NATIVE AMERICAN CONSERVATION CORPS PROGRAMS: CULTURAL HERITAGE AS AN APPROACH TO COMMUNITY WELL-BEING

Michaelle Anne Machuca
University of Montana

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NATIVE AMERICAN CONSERVATION CORPS PROGRAMS:
CULTURAL HERITAGE AS AN APPROACH TO COMMUNITY WELL-BEING

By

MICHAELLE ANNE MACHUCA

Bachelor of Arts in Anthropology, Washington State University, Pullman, WA, 2015

Thesis

presented in partial fulfillment of the requirements
for the degree of

Master of Arts
in Anthropology, Cultural Heritage Option

The University of Montana
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Southwest Conservation Corps Ancestral Lands
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Chas Robles, thank you for the investment of your time and helping me understand the values of SCC AL so they could be represented in this research project

SCC AL Program participants, thank you for sharing your experiences with me at Casa Grande Ruins National Monument, Glen Canyon National Recreation Area, and Rainbow Bridge National Monument during the summers of 2017, 2018, and 2019

Without the support and contributions of these individuals and SCC AL, this project would not have been possible. A sincere and warm thank you.
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Native American Conservation Corps Programs: Cultural Heritage as an Approach to Community Well-Being

Chairperson: Professor Kelly Dixon
Co-Chairperson: Professor Greg Campbell
Outside Committee Member: Chas Robles

This thesis features a case study and research survey to expand awareness of the ways in which Native American communities use and are impacted by culturally specific, relevant, and useful qualities of cultural heritage and cultural resource management (CRM). The case study and survey are framed by theoretical backdrops that include colonialism, post colonialism, and decolonization. Using the Southwest Conservation Corps Ancestral Lands (SCC AL) Program as the subject of this case study, this thesis addresses whether and how participants in the SCC AL Program observed the program’s potential to generate societal benefits that positively influence and/or contribute to individual and community betterment and well-being. To address this research objective, collaborative research methods founded in CRM, yet influenced by the theoretical frameworks such as postcolonialism and decolonization, are used with an aim to produce respectful and equitable research results. In addition- and by default- this thesis used collaborative methods as a study in their own right, exploring how research processes can be equally as valuable and informative as the results they produce. The results of the survey indicate that the SCC AL Program provides tangible and intangible benefits to Native American Conservation Corps participants in terms of individual and community well-being and educational, professional, personal, and economic preparedness. This collaborative research project was carried out with intentions to produce a defendable thesis, support SCC AL’s program model and growth, and contribute to scholarly and applied research relevant to understanding social issues that integrate cultural heritage and well-being.
Chapter 1: Introduction

*In all societies a sense of well-being is associated with the need to connect with and appreciate heritage values.*
- John H. Jameson Jnr., 2008

Part 1: Thesis Introduction

Stemming from postcolonialism and decolonization as responses to colonialism, the fields of cultural heritage and cultural resource management (CRM), have an urgent need to examine the beneficial outcomes cultural heritage oriented projects and programs have on the Native American communities they undeniably affect. This is not to imply that the field of cultural heritage in its entirety is a manifestation of colonialism. However, when cultural heritage and CRM projects prioritize certain research interests and methods over others, they partake in the lingering colonialism which decolonization originally arose to address by recognizing the lack of collaboration, inclusion, and involvement of diverse researchers in the field, literature, and academia.

Adverse effects of cultural heritage oriented projects and programs on Native American communities often dominate conversations and consultation carried out by CRM professionals. However, beneficial outcomes of cultural heritage and CRM projects on Native American communities often receive less time and consideration beyond the mitigation and offsetting of adverse effects. While Native American communities are involved in these conversations and consultations, resulting research done on the effects of cultural heritage and CRM projects and programs on Native American communities has greatly been for the benefit of cultural resource managers, with relatively little attention given to Native American perspectives. How Native American communities engage in culturally specific forms of cultural heritage and CRM to manage their own projects and programs is also frequently left out of research and conversation.
Considering the limited research on how Native American communities engage cultural heritage and CRM projects and programs in their communities, there has been even less research conducted on the adverse or positive effects these culturally specific projects and programs are having on both Native American communities and individuals.

This thesis features a case study and research survey to expand awareness of the ways in which Native American communities in the Southwest region of the United States are using culturally specific, relevant, and useful qualities of cultural heritage and CRM for community betterment and well-being. These qualities include conservation, preservation, values-based management, and community-based participatory research that are used to create conservation corps programs which encourage educational projects rooted in the culture and heritage of tribal communities. The case study and research survey focus on the Southwest Conservation Corps Ancestral Lands (SCC AL) Program and are intended to provide insight into the advantageous effects Native American cultural heritage projects and programs have on both Native American individuals and communities. SCC AL is used as the case study because while SCC AL’s program model is designed and has shown to be advantageous by promoting personal, professional, educational and economic benefits for its participants, the integrated benefit the program has in connection to the community in relation to their mission to support cultural and ecological well-being has yet to be examined. This thesis inquires whether participant benefits gained from SCC AL influence or contribute to individual and community betterment and well-being associated with Native American communities.

SCC AL is also used as a case study to address the following research question: Do the educational, professional, personal, and economic participant benefits of Native American conservation corps programs influence or contribute to individual and/or community well-being?
If so, how? By seeking answers to these questions, this thesis seeks to add to the limited but growing body of research addressing Native American cultural heritage and CRM projects and programs and their effects on individuals and communities. Additionally, this thesis investigates whether there are tangible and intangible outcomes of the benefits from cultural heritage oriented programs in relation to well-being.

**Part 1.2: Thesis Hypotheses, Research Objectives, and Research Questions**

Drawing from a theoretical framework grounded in equitable research and collaboration with SCC AL to ensure the inclusion of Native American perspectives on cultural heritage and CRM projects and programs in the design and review of this project, this thesis tests the following hypotheses:

**Hypothesis 1:** The main hypothesis is participant benefits of Native American conservation corps programs directly influence and contribute to individual and/or community well-being by providing participants with tangible and intangible educational, professional, personal, and economic benefits that are brought back into the community and by preparing participants to pursue personal goals in regard to college, career, and passions.

