Kasha		2018				
Social/Cultural	Images	TEK 1 Interview 2 Photo								
Social/Cultural	Images	1	IMG_2129.jpg	Lambeth, Tara		2017	UNO Shared Drive			
Social/Cultural	Images	TEK 1 Interview 2 Photo								
Social/Cultural	Images	2	IMG_2129.jpg	Lambeth, Tara		2017	UNO Shared Drive			
Social/Cultural	Images	TEK 1 Interview 2 Photo								
Social/Cultural	Images	3	IMG_2129.jpg	Lambeth, Tara		2017	UNO Shared Drive			
Social/Cultural	Images	TEK 1 Interview 2 Photo								
Social/Cultural	Images	4	IMG_2129.jpg	Lambeth, Tara		2017	UNO Shared Drive			
Social/Cultural	Images	TEK 1 Interview 2 Photo								
Social/Cultural	Images	5	IMG_2129.jpg	Lambeth, Tara		2017	UNO Shared Drive			
Social/Cultural	Images	TEK 1 Interview 2 Photo								
Social/Cultural	Images	6	IMG_2129.jpg	Lambeth, Tara		2017	UNO Shared Drive			
Social/Cultural	Images	TEK 1 Interview 2 Photo								
Social/Cultural	Images	7	IMG_2129.jpg	Lambeth, Tara		2017	UNO Shared Drive			
Social/Cultural	Images	TEK 1 Interview 2 Photo								
Social/Cultural	Images	8	IMG_2129.jpg	Lambeth, Tara		2017	UNO Shared Drive			
Social/Cultural	Images	TEK 1 Interview 2 Photo								
Social/Cultural	Images	9	IMG_2129.jpg	Lambeth, Tara		2017	UNO Shared Drive			
Social/Cultural	Images	TEK 1 Interview 2 Photo								
Social/Cultural	Images	10	IMG_2129.jpg	Lambeth, Tara		2017	UNO Shared Drive			
Social/Cultural	Images	TEK 1 Interview 2 Photo								
Social/Cultural	Images	11	IMG_2129.jpg	Lambeth, Tara		2017	UNO Shared Drive			
Social/Cultural	Images	TEK 1 Interview 2 Photo								
Social/Cultural	Images	12	IMG_2129.jpg	Lambeth, Tara		2017	UNO Shared Drive			

Social/Cultural	Images	TEK 1 Interview 2 Photo 45	IMG_2129.jpg	Lambeth, Tara	2017	UNO Shared Drive
Social/Cultural	Images	Powwow Flyer	Powwow Flyer.indd	Lambeth, Tara	2017	UNO Shared Drive
Social/Cultural	Images	Powwow Flyer	Powwow Flyer.pdf	Lambeth, Tara	2017	UNO Shared Drive
Social/Cultural	Images	Powwow Photo 1	Powwow Photo 1.jpg	Lambeth, Tara	2017	UNO Shared Drive
Social/Cultural	Images	Powwow Photo 2	Powwow Photo 2.jpg	Bethel, Matt	2017	UNO Shared Drive
Social/Cultural	Images	Student Recruitment Flyer	Student Recruitment Flyer.pdf	Parfait, Jessica	2017	UNO Shared Drive
Social/Cultural	Images	TEK2 and TEK3 Interview 2 Photo 1	IMG_6208.jpg	Lambeth, Tara	2017	
Social/Cultural	Images	TEK2 and TEK3 Interview 2 Photo 2	IMG_6210.jpg	Lambeth, Tara	2017	
Social/Cultural	Images	TEK2 and TEK3 Interview 2 Photo 3	IMG_6212.jpg	Lambeth, Tara	2017	
Social/Cultural	Images	TEK2 and TEK3 Interview 2 Photo 4	IMG_6213.jpg	Lambeth, Tara	2017	
Social/Cultural	Images	TEK5 Interview 1 Photo 1	IMG_7554.jpg	Bethel, Matt	2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 2	IMG_7555.jpg	Bethel, Matt	2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 3	IMG_7557.jpg	Bethel, Matt	2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 4	IMG_7559.jpg	Bethel, Matt	2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 5	IMG_7561.jpg	Bethel, Matt	2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 6	IMG_7562.jpg	Bethel, Matt	2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 7	IMG_7567.jpg	Bethel, Matt	2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 8	IMG_7569.jpg	Bethel, Matt	2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 9	IMG_7571.jpg	Bethel, Matt	2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 10	IMG_7572.jpg	Bethel, Matt	2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 11	IMG_20180323_164424.jpg	Clay, Kasha	2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 12	IMG_2018323_164423.jpg	Clay, Kasha	