

Federated Indians of Graton Rancheria

The Federated Indians of Graton Rancheria have been working continuously since our restoration to protect and preserve our culture, as well as educate the public regarding our past, present and future. The Tribe organized a Sacred Sites Protection Committee, which focuses on many of these goals and interacts directly with public agencies to assure that the Tribe's best interests are kept in mind. A member of the SSPC brought to the attention of the Tribe that the need was growing for the Tribe to build a database to archive all materials of cultural significance. This idea was also supported by the Graton Tribal Library, who were undertaking a project to receive a donation of a number of items related to tribal history and genealogy. Based on this input, the Federated Indians of Graton Rancheria propose to contract with a consultant to create a custom database for use not only by tribal staff but members of its 6 tribal committees as well as the Language and Basketry groups. The Tribe proposes to complete a working version of the Mukurtu database and make it available for access to its citizenship by the end of the grant period, October 31st, 2017.

Through work to gather information from key stakeholders involved in tribal operations, the Graton Tribal Library identified the need for expansion in the area of archival work to allow its citizenship to participate in creating the framework for a database that will be customized to capture and preserve tribal cultural heritage, assist with educational outreach to the general public, measure up to the Tribe's high standards of security when it comes to cultural information with strong levels of confidentiality, as well support tribal sovereignty through the work of the Sacred Sites Protection Committee, Tribal Historic Preservation Officer, and Cultural Resources Management Department.

The Tribe aims to create a database that will be efficient and easy to navigate so that it may capture the attention of tribal citizens of all ages. The creation of an online database is also in alignment with the Tribe's goal to allow for any citizen, regardless of location, to be able to educate themselves on the history of their tribe, thereby supporting the preservation of our heritage moving forward into future generations.

1. Introduction and Statement of Need

Introduction

The Federated Indians of Graton Rancheria is a federally recognized tribe consisting of over 1,400 Coast Miwok and Southern Pomo peoples whose ancestral lands include Marin and Southern Sonoma Counties, located one hour north of San Francisco, California. These 1,400 citizens not only reside in the tribe's ancestral territory, but are spread across the world. Recently, citizens from both Canada and Australia have visited the Graton Tribal Library to browse the collection and apply for library cards. The citizenship also is reflective of a wide spectrum of educational levels, including those working towards completion of a PHD. The Tribe has a Language Group that meets regularly to learn the Coast Miwok language, as well as craft educational outreach materials to the citizenship in the form of speaking Coast Miwok and placing signage in Coast Miwok at tribal events. The Tribe is also currently operating an ANA Language grant to expand tribal language resources and build capacity to incorporate learning and education around the Southern Pomo language.

The Tribe has a 254 acre land base, held in trust by the United States of America, located just west of Rohnert Park, California. Tribal capacity has allowed for programs that: foster well-being and self-sufficiency for native individuals and families; support a community based upon inclusion and intergenerational learning; and, preserve the Tribe's culture, community, and ethics, while integrating them into the Tribe's operations, projects, opportunities, partnerships, and programs on the tribal trust land and throughout the ancestral territory.

The Tribe administers a number of programs and supportive services to the tribal community consisting of Temporary Assistance to Needy Families (TANF), Environmental and Cultural Protection, Housing, Wellness and Justice, Workforce Development, and Youth and Family Programs. In December 2013, the tribe received designation from the National Park Service regarding their first Tribal Historic Preservation Office (THPO) to further protect cultural resources. In late 2015/early 2016, a Cultural Resource Management department was created by the Tribe to handle all facets of work related to cultural preservation. The Graton Tribal Library was integrated into the Cultural Resource Management department and the Library Coordinator is supervised by the Tribal Historic Preservation Officer, and therefore the Graton Tribal Library supports the THPO by providing access to holdings in the library which strengthen knowledge when working to protect sacred sites.

In December 2013, an updated tribal website was launched containing enhanced tribal department and program information for tribal citizens and the general public at www.gratonrancheria.com. As part of a deliverable under a 2014 IMLS Enhancement Grant, a specific page was created on the tribal website for the Graton Tribal Library. Through this page, the community is given access to local resources, news updates and library forms and applications. In addition, visitors to the page are able to access an online version of the library catalog and cardholders are able to place holds on specific items.

