# MAXIMIZING THE VALUE OF ARCHAEOLOGICAL COLLECTIONS TO MULTIPLE STAKEHOLDERS: COLLECTIONS REHABILITATION OF THE DEEP CREEK SITE AT THE VETERANS CURATION PROGRAM

A Project Report

Presented to

The Faculty of the Department of Anthropology

San José State University

In Partial Fulfillment of the Requirements for the Degree Masters in Arts in Applied Anthropology

By:

Leah Ruth Grant

May 2021

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The Undersigned Graduate Committee Approves the Project Report Titled

Maximizing the Value of Archaeological Collections to Multiple Stakeholders: Collections Rehabilitation with the Veterans Curation Program

Ву

#### Leah Grant

# APPROVED FOR THE DEPARTMENT OF ANTHROPOLOGY SAN JOSÉ STATE UNIVERSITY

Dr. Charlotte Sunseri Department of Anthropology

Dr. Jan English Lueck Department of Anthropology

Jan English-hack

Dr. Marco Meneketti Department of Anthropology

Maryo Menikelli 1200 (2012)

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#### Abstract

This project follows the life of materials from the Deep Creek Site CA-SBR-176 1988-1989 collection processed at the Veterans Curation Program (VCP), connects new data to previous findings, and examines the collection's potential to answer new research questions in the future. Deliverables for this project report are 1) a glossary for non-archaeologists working with legacy collections processed at the VCP, 2) delivery of this report to The San Manuel Band of Mission Indians, the United States Army Corps of Engineers (USACE) Mandatory Center of Expertise for the Curation and Management of Archaeological Collections (MCX-CMAC) and Los Angeles District, and my employers at New South Associates, 3) presentations and papers written on this collection, which are included in the appendices, and 4) a brief discussion of the artifact assemblage. This project was designed to gain new understanding in the value of processing archaeological legacy collections at the VCP by exploring the benefits to multiple stakeholders who are connected to these collections. The overreaching goal of this project is for organizations like USACE to continue to find new ways to maximize the potential benefits for future work with legacy collections by understanding the benefits of collection rehabilitation from multiple perspectives.

Acknowledgements.

I am grateful to have such a supportive community of talented anthropologists and archaeologists in my corner. My persistence and success in this field is fueled by the diverse community of scholars and practitioners whose work continues to inform and challenge my own perspectives. I am appreciative of all my professors at SJSU, but especially grateful for the long-term support offered by my committee. My committee chair Charlotte Sunseri was very accommodating for office hours, which sometimes happened on the bus or train commute to or from campus! Charlotte works hard to help build a sense of community with students who often commute great distances, and who may also have families and full-time jobs. Charlotte, thank you for all of your wisdom and encouragement along the way. Jan English-Lueck seemed to magically be available in her office when I really needed to talk out ideas for my project. Jan often helped me untangle the jumbled ideas I brought to office hours! Thank you for always taking the time to listen. Marco, your messages to "KEEP WRITING" were not in vain! Thank you for welcoming me to SJSU and for the opportunity to work with you at Pt. Reyes.

I would like to thank Jeff Altschul for taking the time to talk to me about the Deep Creek Site. In a year without in-person conversations at conferences, it was great to discuss the Deep Creek Site and the 1988 field season with someone who was there! There is a fondness for this site that came through in the report and other site documents; it was nice to hear it also come through in conversation.

I am extremely grateful to the VCP Project Managers and Archaeologists at USACE who approved my work on the Deep Creek investigation for this project and who took on the additional work of reviewing my project. Meg McDonald from USACE Los Angeles District,

Sharon Knobbe, Amy McPherson, and Christopher Koenig from the St. Louis District MCX-CMAC, and Alaina Harmon formerly from the St. Louis District; I appreciate you making room in your busy schedules to review my work and answer questions for me. I am also incredibly grateful to my Project Manager Jess Mundt at New South Associates for all of the support she offered me through this process. This project report is something completely different from what I first imagined; but ultimately it has helped me grow professionally and has given me an opportunity to become a better manager of archaeological collections and of course, people!

I would have never started this journey if I hadn't signed up for that fateful Intro to Archaeology class at Long Beach City College. Among many other things, Laurel Breece taught me how to perform field survey and mapping with a compass and tapes, the importance of interdisciplinary studies, and most importantly to "keep my eye on the prize" even when it felt like nothing was going right.

Mom and Dad, I know my path in life has not always made sense to you. Thank you for always being there when I really needed you. I love you both very much.

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#### **Chapter 1: Introduction and Objectives**

This project explores the value of archaeological legacy collections to multiple stakeholders, such as archaeologists, tribal members, and newly separated United States military veterans who are trained as archaeological lab technicians at the Veterans Curation Program (VCP). In their recent edited volume *New Life for Archaeological Collections*, Rebecca Allen and Ben Ford define legacy collections as previously-curated collections that are the result of planned and research-sponsored archaeological activities (Ford and Allen 2019). The VCP has a dual mission of both rehabilitating archaeological collections, including legacy collections, for the United States Army Corps of Engineers (USACE) while also providing employment for newly-separated veterans. Rehabilitating these collections is one approach to mitigating the "curation crisis." Managing long-term storage solutions has been an ongoing problem for archaeologists working in many sectors, from federal and state agencies, to cultural resource management firms, as well as in academia.

The last few decades have shown an increasing effort in the field of archaeology to find new long-term storage solutions for collections (Butler 1979; Ford and Allen 2019; Voss 2012). With limited physical storage space and literal tons of archaeological collections in storage, it is important to consider innovative approaches to alleviate challenges faced by curation facilities (Ford and Allen 2019). This in-turn has led to more archaeologists utilizing legacy collections to answer new research questions. Professional associations like the Society for California Archaeology (SCA) and the Society for American Archaeology (SAA) have hosted many papers on this topic and each offer grants to encourage student-researchers to work with legacy and orphaned collections.

Examining the potential value legacy collections offer to communities outside of the field of archaeology specifically is one innovative approach to maximize the value of legacy collections. The VCP is a program that addresses two seemingly unrelated problems with one pot of funds. The program itself is a good example of an applied anthropology project, but additionally, it provides several avenues for both technicians and lab managers to learn from collections in the lab and to conduct research for in-house events and professional conferences.

The VCP is operated by New South Associates under contract with USACE. The VCP operates three satellite labs that are attached to universities and follow the academic calendar and four flagship labs that run in five-month sessions. I was hired as an assistant lab manager in October of 2018 at the San Mateo Flagship lab and was promoted to Artifacts Lab Manager in April of 2020. The VCP hires U.S. Military Veterans to rehabilitate USACE archaeological collections for long-term storage. In the flagship labs, there are three main phases of training for the technicians. Most of the technicians who come to the VCP Flagship labs do not have a background in archaeology, therefore the program is training intensive.

The first week of each session, the technicians participate in 40 hours of training.

Artifact training includes: a basic introduction to anthropology and archaeology, basic artifact material class identification, artifact rehabilitation and rehousing methods, data entry, and drafting collections management reports. Later in the session, when the technicians are confident with artifact processing, they are trained in processing archival material associated with the archaeological collections. Archives training includes: organizing documents into record series and labelling folders, data entry, document rehabilitation, and digitization of most archival material. Technicians are also trained in museum quality artifact photography by a professional forensic photographer. This training not only allows the technicians to successfully rehabilitate

collections, it provides them with a solid set of transferable job skills. After their initial training, technicians also work on professional growth and development, gain proficiency in Microsoft Office Suite, and exercise professional office etiquette.

The Deep Creek Site collection from the USACE Los Angeles District was chosen as a case study for this project because not only is it an important archaeological site, but it also demonstrates how much value even a small collection like this has for VCP employees, the local community, archaeologists, and tribal members. Deep Creek was the first collection the VCP technicians began processing after their intensive first week of training for the winter 2019-2020 VCP session. In the year after the collection was transferred to the VCP, the Deep Creek Site artifacts and archives went from sitting in storage to taking on a life of their own and being utilized in multiple ways.

Both archival materials and the artifact collection were on exhibit for the February 2020 Meet and Greet event held at the lab. Plans for a graduation presentation given by the technicians and another exhibition of this collection at the graduation in March of 2020 were ultimately cancelled due the pandemic. Presenting collections at events like this serves as a point of conversation for the technician to discuss the collection, the site itself, and the work they completed on this collection and others in the lab. In addition to planning the exhibit for the Meet and Greet, the technicians collaborated with each other to create a presentation on CA-SBR-176, the Deep Creek Site, and the collection rehabilitation work they did on the Deep Creek Site collection. The technicians and managers created a conference poster, which discussed the public archaeology aspect of the VCP, and I wrote a conference paper about the importance of the rehabilitation work the VCP technicians do for the Society for California Archaeology (SCA) conference, which was scheduled for March of 2020, but was canceled due to the pandemic. For

the 2021 SAA virtual conference, San Mateo lab managers presented a poster about the remote training and work they were able to do with the technicians over the past year, and I presented the work leading up to this project report in the Archaeologies of California and the Great Basin session at the conference.

The pandemic brought changes to the dates of the VCP sessions, all planned events, and ultimately working in the lab with collections due to state and county COVID-19 guidelines. Like many other organizations, the lab managers were able to take this as an opportunity to reinvent the way we work with collections and people! The lab closed early for the winter session due to shelter-in-place guidelines and the spring session was delayed until July of 2020. This new group of technicians were able to complete their artifact training before the lab faced another closure, which began August 3, 2020. With approval from USACE, the technicians were presented with the option of performing their Professional Growth and Development work and to attend virtual guest speaker events remotely. The lab managers worked to plan archives training in an online format and the technicians were able to process report only collections from USACE Los Angeles District remotely. The technicians also attended weekly team meetings and monthly safety briefings. The technicians were scheduled to graduate in March of 2021, but the extended lab closure brought the session to an end in January 2021. While work done on the collection is not 100% complete at this point, the final catalog and collections management report for the Deep Creek Site have been completed, and artifact photography and archival processing are underway.

Working with archaeological collections like legacy collections takes a certain level of training and experience and presents challenges to even seasoned archaeologists and researchers. In February 2019, SAA Guidelines for Preparing Legacy Archaeological Collections for

Curation was published. These guidelines provide means for archaeologists to ensure that legacy collections are properly cared for to maximize their future research potential. This guide is designed to help professional archaeologists or students of archaeology approach research on legacy collections. VCP technicians do not conduct research as part of their employment at the VCP, but the opportunity may arise for technicians to present research on collections in the lab or at professional conferences. To facilitate non-archaeologists in effective work both processing and potentially conducting research with archaeological collections, it could be beneficial to have a guide like the SAA Guidelines for Preparing Legacy Collections for Curation.

The VCP provides intensive training designed to teach the technicians the basics of collections rehabilitation, yet the program is not designed to train professional archaeologists. VCP technicians come to their positions with varied abilities and educational background; most do not have a background in archaeology. Technicians are provided with visual step-by-step guides to support their training. There are guides for artifact, archive processing, and artifact photography. As a lab manager, one request that has come up more than once is for a glossary of terminology that we use during processing; this was the impetus for developing a glossary of terminology as presented in Appendix A. This deliverable has not been approved by USACE at this point but is a prototype that could be developed in the future.

For VCP technicians or other non-industry professionals, having a guide that outlines the general terminology of archaeological projects and a basic understanding of where certain types of information may be found in the archival materials would be beneficial as a teaching tool with the potential to increase the technicians' level of confidence in their day-to- day work with the collections. This deliverable is important because it may foster better understanding of the process of working with a legacy collection and make this work more accessible to community

members and VCP technicians. An increased level of engagement with the collections can foster productivity and allow technicians to develop their critical thinking (Chapman and Wylie 2015; Henson 2017). Some technicians find it a challenge to understand how all the elements of a legacy collection connect and create a bigger picture of the site itself. It is easy to imagine that non-archaeologists like tribal members and other community members may face similar challenges when approaching these materials.

Upon initial review of the associated records and field notes for the Deep Creek Site, I came across a note in the report drafts that really struck me as apropos to the value of legacy collections: "The most important questions are the ones that are yet to be asked" (Altschul et al. 1989: v). As archaeology continues to move into the future, maximizing the data that we can get from legacy collections becomes increasingly important (Ford and Allen 2019; Frieman and Janz 2018; Roth 2016; Voss 2012). The Deep Creek Site is just one case study showing what can be done if the interests of multiple stakeholders are leveraged to produce a needed outcome for heritage preservation with job skills and professional development opportunities gained along the way (Kroot and Panich 2020; Shackel 2013). In addition to furthering the archaeological understanding of the pre-contact history of the Deep Creek Site, this collection has the potential to answer questions and benefit multiple stakeholders in a variety of ways including providing material for undergraduate and graduate research projects for archaeologists, furthering understanding of culturally significant sites, developing training and educational tools when appropriate, and designing exhibits to engage and inform the public about archaeology and site stewardship are just some of the possibilities.

#### Project Objectives

This project utilized the Deep Creek Site (CA-SBR-176) collection to demonstrate the work done by technicians and lab managers at the San Mateo VCP and examined the intended and unintended effects that result from the rehabilitation of legacy collections at the VCP. My goals for this project were 1) to gauge interest in exploring legacy collections from multiple stakeholders, 2) disseminate the research to interested parties to assist or inform other projects, and 3) create a tool to help non-archaeologists to work more efficiently with legacy collections.

My initial questions were centered on quantifying the benefits that come from collection rehabilitation at the VCP. While the technicians performed the work on the Deep Creek Site collection, it became clear that there were as many different levels of engagement with the process as there were technicians. It became important to me to gather data regarding the technicians' level of interest in the work they were doing and its relation to the quantity and quality of work they were performing on this collection.

The collections at the VCP are processed at the VCP labs, finalized, and then sent to final repositories for long-term storage. The VCP digitizes most of the documents and photographs a representative portion of the collections to facilitate future sharing of these materials with researchers. Finally, USACE is in the process of regionalizing their collections so the artifact and archival materials will be stored in fewer repositories, with the idea that this will make it easier for researchers and other community members to access the collections. Inspired by the SAA guidelines for curating legacy collections, I decided to let some of the data from my interviews guide the creation of a glossary of terms used in collections rehabilitation at the VCP which could potentially develop into a guide of considerations for non-archaeologists working with archaeological collections.

Below are my initial research questions for the project with an introduction to the methods utilized to answer them.

#### Research Questions

- 1. What are the impacts of this legacy collection, and how are they understood by multiple stakeholders? How can Deep Creek serve as a model to understand other legacy collections?
- 2. What changes in archaeological curation practices can we see over time and how do these changes relate to current archaeological ethical mandates? How can the Deep Creek Site collection be used to answer questions from past and future investigations?
- 3. How do the training methods used by the VCP engage veteran employees with no archaeological background? How do these same methods translate to veteran employees with an interest or background in history or archaeology? What occupational fields do VCP graduates move into?

Qualitative and quantitative ethnographic methods were utilized, including a stakeholder analysis, semi-structured interviews, and a series of interviews and surveys given to different agencies and individuals involved in this study. Informants for this project were past VCP technicians, VCP lab managers, representatives from USACE, and representatives from the San Manuel Band of Mission Indians. Semi-structured interviews and surveys were given to past technicians, VCP lab and project managers, visitors to the lab, representatives of the San Manuel Band of Mission Indians, and representatives from USACE. Interviews were transcribed and thematically coded to highlight prominent or reoccurring themes in the interview. I used evaluation methods used in policy analysis as a framework for effective problem solving (Bardach 2012) and contemporary ethnographic methods designed for use in exchanges between

people and organizations (Moeran 2005).

The Deep Creek Site collection and Site CA-SBR-176

In September 2019, the San Mateo VCP received the Deep Creek investigation, which includes six boxes of artifacts. These materials are from the USACE Los Angeles District 1988 survey performed by Statistical Research, Inc. (SRI). The artifact catalog includes 1,215 items and is 53% faunal, 44% lithic, 1% botanical, 1% glass, and 1% mineral. The artifact catalog from the 1988 test excavations is presented as Appendix C. In addition to the artifacts, we received seven linear inches of associated site documents. The collection was previously stored at the SRI office in Redlands, California until late 2018 when the USACE Los Angeles District Archaeologist brought the collection to the District office to access the field notes as they began writing a new Master Plan for the Mojave River Dam. The 1989 report mentions that artifacts that came from 1988 test excavations were most likely from the Late Period, though several test-pits revealed that some artifacts came from contexts with previously disturbed soil. The artifacts recovered from Gerald Smith's excavation in 1954 are likely from the Serrano seasonal base camps discussed in the 1989 report.

The Serrano Indians were the original inhabitants of the Summit Valley. The Mojave River Forks Area of Summit Valley, and most likely the Deep Creek Site, was called *Maka'taveat*, which means Dove's Nest in Yuhaviatam/ Maarenga'yam, the original languages of the Serrano people, most likely for the resemblance of a small peak in the area which resembled a dove's nest. The site report notes that this peak is now in the center of the existing dam (Altschul et al. 1989).

The Deep Creek Site is important to archaeologists and descendants of the Serrano

Indians because it is one of the first prehistoric base camps excavated along the Mojave River

(Altschul et al. 1989). Gerald Smith and R.J. Sayles first recorded the site in 1939. Gerald Smith conducted test excavations in the 1950s using a largely amateur crew of volunteers over the course of two weekends (Altschul et al. 1989; Smith 1955). Testing from the site in the 1950s informed most of the following interpretations of Deep Creek. The report and artifacts from Smith's excavations are available at the San Bernardino County Museum in Redlands, CA.