2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 13	IMG_20180323_164422.jpg	Clay, Kasha	2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 14	IMG_20180323_163148.jpg	Clay, Kasha	2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 15	IMG_3113.jpg	Lambeth, Tara	2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 16	IMG_3112.jpg	Lambeth, Tara	2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 17	IMG_3111.jpg	Lambeth, Tara	2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 18	IMG_3110.jpg	Lambeth, Tara	2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 19	IMG_3109.jpg	Lambeth, Tara	2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 20	IMG_3108.jpg	Lambeth, Tara	2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 21	IMG_3107.jpg	Lambeth, Tara	2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 22	IMG_3106.jpg	Lambeth, Tara	2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 23	IMG_3105.jpg	Lambeth, Tara	2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 24	IMG_3104.jpg	Lambeth, Tara	2018	

Social/Cultural	Images	TEK5 Interview 1 Photo 25	IMG_3103.jpg	Lambeth, Tara	2018
Social/Cultural	Images	TEK5 Interview 1 Photo 26	IMG_3102.jpg	Lambeth, Tara	2018
Social/Cultural	Images	TEK5 Interview 1 Photo 27	IMG_3101.jpg	Lambeth, Tara	2018
Social/Cultural	Images	TEK5 Interview 1 Photo 28	IMG_3100.jpg	Lambeth, Tara	2018
Social/Cultural	Images	TEK5 Interview 1 Photo 29	IMG_3099.jpg	Lambeth, Tara	2018
Social/Cultural	Images	TEK5 Interview 1 Photo 30	IMG_3098.jpg	Lambeth, Tara	2018
Social/Cultural	Images	TEK5 Interview 1 Photo 31	IMG_3097.jpg	Lambeth, Tara	2018
Social/Cultural	Images	TEK5 Interview 1 Photo 32	IMG_3096.jpg	Lambeth, Tara	2018
Social/Cultural	Images	TEK5 Interview 1 Photo 33	IMG_3095.jpg	Lambeth, Tara	2018
Social/Cultural	Images	TEK5 Interview 1 Photo 34	IMG_3094.jpg	Lambeth, Tara	2018
Social/Cultural	Images	TEK5 Interview 1 Photo 35	IMG_3093.jpg	Lambeth, Tara	2018
Social/Cultural	Images	TEK5 Interview 1 Photo 36	IMG_3092.jpg	Lambeth, Tara	2018
Social/Cultural	Images	TEK5 Interview 1 Photo 37	IMG_3091.jpg	Lambeth, Tara	2018
Social/Cultural	Images	TEK5 Interview 1 Photo 38	IMG_3090.jpg	Lambeth, Tara	2018
Social/Cultural	Images	TEK5 Interview 1 Photo 39	IMG_3089.jpg	Lambeth, Tara	2018
Social/Cultural	Images	TEK5 Interview 1 Photo 40	IMG_3088.jpg	Lambeth, Tara	2018
Social/Cultural	Images	TEK5 Interview 1 Photo 41	IMG_3087.jpg	Lambeth, Tara	2018
Social/Cultural	Images	TEK5 Interview 1 Photo 42	IMG_3086.jpg	Lambeth, Tara	2018
Social/Cultural	Images	TEK5 Interview 1 Photo 43	IMG_3085.jpg	Lambeth, Tara	2018
Social/Cultural	Images	TEK5 Interview 1 Photo 44	IMG_3084.jpg	Lambeth, Tara	2018
Social/Cultural	Images	TEK5 Interview 1 Photo 45	IMG_3083.jpg	Lambeth, Tara	2018
Social/Cultural	Images	TEK5 Interview 1 Photo 46	IMG_3082.jpg	Lambeth, Tara	2018
Social/Cultural	Images	TEK5 Interview 1 Photo 47	IMG_3081.jpg	Lambeth, Tara	2018
Social/Cultural	Images	TEK5 Interview 1 Photo 48	IMG_3080.jpg	Lambeth, Tara	2018
Social/Cultural	Images	TEK5 Interview 1 Photo 49	IMG_3079.jpg	Lambeth, Tara	2018
Social/Cultural	Images	TEK5 Interview 1 Photo 50	IMG_3078.jpg	Lambeth, Tara	2018
Social/Cultural	Images	TEK5 Interview 1 Photo 51	IMG_3077.jpg	Lambeth, Tara	2018
Social/Cultural	Images	TEK5 Interview 1 Photo 52	IMG_3076.jpg	Lambeth, Tara	2018
Social/Cultural	Images	TEK5 Interview 1 Photo 53	IMG_3075.jpg	Lambeth, Tara	2018
Social/Cultural	Images	TEK5 Interview 1 Photo 54	IMG_3074.jpg	Lambeth, Tara	2018
Social/Cultural	Images	TEK5 Interview 1 Photo 55	IMG_3073.jpg	Lambeth, Tara	2018