The Graton Tribal Library's ultimate goal is to reduce cultural educational barriers for tribal families and share existing cultural experience across multimedia platforms concerning the rich cultural heritage of Coast Miwok and Southern Pomo peoples. The Graton Tribal Library currently has 131 registered patrons who have access to a carefully curated collection that includes materials and resources reflective of the unique history of the tribal people of the state

of California. The Library is currently open 5 days a week from 8am to 5pm and is staffed by a full time Library Coordinator and part time Library Administrative Assistant. In 2016, the Library Coordinator was granted permission from Tribal Council to offer library services to staff so that they may access the collection for research purposes as well as to deepen staff understanding of cultural history. In this way, the tribal library currently supports a multitude of cultural activities that are provided to the over 1,400 tribal citizens and eligible Native American families through several human service programs administered by the Tribe. Over the years, the Tribe has engaged with other organizations to increase education and cultural information availability to tribal programs and services benefiting the tribal library

- Oakland Public Library, Oakland, CA (2013 native American collection donation, 2014 Children's collection donation (pending))
- ILMS Library Basic and Education grants (2004 – 2015), library catalog system, computer workstations, library shelving, consultation by Oakland Public Library staff and travel to the ATALM conference in 2015.
- Occidental Arts and Ecology Center – environmental workshops and tribal partner for wetland restoration and environmental education new tribal conservation areas
- Sonoma County Regional Parks – Tolay Master Plan supported by tribal citizens participating in the Tolay Advisory Group
- Sonoma County Board of Education, Library Services Director technical assistance for library outreach and services in 2014

Tribal infrastructure includes existing broadband access (speed to 50 Mbps) through a secure tribal network connecting all programs and services. Information technology support staff are provided to tribal programs and services as part of the Tribe's indirect cost support.

The purpose of the grant would be to increase the Graton Tribal Library's capacity in the maintenance and access to tribal archives.

1. Work with a consultant to design and build a customized database module to establish a more robust electronic tool set that provides linkages and enhanced coordination among tribal citizens and committees, as well as partner organizations, thereby improving the quality of and access to library and information services for the Federated Indians of Graton Rancheria and our partners and library patrons.
2. Increase community outreach via a Content Management System (i.e. Mukurtu) to encourage inter-generational learning with educational resources provided to the citizenship in a digital format that speaks to the younger generations learning styles and also is designed in such a way that adult citizens and elders may access the information easily.
3. Develop a section of the archive that provides support to tribal committees as well as Language and Basketry groups by housing material specific to these entities in an online database. By building out an online presence in these areas, the tribe will increase the protection of cultural information as well as preserve said information for future generations to access. This project will aid tribal committees to better perform their

functions and deliver cultural services to all Tribal citizens residing locally and outside of the area by improving access to information, as well as recruit and develop the next generation of professionals to carry forward the work of these important committees and the Tribes' library and information services.

Statement of Need

In 2015, the Tribe was contacted by Bob Thalman who wished to donate the collection of his late wife, Sylvia, to the library. The acquisition of this collection has supported work done through a CalTrans Heritage Management Grant in the area of genealogy. Work to archive the Thalman collection has determined a need to expand the existing library services specific to archival projects. **Currently, the Tribe is in possession of a wealth of cultural information, but is in need of a platform to digitize, organize and curate the material in order to connect our citizenship to these valuable resources.** Graton Tribal Library staff attended a training given by the Falmouth Institute on archives management, policies and procedures for tribal organizations, which began the implementation of a simple strategy to create an inventory of holding in the archive. This led to Library staff participation in a Digital Preservation and Archiving Community Workshop put on by Mukurtu staff at the California Indian Museum and Cultural Center on April 26th, 2016. Through this workshop, staff were able to use their archival project as a template for the days' activities and identify Mukurtu as a viable resource. In summation, the Tribe aims to increase services in the archival area through the following three proposed strategies:

- Partner with a consultant to develop a customized module to allow online access to a tribal archive to citizens, thereby providing tools for citizens to become cultural stewards, presenters and experts on specific areas of cultural knowledge;
- Support the Tribal Heritage Preservation Officer and Sacred Sites Committee by increasing access and capacity for digitizing holdings, maps, photos and other material through a Mukurtu module;
- Partner with Sonoma State University to hold trainings for interested staff/citizens to gain knowledge on the scanning and digitization of a special collection.