Visual 1.1: Hypothesis 1, check marks signify qualities met (Visual by Author 2019)
**Hypothesis 2:** The alternative hypothesis is participant benefits of Native American conservation corps programs directly influence and contribute to individual well-being by providing participants with tangible and intangible educational, professional, personal, and economic benefits and by preparing participants to pursue personal goals in regard to college, career, and passions. However, participant benefits do not extend to community well-being because benefits are:

- Brought back into the community but are not supported by the tribal community

Visual 1.2: Hypothesis 2, check marks signify qualities met, X marks signify unmet qualities (Visual by Author 2019)

**Hypothesis 3:** The null hypothesis is participant benefits of Native American conservation corps programs do not influence and contribute to either individual and/or community well-being because participants are not receiving tangible and intangible educational, professional, personal, and economic benefits.

Visual 1.3: Hypothesis 3, X marks signify unmet qualities (Visual by Author 2019)
To investigate these hypotheses, this thesis addresses the research objectives and questions included in Table 1.1 and Table 1.2; note that these objectives and questions represent the result of integrating this thesis’ research design with feedback from the SCC AL:

<table>
<thead>
<tr>
<th>Thesis Research Objectives</th>
<th>Thesis Research Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Address how Native American communities are applying postcolonialism, decolonization, and cultural heritage to conduct research and projects that incorporate culturally specific research methods, knowledge, education, and practices</td>
<td>1. How do Native American conservation corps programs fuse postcolonialism, decolonization, and cultural heritage into their program model?</td>
</tr>
<tr>
<td>2. Discover how Native American communities engage relevant and useful qualities of CRM to serve their communities through cultural heritage oriented projects and programs</td>
<td>2. How are Native American communities engaging CRM qualities such as values-based management and community-based participatory research to support cultural heritage oriented projects and programs?</td>
</tr>
<tr>
<td>3. Ascertain the advantageous outcomes cultural heritage oriented projects and programs have on Native American individuals and communities</td>
<td>3. What are the advantageous outcomes of educational, professional, personal, and economic participant benefits of Native American conservation corps programs to individuals and community?</td>
</tr>
<tr>
<td>4. Determine what well-being means within the context of cultural heritage and what well-being’s relationship to cultural heritage is</td>
<td>4. How do Native American conservation corps programs support cultural and ecological well-being?</td>
</tr>
</tbody>
</table>

**Table 1.1:** Thesis Research Objectives and Research Questions (Table by Author 2019)

<table>
<thead>
<tr>
<th>SCC AL Research Objectives</th>
<th>SCC AL Research Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Learn about how SCC AL is benefitting their participants in order to gain insight that will assist in the growth and success of their program</td>
<td>1. What parts of SCC AL do participants value the most?</td>
</tr>
<tr>
<td>2. Create a collaborative research project in partnership with SCC AL that produces equitable research which takes into consideration the interests of both SCC AL and my graduate studies throughout all stages of the research process</td>
<td>2. How does working with SCC AL benefit participants?</td>
</tr>
<tr>
<td></td>
<td>3. Are SCC AL participants satisfied with the SCC AL Program?</td>
</tr>
<tr>
<td></td>
<td>4. Are SCC AL participants satisfied with their NPS assignment locations?</td>
</tr>
<tr>
<td></td>
<td>5. Does SCC AL have community support?</td>
</tr>
</tbody>
</table>

**Table 1.2:** SCC AL Research Objectives and Research Questions (Table by Author 2019)
Part 1.3: Research Background

This thesis evolved out of a National Park Service (NPS) satisfaction survey the author created for a visiting SCC AL crew while interning for the Latino Heritage Internship Program (LHIP) at Casa Grande Ruins National Monument (CAGR) in Arizona during the summer of 2017. While the SCC AL crew was on site at CAGR for their eight day assignment the author had the opportunity to work in the field with them as an extra crew member on a vegetation removal project and had the privilege of getting to know the crew members, all of whom were Hopi (Visual 1.4, 1.6). During time in the field and on site the author was able to experience SCC AL’s work ethic, group dynamic, and learn about why participants joined the program in the first place. Unlike other conservation corps program participants the author had experience working with who joined their programs because it was a job opportunity or because of their passion for the outdoors, the SCC AL participants at CAGR revealed they joined, overwhelmingly, because of the professional and cultural skills and values the program supports. The satisfaction survey created by the author asked if participants enjoyed their time at CAGR, working with the NPS, and if they were interested in potentially working with the NPS in the future. However, after learning about SCC AL and working with the crew the author became interested in the program beyond their work with the NPS and began inquiring on why SCC AL participants valued the program.

When applying for positions with the NPS for the summer of 2018 the author took particular interest in locations who shared a working relationship with SCC AL. During the previous summer the author remembered how the SCC AL crew from CAGR was headed to Glen Canyon National Recreation Area (GLCA) for their next assignment. Accordingly, during the interview with GLCA the author expressed interest in working with visiting conservation corps programs, especially SCC AL. The author ultimately accepted an Archaeological
Technician position with GLCA for the 2018 season and again had the privilege to work with and get to know another SCC AL crew, all of which were again Hopi. During their time at GLCA the author served as the point of contact for the SCC AL crew and had the opportunity to continue learning about the structure, culture, and values of the program. For the 2019 season, the author returned to GLCA once more as an Archaeological Technician and for a third year had the opportunity to continue learning about and participating with SCC AL by working with a returning SCC AL Hopi crew (Visual 1.5, 1.7). Ultimately, the author’s experiences participating in SCC AL’s meaningful conservation projects on Native lands at CAGR and GLCA was the inspiration for working with SCC AL on a collaborative research project for this thesis.


Visual 1.5: 2019 group photo with SCC AL Hopi Crew during field trip to Antelope Canyon in Glen Canyon National Recreation Area, Page, Arizona (Visual by Author 2019)

Visual 1.7: 2019 group photo with SCC AL Hopi Crew during field trip to Rainbow Bridge National Monument, Utah (Visual by Author 2019)
Part 2: SCC AL Program Background

SCC AL is comprised of three parts: Conservation Legacy, Southwest Conservation Corps, and the Ancestral Lands Program. Conservation Legacy first established an all-Native American Ancestral Lands Program in 2008 based at Acoma Pueblo, New Mexico (Hassel and Tremble 2016). Conservation Legacy is a purposeful and strategic organization and operates service programs across the nation engaging young Americans in services to conserve, protect, and promote each community’s greatest gifts, and build America’s future (Smith et al. 2018). Conservation Legacy operates programs to support and engage young people from diverse backgrounds to participate in conservation and community-based projects. Within Conservation Legacy, there are also specialized regional programs.