In the 1989 site report, Altschul writes that Singer believed that the site would be destroyed by construction of the dam (Singer 1966) and that a later survey confirmed it had indeed been destroyed (Wells 1977). During a 1985 survey, Altschul et al. discovered that the site, though somewhat damaged, was still largely intact (Altschul et al. 1989). Altschul's research design for the 1988 field season completed by SRI aimed to understand the historic chronology in the Mojave River Forks Region, 2) the nature of prehistoric and ethnohistoric settlement and subsistence systems in this region, and 3) the nature of trade along the Mojave Trail (Altschul et al. 1989).

Serrano Indians are part of the federally recognized, the San Manuel Band of Mission Indians. The Tribe has reservation land and a casino near the city of Highland, California. The Deep Creek Site is important since it is in the Summit Valley which is home to the Guapiabit-Serrano Homeland Archaeological District which was listed on the National Register of Historic Places on October 26, 2020 (RS100001258).

The work done at this site including the excavation, site report, and other associated documents completed by archaeologists with years of experience in this region, led me to take an ethnographic approach to understand the potential impacts of this legacy collection and others like it as opposed to focusing on the archaeological materials. The foundation of this research is built by engaging a mix of ethnographic methods that demonstrate connections between the

stakeholders associated with the collections and the rehabilitation process and benefits that extend from that.

#### Roadmap of Project

Chapter 1 introduces my project providing background on the curation crisis, the

Veterans Curation Program, and the archaeological collection used as a case study for this
project. This background gives context to my research questions, project goals, and objectives.

Chapter 2 reviews relevant literature discussing the value of collections rehabilitation,
specifically legacy collections, through the lens of public archaeology, establishing a framework
for evaluating VCP work to the various stakeholders including, USACE, tribal affiliates, veteran
technicians, archaeological contractors, and other communities. Chapter 3 discusses my use of
ethnographic methods to address my research questions. Chapter 4 is a discussion of my results
and the themes emerging from the interviews. Finally, Chapter 5 presents my conclusions. The
project deliverables, the Deep Creek artifact catalog, and other project materials are presented as
appendices.

# Chapter 2: Collections Rehabilitation, Public Archaeology, and the Benefits to Communities

Collections-based research, collections rehabilitation, and curation have remained important topics in the field of archaeology over the last several decades. This chapter examines relevant literature which not only informs these themes but also explores some of the work done to understand the importance of these themes to communities directly and indirectly related to the rehabilitation, curation, and research performed on archaeological collections including legacy collections.

When I began working with the VCP at the San Mateo laboratory as an Assistant

Laboratory Manager over two years ago, I was immediately impressed by the program's dual mission of rehabilitating archaeological collections for the USACE and providing temporary employment to U.S. military veterans. With each session that I have worked as a manager and the more I talk with other managers and technicians, it has become clear that the value of preparing collections for long-term storage extends beyond the standards designed to meet federal obligations for long-term storage. These collections not only inform the field of archaeology, they may also may inform tribal groups, employ veterans, and educate the public. I became more curious about how the collections rehabilitated at the VCP fit into the bigger picture of agencies and individuals working to ease the curation crisis by maximizing the value of legacy collections. This research focuses on maximizing the value of legacy collections rehabilitated at the VCP by using the Deep Creek Site collection as a case study with the goal of entering this collection and others like it into the current discussions focused on innovative approaches to the curation crisis.

This review of relevant literature approaches the value of collections rehabilitation, specifically legacy collections, through the lens of public archaeology, establishing a framework

for evaluating VCP work to the various stakeholders including, USACE, tribal affiliates, veteran technicians, archaeological contractors, and other communities.

#### The Curation Crisis

Discussions of the curation crisis started to appear in archaeological literature in the 1970s. In their recent 2019 edited volume, Rebecca Allen and Ben Ford present case studies which offer insight on how various agencies and organizations are maximizing the research value of both legacy and orphaned collections. This crisis is a result of the rapid growth of materials excavated and saved for long-term storage (Bawaya 2007; Ford and Allen 2019; Voss 2012), or quite simply as Ford and Allen describe it, "too much stuff with too little interpretation and analysis" (Ford and Allen 2019: xiv). Archaeological collections in long-term storage began to grow at exponential rates when rescue and salvage archaeology became widespread in the mid-twentieth century (Buchanan 2016; Dole 2012; Freiberg and Huvila 2019). Development-led excavations are often designed within restrictive time periods and the research designs for these projects sometimes lack strategic long-term planning (Voss 2012).

One somewhat controversial solution to the curation crisis is that archaeological excavations should be curtailed, but this path still does not present a solution for the overwhelming number of materials in existing legacy and orphaned collections (Voss 2012). Others call for preserving sites in-situ and to stop collecting finds (Butler 1979; Silberman 2015). In her 2012 article, Barbara Voss points out that many archaeologists see curatorial activities as managerial tasks, not investigational ones. Voss argues that the very process of engaging with collections through activities like cataloging, rehousing, and conservation "generate innovative research undertakings" (Voss 2012:145). In other words, while the idea of rehabilitation and curation of legacy and orphaned archaeology collections was once typically understood as a

process to get them ready for further research, Voss argues that the interactions in the curatorial processes are indeed active research activities (Voss 2012:157).

Ford and Allen's 2019 edited volume presents strategies used by cultural resource managers, government agencies, college professors, and others to maximize the value of collections. Various examples in the volume describe professionals who not only rehouse, catalog, and curate these collections, but also reevaluate and reimagine the types of research questions which can be answered by legacy and orphaned collections.

#### Ethics and Compliance Overview

In an effort to standardize the approach to the curation crisis, the SAA began the undertaking of establishing guidelines for its members and partners. In 2003, the SAA published *The Archaeological Curation Crisis: An Integrated Action Plan for the SAA and its Partners*. This paper described the background of the crisis, outlining both short and long-term approaches to the problem. Additionally, the SAA called for actions toward a National Archaeological Curation Program with both short- and long-term actions working towards this as well. Recently, in 2019, the SAA provided the archaeological community with guidelines on how to approach long-term preservation, conservation, and storage of legacy collections (SAA 2019).

Not only is maximizing the research value of collections good practice, it is part of many archaeological organizations' ethical mandates, and with comparison, it can be seen that these directives are almost universal. Ford and Allen point out that the act of curation is at the heart of the discipline of archaeology, supporting the idea that archaeological collections are curated to facilitate future archaeological studies and benefit public audiences (Ford and Allen 2019).

Compliance laws that guide the curation of archaeological materials are products of the times in which they were conceived. For example, the National Historic Preservation Act of 1966 was created to preserve and protect historic and archaeological sites, leading to the creation of the National Register of Historic Places. These regulations included the National Historic Landmark program and established State Historic Preservation Officers. In addition, it created the Advisory Council on Historic Preservation, which led to the creation of the Section 106 review process. On a federal level, regulations that preside over the curation of federally owned collections (36 CFR 79) were not issued until 1990. The Archaeological Resources Protection Act of 1979 directly addressed curation as an essential part of the planning and implementing of archaeological projects. Even 40 years ago, researchers recognized the value in collections held by the National Park Service (Brown 1981; Ford and Allen 2019); these collections serve as comparative collections and for research. On a state level, many regulatory acts did not address curation. For example, the California Environmental Quality Act (CEQA) of 1970 did not address curation and in the archaeological stipulations, curation was left to the discretion of the lead agency responsible for CEQA compliance. In 1993, the California State Historical Resources Commission recognized this gap and issued Guidelines for the Curation of Archaeological Collections (Office of Historic Preservation 1993).

#### Legacy and Orphaned Collections

Archaeologists have considered solutions to the problem of the collections or curation crisis for the last few decades. The collections crisis is driven by a lack of funding, a lack of context and documentation for the collections, and of course, a lack of storage space. Legacy collections are archaeological collections that have been previously curated and are the result of planned and research-sponsored archaeological activities (Ford and Allen 2019). The editors

explain that legacy collections are sometimes larger collections from well-known or iconic sites, like a historical residence, a battlefield, or a plantation. Many of the collections such as the Deep Creek Site collection rehabilitated by the VCP for USACE come from archaeological investigations conducted on USACE subject properties, which are often dam or reservoir sites and in many cases are Native American sites. Many of the collections processed at the VCP come from research-based archaeological investigations, but they may not meet current curational standards. These collections provide great value as a tool for new and also comparative research which is one goal of anthropological inquiry (Ford and Allen 2019: xv).

Orphaned collections are materials that were collected by various methods and curated but never analyzed, written up, and often not cataloged (Ford and Allen 2019). Collections in this category are often the result of an archaeologist intending to work on a collection in the future, but for various reasons this work never happened. Sometimes collections are orphaned following rapid data recovery when there is a scramble to excavate before a site is slated to be destroyed. In some cases, academic archaeologists who have excavated a site may lose funding or face other challenges at the analysis phase of their research. Archaeologists from various agencies and organizations often meet challenges with funding, workspace, or time at this important phase. Orphaned collections may not always have associated paperwork and typically have received no treatment for rehabilitation or curation (Ford and Allen 2019).

Approaching archaeological collections, like legacy collections or orphaned collections, takes a certain amount of training and practice, in addition to a curiosity to drive the discovery of new types of research questions. By processing archaeological collections for long-term storage, archaeologists and others are ensuring that materials will be available in the future for researchers. A strength of archaeology as a discipline has been to go back and ask questions

from the documentary record (Ford and Allen 2019). As the discipline of archaeology grows, so do the methodological and theoretical approaches to working with collections (Ford and Allen 2019; Voss 2012:149; Zubrow 2011).

#### Public Archaeology

Beyond increasing the value of legacy collections for research, examining the benefits of collections and the work of collection rehabilitation through a lens of public archaeology offers new and diverse perspectives. Public archaeology raises consciousness and awareness to different issues of preservation, as well as to contemporary issues in society and communities (Brighton 2011; Little 2007; Richardson and Sanchez 2015; Sanchez 2016). Archaeologists engage in at least three main categories of public archaeology: cultural resource management or cultural heritage management under public law; community outreach and education to help protect archaeological sites by raising awareness and community stewardship of sites, which can help decrease site destruction and looting; and archaeology that aims to help communities or individuals in some way or to explore contemporary social issues (Brighton 2011). Archaeology plays a large part in the growing worldwide heritage movement, which recognizes a growing number of tangible places, including landscapes and very recent archaeological sites, as well as diverse stakeholders. Archaeology raises consciousness and awareness, and encourages different ways of seeing the world, thinking about it, and acting in it. The study of it has the potential to explain the contingency of all human endeavors (Little 2012).

Shackel and Chambers examine the archaeological site as a unique opportunity to show that an "extinct" or past community is relevant to the modern community today (Shackel and Chambers 2004). The authors examine the benefits of public archaeology by describing an internship program developed by educators and archaeologists in which undergraduate interns

take on independent studies focusing on historical research. Using documentary evidence, the student interns uncovered a large amount of primary source materials in a community that was believed to have no written record. The archaeologists, in turn, get rich data, and the educators get an excellent case study for teaching research methods.

As a means for community outreach in public archaeology, Gavin Lucas writes that one landscape can potentially hold multiple meanings to more than one descendant community, and archaeologists can be successful working in collaboration with Tribes in managing cultural resources (Lucas 2004). Lucas is supportive of collaboration between descendant communities and archaeologists, arguing that collaboration is the best way to ensure that there is an understanding that can advance the collective knowledge of archaeological findings. Increased tribal participation does raise more discussions about ethics, proprietary rights, and the role of research in managing cultural resources. Past researchers have sometimes omitted the potential value of their work to the Tribe itself and often overlooked that tribal elders are a rich resource of traditional knowledge (Lucas 2004). Though archaeology is often thought only as the study of material culture from the past, it is important to keep in mind that some tribal people, like the Miami Tribe that Lucas cites in his studies, have an active connection to their ancestors in the present. Although, it is important to note that the relationship between archaeologists and Native Americans has been critiqued and has been subject to a "fundamental" reevaluation by Native American scholars and tribal members (Deloria 1969). Through collaboration and careful research design, Lucas argues that a long-term research framework is an effective way to make a unique contribution to the complete body of knowledge.

Collaborative Archaeology and Stakeholder Theory

Many archaeologists have taken on a more collaborative approach to research. Shifting the focus from a completely western perspective to include traditional Indigenous understandings of history and heritage allows archaeologists to also address the social responsibilities that accompany the production of knowledge (Atalay 2012; Chapman and Wylie 2015; Ferguson 2007; Lightfoot 1998; Silliman 2010). Atalay's decolonizing approach demonstrates that the work archaeologists do with marginalized descendant communities is often political. Atalay asserts that the information archaeologists produce is more than just a source of knowledge about the past. Instead, archaeology is part of the process which is creating both history and heritage for living people today. Her work focuses, in particular, on building an Indigenous archaeology, emphasizing that ideas central to the methodology and theoretical approaches of this decolonized approach are still being defined. Atalay recommends an approach that combines the rigor of Western archaeological science with the knowledge and epistemologies of Indigenous people to "create a set of theories and practices for an ethically informed study of the past, history, and heritage" (Atalay 2006:3).

Atalay explores the potential of archaeology as a tool for social justice and the ways that it can be used to forge more balanced relationships between communities and archaeologists. This work is important to communities seeking to be included in the benefits that come from heritage work, as well as archaeologists interested in decolonizing their own practice and the discipline itself. Atalay presents the ways in which archaeological practices can be rethought to create a sustainable framework for both archaeologists and the communities involved. Atalay presents five principles that go along with Community Based Participatory Research (CPBR) based on collaborative archaeology and other disciplines using CBPR; 1) use a CPBR process, 2)

aim to be participatory in all aspects, 3) build community capacity, 4) engage a spirit of reciprocity, and 5) recognize and integrate multiple systems of knowledge (Atalay 2016).

Atalay uses five archaeological community-based projects as case studies in her book to demonstrate the range of experiences that can come up in this type of project. Atalay discusses that collaboration should begin with research questions and that the community needs to be engaged in the actual research design. She acknowledges the challenges in this approach. While communities and researchers may have different ways of knowing, the concept of "braiding knowledge" can bring together different ways of knowing, instead of rejecting different points of view (Atalay 2006; Kimmerer 2015).

With an active engagement of applied anthropological theory and community collaboration, archaeologists have found that involving descendant communities in the research and planning of heritage projects not only includes their voices in history and heritage planning that previously excluded some communities, but it can also contribute to meaningful research questions (Reeves 2004; Brighton 2011). Using ethnographic research, as well as interacting directly with the community, can provide dynamic social exchanges between the descendant community and anthropologists. Involving Native Americans is just one example of a descendant community who has faced exclusion in their own dominant historical narrative (Childress 2004). Their exclusion has led to contemporary manifestations of inaccurate and painful stereotypes of Native American identity. Matthew Reeves argues that interpretation of marginalized and indigenous people calls for a diverse perspective that moves past research (Reeves 2014). As archaeology continues to make itself relevant as a discipline and in the public eye, public archaeology and community engagement can help move it beyond the limited lens of stewardship.

Over the last decade, archaeology has been used by a few organizations as a means of providing military veterans with opportunities to integrate both into the civilian work force and local communities where they live in both the United States and the United Kingdom. There are similarities and fundamental differences in these programs. The VCP has been in operation for over ten years now and is unique in its dual mission of rehabilitating archaeological collections for USACE and providing temporary, paid employment to veterans who gain transferable job skills, which in turn facilitates the transition back to the civilian job force. American Veteran Archaeology Recovery (AVAR) uses archaeological field work as a platform for veterans to gain confidence, vocational skills, and stewardship for archaeological sites in the U.S. and abroad. The VCP has a mission of rehabilitating collections from previously-excavated collections for USACE. Both programs express that their participants find comfort in the camaraderie that typically manifests with a group of veterans. Furthermore, both groups see success when participants are presented with specialized training and "mission oriented" goals (Arendt 2013; Everell, Bennet and Burnell 2020; Finnegan 2016). Also, both programs engage with local communities with outreach events and public archaeology days.

Beatrix Arendt of the Thomas Jefferson Foundation analyzed two programs using archaeology to build transferable job skills in fields other than archaeology, specifically using the VCP and the Hopedale Archaeology Project as case studies to demonstrate the effectiveness of using archaeology as a form of "social activism" as each program has placed providing employment and education to under-served communities as a fundamental aspect of their goals (Arendt 2013). Both programs provide stepping-stones for participants to gain job skills, become more marketable to potential employers, and help foster professional growth and

development. These programs also incorporate an outreach component that makes archaeology more accessible to the public.

Arendt notes that some critics see anthropology and archaeology as "esoteric" nonessential academic endeavors since many students do not end up working in the field. She also
points out that critics fail to notice or report that students of anthropology and archaeology
develop a range of skills that easily transfer to the broader workforce. These skills range from
math and statistics to technology-based skills to interpersonal communication skills and cultural
awareness that provide a useful toolkit for success in almost every profession. Focusing on the
practical skills gained working on an archaeological field project or in a lab setting reveals how
this experience can help participants gain skills that are transferable to a broader range of
employment opportunities. Arendt refers to these programs as an "alternative educational forum
where individuals who may not otherwise succeed build confidence and thrive" (Arendt
2013:97).

Archaeologists and others continue to find innovative and meaningful approaches to the rehabilitation and curation of legacy and other archaeological collections. When effectively rehabilitated and curated for long-term storage, archaeological collections not only fulfill federal curation compliance and other ethical obligations in the field, but they can also serve to inform, educate in areas other than archaeology and heritage management, and provide opportunities for professional growth and development. It was important for me to implement a project with these values and theoretical underpinnings. In Chapter 3, my methods are outlined to show how these themes can be visualized through the analysis of both qualitative and quantitative data gathered from the VCP.