In February of 2016, a meeting was held with community stakeholders from all 6 tribal committees and the Language and Basketry groups. The 10 attendees are highly involved in cultural activities related to the Tribe and were invited to the meeting based on their particularly valuable knowledge related to cultural preservation. Through a guided group discussion, all attendees provided detailed feedback running the gamut from security concerns to suggestions on specific content to be added to the database to increase support for committee activities. Participants of the Community Stakeholder Meeting expressed extreme interest in being able to both establish a digital repository of cultural information as well as being able to share items with the general public for educational purposes without disclosing information deemed confidential by the Tribe. Attendees were also shown examples of digital archives created by other tribes. Following the discussion, all attendees were given a questionnaire which included specific questions related to the expansion of digital archiving within the context of a module similar to those created for other tribes via Mukurtu.

2. Impact

The first step of this project is to train Graton Tribal Library staff in the area of archive management and build their skill sets through the trainings provided through Sonoma State University and the consultant selected to build the digital archive. The Cultural Resource Management Department, through this increased knowledge, will be a leader within the FIGR tribal government in any areas regarding the archiving of cultural materials. Support around this database will increase the capacity of other departments, committees, groups and project managers within the organization to expand the scope of their work to reach those citizens who reside outside of the Tribe's traditional territory. The experience of creating and managing a custom database will also increase future capacity to offer online library and archival resources related to the history of the Tribe to promote long distance learning for those citizens outside of the immediate area and encourage inter-generational educational opportunities of tribal families to create the next generation of tribal leadership with a strong connection to culture and heritage.

The success of the first step will be measured by a pre and post survey to be provided to participants in archival trainings to gauge the increase of knowledge and skills in the area of archival work.

The second step of the project would be to train at least 10 interested tribal citizens, representing a wide range of ages, whom are engaged in cultural activities, alongside staff to allow for a deeper engagement in the rich heritage of Coast Miwok and Southern Pomo culture. The Tribe is tireless in its efforts to engage citizens of all ages in cultural education. Completion of archival trainings and providing input on the customization of the database as well as the cultural protocols will increase citizen knowledge and provide them with the confidence to develop their skills and qualify them to participate in education outreach opportunities with the greater community as cultural stewards. In addition, through their committee work, these citizens will assist with garnering as much of their fellow citizens input to reach consensus regarding cultural protocols.

The success of this second step will be measured in a similar fashion to the first, through the use of a pre and post survey with questions designed to capture citizen input on how much their confidence, knowledge, and skills have increased both through the archival trainings and participation in the customization of the Mukurtu CMS.

The third step is the ultimate creation of a cultural archive database, enabling the Tribe to begin cataloging and archiving the unique materials currently in our possession and in dire need of preservation.

3. Project Design and Required Resources

The Graton Tribal Library proposes to develop a custom database and content management system to manage, share, annotate, narrate and preserve the Tribe's cultural heritage as it relates to land, language, history, archaeology, and contemporary cultural events, by partnering with a consultant to create a Mukurtu CMS online archive. In alignment with the Tribe's goal of

expanding general library services into the realm of a more robust Cultural Resource Center, a partnership of this kind has become a high priority in order for the Tribe and the Cultural Resource Management Department to reach their goals of preserving (and providing access to) all aspects of tribal heritage for present and future generations, regardless of location. This digital platform will serve the tribal community through the expansion of cultural services by meeting the following goals:

- Extend existing and provide new library services to tribal citizens regardless of their location, enabling access to cultural resources and knowledge.
- Expand the types of media available through the Tribal Library and online library catalog beyond what is currently available, to include maps, photos, audio, video, artwork, tools, jewelry, research papers and manuscripts, and even a native language dictionary and database.
- Build archival protocols and capabilities with tribal government staff and citizens so that moving forward, all cultural information, materials and artifacts are properly preserved, managed, tracked and displayed in a highly secure database.
- Provide appropriate access for tribal citizens to post information related to resources in the library collection, to further the Tribe's collective knowledge.
- Aid the Tribe in developing new tools for cultural learning.
- Create features useful to the Tribe's cultural committees and groups, to support their goals and workflows.
- Support tribal committees and groups in developing new cultural learners to increase citizen participation and carry on their work.
- Share information with the general public without disclosing information deemed confidential by the Tribe.