Southwest Conservation Corps (SCC) is a regional program based in the Southwest Region of the United States and operates service programs in the form of conservation corps programs. Similar to Conservation Legacy SCC provides “young women and men with structured, safe and challenging service and educational opportunities through projects that promote personal growth, the development of social skills, and an ethic of natural resource stewardship” (Southwest Conservation Corps 2019). The SCC “program model incorporates guiding principles of experiential learning, respect, openness and willingness, commitment, responsibility, pride, excellence, health, safety, and fun” (Southwest Conservation Corps 2019). SCC’s program and mission are very similar to Conservation Legacy but focus more regionally on the Southwest. SCC offers programs to the general public but also offers additional Native American specific programs.

Southwest Conservation Corps Ancestral Lands (SCC AL) is an all-Native American and Native American specific program and also operates community-based service programs in the form of conservation corps programs. The SCC AL originated in Acoma Pueblo, New Mexico in
2008 but has since worked with multiple Native American communities to expand and replicate this model in the Navajo Nation, Zuni Pueblo, Hopi and Albuquerque area. SCC AL continues to support the development of new programs in Native American communities where there is an interest or need for them. While grounded in both Conservation Legacy and SCC, SCC AL is its own distinct program that supports a “program model rooted in the culture and heritage of local tribal communities” and “aims to incorporate traditional culture and language as part of crew lifestyle and project work” (Southwest Conservation Corps Ancestral Lands 2019). SCC AL is focused on Native youth leading our nation back to ecological and cultural well-being by engaging Native youth and young adults in meaningful conservation projects on Tribal and public lands including historical preservation, traditional agriculture, chainsaw crews, hiking clubs, stream restoration, fencing, trail construction and more (Smith et al. 2018; Southwest Conservation Corps Ancestral Lands 2019). SCC AL’s model is also designed to promote personal, professional, educational and economic benefits for its participants.

The SCC AL model and approach is well-rounded and is motivated by leading Native American nations back to ecological and cultural well-being by working with public land management agencies to provide community-based experiences intended to contribute to personal, professional, educational and economic benefits and growth. Through both Conservation Legacy and SCC, SCC AL …supports the self-empowerment of Native American communities through the further development of program models across Indian Country that provide jobs and experience for local Native American youth, connect youth to their heritage and cultural values, complete important conservation and interpretation projects at National Park Service units and for native communities, and expose Native American youth to potential careers with public land management agencies. The purpose of the Ancestral Lands approach is to build a solid foundation for creating sustainable native-led programming in tribal communities across the nation. (Hassel and Tremble 2016, 5)
With the support and investment from the community, Conservation Legacy, and SCC, along with their well-rounded and well supported program model and approach, SCC AL has been able to continue to grow and be successful as an influential and impactful program for the Native American communities it works with. SCC AL “has significant impacts on the individuals that participate in the program and the communities in which work is done” because of the integrated way participants learn about their history and the significance of the places they work which then strengthens their connections to their ancestors, culture, language, and traditions (Smith et al. 2018, 5). While the SCC AL Navajo Nation, Zuni Pueblo, Hopi and Albuquerque area programs are replicated from the original Acoma Pueblo program and have the same program structure, each program is unique in that their season varies depending on the meaningful conservation projects on Native lands they take part in.

SCC AL is the first program of its kind and is also one of the few existing Native American specific conservation corps programs focused specifically on heritage. While there are plentiful cultural heritage programs and conservation corps programs across the United States available to the general public, there are very limited cultural heritage oriented programs for Native Americans whose communities could benefit deeply from the experience, education, and exposure these programs offer. SCC AL is the only program of its kind and combines cultural heritage, education, and conservation into its own distinct culturally specific Native American program model. While other conservation corps programs such as the Native Conservation Corps (NCC), Montana Conservation Corps (MCC), and Northwest Youth Corps (NYC) have divisions within their program that provide Native American specific opportunities they are not their own established and distinct program like SCC AL. Additionally, NCC, MCC, and NYC’s Native
American specific opportunities are not directed by a clear, demographic specific, and community-based learning program model like SCC AL.

Instead, Native American specific opportunities with NCC, MCC, and NYC are aligned mainly with their preexisting and overarching program model. For example, NCC is designed to mutually benefit participating Native American students, their local communities, and National Parks but does not promote clear student and community goals (Native Conservation Corps 2016). Or, MCC’s Piikani Lands and Wind River Native American crews operate more or less as normal MCC crews except they are designed for Native American young adults from communities in and around the Wind River Indian Reservation (Montana Conservation Corps 2019). Lastly, NYC’s Tribal Stewards program works closely with tribal communities to engage Native American participants in the traditional Youth Corps Camping model, not a culturally specific or community driven model (Northwest Youth Corps 2019). NCC, MCC, and NYC’s program models each individualistically acknowledge tradition, culture, and knowledge. However, unlike SCC AL, their program models are not aimed towards cultural heritage and well-being by incorporating tradition, culture, and knowledge into their both program model and practices.

**Part 2.1: SCC AL Program Crew Participants**

Given that SCC AL is an all-Native American and Native American specific program operating in the Acoma Pueblo, Navajo Nation, Zuni Pueblo, Hopi and Albuquerque area SCC AL participants are primarily from the Southwest region. The 2018 Conservation Legacy National Park Service FY2018 Report for the Ancestral Lands Program reported 91% of participants identified as Native American and participants were 11% under the age of 18, 72% ages 18-24, 11% ages 25-30 and 6% ages 31-35 (Smith et al. 2018; see also Table 1.3).
### Table 1.3: Breakdown of Total SCC AL Participants from 2016-2018 (Smith et al. 2018) (Table by Author 2019)

<table>
<thead>
<tr>
<th>Year</th>
<th>SCC AL Total Participants</th>
<th>Female-Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>238</td>
<td>35% - 65%</td>
</tr>
<tr>
<td>2017</td>
<td>122</td>
<td>41% - 59%</td>
</tr>
<tr>
<td>2018</td>
<td>442</td>
<td>31% - 69%</td>
</tr>
</tbody>
</table>

#### Part 2.2: SCC AL Program Composition

SCC AL provides conservation corps opportunities to young adults and adults from the Acoma Pueblo, Navajo Nation, Zuni Pueblo, Hopi, and Albuquerque area. The young adult, or high school, conservation corps crews offer paid positions for participants ages 14-18 and take place in the summer over the course of 4-5 weeks. Young adult crews are made up of about three young adult crew members and two experienced adult crew leaders. The adult conservation corps crews offer paid positions for participants 18-30 and also take place in the summer over the course of 8-10 weeks. Adult crews are made up of about three crew members and two experienced crew leaders, all adults. Both program types, young adult and adult, work together throughout the course of their summer employment to complete impactful and challenging conservation and preservation projects in the Southwest region. The adult conservation corps crews, which accounted for 72% of participants in 2018, are the focus of the SCC AL case study (Smith et al. 2018).