#### **Chapter 3: Research Methods**

The main goal of this project is to gain a better understanding of the value of rehabilitating legacy collections at the San Mateo VCP laboratory, particularly the benefits that may not typically be associated with rehabilitating archaeological investigations or legacy collections. From a curation perspective, the benefit is clear; USACE is getting their collections out of storage, rehabilitated, and housed in final repositories where they become accessible to researchers and communities. The nature of the VCP's dual mission of rehabilitating collections and helping veterans transition to the civilian workforce assists two seemingly unrelated purposes, which are actually mutually beneficial to one another. The Deep Creek Site collection was used as a starting point to understand the value of this particular collection and other collections rehabilitated by the VCP.

A stakeholder analysis was conducted in the beginning of this project to identify the different individuals and organizations which intentionally or unintentionally benefit from the collections rehabilitation process at the VCP. In their 2020 article, Matthew Kroot and Lee Panich examine the benefits of considering students working on campus archaeological projects as vital stakeholders (Kroot and Panich 2020). An important step in a stakeholder analysis is to understand and synthesize the goals of the archaeological work efforts to the social roles of the institutions (Kroot and Panich 2020:2). Furthermore, this approach has the potential to boost interest in archaeology and heritage projects in general.

Existing datasets from technician exit interviews and program metrics from the VCP were evaluated to understand the success rates of the program. These data for the exit interviews were provided in summary to me by USACE as some of the material on the exit interviews is

confidential so that VCP technicians feel comfortable to be honest with their evaluation of the program.

Ethnographic methods used in the analysis, included interviews, participant observation, and surveys are presented in Table 1 below. Examples of semi-structured interview questions and surveys are presented in Appendix B. Interviews were given to USACE St. Louis District project managers for the VCP, managers and administrators from New South Associates, and veteran technicians from the San Mateo VCP lab. I utilized participant observation in the San Mateo Lab while the technicians were working on the collection and while they prepared their graduation presentation. Anonymous surveys were given to former technicians from the past three sessions at the San Mateo VCP.

My initial research goals included gathering data and survey responses from visitors to the San Mateo lab for the graduation event, which was scheduled for March 27,2020, but was canceled because of shelter-in-place orders due to the COVID-19 pandemic. Moeran reminds us that fieldwork requires flexibility and the ability to adapt to the unexpected bumps in the road (Moeran 2005:196). While I was not able to collect all the data I initially planned, I administered 10 interviews leading to over 12 hours of interviews, distributed 10 surveys, and logged over 80 hours of participant observation. In addition to these ethnographic methods, data were thematically coded to identify any recurrent or emerging themes. The goal of the surveys and interviews were to gain further understanding of perceived and observed benefits of people working at the VCP in different capacities.

Contemporary ethnographers draw comparisons to traditional or "classic" anthropological settings. Fieldwork can be much different when evaluating an organization or system of organizations and is considered a contemporary approach to ethnography. I utilized

this approach to evaluate data sets and to inform my own status of someone who is evaluating processes in an organization from within the organization (Berdach 2012; Garsten and Nyqvist 2013; Moeran 2005).

#### Objectives:

Using the Deep Creek Site (CA-SBR-176) collection to demonstrate the work done by technicians and lab managers at the San Mateo VCP, this research examines the intended and unintended effects that result from the rehabilitation of legacy collections at the VCP.

Q1: What are the impacts of this legacy collection, and how are they understood by multiple stakeholders? How can Deep Creek serve as a model to understand the benefits of other legacy collections rehabilitated at the VCP and also in other organizations?

To begin to answer this question, it was necessary to identify the stakeholders connected to this site, who indeed may be affected positively or otherwise by the work done to the collection.

- 1. Identify stakeholders and their interests, categorizing level of interest in the project.
- 2. Use a mix of ethnographic methods to explore the impact of the collection on stakeholders.
- 3. Analyze the process of collections rehabilitation and record situations where non-archaeologists may feel unsure about the process and record innovative approaches that non-archaeologists may have while processing collections.

Q2: How do the training methods used by the VCP engage veteran employees with no archaeological background? How do these same methods translate to veteran employees with an interest or background in History or Archaeology? What occupational fields do VCP graduates move into? What are the benefits of the VCP to the veteran community and the field of archaeology?

Approaching a group with a diverse educational background, varied levels of interest in a topic, and varied skill sets and capabilities requires a diverse and varied line of investigation.

- 1.Employ participant observation methods to observe and troubleshoot any roadblocks technicians may experience while training.
- 2. Utilize program data to describe what occupational field or area of study past technicians have followed.
- 3. Conduct interviews and surveys with past techs to provide information about the value to the veteran community.

Methods

Table 1. Ethnographic Methods

Method	Instrument	Variables
Surveys	Anonymous surveys given to technicians, lab managers, and visitors to the San Mateo lab	Demographics, event participation, value of events for career preparation.
Semi- structured Interviews	Interviews of USACE staff about the VCP, Interviews of New South employees serving as lab managers and administrators for the VCP	Career preparedness, demographics, participation in collections-based research, workplace values.
Stakeholder Analysis	Table	Level of investment, size of group, geographic regions.

Stakeholder Analysis. Early in this project, consideration for multiple stakeholders and their varied interest in this project was assessed by performing a stakeholder analysis.

Stakeholders were identified and categorized by categories of primary, secondary, and key stakeholders. Table 2 prioritizes and breaks down the interests of various stakeholders related to

the Deep Creek Site. The Deep Creek Site, CA-SBR-176, is located at the Mojave River Forks Dam, a USACE subject property. Therefore, the artifact assemblage from Deep Creek Site, CA-SBR-176, is a federally-owned collection. Other stakeholders include USACE Los Angeles District, the. VCP as a program sponsored by USACE; this includes USACE Project Managers at the MCX-CMAC in the St. Louis District, administrators and lab managers from New South Associates who currently holds the contract to run the VCP, and U.S. military veterans who are employed by the VCP through New South Associates. Secondary stakeholders are the community at large, researchers, San José State University, and myself.

Table 2: Stakeholder Analysis for the Deep Creek Site collection

Stakeholders	Importance	Influence/	Interests/	Concerns/	
USACE Los Angeles District and MCX-CMAC	Regulatory compliance, curational obligations	Power Subject property ownership, solution to curation crisis	Impacts Fostering stewardship of cultural resources, veteran success in transition to the civilian workforce	Impacts Training non- archaeologists to work with collections, human impact to site	
San Manuel Band of Mission Indians	Materials come from Ancestral homeland	Cultural Committee	Site related to Serrano/Guapiabit homeland for NHRP	Safe home for the artifact collection	
Veterans Curation Program	Mitigate curation crisis, rehabilitate collections, transition veterans to civilian workforce using collections work	Exemplary collections curation in the field of archaeology, positive public programing for USACE	Collections rehabilitation, helping veterans transition back to the civilian workforce	High quality rehabilitation work, success rates of veterans	
New South Associates	Current contractor: Staffing and management of the VCP	Contractors for USACE	Employ Lab Managers and Veteran Technicians	Maintaining USACE curation standards	
Researchers	Access to previously inaccessible collections	Provide a demand for legacy collections	More researchers accessing collections	Accessibility of legacy collections	
Community at Large	Potential stewards of archaeology and history, audience for public archaeology and outreach	Attendance and support at public events and exhibits, social media audience	Interest in seeing collections at Meet and Greets and outreach events, learn about CA archaeology	Gain understanding of how to access/view collections digitally or in person. Understand restrictions to non- public archaeological sites.	
San José State University	Student research, student Success	Pedagogical approach, applied methodology	Adding to the corpus of graduate literature on community-based archaeology projects.	Completion of student's M.A. project.	
Myself	Employment, research opportunity, professional growth and development	Meaningful research, practical deliverables, present research at professional conferences	Desire to connect local researchers and Tribes to collections. Inform the San Manuel Band of Mission Indians of the work VCP did on the collection.	Completion of M.A.	

Participant Observation. As an archaeologist and a lab manager, observation and notetaking never actually stop. Since I started as an assistant lab manager at the San Mateo VCP in 2018, I take notes on trainings given by myself and my colleagues, workflow in the lab, and issues that arise while processing collections. This helps me stay organized and to keep track of things that work well for me as a manager and things that I may need more training on or would benefit from a slightly different approach. I took notes during the artifact processing for the Deep Creek Site collection as I typically would, noting common issues and questions that arose during the sorting and temporary tag process. Additionally, in my role as assistant lab manager, I observed the process of preparing the Deep Creek Site materials for the Meet and Greet event. Two of the four technicians of that session looked through the artifact catalog to decide what artifacts would be displayed. The technicians also prepared a presentation on the Deep Creek Site materials to be delivered to guests at their graduation ceremony. With permission from USACE, I served as the facilitator for this exercise. While the graduation ceremony never occurred, the technicians were able to complete their presentation on the Deep Creek investigation.

Semi-Structured Interviews. Semi-structured interviews were conducted in April and May of 2020. Interviews were administered over telephone and via the Zoom video conferencing platform due to both geographical distance within the VCP as an organization and also to allow for social and physical distancing protocols in place due to the COVID-19 pandemic. I took notes during the interviews to provide context to the transcribed interviews.

Considerations for digital ethnography were engaged to ensure that authenticity and marginal voices are represented (Akemu and Abdelnour 2018). The interviews were conducted without any consideration for anonymity. The VCP has unintentionally developed into a thriving

public archaeology program and our project and lab managers often discuss their experiences with a public audience. Before each interview, I explained my project to each participant and I asked for permission to record the interview. To keep meetings secure, Zoom meetings were given an assigned meeting ID and password. The recordings of the meetings were encrypted and stored locally on my password accessible laptop.

Interviews were conducted with 1) administrators and project managers from the VCP, including personnel from both USACE and VCP contractors from New South Associates, 2) Lab managers who started as technicians in the VCP, and 3) former technicians.

Surveys. Anonymous surveys were administered by Google forms in April 2020 to ten technicians from the past three sessions at the San Mateo VCP lab. The surveys were distributed via email, and seven technicians responded to the survey. I aimed the wording of the survey questions to reveal each technician's perspective of the collections rehabilitation process, identify their interest level in guest speakers, and collect individual perspectives of professional growth and development. Technicians were asked to name and discuss specific collections that they had worked on to get a sense of how engaged the technicians were with the collections they processed and their level of understanding about archaeological collections rehabilitation. The survey consisted of ten questions which are all qualitative short and long answer questions. This survey was similar to the exit interviews the technicians submit at the end of the session but provided them with the opportunity to expand on their responses.

Technician Success Metrics.

The VCP has maintained a high level of technician "success" throughout its more than ten years of operation. There are a variety of goals set by the veterans participating in the

program, and lab managers help the veterans achieve these goals through structured time known as Professional Growth and Development, or PGD. To track the progress of veterans at the VCP, the program identified tangible measures of success that include the technician obtaining employment or successfully matriculating into higher education.

The methods used in this project were effective in gaining a broader perspective of the various stakeholders and uncovering some of the benefits of collections rehabilitation at the VCP which extend beyond what might traditionally be expected. The next chapter will present my analysis of the data collected.

## **Chapter 4: Results and Analysis**

For this project, my goal was twofold: 1) to identify the ways that primary stakeholders like the San Manuel Band of Mission Indians and USACE benefit from the work done at the VCP and 2) to understand the ways that public archaeology and community involvement at the VCP extend these benefits throughout communities. A mixed-methods approach provided me insight from The San Manuel Band of Mission Indians, USACE, project managers at the VCP, veteran technicians and lab managers, and visitors who attended Meet and Greet events from the past three sessions at the San Mateo lab.

Shelter-in-place orders due to COVID-19 forced the San Mateo lab to end the session early without a graduation ceremony. Part of my original research design was to collect surveys from the graduation guests to get feedback on the technicians' presentation on Deep Creek as well as the exhibit of the Deep Creek Site materials that was scheduled to be shown that day. I decided not to survey visitors from the Meet and Greet event earlier that session as people's memories of past events can either fade or shift from their original reactions as time passes.

Most responses to interview questions and surveys and the results from participant observation were resoundingly positive in reaction to the VCP as a program. Reactions that were other than positive may offer room for managers to evaluate training techniques, activities, and approaches to interacting with the public at in-lab events.

## The Deep Creek Assemblage

My research started with the veteran technicians at the San Mateo VCP. The Deep Creek Site collection arrived in our lab not too long before the session began in November 2019. As a new lab, we have been lucky to have our collections room begin to fill up with collections in need of rehabilitation. The Deep Creek Site was the first investigation that came complete with artifacts and associated site records from the 1988 field season contracted with SRI by USACE. The catalog includes 1,215 items and is 53% faunal, 44% lithic, 1% botanical, 1% glass, and 1% mineral. The lab received seven linear inches of associated site documents in association with the artifacts. As a lab manager who is part of the team who trains the technicians, I was very excited to have a legacy collection like this to work on! This collection is a manageable size and had both artifacts and archival materials to process.

This was the first collection that was processed after the first week of collections rehabilitation training during which the technicians learned about artifact, identification, sorting, and cataloging. Since the Deep Creek Site collection was a relatively small collection of artifacts it was ideal for the technicians to utilize all of the steps they learned in training and gain

confidence in the artifact sorting and repackaging processes by performing them start to finish on one collection.

Shortly after the technicians began processing this collection, the USACE Los Angeles District Mojave River Forks Dam subject property, which is the location of the Deep Creek Site, was featured on the California Report on KQED on November 8<sup>,</sup> 2020. Not only did we have a complete collection of artifacts and documents to work with, we had a real-world situation that involved the USACE subject property where the Deep Creek Site materials came from!

Of the four technicians, two had a Bachelor's degree in Anthropology, a field school, and some volunteer experience on archaeological sites. As for the other two technicians, one was a Supply Sergeant in the U.S. Marine Corps who was immediately able to translate his work experience to collections rehabilitation. The other technician was an Administrative Specialist in the Army National Guard, so he also had skills that helped him relate to the process of collections rehabilitation.

## Technician Surveys

The technician survey was sent out to lab technicians from the last three sessions. Six people responded from the ten surveys distributed. The technician survey was designed to gauge how the technician's understanding of archaeology changed over the course of the five-month session, their understanding of the work they performed, their favorite guest speaker, what they achieved in their PGD work, and finally, what individual accomplishments they valued most.

Four of the six respondents mentioned having very little understanding of archaeology before their session at the VCP. The knowledge was described as what they have seen in movies like Indiana Jones or Jurassic Park. The respondent who said their understanding of archaeology

came from Jurassic Park self-corrected stating that Jurassic Park was about paleontology! The other two respondents have Bachelor of Arts degrees in Anthropology and are now both pursuing graduate degrees in the field. Both of those technicians have had one field season and minimal lab or collections management experience. These technicians were in different sessions, and they both really helped other technicians when they could and were able to perform a high level of peer review in artifact processing and cataloging.

When asked how their understanding of archaeology changed during their time at the VCP, all six respondents answered that there was some level of increase in their knowledge or understanding of archaeology. One technician wrote that he learned about compliance regulations and policies like NAGPRA (Native American Graves Protection and Repatriation Act) and the curation process. Another answered that they were able to draw connections between archaeology and other fields of study they would not have previously connected. Other responses demonstrated an understanding of changes to the discipline of archaeology over time and an understanding that archaeologists are now revisiting legacy collections for data sets.

My understanding of archaeology has changed by seeing the progression of the discipline. By working at the VCP, I have been able to read through archives and get an understanding of the train of thought of the archaeologist during that period of time, and how archaeologists are revisiting these legacy collections and reevaluating the collections with new information." (Respondent 1)

I learned a lot more about the processes post-excavation to include cataloguing, curation and the various agencies/laws governing the final disposition of these important artifacts. I would say that I learned a lot more about local archaeology

and what a huge part the NAGPRA process plays in where certain assemblages go. We had a lot of local guests come and give presentations from obsidian toolmaking to the ongoing archeological studies at the Presidio in San Francisco. (Respondent 2)

When asked to describe the collections they worked on during their session, the responses varied by session and individual. Three respondents were part of the session that worked on the Deep Creek Site collection. Some respondents were focused on the material class of the artifacts while some made connections to the past people who may have used the materials. Some respondents had more pragmatic responses to the question and focused on the importance of the curation process. When asked to describe the collections that they worked on and why the work is important, four technicians responded with the following.

Most were from Native American assemblages from Butte (really Black Butte Lake) and Madera County USACE collections. There were many pestle/grindstone fragments, an obsidian projectile point, biface tools, and chert flake tools. It's important that the material culture be preserved for future generations to appreciate and learn from. (Respondent 1)

The rehabilitation work I performed on these collections is important not only to protect the integrity of the artifacts and archives, but to preserve the artifacts and archives for future research. Also, many of these artifacts played a vital role in

the lives of the indigenous peoples of California and a significant part of the state's history. (Respondent 2)

The collections received were mostly nails and scrap metal. Some cool items like arrowheads or mortars. We found part of a glass jar and a 1950 Tootsie car which was cool as well. The work for curation is important because we played a role in preserving a piece of history. Perhaps not all was equally as interesting because a lack of education or understanding. For example, a bag of nails seems boring and a sure way of getting tetanus, but separate the nails into groups and you gain insights on square heads versus round heads and length and thickness. Intricate and DELIBERATE details to the nails. (Respondent 3)

I've worked on collections that contained several different types of materials from about 2 to 3 sites which include artifacts and archives. I believe the preservation of these materials are [sic] important because the information that either came with it or can still be regained can be lost as the people who've originally worked on the projects pass away or forget. (Respondent 4)

When asked if there was a specific collection which stands out in their mind, two out of six respondents answered no. Two respondents were impressed by the fine detail that goes in to making shell beads and projectile points. Only one technician remembered the proper name of their collection.