The work plan for the proposed project includes the following required activities, which will result in a customized content management system for the Tribal Library, and staff that are trained in state-of-the-art archiving practices. FIGR staff will also receive training in database and CMS administration over the life of the project, increasing the technical capacity of the Tribe and further exercising tribal sovereignty.

The Tribe will work with the identified consultant to complete an outline of all inputs, actions, and outputs, to identify critical needs to be addressed by the system. Project staff will work with key government staff and citizen committee members to review these processes, to garner additional input and improve the design where needed. Project staff will work with consultant staff to develop and test the database system and user interface. We will use existing materials collected and curated through the Graton Heritage Preservation Plan project to test the database. Project staff will update the existing FIGR website to host the Mukurtu interface. The Tribe will purchase needed hardware and software, which will include a dedicated server and additional licenses of Filemaker Server, Filemaker Server connections, and Filemaker Pro editing software.

Project Library staff will coordinate four (4) trainings for library/archiving staff and interested tribal citizens, utilizing staff from the Anthropological Study Center at Sonoma State University, whom the Tribe has previously partnered with to digitize materials related to a CalTrans Heritage Management Grant. Project Library staff will work with trainers to develop and administer pre and post surveys to all training participants to measure aptitude and learning of scanning and

digitizing principles. Lastly, Library staff will conduct outreach at tribal events to share the CMS and administer surveys to garner citizen feedback.

Library Coordinator staff time will support participation in trainings, learning Filemaker Pro software, assisting with building of the database, cultural protocols and resulting documentation and vetting these products with Tribal Council and Citizen Committees. Library Administrative Assistant staff time will support participation in scanning/digitization, archive and database training, participation in the development of cultural protocols, organizing meetings with stakeholders as well as outreach to the tribal community.

Project Partners

Our consultant partner, once identified, will support the project by assisting in the development of a Mukurtu CMS online digital community archive that is customized to meet FIGR's cultural protocols and daily practices. The Tribe will create an RFP to identify the most qualified candidate.

The Anthropological Study Center (ASC) at Sonoma State University will offer two 2-hour trainings for up to 10 people (5 people each training), which will include tribal staff and citizens and focus on scanning/digitization/archiving/indexing/editing. The ASC has partnered with the Tribe previously for a Graton Heritage Management Plan and through this process has become increasingly knowledgeable of the Tribe's history and has developed relationships with citizens through the process of documenting stories of Tribal Elders.

Preliminary Work and Planning

The Chair of the Sacred Sites Protection Committee organized an initial presentation from a consultant in July of 2015, which was attended by FIGR staff from numerous departments as well as citizen committee members. The presentation centered on how a project utilizing the free, open source Mukurtu Content Management System platform could provide support and digital solutions for records creation and management around cultural resources, remotely as well as in the office, and also allow tribal citizens access to the system at varying levels, to access information and provide additional pertinent metadata.

In the winter of 2015, the Cultural Resource Management Department (CRMD) was established, consisting of the Tribal Heritage Preservation Officer (THPO), THPO Assistant, Tribal Information Specialist (TIS), Library Coordinator, and Library Administrative Assistant. Upon the creation of this department, many of the specific needs identified in the meeting with the consultant in July resurfaced. In December 2015, the THPO and TIS met again with the consultant to discuss specific functionality around improving access to library resources for staff and committee members, and the ability to access, create, and edit records and metadata remotely.

In March 2016, the CRMD staff met with once again with the consultant and participated in what they term a "data audition." From this latest meeting CRMD staff produced a draft list of inputs, actions, and outputs, as well as a draft set of tables and relationships, based upon discussions and a review of existing datasets.

The Library Coordinator and Library Administrative Assistant attended an Archives Management Policies and Procedures for Tribal Organizations training provided by the Falmouth

Institute in early April of 2016. This led to CRMD staff participation in the Digital Preservation and Archiving Community Workshop on April 26th of 2016 presented by Mukurtu staff at the California Indian Museum and Cultural Center. Via this training, CRMD staff were able to work in a hands-on fashion with the Mukurtu software for the first time, enabling them to recognize the ease of use and specific attention to differential access that the platform provides. Funding from this proposed project will enable library staff to partner with regional institutions such as Sonoma State University, Sonoma County Public Library, and CoDA archiving affiliates for additional training on archives management to further our educational and cultural preservation endeavors. The Tribe will be better equipped when receiving private donations and objects of repatriation, as well as supporting the preservation work of other groups, committees and projects led by other departments of the tribal office.