#### Part 2.3: SCC AL Program Structure

Once participants have applied and are accepted into the program, the SCC AL summer experiences start with trainings and certifications which provide crew members with the skills they will need during the rest of their season. This includes First Aid and CPR, Wilderness First Aid, saw trainings, and chainsaw trainings. Adult conservation corps projects specifically tend to
be technical and the trainings the crew receives are organized in accordance with the natural and cultural resource demands of the locations they will be visiting for assignments on federal and public lands. Once training is done SCC AL crews are sent out for their summer assignments usually consisting of eight or nine days on/five days off intervals called “hitches,” or assignments as they are referred to herein. While on assignment for their days on, SCC AL crews work on site on the designated project and camp either in the front-country or the backcountry, or in some cases on-site accommodation. On their days off between assignments SCC AL crews return to their program base or home until their next assignment.

As a unit, SCC AL crews are together most of the time with the exception of their days off between assignments. From the beginning SCC AL crews do everything as a unit including going through trainings, trip preparation, camping, cooking, eating, and traveling in their crew van. While a family dynamic is not explicitly stated in the formal SCC AL Program model, it is supported as equally as the incorporation of traditional culture and language as part of crew lifestyle and project work. Trainings and certifications provide SCC AL crews with the skills they will need for their assignments. However, even though these skills are undoubtedly important for group success, the group dynamic and the allocation of group responsibility is equally important considering the amount of time crews spend together. A substantial part of the SCC AL crew structure, professionally but especially personally, is the responsibility crew members and leaders have to their fellow crew members to be a respectful and contributing member of the crew. Being a contributing member means participating in both group and individual responsibilities. What this means for the group dynamic is that every crew member has both group and individual responsibilities, often rotating, which they are accountable for in order for crew tasks, jobs, and duties to be distributed equally among the group. Group
responsibilities include but are not limited to shopping for food, setting up or taking down camp, preparing for meals, organizing gear, or planning activities while individual responsibilities include gear preparation, leading morning stretches, getting water, cooking, or doing dishes.

Where SCC AL crews are sent out for their summer assignments depends on which agencies apply to host the crews and the specific SCC AL Programs (e.g. Acoma Pueblo, Navajo Nation, Zuni Pueblo, Hopi and Albuquerque). Federal agencies such as the NPS and Forest Service typically apply to SCC AL with proposed projects which could use the specialized assistance of a SCC AL crew. After receiving applications, SCC AL takes each application into consideration as a potential assignment. However, priority is given to assignment locations where specific SCC AL Programs are culturally affiliation with.

The Acoma Pueblo, Navajo Nation, Zuni Pueblo, Hopi and Albuquerque area SCC AL crews are then designated assignments tailored to each individual program and sent out to locations for projects where they can promote ecological and cultural well-being through meaningful conservation projects on Native lands. While all applications to SCC AL for projects are taken into consideration, most frequently, SCC AL crews work with culturally affiliated NPS locations on community-based projects such as historical and pre-historical preservation, environmental conservation, traditional farming, riparian restoration, invasive vegetation assessment, inventory and monitoring, invasive species removal, and habitat restoration.

Part 2.4: SCC AL Program Assignments
While SCC AL crews most frequently work on technical preservation, conservation, and restoration oriented projects at NPS locations they are culturally affiliated with, they also participate in a variety of other assignments that provide crew members with diverse experiences
and skills. To date, SCC AL has been involved in the following assignments detailed in Table 1.4 below.

<table>
<thead>
<tr>
<th>SCC AL Assignments- As of 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintained trails, improved recreation infrastructure, improved fish and game habitat and improved critical water resources by removing invasive species</td>
</tr>
<tr>
<td>Provided jobs, hands on work experience and national service opportunities to young adults in rural communities</td>
</tr>
<tr>
<td>Completed important infrastructure improvement projects while connecting Native American young adults to stewardship, their heritage and cultural values</td>
</tr>
<tr>
<td>Provided workforce, job training and leadership development opportunities for rural Native American young adults through real world and hands on experience on resource management projects</td>
</tr>
<tr>
<td>Encouraged the sovereignty of Native American communities by providing jobs, work skills and leadership development opportunities for young Native Americans</td>
</tr>
<tr>
<td>Engaged young people, communities, tribal leadership and visitors in shared land stewardship while promoting greater private and public partnerships with the National Park Service</td>
</tr>
</tbody>
</table>

Table 1.4: SCC AL Assignments- As of 2018 (Smith et al. 2018) (Table by Author)

Involvement in these SCC AL assignments engage the program model, support the self-empowerment of Native American communities, and connect crew participants to their cultural heritage while also exposing crew participants to potential careers with public land management agencies.

**Part 2.5: SCC AL Program Partnerships**

SCC AL works closely with various partners and cooperators to create opportunities for their crews that are professionally, personally, and culturally valuable to Native American ecological and cultural well-being. While partners and cooperators are growing annually, there are a number of federal, regional, and tribal agencies and organizations that represent regular partnerships. For example, federal agencies include but are not limited to the NPS, U.S. Forest Service, Bureau of Land Management, Bureau of Indian Affairs, U.S. Fish and Wildlife Service, National Fish and Wildlife Foundation and Bureau of Reclamation. Regional organizations
include but are not limited to Arizona Game and Fish Department, Conservation Lands Foundation, Colorado Plateau Foundation, McCune Foundation, Escalante River Watershed Partnership, Grand Staircase Escalante Partners, Northern Arizona University, and Friends of Cedar Mesa Historic Preservation. Tribal partners and organizations include but are not limited to Acoma Pueblo, BIA Navajo Nation, Navajo Nation, Hopi Tribe, Zuni Pueblo, Zuni Youth Enrichment Program, Hopi Foundation, and the Hopi Education Endowment Fund.