...There were a lot of obsidian fragments that I was able to see and that had such fine detail and serration that I could see and feel the amount of time someone had

to put into it; and fully appreciate the skill and patience needed to create such a tool. (Respondent 1)

The shells bead (sic) it was interesting how these beads were shaped, being that they are so fragile (Respondent 2)

I feel that [the] DCS collection stood out to me the most because I took part in the rehabilitation of the artifacts and archives. I felt that through my work in both aspects of the collection I was able to gain a deep understanding of the history and the meaning of the site. (Respondent 3)

Technicians researched materials in a few different ways. While the technicians are hired to rehabilitate collections, there are opportunities to do research for professional growth and development as well as for social media posts. In the winter 2020 session, technicians were tasked to write a ten-minute group presentation for their graduation guests. The goal was to create a presentation that would showcase the work they did and inform the guests about one of the collections they worked on. This process met some resistance. It was a reminder of what an art it is to present clear, concise information to a general audience.

From creating interest in this project, to editing and peer review, and trying to help technicians understand not to use jargon when writing for a general audience, this was a very enlightening exercise for me as a manager. Technician 1 stopped actively participating early on. This technician felt that not using professional jargon in his presentation was playing down his knowledge. Technician 2 was interested in aspects of the site that were not specifically connected to the archaeology and felt limited by the scope of this brief presentation. Technician 2 went through the motions, yet expressed dissatisfaction with the process afterwards.

Technician 3 became very engaged with understanding the subject property for his section of the project, and Technician 4 took the lead with edits to the document and PowerPoint presentation.

Technicians from the other two sessions noted taking time to research information to help identify artifacts. One technician discussed staying on course with the obligations of the job.

...Research was limited due to the scope of our main duties (cataloging and curation). We did learn a functional process of records management/databasing for the artifacts, but our analysis was limited to the cataloging and photography of certain artifacts. With the camera we used, we were able to bring out some of the finer details more vividly. So, general information was acquired. (Respondent 1)

Each session, each VCP lab has a variety of guest speakers present on topics ranging from archaeology and veterans' resources to financial wellness. Five out of six responded when asked who their favorite guest speaker was. Two technicians from different sessions mentioned presentations given by archaeologists; one was a virtual presentation and the other was in person. One technician mentioned our photography trainer as their favorite, and one mentioned a guest speaker who talked about local resources for veterans. Another respondent mentioned enjoying the fieldtrip to the Presidio.

The guest speakers and hosts of various field trips have become a part of the VCP community. Many of our guest speakers take time from their busy schedule to lecture and demonstrate skills like flintknapping or basket weaving. I conducted informal interviews with a few of the guest speakers who have participated in one or more sessions as a guest speaker or presenter at the VCP. Many of the guest speakers have mentioned that serving as a guest speaker

has been beneficial to them in several ways including having a general audience to debut a new lecture, job talk, or presentation. They also report that presenting at the VCP is an overall positive experience.

All VCP labs usually incorporate a flintknapping demonstration into each session. For the technicians, understanding the work that goes into this technology breathes a little life into their work processing collections, which often have a large quantity of some tools like projectile points and grinding stones. Ken Peek is a self-proclaimed "rock hound" and flintknapper. I asked Ken to tell me about his experience as a guest presenter at the San Mateo VCP.

It's been a privilege and an honor for me to contribute, if even in a small way, to this wonderful program. It has given me a chance to share my expertise with our veterans, whose contributions and sacrifices I can never thank them enough for. To see the genuine interest expressed by these fine folks has lifted me up and I can only hope that I've been able to do the same for them. I've greatly missed the opportunity to be a part of this program (in person) during the COVID-19 pandemic, but hope that in the not-too-distant future we will be able to share our time together again! (Ken Peek, personal communication, April 1, 2021).

The next question asked technicians about the results they saw from the time they spent working on PGD. Six out of six technicians mentioned resumes. For one technician, this was the very first resume that they had ever drafted. The others mentioned updating and improving their resumes. Some technicians expressed the importance of shifting from a military mindset; "It (the VCP) helped me transition from a military mindset to a more open mindset. I didn't feel like I

was taking orders and I could share my ideas." Other responses included exploring career paths, networking with the veteran community, networking with archaeologists, and gaining a better understanding of the job market.

The next question asked the technicians to list three accomplishments either personal or professional that they accomplished over the course of the session. The topics ranged from gaining experience as an archaeologist, creating resumes, learning how to work better with others, and acclimating to a civilian work environment.

Three accomplishments to me would be: (1) being able to be hired (if only for 5 months) into a field that I absolutely love, (2) making friends and lasting connections with those who work within the field and finding similar interests with them, and (3) realizing my inner strength and potential that I can accomplish something, no matter how difficult it may be to manage (I was working two jobs, commuting and sometimes running on little or no sleep). If I want something and enjoy doing something enough, those negative things seem to fade away.

Happiness in a career is a huge motivator and has such a positive impact on your life when you are doing something you enjoy; it doesn't feel like 'work'. (Respondent 1)

Learned how to work in a civilian work environment. Was able to complete all of the hours provided to help the team without using any PTO during the session.

Made an effort to talk about my classes and share my knowledge and also receive knowledge from others that knew about my topics. (Respondent 2)

When asked why these accomplishments were important to them, the technician responses included building comradery, having the feeling of a close-knit family like in the military, and gaining transferable job skills to help secure fulltime employment. At the San Mateo lab, there has been at least one technician with a background in history or archaeology in each session. For these technicians, the job skills that are gained at the VCP contribute directly to building their resume in a career path related to their fields of interest.

Being hired into the field and making connections was important to me because archaeology is such a small world and hard to get into as a career; so, every hour spent and every person met, and every friend made is another step closer to achieving my goal. (Respondent 1)

...I love learning about new things whether I can directly use it or not because sooner or later there is always a project that I end up using the information on.

Making friends with veterans are useful to me because not everyone can relate to what you might be going through. (Respondent 2)

The last survey question was left open for additional comments. Five technicians responded to this question, including one with "no." Three expressed gratitude for the opportunity, and one recommended the program to other veterans.

I highly recommend the VCP to any veteran; whether they are looking to make a career change, adapting to life after the military and connecting with other veterans, or just looking to increase their knowledge in a whole new exciting job

sector. Lastly, thank you for the opportunity and the fun times! (Respondent 1)

Semi-Structured Interviews with VCP Management

The following interviews are not from the San Mateo lab. These lab managers work in the other labs and have worked on rehabilitating archaeological investigations other than the Deep Creek Site. There are currently four VCP lab managers who started as technicians and advanced to manager positions after their five months as a technician in the program. I interviewed three managers from this category. One of the interview session recordings malfunctioned. Subsequently, the following section is based on two of those interviews.

These individuals have very different perspectives given their military experience, education, and personal background, but their experience getting hired at the VCP and the events leading up to their technician positions had some similarities. Jake received a bachelor's degree in history from University of Massachusetts, Amherst after he got out of the Marine Corps. Jake moved to the D.C. area to seek employment in a bigger job market than western Massachusetts. Rodriguez came to the VCP almost immediately after he separated from the Navy. Jake had hoped that his college degree would help him find a good job but was struggling to find employment. Rodriguez did not have an immediate plan for school or employment when he separated from the Navy.

This program has literally changed my life twice over...at least the direction of my life twice over. Once as a technician and then coming back as a manager. I don't know how long I'll stay here, but I'm not like planning on leaving. I'm really happy that we're able to keep the program going and keep bringing more

technicians, more vets. It's been really nice to see it since I've been a manager, we have hired two, new managers, (replacement managers), that were also vets. (Jake Petrie, personal communication April 21, 2020)

I went to the Vet Center and I didn't have a job. I was out of the Navy already without a job or anything. And, you know, I'm very open, I'm not that shy. So as soon as they asked me, hey, how can we help you? I said, I'm looking for a job. I need a job! I was trying to get a federal job. But those take too long; it's not something you can get right away. And I have been applying for almost two months before I left the Navy. So since like early February, maybe before that, but I did not really see pretty much any, any feedback till then. And I was trying also to start to maybe go to school that fall. And the thing is you have to start the whole process like a year before. (Nephtali Rodriguez, personal communication April 28, 2020)2

Rodriguez separated from the Navy on April 12, 2019. Still unsure what he would do for employment. He was referred to the Vet Center for advice.

"I went to the Vet Center on a Monday and they hand me a sign, a flyer for the VCP that Monday. It was the last day to apply, I actually applied very late on Tuesday, so I called...they let me interview. I applied on April 16 and got the job that started that May. And so that's what I'm telling you, "#blessed", because it was from getting out of the Navy, going to the Vet Center, getting the flyer and

then starting at the VCP. (Nephtali Rodriguez, personal communication April 28, 2020)

When asked if their jobs in the military or education previous to their employment at the VCP had any influence on their personal success, their answers varied on this topic. Jake was an O3-11 Rifleman in the Marine Corps who ended up serving as a heavy machine gun operator on a boat, so he was not able to draw any connections between his military occupational specialty (MOS) and success at the VCP. Rodriguez was an Intelligence Specialist in the Navy and was often tasked to create briefings on a broad range of topics. He often had to become a subject matter expert in areas that he was unfamiliar with. He would do research and create PowerPoint presentations for his team.

After Jake's session as a technician at the VCP, he worked as an instructional designer for the Federal Aviation Administration before being accepted to George Washington University for the Masters in Museum Studies program. Jake completed the MA and is now the archives manager at the Alexandria VCP lab. Rodriguez has recently started the Museum Studies program at George Washington University.

Interviews with Other Managers and Administrators

The following interviews were conducted with the current project manager from the VCP contractor New South Associates, and a former Assistant Project Manager from USACE who also worked as a lab manager and a curator on the contractor side of the VCP.

Jessica Mundt is a VCP Project Manager. "Jess" is a Registered Professional Archeologist (RPA) with experience in the archives, lab, and fieldwork. Jess, like many other members of the VCP management team, wears many hats. Jess started as an assistant lab manager with the Alexandria lab and moved up to Archives Manager, Lab Director, then Assistant Project Manager/Administrator. Now Jess serves the VCP as the Project Manager for the four Flagship labs, and an Administrator for the satellite lab at Texas State University.

When asked if there were any benefits that are related to the VCP that are unexpected or surprising, Jess responded with a discussion of the opportunities for managers to grow professionally each session. Each session is followed by a month with no technicians in which managers can catch up on things like finalizing collections, updating training materials, and receive training. This off month is when lab managers receive feedback from their project managers based in part on the technicians' supervisor evaluations. Jess expressed that she is always impressed by the ability of the VCP to create the opportunity for managers to grow as professionals as each session presents new opportunities to learn with collections and new opportunities to improve management skills.

Lab managers are excited about training and are developing new ways of training people because we are growing and adding new staff...every time we bring on new staff, they have a different eye for our training materials, they come to it with fresh eyes, is what I was going to say. They will kind of identify it/a different gap in the training or something that the technicians typically have a difficult time understanding, and I love that our lab managers instead of just going with it and saying, 'oh yeah that's hard, don't worry about it, we'll figure it out for', you know,

they're coming up with new training methods to try to figure out how to teach these difficult things in a new way. It's really exciting, and it is cool to be in a program where people care about stuff and they want it to get better, they don't just sit back and let it stay as it's always been. There's a lot of life in this program, um and it's cool to see people develop new things all the time and then to share them with everybody and then be receptive to other people's feedback too.

(Jessica Mundt, personal communication May 14, 2020)

The interview moved on to the impact that collections rehabilitation at the VCP has on the physical collections themselves.

Everything that we do to stabilize collections and get them sorted and in order so it's not so, you know, off-putting for a future researcher...I mean, if I was looking for a collection to do some graduate research on- the state that some of the collections come into the VCP, I might not choose one of those collections because there might be an easier collection to work with. So, I mean, just getting these collections into this beautiful organization and rehousing them and creating a catalog, that while it isn't super in-depth as far as artifact analysis, it provides a basic assessment of what's in these boxes and really serves as a jumping off point for future researchers...you know I feel like we have rehabilitated a lot of collections and we are making them a really good resource for future research. And, my hope is always that someone will eventually use these collections again, like you're doing with Deep Creek. I mean, I think that is everybody's goal to get these collections out of storage, and to get something valuable out of them. (Jessica Mundt, personal communication May 14, 2020)

Jess speaks about the impacts of collections rehabilitation on the technicians:

... There are dramatic things that happen with the technicians as well...gosh, just sitting down and taking time with technicians to figure out where they are as far as what they understand about technology, and you know, using the archaeological process as a tool to teach them skills has been amazing, really rewarding, and also really beneficial for the technicians. As a lab manager in Alexandria, there was a time when I taught a technician how to use a mouse on a computer... it was just that they went into, straight out of high school they went into the military and their MOS didn't require them to ever use a computer- they just kind of missed that time frame to learn how to use a computer, and then after that, they were kind of embarrassed about it you know, but the VCP was a place they felt safe and comfortable saying, you know what? I don't know how to use a mouse; can you show me how to do this? To be able to do that and kind of break down that barrier for somebody so that they could go on and be confident and search for jobs, you know feeling like they can function out in the civilian world that's an amazing thing to be able to do. (Jessica Mundt, personal communication May 14, 2020)

Dan Jones is a former VCP Lab Manager and former Assistant Project Manager at USACE. He has an MA in Archaeology, and his research interest was mainly bioarcheology. Dan spoke to the success of the VCP with regard to veterans working at the VCP and also to USACE's treatment of collections. Dan reflected on ways he kept technicians engaged while they were rehabilitating collections when he was a lab manager. We discussed USACE's efforts

to get collections out of storage and into repositories, and Dan reflected on technology making curated archaeological collections more accessible and how new technology could make the materials rehabilitated at the VCP vastly more accessible with technologies like photogrammetry and 3D modelling:

In terms of getting students and others interested, being on a computer pulling up documents and words on a page just isn't going to do it for most...what if they were talking about the first humans in the Americas and talking about the projectile points those people made and the teacher could download a file for 3-D printing that they could hold in their hands? I really like that the Corps is putting so much emphasis on going back to collections that are sitting on shelves in various locations and legitimately trying to rehabilitate those collections...and not only collecting that information, but putting it in a medium that is accessible to the public, to students, to different Tribes and indigenous people. I think they've done a real good job of that. (Dan Jones, personal communication May 21, 2020)

I asked Dan about any technician success stories that stood out to him from his time as a lab manager, and he told a story of a technician who hadn't left his house and basically lived in his basement for over three years after returning from deployment. He came to the VCP, and by the end of the session he didn't go into a job right away, but he had become "a social butterfly."

He didn't move directly into a job or school, but the fact that he was no longer depressed and anxiety ridden was a huge accomplishment. Since then, he has gotten his real estate license and is working in sales. (Dan Jones, personal communication May 21, 2020)

## **Chapter 5: Synthesis of Results**

A mixed-methods approach was effective in this project, though if this study were to be revisited, I would recommend expanding the surveys and interviews to include the local veteran community organizations including veterans service officers and visitors to events at the lab where technician presentations and exhibitions are presented to the public in non-pandemic times. I used a combination of stakeholder analysis, interviews, and conversations with USACE archaeologists and the San Manuel Band of Mission Indians to understand how other primary stakeholders like Tribes may benefit directly or indirectly from the collections rehabilitation performed at the VCP. People employed by the VCP in management and administrative positions were really impressed by the opportunities and sometimes dramatic transitions that happened for technicians in the program. While my bias as a researcher who is employed by this program may lean towards a positive view of the VCP as a program, I am not alone in this perspective. Recurring themes throughout this project include altruism, gratitude, community, professional growth and development, and an interest in cultural resources and heritage.

While my aim in conducting the stakeholder, analysis was in part to gauge interest in different groups of stakeholders utilizing legacy collections at the VCP, there was no input from the San Manuel Band of Mission Indians since I was unable to interview the Cultural Affairs Working Group from the Tribe. Though a detailed account of the rehabilitation of the artifact and archival materials are included in the finding aid and collections management report for each collection, the Tribe's feedback might offer additional input as to what information would be important to them and how it might be easily accessed.

Themes relating to public archaeology and community building really resounded with both VCP lab staff and guest speakers! I conducted informal interviews with many of the guest speakers who presented at the San Mateo lab either virtually or in person. More than one guest speaker has presented their anthropology dissertation, thesis defense, or "job talk" at the VCP, finding the audience of technicians and lab managers to be interested and welcoming. While our technicians benefit from the wisdom of guest speakers in the field of archaeology and other fields, it is great feedback for the program that the guest speakers are also experiencing a positive result from their experience.

As regular practice, I keep notes on what training methods work for some technicians and where some don't. As a lab manager, it's important to not only observe but to engage with the technicians in the training process as there are so many learning styles and different capabilities among the VCP technicians. Armed with the training tools developed by the VCP and archaeological collections that can be connected to both past and very much extant groups of people, and a variety of tasks to be performed on every collection, there are multiple ways to connect technicians with a job or tasks that not only hold their interest but also help them be successful at their duties in the lab.

Technician exit interviews and supervisor evaluations are an important to ensuring lab managers are working in ways that most benefit the technicians and also ensure a high quality of collections management for each collection. Some technician feedback I received about the Deep Creek graduation presentation reminded me that not all technicians understand the structure of a presentation created for a general audience and may become frustrated by perceived limitations to their research. Even with some negative pushback from technicians, it can be seen that using the Deep Creek Site collection as a subject for a Meet and Greet and graduation presentation in

2020 created a space for the technicians who wanted an extra challenge to do so and for the others to see ways that the day-to-day work of archaeological curation bears interest to communities interested in regional histories and archaeologies.