This project is the next step in an endeavor that has been supported by a 2014 Library Enhancement Grant award from the Institute of Museum Library Services (grant award number: NG-03-14-0009-14). Specifically, CRMD staff drafted a strategic plan for developing digital features around Tribal Library resources as a grant deliverable. The “Strategy for the Digital Design of the Tribal Library,” which is currently being reviewed by Tribal Council, outlines the background, needs, and Tribal Library vision, goals, and objectives around developing digital resources and ensuring the sustainability of the Graton Tribal Library as a valuable national resource on the Coast Miwok and Southern Pomo people. The plan analyzes the current status of the Tribal Library and opportunities for expansion, outlines existing staffing and additional staffing needs, and methods for evaluating the Tribe’s progress over the next 5 years. In February 2016, before finalizing the strategic plan, CRMD staff met with community stakeholders from all 6 tribal committees and the Language and Basketry groups, to garner input on the specific needs and concerns of each committee. Attendees were provided a short questionnaire ahead of the meeting so that they could prepare their responses ahead of time and be best prepared for the planned group discussion. This feedback is included in the plan as an attached memo to the FIGR Tribal Council.

4. Evaluation Methods, Dissemination, and Sustainability

The Tribe will work closely with participants of the Community Stakeholder Meeting to provide updates on the progress of the project and allow for input on how to proceed to the next step in the development of the database. Given the fact that the database will be customized by tribal staff and citizens with involvement in many diverse elements of tribal operations, quality feedback is essential to success. Starting with the focus group consisting of Community Stakeholders, a pre and post user survey will be conducted to rate user satisfaction in regards to the ease of use of the database.

By the close of the grant period, the Tribe will assemble a document reporting on the testing of the Mukurtu database in the following categories: general number of users, usage by committee and group members, user fluency in particular areas of the database, and types of usage (research, archival, genealogical, Tribal Monitor input, THPO project info, etc.). This information is crucial to the future development of the database, and can assist tribal staff and the consultant in identifying potential barriers to user engagement. These metrics will be collected by the consultant and will be analyzed by Tribal staff and the focus group members.

The Library Coordinator and Library Administrative Assistant will attend two seasonal tribal events with the Mukurtu CMS loaded onto iPads so that citizens may interact with the software and provide feedback and suggestions via a short survey. The success and growth of the database is contingent upon citizen interaction. In a sense, the story of the Tribe evolves with input from the citizenship as well as committee and group members. The database will also be used in the same manner to assist with support of other endeavors by the Tribe to document its culture such as the Graton Heritage Management Project which hosts periodic events throughout the year with a focus on genealogy, family photo sharing and elder interviews which can all be added to the Mukurtu database to be accessed and expanded upon by citizens throughout the world.

The Tribe will stipulate a commitment to the “train the trainer” model in the RFP for this project, and this will be put into place so that tribal staff will be able to develop the skills necessary to manage the database module on their own once it is fully built. **To ensure sustainability, future development, hosting and management costs for the CMS will be budgeted into the funds allocated to the Cultural Resource Management Department annually through the Tribe’s Revenue Allocation Plan.** Staff will be equipped to train interested citizens to work with the module and grow into roles as cultural stewards. These Cultural Stewards will become experts on tribal cultural knowledge and expand the Tribe’s ability to provide educational outreach to schools and other organizations in the greater community.

A robust digital archive will be the bridge to the eventual procurement of a physical space to display and house a more expansive collection of artifacts, documents and repatriated materials related to tribal heritage, located on the tribal trust land once the opportunity arises. The creation of efficient archival protocols and procedures in the digital realm will serve the Tribe well when moving into the management of physical items.