Social/Cultural	Images	TEK5 Interview 1 Photo 56	IMG_3072.jpg	Lambeth, Tara	2018

Social/Cultural	Images	TEK5 Interview 1 Photo 57	IMG_3071.jpg	Lambeth, Tara		2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 58	IMG_3070.jpg	Lambeth, Tara		2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 59	IMG_3069.jpg	Lambeth, Tara		2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 60	IMG_3068.jpg	Lambeth, Tara		2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 61	IMG_3067.jpg	Lambeth, Tara		2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 62	IMG_3066.jpg	Lambeth, Tara		2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 63	IMG_3065.jpg	Lambeth, Tara		2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 64	IMG_3064.jpg	Lambeth, Tara		2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 65	IMG_3063.jpg	Lambeth, Tara		2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 66	IMG_3062.jpg	Lambeth, Tara		2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 67	IMG_3061.jpg	Lambeth, Tara		2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 68	IMG_3060.jpg	Lambeth, Tara		2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 69	IMG_3059.jpg	Lambeth, Tara		2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 70	IMG_3057.jpg	Lambeth, Tara		2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 71	IMG_3056.jpg	Lambeth, Tara		2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 72	IMG_3055.jpg	Lambeth, Tara		2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 73	IMG_3054.jpg	Lambeth, Tara		2018	
Social/Cultural	Images	TEK5 Interview 1 Photo 74	IMG_3053.jpg	Lambeth, Tara		2018	
Social/Cultural	Tabular/Spreadsheet	NAS TEK Factor Calculation	NAS TEK Factor Calculation.xlsx	Lambeth, Tara		2019	
Social/Cultural	Text	NAS Code Cloud	NAS Code Cloud.pdf	Lambeth, Tara		2019	
Social/Cultural	Tabular/Spreadsheet	NAS Code Applications	NAS Code Applications.xlsx	Lambeth, Tara		2019	
Geospatial	Images	Dulac 1964 USGS Quad Map	Dulac 1964 USGS Quad Map.pdf	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	Dulac 1964 USGS Quad with Land Loss	Dulac 1964 USGS Quad with Land Loss. Pdf	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	Dulac 1964 USGS Quad with Land Loss 50p	Dulac 1964 USGS Quad with Land Loss 50p.pdf	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	Dulac 2008 USGS DOQQ Imagery	Dulac 2008 USGS DOQQ Imagery.pdf	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	Dulac 2013 National Geographic Map	Dulac 2013 National Geographic Map.pdf	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	Dulac 2014 Landsat 8 Satellite Image	Dulac 2014 Landsat 8 Satellite Image.pdf	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	Dulac Restoration Projects 2	Dulac Restoration Projects 2.pdf	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	Dulac Restoration Projects	Dulac Restoration Projects.pdf	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	Dulac World Street Map	Dulac World Street Map.pdf	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	Dulac World Topographic Map	Dulac World Topographic Map.pdf	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	Golden Meadow 1964 USGS Quad Map	Golden Meadow 1964 USGS Quad Map.pdf	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	Golden Meadow 2008 USGS DOQQ Imagery	Golden Meadow 2008 USGS DOQQ Imagery.pdf	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server