In the exit interviews, technicians are asked to rate the quality of their training. As demonstrated in Table 3 below, VCP photography training is rated the highest by technicians with 69% rating the training as excellent; 65% of technicians rate their training and experience with artifacts processing and curation as excellent, followed closely by archives processing and records management with 58% technicians rating this experience as excellent. Training in archaeology and history technicians' rated training was rated Excellent by 54% of the technician surveys. Most of the general training on archaeology or history occurs during week one which is a training-heavy week. Varied interests and educational backgrounds could also factor into these lower ratings by technicians.

Table 3: Technician Exit Interviews (Data provided by USACE St. Louis District MCX-CMAC)

Area of Training	Excellent	Good	Fair	Poor
Artifacts Processing & Curation	65%	31%	4%	0%
	(N=17)	(N=8)	(N=1)	(N=0)
Archives Processing & Records Management	58%	10%	4%	0%
	(N=15)	(N=10)	(N=1)	(N=0)
Photography	69%	23%	8%	0%
	(N=18)	(N=6)	(N=2)	(N=0)
Microsoft Office Software	50%	27%	23%	0%
	(N=13)	(N=7)	(N=6)	(N=0)
Archaeology and History	54%	35%	8%	4%
	(N=14)	(N=9)	(N=2)	(N=1)
Professional Office Skills	54%	31%	12%	4%
	(N=14)	(N=8)	(N=3)	(N=1)

Ultimately, the VCP is temporary paid employment and not an educational program, though there is space for a tremendous amount of learning and professional and even personal growth. Managers help technicians establish goals for their time in the program and schedule frequent check-ins with the technicians to help them stay on track with their goals.

The program success metrics as of December 2020 presented in Table 4, reflect that this is a very successful program for the technicians who participate. As of December 2020, of the 617 past veterans who participated in a five-month session at one of the flagship VCP labs, 72% (442) were gainfully employed by the end of their session and 19% (120) had matriculated or remained enrolled in a college or university. The other 9% may find personal successes volunteering in the community or receiving treatment for health concerns.

Table 4: Program Success Metrics for Flagship Labs as of December 2020

Number of VCP Graduates Employed	442	72%
Number of VCP Graduates in School (Not Employed)	120	19%
Total	562	91%
Flagship Total Past Vets	617	

#### **Chapter 6: Conclusions and Next Steps**

Due to lab closures because of state and county guidelines that were in effect for COVID-19 precautions, there is still some work to be completed on the Deep Creek Site investigation, but the collection is close to being ready for a final review by USACE and to be moved to its final repository for long-term storage and preservation. The COVID-19 pandemic significantly changed the original course of this project. I was not able to interview any tribal members from the Cultural Advisor Working Group (CAWG). The Cultural Resources Director did bring my request to the Tribe, CAWG but they declined an interview with me. The Tribe was heavily impacted by COVID-19, and their Cultural Resources Director, Jessica Mauck, stated that discussions about collections a sensitive topic for Tribal groups (Jessica Mauck, personal communication, August 5, 2020.

While I was not able to interview representatives from the San Manuel Band of Mission Indian's CAWG as I had hoped, in order to directly hear how they felt about the work done to this collection or how it may or may not benefit them, the materials from this site are important since they are from the Summit Valley which is home to the Guapiabit-Serrano Homeland Archaeological District which is now listed on the National Register of Historic Places (RS100001258, October 26, 2020). The rehabilitation and preparation of the collection for long-term storage will ensure the collection is available for the CAWG or other representatives from the Tribe to access in the future.

The benefits of collection rehabilitation from USACE's perspective are two-fold: first, the VCP collections rehabilitation helps USACE meet federal mandates for curation that USACE is obligated to follow. Secondly, the VCP has in turn become a vibrant, yet unintentional public

archaeology program (Heckman and Mundt 2018). USACE-owned collections rehabilitated at VCP labs provide lab managers and technicians a chance not only to gain hands-on experience working with collections, but they also provide opportunities for research and archaeological conference presentations. Even technicians without an interest in archaeology can benefit from the experience of researching a collection and presenting that information in a poster or paper. Examples of presentations given on the Deep Creek Site are given in Appendix D.

The Deep Creek assemblage has been busy at the San Mateo VCP lab! The technicians created an exhibit of both archival material and artifacts for the February 2020 Meet and Greet, collaborated on a presentation for a general audience for their graduation, and co-authored a poster for the SCA conference in 2020. Though the SCA conference and VCP graduation were cancelled due to the pandemic, the technicians still gained experience from creating these presentations. One technician, Vanessa, who is working on her MA in public history was enthusiastic about the opportunity, "I feel extremely lucky to get to work with collections like Deep Creek because the artifacts that I am handling played an important role in the everyday lives of the first people of California, and I believe I have learned about California history on a more personal level."

The Deep Creek Site materials were important on a few levels. This was the first archaeological investigation that the San Mateo lab had received complete with artifacts and associated records. Not only was I able to work with the other lab managers and technicians to create an exhibit for the Meet and Greet, a conference poster, and a graduation presentation, but I was also able to get experience submitting two professional conference papers and of course complete the work for this project report towards the completion of my MA degree in Applied Anthropology at San José State University.

Beyond its potential to provide employment and transferable job skills to the VCP technicians, the Deep Creek Site collection potentially has value to the San Manuel Band of Mission Indians, as the Deep Creek Site is part of their ancestral homeland. Though the VCP lab is only a short-term home for the artifacts and documents from the Deep Creek Site, it has been an important part of our community in this lab by providing a collection to rehabilitate to employ veterans, as a tool to educate the technicians about the history and archaeology of the site, and as a research collection.

When former Director of the MCX-CMAC, Sonny Trimble, designed the VCP, he had the dual mission of rehabilitating collections for USACE and providing temporary employment and transferable job skills to U.S. military veterans in mind, but the benefits of the collections rehabilitation work done at the VCP may extend further than he initially imagined. Federal laws spell out the stewardship and curation compliance obligations for agencies like USACE, but it can be seen that there is much more benefit to this collections work than simply meeting compliance obligations.

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Appendix A: Glossary of Terminology Related to Collections Rehabilitation at the VCP

This glossary is not an exhaustive list of terminology used at the VCP, but it is designed to be a starting off point for this supplemental guide. Past technicians at the San Mateo VCP lab have requested a training aid like this in the past. If this is approved, it could be further developed and added to the technicians' training binders and possibly added to the digitized material that goes along with the finalized collections to the final repository as non-archaeologist community members may also benefit from the definitions. These definitions are compiled from various archaeological associations including the American Institute of Archaeology and National Parks Service.

Accession Number: A unique number assigned to a collection or object for identification.

**Acidic Container:** Non-archival box or container not suitable for long-term storage. Acids can weaken fibers in materials like paper and cloth, causing them to become brittle over time.

**Archaeological Collection:** Physical representations of past research of a specific area or site including artifacts and associated site documents.

**Archaeological Investigation:** Typically, a three-phase investigation of an archaeological site.

Phase I: Identification, Phase II: Evaluation, and Phase III Mitigation/Data Recovery

**Archival Quality:** Materials that have been manufactured of inert materials specifically designed to extend the life of artifacts and records by protecting them from agents of deterioration.

**Artifact:** A portable object, modified or manufactured by humans.

**Artifact I.D.:** A unique identifying six-digit number assigned at the VCP. The first three digits indicate the box number and the second three digits represent the number of the item within the assemblage.

**Assemblage:** A group of artifacts found within the same archaeological context.

Botanical: Plant material; object made from plant material such as a basket.

**Catalog:** At the VCP, artifact catalogs are recorded on Excel spreadsheets and list pertinent information for each artifact such as artifact number, provenience, weight, material class, and a description of the artifact.

**Catalog Number:** A unique identification number sometimes assigned to an artifact before it arrives at the VCP.

Ceramic: A material class of objects; objects made of fired or baked clay.

Collections Management Report: A report created by the VCP which provides a detailed description of the background, contents, and rehabilitation efforts performed on each investigation at the VCP. The Collections Management report details all known curatorial efforts performed on the collection before it's arrival in addition to VCP rehabilitation efforts.

**Context:** The position and associations of an artifact, feature, or archaeological find in space and time. Noting where the artifact was found and what was found around it assists archaeologists in determining chronology and interpreting function and significance.

Curation: Organizing, rehousing, and rehabilitating collections for long-term storage.

**Ecofact:** An archaeological find that is made of organic material that has cultural or historical significance but is not modified or manufactured by humans.

**Excavation:** Systematic digging up and recording of archaeological sites including uncovering and recording the provenience, context, and three-dimensional location of archaeological finds.

Faunal material: Animal bones, teeth, horns, etc.

**Finding Aid:** A guide to assist researchers in locating or using archival collections. It provides a detailed description of the background, contents, and rehabilitation efforts performed on a specific investigation at the VCP.

**Legacy Collection:** Previously curated collections that are the result of planned research-sponsored archaeological activities, whether originating from a university, government agency, or cultural resource management activities. (Ford and Allen 2019)

Lithic: Stone; a material class of artifacts.

Material Class: Classification of what material artifacts are manufactured from.

NAGPRA: Native American Graves Protection and Repatriation Act; 25 U.S.C. 3001-3013, 43 CFR Part 10 was passed on November 16, 1990, to resolve the disposition of Native American cultural items and human remains under the control of Federal agencies and institutions that receive Federal funding ("museums"), as well as the ownership or control of cultural items and human remains discovered on Federal or tribal lands after November 16, 1990. The statute and regulations outline the rights and responsibilities of lineal descendants, Indian Tribes (to include Alaska Native villages), Native Hawaiian organizations, Federal agencies, and museums under the Act, and provide procedures for complying with NAGPRA.

**Orphaned Collection:** Collections that were collected and curated in some fashion, but never analyzed or reported on. (Ford and Allen 2019)

**Projectile Point:** The preferred terminology for lithic points like darts, arrow heads, and spear points.

**Provenience:** The three-dimensional context of an archaeological find (including geographic location) which may give information about its function or date (AIA).

**Record Series:** Sorting categories for documents based on their shared circumstances of creation, receipt, or use. The VCP uses five basic record series 1) Administrative, 2) Background, 3) Field, 4) Analysis, and 5) Report.

**Repository:** A facility that can provide professional, systematic, and accountable curational services on a long-term basis.

# San Mateo VCP Technician Survey March 2020

This survey will be used to provide qualitative data for a project report that will fulfill part of my obligations for my Master's degree in Applied Anthropology. Participation is voluntary. Thank you for participating! Leah Grant, Lab Manager, San Mateo VCP (lgrant@newsouthassoc.com).

### \* Required

How would you describe your previous understanding of archaeology before completing your 5-month session at the VCP? \*

How has your understanding of archaeology changed since your training and work experience at the VCP? \*

In general, describe the collections you worked on this session. In your own words, describe why the rehabilitation work you performed on these collections is important. \*

Is there a specific collection or collections that stood out to you? If so, why? \*

Did you conduct any research on the collections you worked on this session? What was the result of this research? (acquiring general information, conference poster, in-lab presentation, etc.) \*

Who was your favorite guest speaker(s) over the course of the session? Why?

You spent several hours working on Professional Growth and Development (PGD) this session. What results did you see from your efforts? \*

List 3 accomplishments you achieved this session. These accomplishments can be personal or professional. \*

Please describe why these accomplishments were important to you (optional). \*

Additional comments?

Interview Questions for The San Manuel Band of Mission Indians Cultural Resource Director or Cultural Committee

- 1. What is your perspective on the curation of collections? Does the Tribe have a museum?
- 2. Is the Tribe interested in receiving information about collections? Is the Tribe interested in digital access to collections?
- 3. What is the status of the National Register of Historic Places nomination for the Guapiabit Serrano Homeland Archaeological District?
- 4. Do you have any questions for me about the collections rehabilitation process at the Veterans Curation Program?

Interview Questions for Lab Managers who were formerly technicians:

- 1. Tell me about your understanding of archaeology previous to your session as a technician at the VCP? How did that change over the course of the session? Did you have archaeological experience before your session? Please describe that to me.
- 2. Did you have job skills in the military that helped you excel in your position as a tech?
- 3. What was your job in the military?
- 4. Now that you are a manager, what has changed? Would you say your interest in history or archaeology has changed or has it stayed the same?
- 5. From your experience as a technician and now as a lab manager, can you describe the impact this program has on veterans? Can you think of ways this program impacts other people besides the veteran community?
- 6. Any other comments on your experience in general?

# Interview Questions for USACE VCP Project Managers

- 1. How long have you worked with USACE? How long has that time been on the VCP side of things?
- 2. What is your professional background?
- 3. From your point of view, what types of impacts have you seen with the VCP rehabilitation of USACE collections? How has the VCP impacted the MCX and does the VCP help the MCX meet its obligations for compliance regulations?
- 4. How was the original plan for training veteran technicians established? How has this changed?
- 5. How are progress and/ or success measured for the veteran technicians in the program and in terms of collections rehabilitation?
- 6. Are there any unintended consequences of the VCP that come to mind?
- 7. Do you have any additional comments?

Interview Questions for New South Associates Administrators

- 1. How long have you worked with the VCP? What is your professional background?
- 2. From your point of view, what types of impacts have you seen with the VCP rehabilitation of USACE collections?
- 3. How have obligations as a contractor for USACE changed over time?
- 4. How are progress and/ or success measured for the veteran technicians in the program and in terms of collection rehabilitation?
- 5. How has training of the veteran technicians changed or stayed the same over the last 5 years? What techniques or training devices has contractor staff added to the training?
- 6. Are there any unintended consequences of the VCP that come to mind?
- 7. Do you stay engaged in the archaeological community outside of your work at the VCP?
- 8. How many lab managers are RPA's? How many have a graduate degree in Anthropology or a related field? How many technicians have been hired as lab managers after completing a session at the four flagship VCP labs?
- 9. How have you grown in your position at the VCP? How have you grown as an archaeologist?
- 10. Do you have any additional comments?

# Appendix C: Deep Creek Artifact Catalog

Artifact	Cit - November	B	Danish	Characteristic		Marka vial Class	Autifort Donaviotion		14/-:-b-
ID	Site Number	Provenience	Depth	Stratum	Level	Material Class	Artifact Description	Count	Weight
001-001	CA-SBR-176	Not Given	Not Given	Not Given	Not Given	Lithic	Unmodified stone	1	6174.0
002-001	CA-SBR-176	Not Given	50 cm	Not Given	Not Given	Lithic	Unmodified stone	3	13892.0
003-001	CA-SBR-176	Not Given	Surface	Not Given	Not Given	Lithic	Fire-cracked rock	4	1946.7
003-002	CA-SBR-176	Not Given	Surface	Not Given	Not Given	Lithic	Fire-cracked rock	1	164.7
003-003	CA-SBR-176	Not Given	Surface	Not Given	Not Given	Faunal	Unmodified bone	1	1.0
003-004	CA-SBR-176	Not Given	Surface	Not Given	Not Given	Faunal	Unmodified bone	1	1.2
003-005	CA-SBR-176	Not Given	Surface	Not Given	Not Given	Faunal	Unmodified bone	1	0.01
003-006	CA-SBR-176	Test pit 2	Not Given	1	5B	Lithic	Chipped stone	1	0.01
003-007	CA-SBR-176	Not Given	Surface	Not Given	Not Given	Lithic	Fire-cracked rock	3	1124.4
003-008	CA-SBR-176	Not Given	Surface	Not Given	Not Given	Lithic	Hammerstone	1	229.1
003-009	CA-SBR-176	Not Given	Surface	Not Given	Not Given	Lithic	Chipped stone	5	30.2
003-010	CA-SBR-176	Not Given	Surface	Not Given	Not Given	Lithic	Fire-cracked rock	7	1436.0
003-011	CA-SBR-176	Not Given	Surface	Not Given	Not Given	Lithic	Chipped stone	5	22.6
003-012	CA-SBR-176	Not Given	Surface	Not Given	Not Given	Glass	Fragment	2	3.0
003-013	CA-SBR-176	Test pit 1	10-20 cm	1	2	Faunal	Unmodified tooth	1	0.01
003-014	CA-SBR-176	Test pit 1	10-20 cm	1	2	Faunal	Unmodified bone	25	1.4
003-015	CA-SBR-176	Test pit 1	10-20 cm	1	2	Faunal	Unmodified bone	1	0.01
003-016	CA-SBR-176	Test pit 1	10-20 cm	1	2	Faunal	Unmodified bone	1	0.01
003-017	CA-SBR-176	Not Given	Surface	Not Given	Not Given	Lithic	Groundstone	1	1085.5
003-018	CA-SBR-176	Not Given	Surface	Not Given	Not Given	Lithic	Fire-cracked rock	1	137.5
003-019	CA-SBR-176	Not Given	Surface	Not Given	Not Given	Lithic	Fire-cracked rock	3	7.5
003-020	CA-SBR-176	Not Given	Surface	Not Given	Not Given	Faunal	Unmodified bone	1	0.01
003-021	CA-SBR-176	Test pit 2, Test pit 2 extension	40-50 cm	1	5B	Lithic	Fire-cracked rock	2	62.2
003-022	CA-SBR-176	Not Given	Surface	Not Given	Not Given	Lithic	Fire-cracked rock	10	912.0
003-023	CA-SBR-176	Test pit 2, Test pit 2 extension	Surface	Not Given	Not Given	Lithic	Chipped stone	8	1.9
003-024	CA-SBR-176	Test pit 2, Test pit 2 extension	Surface	Not Given	Not Given	Lithic	Chipped stone	1	97.5