IMLS Library Enhancement Activity	Oct – Nov 2017	Dec - Jan 2017/8	Feb –Mar 2018	Apr – May 2018	Jun - Jul 2018	Au/Sep/Oc 2018
Hire consultant/create project outline						
Review Outline with Stakeholders/Council						
Test Database with consultant/focus group						
Update existing website to host Mukurtu						
Training with Sonoma State						
Outreach at Tribal Events/ further testing						
Purchase hardware and software						
Process citizen surveys from Tribal events						
Process surveys from trainings						
Develop report on testing results						

DIGITAL STEWARDSHIP SUPPLEMENTARY INFORMATION FORM

Introduction:

IMLS is committed to expanding public access to IMLS-funded research, data and other digital products: the assets you create with IMLS funding require careful stewardship to protect and enhance their value. They should be freely and readily available for use and re-use by libraries, archives, museums and the public. Applying these principles to the development of digital products is not straightforward; because technology is dynamic and because we do not want to inhibit innovation, IMLS does not want to prescribe set standards and best practices that would certainly become quickly outdated. Instead, IMLS defines the outcomes your projects should achieve in a series of questions; your answers are used by IMLS staff and by expert peer reviewers to evaluate your proposal; and they will play a critical role in determining whether your grant will be funded. Together, your answers will comprise the basis for a work plan for your project, as they will address all the major components of the development process.

Instructions:

If you propose to create any type of digital product as part of your proposal, you must complete this form. IMLS defines digital products very broadly. If you are developing anything through the use of information technology – e.g., digital collections, web resources, metadata, software, data– you should assume that you need to complete this form.

Please indicate which of the following digital products you will create or collect during your project.

Check all that apply:

Every proposal creating a digital product should complete ...	Part I
If your project will create or collect ...	Then you should complete ...
<input type="checkbox"/> Digital content	Part II
<input checked="" type="checkbox"/> New software tools or applications	Part III
<input type="checkbox"/> A digital research dataset	Part IV

PART I.

A. Copyright and Intellectual Property Rights

We expect applicants to make federally funded work products widely available and usable through strategies such as publishing in open-access journals, depositing works in institutional or discipline-based repositories, and using non-restrictive licenses such as a Creative Commons license.

A.1 What will be the copyright or intellectual property status of the content you intend to create? Will you assign a Creative Commons license to the content? If so, which license will it be? <http://us.creativecommons.org/>

The Federated Indians of Graton Rancheria will be utilizing existing software to develop a customized Mukurtu CMS online archive. Mukurtu 2.0 CMS was publicly released as open source software under a General Public License in April 2015. Mukurtu CMS 2.02 is readily available for download at no cost through GitHub (<https://github.com/MukurtuCMS>) or as a hosted service on mukurtu.net. The customized system developed through the proposed project will be based upon the Tribe's unique cultural protocols and daily practices, and deployed as a highly secure hosted service with controlled, differential access, due to the sensitive nature of the data that it will eventually contain. Where appropriate, the Tribe will endeavor to provide background documentation and design information to assist other indigenous groups in developing their own archive.

A.2 What ownership rights will your organization assert over the new digital content, and what conditions will you impose on access and use? Explain any terms of access and conditions of use, why they are justifiable, and how you will notify potential users of the digital resources.

FIGR will assert full ownership over the customized CMS developed through this project. The proposed project will not result in the creation of new digital content, but rather a system to begin creating and archiving digital content. Conditions for access and use will be developed as part of the documentation process during database/CMS development. The Tribe will provide access to tribal citizens and the general public as stipulated in the cultural protocols to be developed, which will be regulated through the Citizenship and Cultural Resource Management departments and enabled by the Mukurtu CMS. Conditions of use will include an agreement not to share images or information with ineligible parties, nor reproduce them unless otherwise specified. Citizens will have the opportunity to limit access to sensitive familial content to family members. These terms of access and conditions of use are justifiable in order to protect sensitive information and sites, as a matter of Tribal sovereignty.

A.3 Will you create any content or products which may involve privacy concerns, require obtaining permissions or rights, or raise any cultural sensitivities? If so, please describe the issues and how you plan to address them.

Yes, the FIGR Mukurtu CMS will be customized to assist the Tribe in managing private or culturally sensitive materials. During the life of this project we will be working with existing content that includes private and/or culturally sensitive materials, to which access will be limited. Examples of these types of issues are genealogical information or elder interviews including sacred songs, both of which are an important part of the Tribe's cultural heritage but considered private. Non-native tribal government staff working with the system will not have access to certain types of information, which will be enforced through Cultural Resource Management Department policy as well as password protection within the system. Any public requests for use of the proposed CMS for research purposes will be considered on a case by case basis.