As a program, SCC AL is open and welcome to partnerships and collaborations with partners, cooperators, and communities who can assist them in supporting their values and continued success, as well as communities who they can provide support for new SCC AL programs in Native American communities where there is an interest or need for them. This thesis is a product of partnership and collaboration resulting from how SCC AL welcomes outside involvement both in the field and research.

**Part 3: Research Importance**

Through this thesis, SCC AL seeks to assess if their program is benefiting participants in order to gain insight that assists with program improvements and applying for future funding. It is imperative this thesis produce equitable research because of the collaborative nature of the research project. It is equally important this thesis and its research methods reflect the collaborative, value-based, and community-based program models of SCC AL so research remains grounded in the growing body of research on Native American cultural heritage and CRM projects and programs in which it seeks to contribute to. SCC AL has been rapidly growing since the program began in 2008. Program improvements, program support, and funding can assist SCC AL in expanding and establishing new programs in Native communities in the Southwest. More broadly, what is learned from SCC AL can be used by other conservation
corps programs looking to establish similar Native American conservation corps programs with foundations in cultural heritage in different regions of the United States.

**Definition of Well-Being**

- **General Definition of Well-Being:** the state of being comfortable, healthy, or happy
- **Types of Well-Being:** Psychological, mental, physical, social, spiritual, cultural, financial, personal, professional, and educational
- **Components of Well-Being:** the balance between circumstantial *positive affects* of and *negative set backs* to well-being that influence one's capability to be grounded in and engage well-being
- **Working Definition of Well-Being:** the state of being balanced and grounded in well-being; also prepared, equipped, and knowledgeable about how to continue bettering oneself and others by engaging well-being

Visual 1.8: Explanation and Working Definition of Well-being for the Purposes of this Thesis (Visual by Author 2019)

Since this thesis focuses on the well-being of Native American individuals and communities, another objective of this thesis is to contribute to the larger scholarly conversation of well-being. “Well-being is a growing area of research, yet the question of how it should be defined remains” (Dodge et al. 2012). However, fields such as psychology, health, linguistics, anthropology, and archaeology are engaging in research concerning well-being by seeking a
definition, as well as how to find measurable explanations for what influences or promotes well-being. Even though cultural heritage and CRM are designed to utilize collaboration and consultation, both of which have great potential for contributing knowledge or revealing connections to well-being, the fields of cultural heritage and CRM have had limited engagement with research consciously connecting these fields to well-being. This research project seeks to contribute to considerations of well-being in general, but especially within the context of heritage. “Well-being is more than just happiness. As well as feeling satisfied and happy, well-being means developing as a person, being fulfilled, and making a contribution to the community” (Shah and Marks 2004, 2) With this in mind, while recognizing that well-being is a multifaceted and involved set of conversations that is taking place across diverse fields of research, a working definition of well-being provided as applied to and used in thesis is presented in Visual 1.8.

Considering cultural heritage and CRM’s historical connection and derivative relationship to colonialism, postcolonialism, and decolonization, this thesis includes a discussion of these theories and their associated practices, approaches, and methods. These theories are discussed within the context of their relationship to Native American management of cultural resources and heritage. Using the research survey, this thesis then combines research on applied Native American conservation corps programs and the influence of theories to evaluate current efforts by Native American communities engaging in cultural heritage programs. Also, this research was done with the intention of motivating a future of collaborative and pertinent research that contributes to both cultural heritage scholarship and Native American communities. Additionally, this research complements theoretical discussions regarding how to use postcolonial theory as an analytical or interpretative tool and how lingering issues of colonialism
limits the advancement of cultural heritage and CRM, especially in regard to Native American well-being studies.

Part 3.1: Research Summary

Chapter 1: Introduction introduces the hypotheses, research objectives, and questions of both this thesis and SCC AL. SCC AL as the case study is introduced through its program background, structure, and participants. Chapter 2: Literature Review and Theoretical Framework discusses theoretical influences such as colonialism, post colonialism, and decolonization and their relationship to Native American cultural heritage. This chapter also converses different applications and uses of cultural heritage and well-being to set the foundation for the scholarly framework. Chapter 3: Collaborative and Interpretive Methods describes the collaborative methods for partnering with SCC AL including communication, content, creation, approval, and administration of the research survey. Interpretive methods applied to qualitative and quantitative analysis of the survey are also explained. Chapter 4: Results of SCC AL Research Questions presents quantitative and qualitative data from the survey responses that address the research objectives and research questions of both this thesis and SCC AL. Chapter 5: Discussion and Conclusion summarizes and discusses the results of the survey in relation to the data analysis, literature review and theoretical framework to address this thesis’ hypotheses. This chapter also discusses data sharing plans, research limitations and challenges, suggestions for future research, and the valuable lessons learned from this thesis’ collaborative research project.
Chapter 2: Literature Review and Theoretical Framework

From the vantage point of the colonized, a position from which I write, and choose to privilege, the term “research” is inextricably linked to European imperialism and colonialism. The ways in which scientific research is implicated in the worst excesses of colonialism remains a powerful remembered history for many of the world's colonized peoples.
- Linda Tuhiwai Smith, 2012

Part 1: Literature Review: Postcolonialism and Decolonization

Postcolonialism and postcolonial theory are frequently used in cultural and social sciences, but the terms are rarely defined clearly because postcolonialism encompasses many variants of postcolonial theory and refers to more than simply a period of time following colonialism in different parts of the world. As a concept, postcolonialism includes the study of discourses regarding politics, economics, and culture. It has also been a catalyst for movements and theories founded in decolonization reevaluating the future of anthropology and its sub-disciplines, including cultural heritage. Among the outcomes of this are increasing examples of research being led and conducted by Native Americans and Indigenous peoples, as well as the application of Indigenous research methods, knowledge, education, and practices to cultural heritage scholarship and cultural resource management (CRM).