		Golden Meadow 2013 National Geographic Map	Golden Meadow 2013 National Geographic Map.pdf	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	LandLossScale	LandLossScale.tif	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Geospatial (vector, raster, or gridded)	CPRA_Inf_Lines	CPRA_Inf_Lines.shp	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Geospatial (vector, raster, or gridded)	CPRA_Inf_Points	CPRA_Inf_Points.shp	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Geospatial (vector, raster, or gridded)	CPRA_Inf_Polygons	CPRA_Inf_Polygons.shp	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Geospatial (vector, raster, or gridded)	CPRA_Projects	CPRA_Projects.gdb	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Geospatial (vector, raster, or gridded)	DulacAreaProjects	DulacArea.gdb	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Geospatial (vector, raster, or gridded)	DulacAreaProjects	DulacAreaProjects.dbf	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Text	DulacAreaProjects	DulacAreaProjects.xls	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Text	LA-30 Coast-Wide Reference Monitoring	LA-30 Coast-Wide Reference Monitoring.pdf	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Text	LA-161 LASARD	LA-161 LASARD.pdf	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server
		LA-226	LA-226				
Geospatial	Text	BICM_Final_Report_20170228	BICM_Final_Report_20170228.pdf	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server
		LA-252 System-wide Assessment	LA-252 System-wide Assessment				
Geospatial	Text	Monitoring.pdf	Monitoring.pdf	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Text	LA-284	LA-284.pdf	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Text	TE-108	TE-108.pdf	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Text	TE-110	TE-110.pdf	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Geospatial (vector, raster, or gridded)	TEK1_Route.dbf	TEK1_Route.dbf	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Geospatial (vector, raster, or gridded)	TEK1_Route.sbn	TEK1_Route.sbn	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Geospatial (vector, raster, or gridded)	TEK1_Route.sbx	TEK1_Route.sbx	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Geospatial (vector, raster, or gridded)	TEK1_Route.shx	TEK1_Route.shx	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	PHOTO1_0080	PHOTO1_0080.jpg	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	PHOTO1_0081	PHOTO1_0081.jpg	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	PHOTO1_0082	PHOTO1_0082.jpg	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	PHOTO1_0083	PHOTO1_0083.jpg	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	PHOTO1_0084	PHOTO1_0084.jpg	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	PHOTO1_0085	PHOTO1_0085.jpg	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	PHOTO1_0086	PHOTO1_0086.jpg	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	PHOTO1_0087	PHOTO1_0087.jpg	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	PHOTO1_0088	PHOTO1_0088.jpg	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	PHOTO1_0089	PHOTO1_0089.jpg	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	PHOTO1_0090	PHOTO1_0090.jpg	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	PHOTO1_0091	PHOTO1_0091.jpg	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	PHOTO1_0092	PHOTO1_0092.jpg	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	PHOTO1_0093	PHOTO1_0093.jpg	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	PHOTO1_0094	PHOTO1_0094.jpg	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	PHOTO1_0095	PHOTO1_0095.jpg	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	PHOTO1_0096	PHOTO1_0096.jpg	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	PHOTO1_0097	