Artifact									
ID	Site Number	Provenience	Depth	Stratum	Level	Material Class	Artifact Description	Count	Weight
		Test pit 2, Test							
003-025	CA-SBR-176	pit 2 extension	40-50 cm	1	5B	Lithic	Unmodified stone	7	626.9
003-026	CA-SBR-176	Test pit 1	20-30 cm	1	3	Faunal	Unmodified bone	29	1.3
003-027	CA-SBR-176	Not Given	Not Given	Not Given	Not Given	Lithic	Chipped stone	4	4.9
003-028	CA-SBR-176	Not Given	Not Given	Not Given	Not Given	Lithic	Unmodified stone	3	114.7
003-029	CA-SBR-176	Not Given	Not Given	Not Given	Not Given	Lithic	Unmodified stone	3	64.6
003-030	CA-SBR-176	Not Given	Not Given	Not Given	Not Given	Lithic	Unmodified stone	4	268.0
003-031	CA-SBR-176	Not Given	Surface	Not Given	Not Given	Lithic	Projectile point	1	0.9
003-032	CA-SBR-176	Not Given	Surface	Not Given	Not Given	Lithic	Unmodified stone	1	635.7
003-033	CA-SBR-176	Not Given	Surface	Not Given	Not Given	Faunal	Unmodified bone	1	0.01
003-034	CA-SBR-176	Not Given	Not Given	Not Given	Not Given	Lithic	Fire-cracked rock	2	23.8
004-001	CA-SBR-176	Test pit 1	37 cm	1	4	Lithic	Groundstone	1	943.3
004-002	CA-SBR-176	Not Given	Not Given	Not Given	Not Given	Lithic	Groundstone	1	895.0
004-003	CA-SBR-176	Test pit 1	37 cm	1	4	Lithic	Groundstone	1	2439.3
		Backhoe trench							
004-004	CA-SBR-176	7, Non random	Not Given	Not Given	Not Given	Lithic	Groundstone	1	1044.0
	04 655 476	Backhoe trench							20540
004-005	CA-SBR-176	7, Non random Test pit 1,	Not Given	Not Given	Not Given	Lithic	Groundstone	1	2054.0
004-006	CA-SBR-176	Feature 1	Not Given	1	5	Lithic	Groundstone	1	2901.7
005-001	CA-SBR-176	Not Given	Surface	Not Given	Not Given	Lithic	Fire-cracked rock	3	248.0
003 001	CA SBILLIA	Test pit 2	Janace	Not diven	Troc Given	Ereme	THE CHURCUTOCK	-	240.0
005-002	CA-SBR-176	extension	70-80 cm	1	8	Botanical	Charcoal	1	3.2
		Test pit 2							
005-003	CA-SBR-176	extension	70-80 cm	1	8	Botanical	Seed	6	0.01
005-004	CA-SBR-176	Test pit 2	20-30 cm	1	3	Faunal	Unmodified bone	8	2.4
005-005	CA-SBR-176	Test pit 1	Surface	Not Given	Not Given	Glass	Fragment	2	2.1
005-006	CA-SBR-176	Test pit 1	30-40 cm	1	4	Lithic	Unmodified stone	12	5.9
005-007	CA-SBR-176	Test pit 1	0-10 cm	1	1	Glass	Fragment	5	4.1
005-008	CA-SBR-176	Test pit 1	0-10 cm	1	1	Lithic	Chipped stone	3	6.9
005-009	CA-SBR-176	Test pit 1	0-10 cm	1	1	Lithic	Chipped stone	3	6.9

Artifact									
ID	Site Number	Provenience	Depth	Stratum	Level	Material Class	Artifact Description	Count	Weight
005 040	CA CDD 476	Test pit 2	N . G.						0.04
005-010	CA-SBR-176	extension	Not Given	1	8	Glass	Fragment	1	0.01
005 011	CA CDD 176	Test pit 2, Test	50-60 cm	1	6	Faunal	Unmodified bone	15	0.01
005-011	CA-SBR-176	pit 2 extension Test pit 2,	50-60 CIII	1	0	Faunal	Onmodified bone	15	0.01
005-012	CA-SBR-176	Feature 1	40-50 cm	1	5A	Faunal	Unmodified bone	25	3.8
003 012	CA SBIC 170	Test pit 2; Test	40 30 6111	1	JA	Tauriai	onnounce bone	23	3.0
		pit 2, Test pit 2	30-40 cm;		4; Not				
005-013	CA-SBR-176	extension	40-50 cm	1; 1	Given	Faunal	Unmodified bone	24	5.0
		Test pit 2							
005-014	CA-SBR-176	extension	70-80 cm	1	8	Faunal	Unmodified bone	9	0.01
005-015	CA-SBR-176	Test pit 2	10-20 cm	1	3	Faunal	Unmodified bone	18	3.3
005-016	CA-SBR-176	Test pit 2	10-20 cm	1	3	Faunal	Unmodified bone	1	0.01
005-017	CA-SBR-176	Test pit 1	0-10 cm	1	1	Botanical	Charcoal	1	0.01
		Test pit 2							
005-018	CA-SBR-176	extension	89-90 cm	1	9	Faunal	Unmodified bone	5	1.3
005-019	CA-SBR-176	Test pit 2	0-10 cm	1	1	Botanical	Charcoal	1	2.0
		Test pit 2							
005-020	CA-SBR-176	extension	30-40 cm	1	4	Faunal	Unmodified bone	44	4.0
005-021	CA-SBR-176	Test pit 1	40-50 cm	1	5	Faunal	Unmodified bone	23	1.1
		Test pit 2, Test							
005-022	CA-SBR-176	pit 2 extension	50-60 cm	1	6	Botanical	Charcoal	1	1.4
005-023	CA-SBR-176	Test pit 2	0-10 cm	1	1	Faunal	Unmodified bone	7	2.0
005-024	CA-SBR-176	Not Given	Surface	Not Given	Not Given	Lithic	Chipped stone	2	158.9
		Test pit 2							
005-025	CA-SBR-176	extension	22 cm	1	3	Faunal	Unmodified bone	3	26.8
005-026	CA-SBR-176	Test pit 1	50-60 cm	1	6	Botanical	Charcoal	1	0.01
005-027	CA-SBR-176	Test pit 1	20-30 cm	1	3	Lithic	Chipped stone	19	6.7
		Test pit 2							
005-028	CA-SBR-176	extension	10-20 cm	1	2	Botanical	Charcoal	1	0.01
		Test pit 2, Test							
005-029	CA-SBR-176	pit 2 extension	60-70 cm	1	7	Lithic	Bead	2	0.01
005-030	CA-SBR-176	Test pit 2	10-20 cm	Not Given	Not Given	Lithic	Chipped stone	1	0.01

Artifact									
ID	Site Number	Provenience	Depth	Stratum	Level	Material Class	Artifact Description	Count	Weight
005 004	04 655 476	Test pit 2							
005-031	CA-SBR-176	extension	80-90 cm	Not Given	Not Given	Lithic	Chipped stone	3	8.8
005-032	CA-SBR-176	Test pit 1	0-10 cm	1	1	Lithic	Projectile point	1	0.01
005-033	CA-SBR-176	Not Given	Surface	Not Given	Not Given	Lithic	Chipped stone	1	12.6
	04 600 476	Test pit 2	00.400		10				
005-034	CA-SBR-176	extension	90-100 cm	2	10	Botanical	Charcoal	1	0.01
005-035	CA-SBR-176	Test pit 2, Feature 1	40-50 cm	1	5	Botanical	Charcoal	1	2.2
003 033	CA 3BR 170	Test pit 2	40 30 cm	1	3	Botamear	Charcoar		2.2
005-036	CA-SBR-176	extension	30-40 cm	1	4	Botanical	Charcoal	1	0.9
005-037	CA-SBR-176	Test pit 1	0-10 cm	1	1	Faunal	Unmodified bone	10	0.01
		Test pit 2, Test							
005-038	CA-SBR-176	pit 2 extension	60-70 cm	1	7	Faunal	Unmodified bone	23	1.7
		Test pit 2							
005-039	CA-SBR-176	extension	20-30 cm	1	3	Botanical	Charcoal	1	2.0
005-040	CA-SBR-176	Test pit 2	10-20 cm	1	2	Lithic	Projectile point	1	0.7
005-041	CA-SBR-176	Test pit 2	0-10 cm	1	1	Botanical	Charcoal	1	0.01
		Test pit 2							
005-042	CA-SBR-176	extension	10-20 cm	1	2	Faunal	Unmodified bone	88	50.8
		Test pit 2							
005-043	CA-SBR-176	extension	10-20 cm	1	2	Faunal	Unmodified bone	88	50.8
005 044	CA CDD 47C	Test pit 2	10 20	1		Farmel	Unmodified bone	00	F0.0
005-044	CA-SBR-176	extension Test pit 2	10-20 cm	1	2	Faunal	Onmodified bone	88	50.8
005-045	CA-SBR-176	extension	0-10 cm	1	1	Lithic	Chipped stone	37	119.8
005-045	CA-3BK-170	Test pit 2	0-10 CIII		1	Littiic	Chipped stone	37	113.6
005-046	CA-SBR-176	extension	0-10 cm	1	1	Lithic	Chipped stone	37	119.8
005-047	CA-SBR-176	Not Given	Surface	Not Given	Not Given	Lithic	Fire-cracked rock	2	26.9
		Test pit 2							
005-048	CA-SBR-176	extension	30-40 cm	1	4	Lithic	Bead	1	0.01
005-049	CA-SBR-176	Test pit 1	30-40 cm	1	4	Faunal	Unmodified bone	29	2.7
005-050	CA-SBR-176	Test pit 1	30-40 cm	1	4	Faunal	Unmodified bone	29	2.7

Artifact									
ID	Site Number	Provenience	Depth	Stratum	Level	Material Class	Artifact Description	Count	Weight
005-051	CA-SBR-176	Test pit 2, Feature 1	40-50 cm	1	5A	Lithic	Chipped stone	18	20.8
003-031	CA-3BN-170	Test pit 2,	40-30 cm	1	JA.	Littiic	Chipped stone	10	20.8
005-052	CA-SBR-176	Feature 1	40-50 cm	1	5A	Lithic	Chipped stone	18	20.8
005-053	CA-SBR-176	Test pit 1	50-60 cm	1	6	Lithic	Fire-cracked rock	2	2.9
005-054	CA-SBR-176	Test pit 2	0-10 cm	1	1	Glass	Fragment	2	17.2
005-055	CA-SBR-176	Test pit 1	10-20 cm	1	2	Lithic	Chipped stone	12	1.1
005-056	CA-SBR-176	Test pit 2	10-20 cm	1	2	Glass	Fragment	2	0.01
		Test pit 2							
005-057	CA-SBR-176	extension	90-100 cm	2	10	Lithic	Fire-cracked rock	1	0.01
005-058	CA-SBR-176	Test pit 2 extension	90-100 cm	2	10	Lithic	Chipped stone	1	0.01
005-059	CA-SBR-176	Not Given	Surface	Not Given	Not Given	Lithic	Fire-cracked rock	3	248.0
005-060	CA-SBR-176	Test pit 2	10-20 cm	1	3	Faunal	Unmodified bone	1	0.01
		Test pit 2							
005-061	CA-SBR-176	extension	0-10 cm	1	1	Lithic	Fire-cracked rock	2	11.6
006-001	CA-SBR-176	Test pit 1	50-60 cm	1	6	Faunal	Unmodified bone	6	0.01
006-002	CA-SBR-176	Test pit 1	40-50 cm	1	5	Lithic	Unmodified stone	2	94.0
006-003	CA-SBR-176	Test pit 1	40-50 cm	1	5	Lithic	Chipped stone	13	7.3
006-004	CA-SBR-176	Not Given	Surface	Not Given	Not Given	Lithic	Unmodified stone	1	57.7
006-005	CA-SBR-176	Test pit 1	10-20 cm	1	2	Lithic	Unmodified stone	1	183.5
		Test pit 2							
000 000	CA CDD 176	extension; Test	20-30 cm;	1.1	2. 2	Lithic	Chianad atama		225.6
006-006 006-007	CA-SBR-176	pit 2 extension	20-30 cm	1; 1	3; 3	Lithic	Chipped stone Chipped stone	54	335.6
006-007	CA-SBR-176	Test pit 1 Test pit 2, Test	Surface	Not Given	Not Given	Litnic	Chipped stone	4	186.2
006-008	CA-SBR-176	pit 2 extension	Not Given	1	6	Lithic	Chipped stone	1	0.01
		Test pit 2, Test					1 12 2 2 2 2		
006-009	CA-SBR-176	pit 2 extension	Not Given	1	6	Lithic	Chipped stone	1	0.01
		Test pit 2, Test				l			
006-010	CA-SBR-176	pit 2 extension	50-60 cm	1	6	Lithic	Chipped stone	24	40.6
006-011	CA-SBR-176	Test pit 2, Test pit 2 extension	60-70 cm	1	7	Lithic	Chipped stone	18	42.8

Artifact									
ID	Site Number	Provenience	Depth	Stratum	Level	Material Class	Artifact Description	Count	Weight
		Test pit 2, Test							
006-012	CA-SBR-176	pit 2 extension	60-70 cm	1	7	Lithic	Chipped stone	3	143.4
006-013	CA-SBR-176	Test pit 2	30-40 cm	1	4	Lithic	Chipped stone	1	160.8
006-014	CA-SBR-176	Test pit 2	30-40 cm	1	4	Lithic	Unmodified stone	1	166.8
		Test pit 2							
		extension,							
006-015	CA-SBR-176	Feature 1	38 cm	1	4	Lithic	Fire-cracked rock	5	269.3
		Test pit 2							
006-016	CA-SBR-176	extension	0-10 cm	Not Given	1	Faunal	Unmodified bone	10	4.3
006-017	CA CDD 47C	Test pit 2	30-40 cm	1		Lithic	Chinned store	1	0.01
006-017	CA-SBR-176	extension Test pit 2	30-40 Cm	1	4	LITTIC	Chipped stone	1	0.01
006-018	CA-SBR-176	extension	30-40 cm	1	4	Lithic	Chipped stone	1	0.01
006-019	CA-SBR-176	Test pit 2	30-40 cm	1	4	Lithic	Chipped stone	33	208.1
006-020	CA-SBR-176	Test pit 2	30-40 cm	1	4	Mineral	Mica	1	0.01
000-020	CA-3BR-170	Test pit 2	30-40 CIII	†	<del>-</del>	Willieral	IVIICa	1	0.01
006-021	CA-SBR-176	extension	70-80 cm	1	8	Lithic	Chipped stone	18	102.6
		Test pit 2						-	
006-022	CA-SBR-176	extension	10-20 cm	1	2	Lithic	Chipped stone	52	85.7
006-023	CA-SBR-176	Test pit 1	20-30 cm	1	3	Botanical	Charcoal	1	2.7
006-024	CA-SBR-176	Not Given	Surface	Not Given	Not Given	Faunal	Unmodified bone	2	0.01
006-025	CA-SBR-176	Not Given	Surface	Not Given	Not Given	Lithic	Fire-cracked rock	4	135.3
006-026	CA-SBR-176	Not Given	Surface	Not Given	Not Given	Lithic	Chipped stone	25	109.2
006-027	CA-SBR-176	Test pit 2	17 cm	1	2	Faunal	Unmodified bone	23	30.1
006-028	CA-SBR-176	Not Given	Surface	Not Given	Not Given	Lithic	Chipped stone	3	113.3
006-029	CA-SBR-176	Not Given	Not Given	Not Given	Not Given	Lithic	Groundstone	1	3800.0
006-030	CA-SBR-176	Not Given	Not Given	Not Given	Not Given	Lithic	Groundstone	1	6152.0

#### 1. Technician Graduation Presentation March 2020

This presentation was divided by sections for both the research and presentation. After coming up with a general outline, the technicians chose the section(s) to work on that interested them the most.

#### **Introduction (Oscar)-Slide 1**

Today, we are going to talk to you about the collection of artifacts and archives that we processed this session from the Deep Creek Site, CA-SBR-176. First, I am going to tell you a little bit about the Mojave River Dam, which is the U.S. Army Corps of Engineers (Corps) subject property where the Deep Creek Site is located. Then, Jeff will give you a little bit of background about why the site is important, Chris will talk about the artifact assemblage, and Vanessa will give you some information on the work she did on the archival materials from the Deep Creek investigation.

# Section I (Oscar): Dam History and Fieldwork-Slide 2

The Mojave River Dam was completed in May of 1971. The dam continues to operate as it was designed, and it reduces flood risks for over 16,000 people. The primary purpose of the Mojave River Dam is to provide flood protection for the surrounding cities in San Bernardino County. It is an un-gated flood control dam that serves approximately 19,000 acres of agricultural land, important highways, railroads, and residential homes and businesses (Todd Engineers, Kennedy/Jenks Consultants 2013).

In November 2019, the U.S. Army Corps of Engineers changed the Mojave River Dam's risk characterization from low to high urgency of action (USACE 2019). The Mojave River Dam and other Corps-owned dams are reviewed and rated periodically according to age and condition, among other factors. While the dam has not failed, in an extreme flooding event, water could exceed the dam's capacity and overtop it. The Corps has begun implementing risk-reduction plans.

Interestingly, archaeologists once believed that the construction of the dam destroyed the Deep Creek Site, but in a 1985 Corps-sponsored survey, Jeff Altschul and archaeologists with Statistical Research reported that the site was slightly damaged but still intact (Altschul 1991). The materials we processed in the lab were from a subsequent field season in 1988.

#### Section II (Jeff): Site Background-Slide 3

Previous analyses of prehistoric settlement in the Mojave River Forks region have viewed Deep Creek, as well as other large sites located along the Mojave River, as seasonal base camps occupied during the winter months (Altschul 1991). Deep Creek's period of significance is about 2000 BC to 1866 AD (California State Parks N.D.).