While they are inherently connected, postcolonialism is concerned with analyzing issues related to politics, economics, and culture, and cultural heritage is concerned with preserving the legacies of politics, economics, and culture. This thesis uses postcolonialism as a term, theory, and application for examining decolonized forms of cultural heritage and CRM practice in the United States to contribute a case study emphasizing the historical and contemporary connections of such practices to Native American communities and programs, such as the Southwest Conservation Corps Ancestral Lands (SCC AL) Program. For Native American communities specifically, decolonized practices of cultural heritage manifest in culturally
specific forms of cultural heritage programs, CRM, community-based participatory research (CBPR), and community well-being through education. Native American communities can utilize these practices through applied programs such as SCC AL to assert local-interests for community betterment and benefit. To establish the theoretical framework for this thesis, this chapter focuses on the intersections of postcolonialism, decolonization, and cultural heritage to explore how Native American communities are using culturally specific applications of cultural heritage and CRM to engage programs and projects which promote value-based management and drive community-based research. As the results of the SCC AL experience and surveys are evaluated they are also used to address how results compare and contribute to cultural heritage scholarship reviewed here. Outcomes of such scholarship have the potential to benefit communities by promoting individual and community well-being.

This chapter emphasizes this thesis’ first research objective of addressing how Native American communities are applying postcolonialism, decolonization, and cultural heritage to conduct research and projects by utilizing culturally specific research methods, knowledge, education, and practices. After examining this objective, it is necessary to address this thesis’ second research objective to determine how Native American communities engage relevant and useful qualities of CRM to serve their communities through cultural heritage oriented projects and programs. From there, based on the foundations established on culturally specific forms of postcolonialism, decolonization, cultural heritage, and CRM, this thesis research seeks to determine the benefits cultural heritage oriented projects and programs have on Native American individuals and communities, as well as to determine what well-being means within the context of cultural heritage and its relationship to cultural heritage. These objectives are essential to address in order to answer associated research questions in later chapters of this thesis.
Part 1.2: Postcolonialism: History, Theory, and Development

Postcolonialism refers to colonialism’s immediate association with intrusions, conquest, economic exploitation, and the domination of Indigenous peoples by Europeans with the “post” of postcolonialism referring to the period of time occurring after colonial conquest and rule (Thomas 1994; Williams and Chrisman 1994). The concept of postcolonialism prompts questions such as: When exactly is “postcolonial”? What does it still effect? Yet, with every circumstance postcolonialism means something different according to who, when, how, and what is involved (Chambers and Curti 1996). Postcolonialism takes place and is experienced differently around the world and is usually associated with a power and paradigm shift motivated by the colonized recognizing and contesting regulatory and hegemonic dominance after colonial rule (Childs and Williams 1997; Freire 2006; Mulcahy 2017; Smith G. H. 2002). However, postcolonialism as a term, theory and application is much more than the definition of its two parts, post and colonial. “Postcolonialism and the coloniality of power coexist in different forms and intensities, in different national scenarios, with the nationality of power as well as with the globality of power” (Ribeiro 2011, 290). While postcolonialism does include temporal discussions, time frames differ depending on the colonized and the colonizer.

One of postcolonialism’s main assumptions is that there is a unified colonial narrative of the colonized. In the field of anthropology, postcolonialism is assumed to have moved beyond Eurocentric constraints. At the intersection of postcolonialism and Native American studies, assumptions are that the gap between the colonized and the colonizer is narrowing, perpetuating an “era coming to an end, if it is not already concluded” (Brown 2003, 222). However, celebrations of the total abandonment of colonialism and purity of postcolonialism may be pre-celebratory considering the persistence of neo-colonialism in the 20th century (McClintock 1992; Whitt 2009). When self-reflecting the field of anthropology habitually forgets to acknowledge
postcolonialism still refers to and is deeply rooted in studies of colonialism and decolonization. The fact that postcolonialism is so interconnected with a world formed and influenced by decolonization is one of the main justifications for use of the term postcolonial and practice of postcolonial theory (Childs and Williams 1997). Ironically, postcolonialism exists in the lingering particularities of colonialism embedded in the postcolonial framework.

Postcolonialism is concerned with analyzing issues related to politics, economics, and culture as well as examining the mechanisms used to interpret these issues such as thought processes, methodologies, hierarchies of power, and paradigms. In this sense, the decolonization of postcolonialism involves decolonizing research methods, thoughts, and history while counteracting the coloniality of knowledge to progress towards the abandonment of hegemonic and colonial based standpoints in anthropology (Haber 2016; Mulcahy 2017). In anthropology specifically, postcolonial theory “challenges scholars to position [their] work between the traps of the universal and the culturally specific” (Tsing 2005, 1). By positioning research between the universal and culturally specific, postcolonialism urges against generalities and particularities and generates space for voices of the historically oppressed to contribute to culturally specific alternative research methods, knowledge, education, and practices.

Postcolonial theory in anthropology developed from the need for representation of oppressed, silenced, and unrecognized voices in the writing of history because as Native Americans and Indigenous peoples began to study historical accounts pertaining to them, they also began to refute them as incorrect (Fassin 2015; Van Dommelen 2011). This further contributed to the need for representation of subaltern voices in anthropology. In archaeology, postcolonialism was prompted from pressure by Native American and Indigenous groups who demanded they stop being treated as objects of Western scientific discourse and insisted
Indigenous knowledge and ways of knowing be considered important (Hamilakis and Duke 2016). The demands and insistence by Native American and Indigenous groups forced anthropology to consider itself internally and reflexively, leading to a reevaluation of its history heavily steeped in colonialism.

Reevaluation of the field of anthropology led the field to transition into postcolonial theory with its increased cultural sensitivity, inclusion of Indigenous voices, and reflexive quality of counteracting colonial knowledge and colonial hegemonic standpoints (Haber 2016). However, subsequent evaluations were necessary as postcolonialism evolved to entail more than rudimentary inclusion of Indigenous voices and decolonization of knowledge. Next, anthropology had to consider its postcolonial roots and its connections to present issues related to politics, economics, and culture. Through analyzing issues of politics, economics, and culture, anthropology had to inherently examine the postcolonial processes influencing these issues by analyzing its own intrinsic relationships to imperialism and the various forms of postcolonialism productive within the theory itself.