PHOTO1_0097.jpg	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	PHOTO1_0098	PHOTO1_0098.jpg	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	PHOTO1_0099	PHOTO1_0099.jpg	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	PHOTO1_0100	PHOTO1_0100.jpg	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	PHOTO1_0101	PHOTO1_0101.jpg	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	PHOTO1_0102	PHOTO1_0102.jpg	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	PHOTO2_0040	PHOTO2_0040.jpg	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	PHOTO2_0041	PHOTO2_0041.jpg	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	PHOTO2_0042	PHOTO2_0042.jpg	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	PHOTO2_0043	PHOTO2_0043.jpg	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	PHOTO2_0044	PHOTO2_0044.jpg	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server

Geospatial	Images	PHOTO2_0045	PHOTO2_0045.jpg	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	PHOTO2_0046	PHOTO2_0046.jpg	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	PHOTO2_0047	PHOTO2_0047.jpg	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Geospatial (vector, raster, or gridded)	TEK1 071917 TEK trip	Tracey 071917 TEK trip.gis	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Text	TEK1 071917 TEK Trip point summary	TEK1 071917 TEK Trip point summary.pdf	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Geospatial (vector, raster, or gridded)	TEK1_PTS.cpg	TEK1_PTS.cpg	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Geospatial (vector, raster, or gridded)	TEK1_PTS.dbf	TEK1_PTS.dbf	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Geospatial (vector, raster, or gridded)	TEK1_PTS.sbn	TEK1_PTS.sbn	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Geospatial (vector, raster, or gridded)	TEK1_PTS.sbx	TEK1_PTS.sbx	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Geospatial (vector, raster, or gridded)	TEK1_PTS	TEK1_PTS.erdas	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Geospatial (vector, raster, or gridded)	TEK1_PTS.shx	TEK1_PTS.shx	Bethel, Matt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	Bayou Location Map	Bayou Location Map.pdf	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	Bayou Location Map 2	Bayou Location Map2.pdf	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Geospatial (vector, raster, or gridded)	GoldenMeadowAreaProjects	GoldenMeadowArea.gdb	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	Catfish_Lake	Catfish_Lake.PNG	Braud, DeWitt	Bethel, Matt	2019	LSU GIS Server
Geospatial	Images	CatfishLake_Area_LandLoss	CatfishLake_Area_LandLoss.PNG	Braud, DeWitt	Bethel, Matt	2019	LSU GIS Server
Geospatial	Images	Dulac_Area	Dulac_Area.PNG	Braud, DeWitt	Bethel, Matt	2019	LSU GIS Server
Geospatial	Images	Dulac_GoldenMeadow_LandLoss	Dulac_GoldenMeadow_LandLoss.PNG	Braud, DeWitt	Bethel, Matt	2019	LSU GIS Server
Geospatial	Images	Dulac_GoldenMeadow_Region	Dulac_GoldenMeadow_Region.PNG	Braud, DeWitt	Bethel, Matt	2019	LSU GIS Server
Geospatial	Images	Dulac_LandLoss	Dulac_LandLoss.PNG	Braud, DeWitt	Bethel, Matt	2019	LSU GIS Server
Geospatial	Images	GoldenMeadow_AreaPanels	GoldenMeadow_AreaPanels.PNG	Braud, DeWitt	Bethel, Matt	2019	LSU GIS Server
Geospatial	Images	GoldenMeadow_LandLoss	GoldenMeadow_LandLoss.PNG	Braud, DeWitt	Bethel, Matt	2019	LSU GIS Server
Geospatial	Images	Historic_Hurricanes	Historic_Hurricanes.PNG	Braud, DeWitt	Bethel, Matt	2019	LSU GIS Server
Geospatial	Images	Hurricane Category	Hurricane Category.PNG	Braud, DeWitt	Bethel, Matt	2019	LSU GIS Server