The Serrano, the indigenous occupants of Summit Valley, practiced a seasonal migration that consisted of movement up and down the mountains. According to archaeologist Jeff

Altschul, in the winter, large, multi-familial villages were established near a secure water source. In the spring, the Serrano left these base camps and familial groups began their movement up the mountains in time with the ripening of various plants used for food resources. The trek up the mountain ended around autumn in stands of oak trees. In addition to gathering acorns, the Serrano hunted deer and held annual mourning ceremonies in the fall. Around the first snow, the acorn camps broke up and families hiked down the mountains to their respective winter village base camps (Altschul 1991).

Descendants of the Serrano are now part of the federally recognized San Manuel Band of Mission Indians, located near the city of Highland, California. The Deep Creek Site is part of a greater area known as the Guapiabit-Serrano Homeland Archeological District. The San Manuel Band of Mission Indians has nominated this region for the National Register of Historic Places. They are actively establishing public recognition of the cultural connection between the District and the Serrano people, honoring the generations of Serrano ancestors, and promoting the preservation of the sites that the District contains (California State Parks N.D.).

# Section III (Chris): The Artifact Assemblage Slide-4

The Deep Creek Site collection consists of six boxes with a total of 1,215 artifacts: 53% faunal remains (or the skeletal remains of animals), 44% lithic (or stone tools),1% botanical material (including seeds and charcoal), 1% glass, and <1% mineral. After our first week of training, we processed the collection of artifacts from the Deep Creek Site. Artifacts were retagged and rehoused, then cataloged within a database and photographed to assist with future analysis. Once collections like Deep Creek are sent to a final repository, archaeologists and other researchers can use them to gain a better understanding of the material culture and also the ecology from the time period associated with the site.

Faunal remains consisted of unmodified bones of various mammals. The data provided by these materials could reveal more about people's diets or show how animals were killed and processed for food and clothing. Looking at the lithic materials from this collection, archaeologists can determine more specific activities and behaviors associated with tools and toolmaking. Some examples include arrowheads for hunting and stone grinding tools for processing food.

Botanical samples from the collection give insight into the site's past environment. Seeds can provide information about plants that grew, were processed, and eaten at a site. Charcoal can also help identify plant species and can be used to determine the age of the site via carbon-14 dating. Charcoal could also show if a fire event occurred at one time.

### Section IV (Vanessa): Archives-Slide 5

The Deep Creek Site collection not only contains artifacts, but also the associated documents from the 1988 field season. The archival material associated with this collection is mainly field notes, photographs, lab analysis, and report drafts. Like the artifacts, the archives must also be prepared for long-term storage. Prior to being housed in acid-free archival folders and boxes, the documents must be cleaned, mended (if needed), organized by content, scanned,

and entered into the database just like the artifacts. Handling the archives was a true test of patience. The Deep Creek archive collection contained an enormous number of contaminants such as staples and non-archival tape. All of the tape had to be removed using a special tool that resembles a spatula that heats up to warm the adhesive so it can be easily removed from the paper. In order for the pages not to stick together from residual adhesive, archival tissue mending tape was used to protect the integrity of the documents.

#### Section V (Vanessa): Conclusion –Slide 6

This collection from the Deep Creek Site is a prime example of the work we do at the Veterans Curation Program. These collections provide an avenue to assisting veterans like us through the transition process from military to civilian life while rehabilitating and preparing artifacts and archives for long-term storage. This collection in particular has allowed us (veterans) to see the value the artifacts contribute to California history while learning more about the site itself and contemporary issues that surround it. Today we talked to you about how the Deep Creek site and the surrounding area have cultural significance to the San Manuel Band of Mission Indians. We also discussed how the artifacts we processed have the potential to inform archaeologists and other researchers about the past lifeways of the Serrano, and that the Mojave River Dam itself is slated for more changes. It has been really amazing to learn how many issues past and present are connected to this one collection of artifacts!

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# Conference Paper for Society for California Archaeology March 2020 (Conference cancelled)

#### Abstract:

The Deep Creek Investigation is a small legacy collection of artifacts and documents from the Deep Creek Site (CA-SBR-176) which is located in the Mojave River Forks region in San Bernardino County, CA. This collection was recently rehabilitated by technicians at the Veterans Curation Program (VCP) in San Mateo. The VCP provides temporary employment to newly separated veterans. The veteran technicians gain transferable job skills via the process of rehabilitating archaeological collections for the United States Army Corps of Engineers (USACE). In turn, the research value of collections like Deep Creek are maximized when they are moved out of storage to final repositories making them accessible to communities and researchers. This paper will follow the life of the materials from the Deep Creek Site at the VCP, connect new data to previous findings, and examine the collection's potential to answer new research questions in the future.

The curation crisis, or collections crisis, has long been an ongoing problem for archaeologists working in many of our sectors, from federal and state agencies, to cultural resource management firms, as well as in academia. While much work has been done to consider long-term storage solutions as well as the value of legacy collections to answer new research questions, it is also important to consider innovative approaches to alleviate challenges faced by curation facilities. The Veterans Curation Program (VCP) has a dual mission of both rehabilitating collections for the United States Army Corps of Engineers (USACE) while also providing newly separated United States military veterans with temporary paid employment. This temporary employment in turn provides technicians with transferable job skills through processing archaeological collections. This paper examines the potential value of collections like those from Deep Creek to multiple stakeholders. Using the Deep Creek Site (CA-SBR-176) collection to demonstrate the work done by technicians and lab managers at the San Mateo VCP, I will examine the multiple benefits that may result from the rehabilitation of legacy collections at the VCP. I am an employee of New South Associates which operates the VCP under contract with USACE, I work as an Assistant Lab Manager at the VCP in San Mateo.

The VCP was created ten years ago by Michael "Sonny" Trimble, an archaeologist with USACE who worked in Iraq from 2004-2007 as part of the Mass Graves Investigation Team (MGIT). Through excavating mass burials, this team helped prove that crimes against humanity were committed against Kurds and Shia individuals by Saddam Hussein in reaction to political uprisings in 1991. While in Iraq, Trimble formed close relationships with the military personnel

who supported the investigations, and as military personnel came home from Iraq, Trimble took note of what he heard from these individuals: acclimating to civilian life was a challenge, and it was hard to find employment while transitioning from the military. Trimble developed the VCP to help newly-separated veterans transition into the civilian workforce and also to rehabilitate atrisk collections for USACE by hiring veterans to do the collections rehabilitation work. The first VCP lab opened in 2009 and there are currently seven VCP labs across the country. The VCP lab in San Mateo started its first session in November of 2018 and is currently processing collections from the Los Angeles and Sacramento USACE districts

Today I will be talking about the Deep Creek Site collection from the USACE Los Angeles District because not only is it an interesting and important archaeological site, but it is a great example to demonstrate how much value a collection like this has to the technicians in the program.

The collection was previously stored at the USACE Los Angeles District repository since the 1988 field season. Deep Creek was the first collection the technicians began processing after their intensive first week of training this session. In September 2019, we received six boxes of artifacts from the Deep Creek Investigation from the Army Corps' Los Angeles District 1988 survey performed by Statistical Research Inc. The catalog includes 1,215 items. The collection is 53% faunal, 44% lithic, 1% botanical, 1% glass, and 1% mineral. In addition to the artifacts, we received seven linear inches of associated site documents. In the six months since we received the collection, the Deep Creek Site artifacts and archives have gone from sitting in storage to taking on a life of their own and being utilized in multiple ways!

I am going to give you a brief overview of Deep Creek Site and why it is significant. The Serrano were the original inhabitants of the Summit Valley. The Mojave River Forks Area—and most likely Deep Creek Site—was called **Maka'taveat** (which means Dove's Nest), probably for the resemblance of a nearby rock formation to a dove's nest. Deep Creek Site is important as it was one of the first prehistoric base camps excavated along the Mojave River (Altschul 1989), and was first recorded archaeologically in 1939 with limited test excavations later conducted in the 1950's (Altschul 1989, Smith 1955). Testing from the site in the 1950's informed most of the following interpretations of Deep Creek. In the 1989 site report, Altschul wrote that it became apparent that the construction of the Mojave River Dam would potentially destroy the

site (Singer 1966) and a later survey confirmed it had been destroyed (Wells 1977). During a 1985 survey, Altschul et al. discovered that the site, though somewhat damaged, was still intact (1989).

Now that I've introduced the importance of the Deep Creek site and its potential research value, I want explain the different ways the veteran technicians, lab managers, and visitors to the lab have interacted with the collection and the benefits that have resulted. Many of our technicians find our program based on word of mouth from a friend who has been through the program. We also reach out to potential applicants through social media, veterans' service organizations, and universities. Each session, lab managers and technicians attend several public archaeology events and other community engagements to reach out to the community at large while simultaneously helping our technicians learn more about archaeological lab methods and research design. Although this is a paid position and not a volunteer or unpaid internship for the VCP, only approximately 5% of the veterans in any given session have a previous connection to archaeology. This means that most veterans that go through the program have a superficial understanding of archaeology and no previous training in handling collections. (Heckman and Mundt 2017). Technicians therefore spend the first week of their session completing 40 hours of training.

Currently, veteran lab technicians at the four flagship labs are hired for five-month session. The VCP also runs three satellite labs which frequently follow an academic year. Each session, the lab managers provide the technicians with a full week of training to help them become familiar with anthropology and archaeology, learn terminology, and get hands on training in artifact processing, data entry, report writing, and artifact photography. A month into the session, technicians are trained to process archival documents which consist of records associated with the archaeological investigations run by the USACE.

The VCP uses several step by step guides to demonstrate the processes performed in collections rehabilitation in our facilities. This allows the techs to be confident in collections rehabilitation and to work independently with fewer questions for the lab managers. Technicians started processing Deep Creek artifacts during the first week of the session, and this small collection helped the technicians work through the different steps of artifact processing in about a week. Using the Deep Creek Site collection, they became comfortable in re-bagging and

tagging, data entry, artifact photography, scanning, and basic collections management report writing.

It is also important to note that collections like Deep Creek allow the VCP labs to hire veterans for paid temporary employment as well as lab management in permanent positions. One of the main goals of the VCP is to help newly-separated veterans' transition to the civilian work force. Not only can veterans benefit from picking up transferable job skills, they also may benefit from drawing these connections from the past to the present. Some veterans experience feelings of isolation when transitioning back into civilian life and being a part of the collection rehabilitation process allows the technicians to continue to be of service as they build their resume and increase their marketability in a setting where there is team work and camaraderie with fellow veterans.

Through their work rehabilitating collections like Deep Creek, we hope that the technicians develop a deep sense of respect and understanding in the value and importance of these resources. Since permanent positions in the field of archaeology are limited, we do not necessarily encourage the veterans in our program to go into archaeology, but many have stayed in the field or a related field. Many of the VCP lab managers and some technicians take the opportunity to present at professional conferences. This not only increases stewardship for archaeological and historic sites, but it helps lab managers and technicians maintain and develop connections within the archaeological community. For me, the chance to think about the materials from the Deep Creek Site outside of the daily workflow and metrics has been professionally rejuvenating! As a team we have developed a shared interest in this collection, as evidenced by the opportunities for our lab curator, a technician, and myself to participate in this conference. All the technicians from our current session helped produce the poster for this conference and contributed to my work on this paper. If you get a chance, stop by and visit the Heritage Management poster session and say hi to Vanessa and Claire!

It can be a challenge to keep technicians engaged in processing artifacts when there are sometimes over 1,000 pieces of chipped stone in one box and they all have separate non-sequential catalog numbers painted on them! It is important to emphasize to our technicians that archaeology is much more than a collection of old "stuff." In his article *Archaeology and Education*, Don Henson writes, "Our relationship with the past depends on us seeing the connections and resonances between the past and present" (2017). The basic archaeological

processes are twofold: discovery and interpretation. The VCP technicians are not excavating in the field or interpreting sites, but keeping these two processes in mind in the lab can help us engage technicians and can help them bridge the gap from looking at the material culture of the past to having some ability to connect these collections to concerns in the present (Henson 2017). Some of our technicians have written social media posts about our collections and the sites that they come from. This is a great opportunity for the technicians to do some research and learn more about the collections while sharing their knowledge with the lab and our social media audience.

Taking a step back from the day-to-day laboratory processing, knowing that the Deep Creek Site collection is from an important California site and has relevance to contemporary environmental and infrastructure issues helps the technicians to understand the importance of the rehabilitation work they are performing. Lab managers also plan field trips to local archaeological and historical sites and invite professional archaeologist to come talk to the technicians to help place the significance of their work within the larger context of California Archaeology. We have had visits to the lab from SCA President Rebecca Allen, Carolyn Smith came and talked to the technicians about Karuk basketry and basket curation, also Meredith Reifschneider came and talked about her current research at the Presidio Trust which focuses on Military Medical practices from the Military Period at the fort. We are happy to have visitors come talk about their professional role is or to talk about their research!

Each session at the VCP we host a Meet and Greet, which is an opportunity for the technicians to take ownership of the work they have been doing. For this event, the technicians set up their work stations to demonstrate the different steps in artifact and archives processing, including photography, scanning, and data entry. This process helps the technicians build confidence in the skills they have developed and gives them an opportunity to connect with the local community. At the Meet and Greet event this session, materials from the Deep Creek Site collection were represented at each work station and were also utilized for a hands-on display of the various material classes represented in the collection. The technicians were able to discuss the types of questions that can be answered by examining botanical, lithic, and faunal remains with a general audience, from children to Colonels, who visited us in the lab.

In addition to providing veterans with training and the opportunity to build transferable skills through artifact processing, the Deep Creek Site collection also has potential research value

for professionals in the field. On November 1, 2019, USACE reclassified the characterization of the Mojave Dam flood risk from low to high urgency of action (USACE 2019). Older infrastructure like the Mojave Dan met the standards of the time, but phenomena like climate change and other factors were not yet understood and their impacts were not considered. Environmental changes threaten the status of intact sites in the Mojave Dam area. For this reason, it is especially important that we understand the extent of previous work done at sites like Deep Creek and that we ensure the longevity of collections through rehabilitation, if necessary.

The technicians have just completed processing the associated records for Deep Creek. We plan on spending an afternoon reviewing the collection to remind them of all the important and impactful work they have done. The technicians will also curate a small "exhibit" of materials from the collection with exhibit labels for their graduation event that will be held in March. As a group, the technicians will give a brief presentation on the collection for the graduation attendees. This is an opportunity for the technicians to connect more with the collections using critical thinking, creative skills, and provides an opportunity for them to gain experience in public speaking in a comfortable setting. With the permission of the St. Louis and Los Angeles USACE districts, I would like to expand this talk into a project report to be delivered to USACE and New South Associates using more quantifiable research methods to gather data to better understand the multiple benefits of rehabilitating collections using Deep Creek Site as a case study. Potential research questions for Deep Creek Site may include:

- 1. What are the impacts of this legacy collection, and how are they understood by multiple stakeholders? How can Deep Creek serve as a model to understand this collection and others like it?
- 2. How have the several different phases of archaeological testing performed at Deep Creek impacted the different groups of stakeholders connected to this site? What changes in archaeological practices can we see over time and how do these changes relate to current archaeological ethical mandates? How can the Deep Creek Site collection be used to answer questions from past and future investigations?

Rehabilitating collections and helping veterans integrate into the civilian work force is our mission at the VCP. As archaeology continues to move into the future, maximizing the data that we can get from legacy collections becomes increasingly important. The Deep Creek Site is

just one case study showing what can be done if the interests of multiple stakeholders are leveraged to produce a needed outcome for heritage preservation with job skills and professional development opportunities gained along the way! When I first started looking though the Deep Creek archives, I came across this quote from Jeff Altschul: "The most important questions are the ones that are yet to be asked" (Altschul 1989). In addition to furthering our understanding of the pre-contact history of the Deep Creek Site, this collection has the potential to answer questions and benefit multiple stakeholders in a variety of ways.

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# Society for American Archaeology Conference Paper April 2021

#### Abstract:

The Deep Creek Investigation is a small legacy collection of artifacts and documents from the Deep Creek Site (CA-SBR-176), which is located in the Mojave River Forks region in San Bernardino County, CA. This collection was recently rehabilitated by technicians at the Veterans Curation Program (VCP) in San Mateo. The VCP provides temporary employment to newly separated veterans. The veteran technicians gain transferable job skills via the process of rehabilitating archaeological collections for the United States Army Corps of Engineers (USACE). In turn, the research value of collections like Deep Creek are maximized when they are moved out of storage to final repositories making them accessible to communities and researchers. This paper follows the life of these materials from the Deep Creek Site at the VCP, connects new data to previous findings, and examines the collection's potential to answer new research questions in the future.

Good morning. My name is Leah Grant, and I am an employee of New South Associates which operates the Veterans Curation Program (VCP) under contract with the United States Army Corps of Engineers (USACE). The VCP has a dual mission of rehabilitating collections for the Corps while also providing newly separated United States military veterans with temporary paid employment. I work as a Lab Manager at the San Mateo VCP.

The Deep Creek Investigation is a small legacy collection including artifacts and associated site documents from the Deep Creek Site (CA-SBR-176), which is located in the Mojave River Forks region in San Bernardino County, CA. Today I will be talking about the Deep Creek Investigation because not only is it an interesting and important archaeological site, but it is a great example to demonstrate how much value a legacy collection like this has to archaeologists, Tribes, and land managers like USACE, as well as other stakeholders like the veterans employed by the VCP.

My goal for this project is to better understand the intended and unintended outcomes that result from the rehabilitation of legacy collections at the VCP. I will start off by giving a bit of background on the Deep Creek Site and its archaeological significance, then I will discuss the

collection and give an overview of its catalog. From there I will describe my project including my research questions, methods, and preliminary findings.