Part 1.3: Postcolonialism: Imperialism, and Other Forms

The following section briefly discusses imperialism and various forms of postcolonialism and how they continue to structure postcolonial theory and practice in relation to anthropology. Through imperialism, postcolonial theory exploits knowledge and research, usually at the expense of Native American and Indigenous peoples. From the perspective of the colonized, “the term ‘research’ is inherently colonial and problematic because it is inextricably linked to
European imperialism and colonialism” (Smith L. T. 2012, 1). Indeed, when postcolonial research fails to make use of Indigenous knowledge and ways of knowing it contributes to regenerated forms of imperialism or new imperialism (Agnani et al. 2007; Lavia and Mahlomaholo 2012). From the colonized perspective, despite the postcolonial paradigm shift, colonialism remains in effect to deny validity of Indigenous peoples’ claim to existence, land, territories, and to the survival of their languages and forms of cultural knowledge (Smith L. T. 2012). “Imperialism frames the Indigenous experience” and the collective memory of imperialism is perpetuated through knowledge about Indigenous peoples and through research methods that collect, classify, and represent knowledge to the West and, then back to those who have been colonized (Fassin 2015; Smith L. T. 2012, 19). Imperialism and colonialism are apparent in the subjugation of Indigenous knowledge in postcolonial methodological and research practices. In anthropology this occurs when research is conducted on Native American or Indigenous communities instead of with, by, or for them.

When referring to postcolonial theory, clarification on the usage of postcolonialism is important because there are many forms of postcolonialisms and perspectives occupying space within the term and theory (Williams and Chrisman 1994). Clarification of usage may entail explanations ranging from timeframe and location to punctuation. For example, within the context of this chapter the structure, punctuation, and use of postcolonialism can be clarified. When the hyphen is dropped in post-colonialism to become one word, postcolonialism, it can be used as a framework to look at the tendency in the literature of subjugation which is

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1 The term research is used in this thesis. However, it is used with recognition of its colonial roots and the need for an alternative term created by descendant communities and the perspective of the colonized. Due to lack of such a term at the time of writing and for the sake of consistency within this thesis the term research will continue to be used.
marked by a systematic process of cultural domination through the imperial structures of power to be something not “post” but actually implicit to and present in the discourses of colonialism itself (Williams and Chrisman 1994). Whereas with the hyphen, post-colonialism simply refers to the “after” of colonialism where presently colonialism is no longer active. This suggests that instead of postcolonialism being only a description for a period of time, postcolonialism can actually represent historical stages, contemporary realities, and ideological orientations (Williams and Chrisman 1994). Realizing the many inhabitable forms of postcolonialism only further accentuates the need for usage explanation. The presence of colonialism within these forms of postcolonialism also simultaneously brings to light the lingering particularities of colonialism embedded within the postcolonial framework.

For example, lingering particularities of colonialism in the form of dichotomies such as overt and covert, historical and ideological, and methodological and theoretical continue to structure postcolonial theory and practice in anthropology by influencing how research is conducted. When contemplating how to reassess anthropological theory, practices, approaches, and methods through a postcolonial lens capable of combing out lingering colonialism, evaluating the how colonialism permeates anthropological spaces becomes especially germane. Bearing in mind postcolonialism’s multisited involvement in the discipline of anthropology is essential to the process of reevaluating anthropology as a discipline with roots in colonialism. Especially for archaeology which has traditionally “discouraged an explicit reflexive discussion on the politics of origins of Western archaeology, and on the ethical and political dimensions of archaeological thinking and practice” (Hamilakis and Duke 2016, 18). Postcolonial theory, as it applies to anthropology and archaeology, claims to have origins in the best interest of Native Americans and Indigenous peoples (Menozzi 2014). However, despite postcolonialism’s
expressed good intentions, the “post” of colonialism still incorporates many aspects of colonialism used as mechanisms to control warranted research methods and paradigms, coloniality of knowledge, and subjugation of information. These mechanisms influence who conducts anthropological and archaeological research and how Indigenous knowledge and ways of knowing are incorporated into both theoretical and applied usages of postcolonial theory and decolonization.

Thus, in anthropology postcolonial theory and practice subsequently retain particularities of colonialism that are embedded in its framework hindering postcolonial theory from moving into the “post” of colonialism. As mentioned earlier, in anthropology and archaeology it is difficult to speak of postcolonialism without first discussing colonialism itself. This is a reflection and critique of how colonialism is ever present in a so-called postcolonial and decolonizing era.

Part 1.4: Postcolonialism: Cultures of Postcolonialism and Colonialism

Despite claims that postcolonialism in anthropology has moved beyond Eurocentric constraints, colonial models, and inadequate dichotomies, continuing to consider colonialism in relation to postcolonialism is nevertheless critical in order to examine how colonialism is currently active. Such considerations can foster new discussions about how fields like anthropology can further dissect and interrogate lingering particularities of colonialism within postcolonialism that maintain colonial agency.

While the subject of the relationship of anthropology to the colonial process, and in particular the issue of its role in promoting forms of colonial policy and practice through its generation of knowledge about subjugated peoples, has been keenly debated for some considerable time anthropological investigations of the actual cultures of colonialism are much rarer and close studies of the cultures of postcolonialism and the deep cultural dilemmas and fissures that they embody are rarer still. (Clammer 2008, 158)
In anthropology, colonial discourse on postcolonialism is a relatively untouched subject. This lack of discourse acts counterproductively against anthropology’s claims to reflexivity that would otherwise encourage postcolonial and colonial discourse. How postcolonialism and colonialism are fundamentally connected to each other are essential to discuss when examining cultures of colonialism, including their assumptions, definitions, processes, and conflicts.

While postcolonial theory has attempted to challenge binaries often favored in Western Science, the term postcolonialism acts counteractively as a singular and monolithic term, reorienting itself around the binary of colonial and postcolonial (McClintock 1992, Chambers and Curti 1996). This binary opposition situates postcolonial theory “around a binary axis of time rather than power … which runs the risk of [further] obscuring the continuities and discontinuities of colonial and imperial power” (McClintock 1992, 85-88). Faced with colonialism from the past in the postcolonial present, postcolonialism in anthropology is confronted with the challenge of recognizing and reconciling its past in order to move forward as a productive and relevant discipline.