Part II: Projects Creating Digital Content

A. Creating New Digital Content

A.1 Describe the digital content you will create and the quantities of each type and format you will use.

This project will not fund the creation of new digital content. We will however utilize existing content in order to test the system and then showcase it to tribal citizens through planned outreach activities.

A.2 List the equipment and software that you will use to create the content or the name of the service provider who will perform the work.

A.3 List all the digital file formats (e.g., XML, TIFF, MPEG) you plan to create, along with the relevant information on the appropriate quality standards (e.g., resolution, sampling rate, pixel dimensions).

B. Digital Workflow and Asset Maintenance/Preservation

B.1 Describe your quality control plan (i.e., how you will monitor and evaluate your workflow and products).

B.2 Describe your plan for preserving and maintaining digital assets during and after the grant period (e.g., storage systems, shared repositories, technical documentation, migration planning, commitment of organizational funding for these purposes). Please note: Storage and publication after the end of the grant period may be an allowable cost.

C. Metadata

C.1 Describe how you will produce metadata (e.g., technical, descriptive, administrative, preservation). Specify which standards you will use for the metadata structure (e.g., MARC, Dublin Core, Encoded Archival Description, PBCore, PREMIS) and metadata content (e.g., thesauri).

C.2 Explain your strategy for preserving and maintaining metadata created and/or collected during your project and after the grant period.

C.3 Explain what metadata sharing and/or other strategies you will use to facilitate widespread discovery and use of the digital content created during your project (e.g., an Advanced Programming Interface, contributions to the DPLA or other support to allow batch queries and retrieval of metadata).

D. Access and Use

D.1 Describe how you will make the digital content available to the public. Include details such as the delivery strategy (e.g., openly available online, available to specified audiences) and underlying hardware/software platforms and infrastructure (e.g., specific digital repository software or leased services, accessibility via standard web browsers, requirements for special software tools in order to use the content).

D.2 Provide URL(s) for any examples of previous digital collections or content your organization has created.

Part III. Projects Creating New Software Tools or Applications

A. General Information

A.1 Describe the software tool or electronic system you intend to create, including a summary of the major functions it will perform and the intended primary audience(s) the system or tool will serve.

We do not plan to create software in this project. Rather, we plan to implement a customized Mukurtu CMS as a core platform to manage, share, annotate, narrate and preserve the Tribe's cultural heritage. The major functions the CMS will provide include: the creation of a sustainable, searchable repository for cultural data archiving and preservation; and providing differential, appropriate, and remote access to cultural data for a variety of users, including tribal citizens and the general public. Mukurtu CMS allows communities and users to create, manage and share digital heritage content on their own terms. The unique intersection between protocols and online database publishing of Mukurtu provides users with both a stable and upgradeable tool to manage and share their digital assets and a platform for preservation and growth of cultural materials. Mukurtu CMS is also a cost-effective starting-point that can be customized and configured into a data rich, integrative platform. The cultural and sharing protocols provide a safe space for knowledge exchange, which allows different groups of interest to collaborate and interact with shared materials in appropriate ways without dictating open access of sensitive data. Protocols and data can be made open to the public at any time. The intended primary audience are the tribal citizens of the Federated Indians of Graton Rancheria. The secondary intended audience are interested cultural learners and researchers from the general public.

A.2 List other existing digital tools that wholly or partially perform the same functions, and explain how the tool or system you will create is different.

We are currently using ResourceMate for the physical cataloging of materials, including ISBN lookup through the Library of Congress and Amazon, as well as managing patron records. In addition, ResourceMate hosts our library catalog online which we are able to update via FTP. However, ResourceMate does not allow for the management of digital materials, provide differential access, nor does it include any archival features (such as extending metadata), as it primarily functions as a library cataloging system.

B. Technical Information

B.1 List the programming languages, platforms, software, or other applications you will use to create your new digital content.

Mukurtu CMS is based primarily on Drupal 7.x, an internationally supported and developed open-source platform. Mukurtu CMS is also open source under a GPL license. This platform will form the basis of our expanded digital library and archive, the repository and access-point for our digital library. Mukurtu CMS runs on a L/M/W AMP stack - Linux/Mac/Windows + Apache, MySQL and PHP. Filemaker Pro software will be used to create, edit, and maintain the database that stores the actual content.