Let me begin by giving some background on the Deep Creek Site and the artifact assemblage. The Deep Creek Site is located near the Mojave River Dam which is a USACE managed property in the Los Angeles District. This site is important as it was one of the first prehistoric base camps excavated along the Mojave River (Altschul 1989). It was first recorded in 1939 by Gerald Smith and R.J. Sayles. In 1953, the site was excavated by the Archaeological Survey Association of Southern California led by Gerald Smith using a largely amateur crew of volunteers over the course of two weekends (Altschul 1989, Smith 1955). Testing of the site in the 1950s informed most of the following interpretations of Deep Creek. In the 1989 site report, Altschul wrote that Singer believed that the site would be destroyed by construction of the Mojave Dam (Singer 1966) and that a later survey confirmed it had indeed been destroyed (Wells 1977).

During a 1985 USACE-sponsored survey of the region, Altschul discovered that the site, though somewhat damaged, was still largely intact (1989). The goals for the 1988 field season were to understand the site boundaries, to understand the historic chronology in the Mojave River Forks Region, the nature of prehistoric and ethnohistoric settlement and subsistence systems, and the nature of trade in this region.

The San Manuel Band of Mission Indians are Serrano Indians whose ancestors inhabited the area encompassing the Deep Creek Site. The Deep Creek Site is a part of the Summit Valley which is home to a group of sites known collectively as the Guapiabit-Serrano Homeland Archaeological District. This region was listed to the National Register of Historic Places on October 26, 2020.

In addition to the past work done to contribute to the understanding of the archaeology of this area, rehabilitating collections like the Deep Creek investigation is one approach to mitigating the "curation crisis." Managing long-term storage solutions has been an ongoing problem for archaeologists working in many sectors. The last few decades have shown an increased effort in the field of archaeology to find new long-term storage solutions for collections (Butler 1979, Voss 2012, Ford and Allen 2019). With limited physical storage space and literal tons of archaeological collections in storage, it is important to consider innovative approaches to alleviate challenges faced by curation facilities (Ford and Allen 2019). This in-turn has led to more archaeologists utilizing legacy collections for research. Professional associations like the Society for California Archaeology and the Society for American Archaeology have hosted many papers on this topic and each offer grants to encourage student-researchers to work with legacy and orphaned collections. Along these same lines, the VCP managers and technicians have presented research on collections rehabilitated in VCP labs for professional conferences, and local archaeological societies.

At the VCP, the Deep Creek Site collection has served as a vehicle to provide transferable job skills to the veterans employed in the program, and as a case study for research that I am conducting for a project report to complete my MA in Applied Anthropology at San José State.

In September 2019, the San Mateo VCP received six boxes of artifacts from the Deep Creek Investigation. These materials are from test pits excavated by Statistical Research Inc. under contract with USACE, Los Angeles District. The catalog includes 1,230 items and is 52% faunal, 45% lithic, 1% botanical, 1% glass, and < 1% mineral. In addition to the artifacts, we received seven linear inches of associated site documents. The collection was previously stored

at the Statistical Research Inc. office in Redlands, CA until late 2018 when one of the USACE Los Angeles District Archaeologists brought the collection to the Los Angeles District office in order to access the field notes as they began writing a new Master Plan for the Mojave River Dam.

The metrics for the VCP demonstrate high success rates in meeting the goals of rehabilitating collections for USACE and with veteran success rates in finding permanent employment or matriculating to either higher education or vocational training programs. In the 11 years of operation, the VCP has employed and trained over 670 veterans. Over 91% of veteran graduates have gone on to find permanent employment or returned to universities and colleges to continue their education. Over 600 USACE archaeological collections are being, are planned for, or have been processed to date across the four full-service facilities.

This paper originally aspired to examine the value of collections like Deep Creek to multiple stakeholders including the San Manuel Band of Mission Indians, the archaeological community, and the local community in addition to USACE and the veteran community.

Although the pandemic greatly limited my ability to engage communities outside of the VCP and Corps of Engineers, I was still able to begin to address my initial research questions.

- 1. What are the impacts of this legacy collection and others like it processed at the VCP? How are they understood by the different stakeholders including Tribes, archaeologists, scholars, USACE, and the public? How can the Deep Creek investigation serve as a model to better understand the value of this collection and others like it processed at the VCP?
- 2. How have the several different phases of archaeological testing performed at Deep Creek impacted the different groups and agencies connected to this site? What changes in

archaeological practices can we see over time and how do these changes relate to current archaeological ethical mandates?

3. What kinds of questions can the Deep Creek Site collection be used to answer?

I used a mixed-methods approach to gather data for this project. My original research design included administering surveys to lab visitors at the March 2020 graduation which unfortunately was cancelled due to COVID-19 safety measures. Surveys were given to past technicians about the collections they worked with during their session. I planned to administer semi-structured interviews to representatives of the San Manuel Band of Mission Indians, VCP lab and project managers, and representatives from USACE. The Tribe declined to participate in an interview, but I was able to conduct interviews with employees from USACE and the VCP. Interviews were transcribed and thematically coded to highlight prominent or reoccurring themes. I used evaluation methods used in policy analysis as a framework for effective problem solving (Bardach 2012) and contemporary ethnographic methods designed for use in exchanges between people and organizations (Moeran 2005).

I am still writing up my results and looking at my data, so my findings are preliminary at this time. The pandemic significantly reduced the number of in-person events in the past year and limited some of the surveys and interviews I planned on giving, but there was still a significant amount of data for me to start answering my research questions.

While I wasn't able to interview members of the San Manuel Band of Mission Indians, this collection is from a region that was nominated for the National Register known as the Guapiabit- Serrano Homeland Archaeological District. The 1989 site report recommended the site be nominated as there were still intact cultural deposits that contained data significant to regional prehistory (Altschul et al. 1989). While this is a federally-owned collection, I hope that

there is value for the Tribe knowing that this assemblage of artifacts from ancestral land has been rehoused and cataloged, and that the documents have been cleaned, organized into record series, and digitized.

For the Corps, this collection of artifacts and others processed at the VCP help to fulfill obligations established under 36CFR79 for the Curation of Federally Owned and Administered Archaeological Collections. Also, USACE will be able to cite this work in the Mojave River Dam Master Plan if necessary.

It can be a challenge to keep technicians engaged in processing artifacts when there are sometimes over 1,000 pieces of chipped stone in one box and they all have separate non-sequential catalog numbers painted on them! It is important to emphasize to our technicians that archaeology is much more than digging in the dirt and hoarding boxes of old "stuff." In his article *Archaeology and Education*, Don Henson writes, "Our relationship with the past depends on us seeing the connections and resonances between the past and present" (2017). The basic archaeological processes are twofold: discovery and interpretation. The VCP technicians are not excavating in the field or interpreting sites, but keeping these two processes in mind in the lab can help us engage technicians and can help them bridge the gap from looking at the material culture of the past to having some ability to connect these collections to concerns in the present (Henson 2017). Furthermore, this engagement also helps foster stewardship of historic place, archaeological sites, and the artifacts that come from them.

Through the work involved in processing the Deep Creek Site collection, the technicians gained transferable job skills including data entry and database management, proficiency with Microsoft Office, digitizing and editing documents, and artifact photography. Technicians also

collaborated on a graduation presentation about the Deep Creek Site in March of 2020, which helped to develop their research, writing, and presentation skills.

This collection has been significant to me as a student and as a professional. The goal of collections rehabilitation at the VCP is to make sure that USACE archaeological collections are in good condition and accessible to future researchers. I am using the Deep Creek Site artifacts and archives as a case study for my Masters in Applied Anthropology at San José State University. With archaeological work and interest at the Deep Creek Site over the course of almost 100 years, this material has given me a chance to understand the significance of archaeological legal and ethical mandates from different perspectives. Finally, as a lab manager at the VCP, it has given me a chance to step back and consider how I engage the training methods we use for the technicians at the San Mateo lab, and program wide.

While rehabilitating collections and helping veterans integrate into the civilian work force is the mission at the VCP, it can be seen that this work carries more importance than just the act of collection rehabilitation itself. When I first started looking through the Deep Creek archives, I came across this note possibly written by Jeff Altschul: "The most important questions are the ones that are yet to be asked" (Altschul 1989). As archaeology continues to move into the future, maximizing the data that we can get from legacy collections becomes increasingly important. The Deep Creek Site is just one case study showing what can be done if the interests of multiple stakeholders are leveraged to produce a needed outcome for heritage preservation with job skills and professional development opportunities gained along the way! In addition to furthering our understanding of the pre-contact history of the Deep Creek Site, this collection has the potential to answer questions and continue to benefit multiple stakeholders in a variety of ways. In the year and a half that has passed since the lab received the collection, the

Deep Creek Site artifacts and archives have gone from sitting in storage to taking on a life of their own and being utilized in multiple ways!

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Appendix E: A Summary of San Manuel Band of Mission Indians Presentation at the Society for American Archaeology Conference 2021

Conducting a project to understand the impacts of an archaeological legacy collection without the input of one of the primary stakeholders left this project feeling very unbalanced. Many benefits of collections rehabilitation at the Veterans Curation Program (VCP) almost speak for themselves, yet a very important voice was missing in the project report. After this project report was signed off on by my committee, I began catching up on recorded conference talks from the Society for American Archaeology (SAA) 2021 Annual Meeting. In the April 15, 2021 session, *Refining Archaeological Data Collection and Management to Achieve Greater Scientific, Traditional, and Educational Values*, Alexandra McCleary, Tribal Archaeologist for the San Manuel Band of Mission Indians (SMBMI) presented a paper on behalf of the Tribe's Cultural Resource Management department titled, *Decolonization and Co-Stewardship:*Protecting Cultural Landscapes across Serrano Ancestral Territory.

The tribe had declined an interview while I was collecting data for this project, in part due to the impact of the COVID-19 pandemic and the difficult nature of discussing federally-owned collections that come from ancestral lands. I reached back out to the Tribal Archaeologist from SMBMI in July of 2021 to ask permission to include a summary of the SAA talk as an addendum and she approved on behalf of the Tribe.

Below are the questions that I submitted to the Tribe's Cultural Affairs Working Group (CAWG) in May of 2020 via their Cultural Resource Director, Jessica Mauck. These were intended to be a guide for a semi-structured interview. When I was listening to the SMBMI's SAA presentation many of the questions I had were answered either directly or indirectly.

Interview Questions for The San Manuel Band of Mission Indians Cultural Resource Director or Cultural Committee.

- 1. What is your perspective on the curation of collections? Does the tribe have a museum?
- 2. Is the tribe interested in receiving information about collections? Is the tribe interested in digital access to collections?
- 3. What is the status of the National Register of Historic Places nomination for the Guapiabit Serrano Homeland Archaeological District?
- 4. Do you have any questions for me about the collections rehabilitation process at the Veterans Curation Program?

This talk from the SAA's 2021 conference in April of 2021 presented the Tribe's experiences and perspectives in their role as co-stewards of Serrano ancestral land. The SMBMI employs multiple professional archaeologists who meet and exceed the Secretary of the Interior's (SOI) Professional Qualification Standards to hold agencies and cultural resource management firms accountable to the highest standards in the process of identifying, characterizing, and mitigating impacts to Serrano cultural resources (Mauck et al. 2021). The Tribe has moved to take a decolonized approach to the process of cultural resource management and interactions with both agencies and cultural resource management firms conducting archaeological activities within SMBMI's 7.5 million acres of ancestral territory. As a federally-recognized tribe in the state of California, the tribe is able to engage in government to government consultation with both state and federal agencies in regards to the Tribe's cultural resources. The SMBMI operates their own Cultural Resource Management Department.

McCleary describes how and when archaeology has operated in a colonized space to give context to the decolonized approach to the Tribe's archaeology as one that respects and recognizes tribes as subject matter experts on the appropriate treatment and care of their cultural resources (Mauck et al. 2021).

I think it's helpful first to examine how and when archaeology is a colonized space; it is such when it operates as an extractive process to the detriment of descendant communities. It is colonized when descendant communities are removed from the decision-making process, when cultural resources are treated in ways that descendant communities consider to be inappropriate, and generally when a nation's sovereignty with regards to its cultural resources is not honored. When a tribe's cultural resources are devalued due to their alterity to ethnocentric Western perceptions of significance.

In the conference talk, McCleary explains that the tribe views the caretaking of all things in their ancestral territory as their responsibility regardless of who owns or manages any portion of that land. SMBMI maintains a considerable database of information which allows for robust assessments of cultural and archaeological sensitivity of project areas. The staff of the Cultural Resource Management Department serves as both professional archaeologists and representatives of a sovereign tribal nation. The Tribe engages in a partnership mentality with all stakeholders. They often take the lead in writing out scopes of work for archaeological testing and data recovery as well as artifact discovery and treatment plans. They do this at no cost to the agency or the developer. The Cultural Resource Management Department maintains a document

library and GIS database with cultural data such as archaeological information, oral histories, and ethnographic studies (Mauck et al. 2021).

We use these various types of information to relay holistic cultural sensitivity assessments of any given project area directly to the government agency early in the planning stages, when given an opportunity to do so. We also provide guidance to archaeologists regarding thoughtful and culturally appropriate archaeological identification efforts and non-collective site evaluation methods, and educate partners regarding the outdated modalities and cultural inappropriateness of material data collection and long-term curation. Instead we offer clever solutions for avoidance and curation in place. By using a decolonized process and adopting a co-stewardship ethos, our cultural resources management department has found success in our efforts to preserve important Serrano landscapes in ways that are reflective of the Tribe's mission. That is to promote its culture, protect its land, and sustain its tribal government through education and for the advancement of the tribe and community.

The Tribe firmly believes that reason, combined with methodical and deliberate consultation, "wins the day every time." SMBMI seeks solutions-oriented conversations with agencies and other stakeholders; they see consultation as an opportunity to educate other stakeholders in culturally appropriate and scientifically robust archaeological research strategies such as "catch and release" survey and other non-destructive analysis. The Tribe offers solutions

for avoidance and/or curation in place when feasible, which in addition to being culturally appropriate treatment methods, is typically cost effective to the land owner.

One example of solutions-oriented conversations given in the talk was curation-in-place as a means of long-term artifact storage. McCleary points out that the curation crisis emerged because archaeologists sought to collect and curate the majority of artifacts they excavate from the ground. McCleary argues that this practice is rooted in a colonial mentality which seeks to extract and possess resources from an area without regard to the health, well-being, and cultural mores of those communities. Presenting a counter-argument to the justification of long-term curation for the data potential of artifact collections, McCleary reasons that there is not significant work being done in terms of follow-up research. She argues that most data potential for each individual artifact is exhausted during documentation when artifacts are numbered, described, weighed, and photographed. Finally, she points out that there is not a whole lot of money or time to do more research particularly in the cultural resource management compliance context.

McCleary explains,

By offering the solution of artifact reburials post archaeological documentation and analysis, we are offering a culturally appropriate and cost-effective solution to the curation crisis. And we have had pretty good success in arguing this case to project developers and agencies. By centering a decolonized process and adopting a co-stewardship ethos, the San Manuel Band of Mission Indians has found some success in implementing the Tribe's preferred cultural resources management

strategies including avoidance of known resources, non-collecting archaeological sampling methods, and burial plans for development projects (Mauck et al. 2021).

The Deep Creek collection is from a region that was nominated for the National Register of Historic Places (NRHP) known as the Guapiabit-Serrano Homeland Archaeological District.

The 1989 site report recommended the site be nominated as there were still intact cultural deposits that contained data significant to regional prehistory (Altschul et al. 1989). When I originally contacted Jessica Mauck, I had asked her about the status of nomination for this area and she responded that there were several factors contributing to the delay of this review process including the retirement of a previous reviewer in 2019 and a reduction in staff following the Bureau of Land Management (BLM) National Heritage Program's relocation from Washington D.C. to Santa Fe, New Mexico. Mauck said that after many follow-ups, the review had been brought back to the BLM staff's attention and that she expected to see movement in the process, though it would likely be slow (Jessica Mauck, personal communication 2020). The Guapiabit Serrano Homeland Archaeological District was listed on the National Register of Historic Places on October 26, 2020.

Long-term curation of archaeological materials is a professional mandate that is standard with multiple professional archaeological organizations world-wide. This is largely because of the awareness on the part of archaeologists that technological and scientific advances could and have provided new and valuable data from previously-excavated collections that may have at one time been deemed unimportant. Because of this potential, deaccessioning archaeological collections has been a point of debate in the archaeological community. While the fear of discarding potentially important materials is valid, conversations of how to make these decisions

remain unresolved. There has been much thought and discussion during the last few decades on how to find solutions for many of these problems. The National Park Service's (NPS) discussion on deaccessioning archaeological collections points out that some of these curation-related problems, including the difficulties associated with deaccessioning and reorganizing previously-accessioned collections to reduce the amount of materials curated, may be solved with more training and research of the subject, establishing and reassessing professional standards and guidelines, and by encouraging interaction and conversation between archaeologists and repositories about best practices (NPS 2021).

The VCP is a program which was designed with a dual mission of rehabilitating federally-owned archaeological collections for long-term storage and providing U.S. military veterans with transferable job skills and temporary employment; it can be seen that this program has benefits outside and in addition to the original dual mission. The VCP serves in part as a public archaeology program and is inclusive of many community voices and stakeholders.

Looking forward in the matter of the collections' crisis, I expect that USACE will continue to weigh the input of multiple stakeholders, including the tribes whose ancestral lands hold previously excavated archaeological sites, and resources. As McCleary noted, use of "solutions-oriented conversations" could prove both fiscally and ethically rewarding in the curation of federally-owned archaeological collections.

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