Geospatial	Images	Hurricanes_Category_East_Labels_Year	Hurricanes_Category_East_Labels_Year.pdf	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	Hurricanes_Category_West_Labels_Year	Hurricanes_Category_West_Labels_Year.pdf	Braud, DeWitt	Bethel, Matt	2017	LSU GIS Server
Geospatial	Images	Leeville Vicinity	Leeville Vicinity.pdf	Braud, DeWitt	Bethel, Matt	2018	LSU GIS Server
Geospatial	Images	MaxOiling_Footprint	MaxOiling_Footprint.PNG	Braud, DeWitt	Bethel, Matt	2019	LSU GIS Server
Geospatial	Images	UHN Study Area	UHN Study Area.PNG	Braud, DeWitt	Bethel, Matt	2018	LSU GIS Server
Geospatial	Images	UHN_CommunityServiceAreas	UHN_CommunityServiceAreas.pdf	Braud, DeWitt	Bethel, Matt	2018	LSU GIS Server
Geospatial	Images	HoumaSCAT_GroundObservations	HoumaSCAT_GroundObservations.PNG	Braud, DeWitt	Bethel, Matt	2019	LSU GIS Server
Geospatial	Images	HoumaSCATGridCells	HoumaSCATGridCells.PNG	Braud, DeWitt	Bethel, Matt	2019	LSU GIS Server
Geospatial	Images	HoumaSCATMaximumOiling	HoumaSCATMaximumOiling.PNG	Braud, DeWitt	Bethel, Matt	2019	LSU GIS Server
Geospatial	Images	HoumaSCATMaximumOilingObservational	HoumaSCATMaximumOilingObservational.PNG	Braud, DeWitt	Bethel, Matt	2019	LSU GIS Server
Geospatial	Images	NESDIS_SAR_OilingFootprint	NESDIS_SAR_OilingFootprint.PNG	Braud, DeWitt	Bethel, Matt	2019	LSU GIS Server
Geospatial	Images	1964 Houma Navigation Canal Overlaid on 2017 DOQQ Image	UHN_Maps.ppt	Braud, DeWitt	Bethel, Matt	2019	LSU GIS Server

Geospatial	Images	CPRA Project Features Dulac	UHN_Maps.ppt	Braud, DeWitt	Bethel, Matt	2019	LSU GIS Server
Geospatial	Images	CPRA Projects Dulac CPRA Outreach Projects Dulac	UHN_Maps.ppt	Braud, DeWitt	Bethel, Matt	2019	LSU GIS Server
Geospatial	Images	CPRA Project Features Golden Meadow	UHN_Maps.ppt	Braud, DeWitt	Bethel, Matt	2019	LSU GIS Server
Geospatial	Images	CPRA Projects Golden Meadow	UHN_Maps.ppt	Braud, DeWitt	Bethel, Matt	2019	LSU GIS Server
Geospatial	Images	CPRA Outreach Projects Golden Meadow	UHN_Maps.ppt	Braud, DeWitt	Bethel, Matt	2019	LSU GIS Server
Geospatial	Images	Timbalier Islands DOQQ March 2004 Pre-Rita	UHN_Maps.ppt	Braud, DeWitt	Bethel, Matt	2019	LSU GIS Server
Geospatial	Images	Timbalier Islands DOQQ October 2005 Post-Rita	UHN_Maps.ppt	Braud, DeWitt	Bethel, Matt	2019	LSU GIS Server
Geospatial	Images	Timbalier Islands Landsat 2014	UHN_Maps.ppt	Braud, DeWitt	Bethel, Matt	2019	LSU GIS Server
Geospatial	Images	Timbalier Islands DOQQ September 2017	UHN_Maps.ppt	Braud, DeWitt	Bethel, Matt	2019	LSU GIS Server

Information Products Report

InfoProductType	DigitalResourceType	Title	FileName	Creators	PublicationYear	Publisher	RepositoryName	DOIorPersistentURL	DatasetReference
InfoProductType	Software and Source Code	Gravity Simulations	AppleFalling.grvsim	Galleli, Galileo; Newton, Isaac	1701	Royal Society	Really Big Digital Repository for Models and Simulations	doi: 10.1000/grav.2000	doi: 10.1000/grav.1000, http://www.nodc.noaa.gov/cgi-bin/OAS/prd/accession/details/000000
Workshop or Conference Proceeding	Text	Bayou Rising Presentation	Bayou Rising Presentation.pptx	Clay, Kasha	2018				
Workshop or Conference Proceeding	Text	Coastal Connections Presentation	Coastal Connections Presentation.pptx	Clay, Kasha	2018				
Workshop or Conference Proceeding	Text	Coference on Social Sustainability Presentation	Coference on Social Sustainability.pptx	Parfait, Jessica	2018				
Workshop or Conference Proceeding	Text	Coastal GeoTools Presentation	Coastal GeoTools Presentation.pptx	Parfait, Jessica	2018				
Website or Data Portals	Web Based Resource	UHN Story Map		Clay, Kasha; Parfait, Jessica	2019				