B.2 Describe how the intended software or system will extend or interoperate with other existing software applications or systems.

The proposed system infrastructure, which will include the repository and access-point for the digital library, will be based on Mukurtu CMS, running locally on our server and remotely on the CoDA supported Mukurtu.net service, which runs Mukurtu CMS as a PAAS (platform-as-a-service). Mukurtu CMS has implemented additional geospatial functionality by making a map view available with points to any record with GPS coordinates in its metadata.

B.3 Describe any underlying additional software or system dependencies necessary to run the new software or system you will create.

None. The central design principle for Mukurtu CMS is to "do no harm" to digital heritage content. Mukurtu CMS accepts a wide range of file types, which can be imported and exported after MD5 hash validation checks, a bit-for-bit systematic check against the original file. All metadata and media stand alone, and can be exported at any time from the system as plaintext (CSV) files and archival media, or xml feeds through API as JSON. Furthermore, all metadata and media will also be stored external to the content management system in a secure file system on the local FIGR server.

B.4 Describe the processes you will use for development documentation and for maintaining and updating technical documentation for users of the software or system.

Robust documentation is a core element of this project, from the planning stage, including training, production, and through to deployment and long-term cultural and digital heritage preservation planning that extends beyond the grant term. As key protocols are developed to govern the design and development of the overall system, these milestones will be captured as governing documentation on the design and use of the system. These governing documents will be created with input from staff and interested citizens, with final approval from the Tribal Council. Through this project we will leverage technology to support our core mission of extending education, training and employment opportunities for tribal citizens.

B.5 Provide URL(s) for examples of any previous software tools or systems your organization has created.

Our partnering organization, CoDa, has created the following:

<http://www.mukurtu.org>
<http://www.mukurtu.net>

C. Access and Use

C.1 We expect applicants seeking federal funds for software or system development to develop and release these products as open source software. What ownership rights will your organization assert over the new software or system, and what conditions will you impose on the access and use of this product? Explain any terms of access and conditions of use, why these terms or conditions are justifiable, and how you will notify potential users of the software or system.

FIGR will assert full ownership over the customized CMS developed through this project. Conditions for access and use will be developed as part of the documentation process during database/CMS development. The Tribe will provide access to tribal citizens and the general public as stipulated in the cultural protocols to be developed, which will be regulated through the Citizenship and Cultural Resource Management departments and enabled by the Mukurtu CMS. Conditions of use will include an agreement not to share images or information with ineligible parties, nor reproduce them unless otherwise specified. Citizens will have the opportunity to limit access to sensitive familial content to family members. These terms of access and conditions of use are justifiable in order to protect sensitive information and sites, as a matter of Tribal sovereignty. Potential users will be notified prior to access through the posted terms and conditions to be developed during the grant period.

C.2 Describe how you will make the software or system available to the public and/or its intended users.

The system will be accessible through any available web browser on the Internet. We will link to the site through the Tribe's public website - <http://gratonrancheria.com>

Part IV. Projects Creating Research Data

1. Summarize the intended purpose of the research, the type of data to be collected or generated, the method for collection or generation, the approximate dates or frequency when the data will be generated or collected, and the intended use of the data collected.

2. Does the proposed research activity require approval by any internal review panel or institutional review board (IRB)? If so, has the proposed research activity already been approved? If not, what is your plan for securing approval?

3. Will you collect any personally identifiable information (PII) about individuals or proprietary information about organizations? If so, detail the specific steps you will take to protect such information while you prepare the research data files for public release (e.g. data anonymization, suppression of personally identifiable information, synthetic data).

4. If you will collect additional documentation such as consent agreements along with the data, describe plans for preserving the documentation and ensuring that its relationship to the collected data is maintained.

5. What will you use to collect or generate the data? Provide details about any technical requirements or dependencies that would be necessary for understanding, retrieving, displaying, or processing the dataset(s).

6. What documentation will you capture or create along with the dataset(s)? What standards or schema will you use? Where will the documentation be stored, and in what format(s)? How will you permanently associate and manage the documentation with the dataset(s) it describes?

7. What is the plan for archiving, managing, and disseminating data after the completion of research activity?

8. Identify where you will be publicly depositing dataset(s):

Name of repository: _____

URL: _____

9. When and how frequently will you review this data management plan? How will the implementation be monitored?