To address the ever-present question in anthropological postcolonial theory of what defines and differentiates the binary of colonialism and postcolonialism is less of a response recognizing the difference between the two than it is an acknowledgement of their interconnectedness to each other and to colonial power and administration (Van Dommelen 2011). As an alternative to recognizing the difference between colonialism and postcolonialism, contemporary anthropological criticisms suggest anthropologists recognize how colonialist discourse undeniably influences postcolonialism; therefore, neither can be separated from the other (Trivedi and Mukherjee 1996). Considering the implausibility of their separation, colonialism’s baggage affects the way postcolonialism “is controlled, directed, and even created
by the very imperial culture it seeks to resist and replace” (Biolsi and Zimmerman 1997; Trivedi and Mukherjee 1996, 35). Acknowledging that postcolonialism is not separate from but is instead connected to colonialism means neither term is as basic as assumptions presume.

Colonialism as a term, theory, and practice is considered to be rather straightforward because it refers to strategic and documented historical events and, for the most of part, does not occur in the present. However, similar to postcolonialism, colonialism is not straightforward considering the multiplicity in which it is experienced. Because of their interconnectedness, despite postcolonialism’s efforts to move past colonialism the “overemphasis on colonialism and on colonially can curiously (re)generate precisely what needs to be criticized and surpassed” in the first place (Ribeiro 2011, 290). When considering anthropology, it is crucial to examine how the use of postcolonialism and postcolonial theory could potentially regenerate colonialism. Therefore, anthropologists must compromise with postcolonial theory and practice in order to use it against the grain, subvert it to their advantage, and deploy it to their benefit, all the while attempting to safeguard against its potentially harmful and distorting colonial tendencies of colonializing anthropological practice (Trivedi and Mukherjee 1996). In doing so, anthropologists can engage postcolonial theory and practice as intended to represent voices of the historically oppressed and include Indigenous narratives in the rewriting of history.

Discussing cultures of postcolonialism and colonialism also requires examining associated assumptions, definitions, processes, and conflicts. Colonialism comprises its own set of cultural, ethnographic, political, and economic processes and conflicts which inherently influence postcolonialism as an evolving framework (Williams and Chrisman 1994). While the “post-colonial scene” exists suspended from history as if “definitive historical events have preceded us and are not now in the making” the term itself, postcolonialism, in its singular
fashion effects a re-centering of global history around the colonial rubric (McClintock 1992, 86-87). Thus, “colonialism returns at the moment of its disappearance” and reaffirms itself regeneratively by actively or implicitly continuing to construct colonial relations (Kempf 2009; McClintock 1992, 86). After reevaluation and reflexive consideration by the field of anthropology, recognizing colonialism’s reorienting, re-centering, regenerative, and re-exclusionary consequences, there was a consequent call to address colonialism’s influence on postcolonialism. Anthropology’s call recognized the need for a parallel, yet more applied theory with the potential for mindfully undoing colonialism’s enduring influence. As a result of this call, decolonization was accordingly created and employed with the intention of holding colonialism at bay in a postcolonial era.

**Part 1.5: Decolonization: History and Theory**

While lingering colonialism should not be considered as beneficial for new forms of postcolonial theory such as decolonization, it is also imperative to clarify it was colonialism’s persistent presence which initiated the call for creation of new theories, practices, and approaches of postcolonial theory (Nicholas 2010). So far, this chapter discusses how colonialism limits anthropology from fully applying and integrating postcolonial theory and practice for its intended use: to represent voices of the colonized and to include Native American and Indigenous research methods and paradigms, Indigenous knowledge, and ways of knowing. The following section on decolonization discusses how recognizing lingering colonial agency in anthropology contributes to the reexamination of anthropology as a discipline, an undertaking which requires the consideration of variant forms of postcolonial theory.

The application of decolonization to postcolonial theory arose to address the effects of lingering colonialism including the lack of collaboration, inclusion, and involvement of Native
American and Indigenous researchers in the field, literature, and academia. Decolonization serves as the foundation for deconstructing colonialism in Western scholarship but is only part of a much larger intent to critically analyze both postcolonial practice and theory (Smith L. T. 2012). Discussing how postcolonial theory gave way to decolonization in anthropology illuminates how decolonization has led to the development of theories, practices, and approaches focused on Native American involvement and participation in research, including Indigenous research methods and paradigms, Indigenous knowledge, and ways of knowing.

“Decolonization is the intelligent, calculated and active response to the forces of colonialism that perpetuate the subjugation and/or exploitation of our [Native American] minds, bodies, and lands, and it is engaged for the ultimate purpose of overturning the colonial structure and realizing Indigenous liberation” (Yellow Bird and Waziyatawin 2012, 3). For Native Americans, anthropologists, and researchers decolonization involves dismantling postcolonialism by decolonizing literature, academia, theory, and the mind. However, as discussed earlier, the experience of the colonized is not one unified experience, narrative, or understanding. Decolonization is not experienced, explained, or regarded universally by those engaging in efforts to decolonize. These different experiences compound to challenge postcolonial theory and decolonization’s intellectual breadth and inclusion.

Decolonization is not a passive process and Native Americans are not passive recipients of decolonization. By recognizing the premise of colonization and working towards decolonization Native Americans are not relegating themselves to a status of victims. On the contrary, they are working toward transforming their communities by actively reflecting upon their community needs and taking action in order to transform them, such as in the case with SCC AL (Yellow Bird and Waziyatawin 2012). “The challenge is always to demystify, to
decolonize” and by taking part in decolonization as partners, participants, and researchers Native Americans are helping to elevate decolonization from parallel to, to equivalent to postcolonial theory (Smith L. T. 2012, 16). Another challenge and motivation of decolonization is to reclaim Native truths through Native Science and decolonized methodologies in order to transform the current passive narrative of Native Americans into a new active narrative that helps to improve the lives of Native Americans by achieving equity, inclusion, and policy changes for their communities (Cajete 2000; Campisteguy et al. 2018; Smith L. T. 2012). Decolonized research plays an integral role in the transformations Native Americans are seeking in order to change their narratives and their communities.

Native Americans are acutely aware of how research has been inextricably linked to imperialism, colonialism, and postcolonialism, as well as how they have been objectified by research in the process of Western Science subordinating their needs (McNiven 2005; Smith L. T. 2012). From postcolonial theory, decolonization emerged as a way Native Americans could contest colonialism while developing and utilizing theories, practices, and methods focused on Native American involvement and participation in research valuable to their communities. While examining the complicated relationships between postcolonialism and decolonization is a reflexive obligation for anthropology, it is not enough (Ribeiro 2011). Discussions must also be genuinely inclusive of Indigenous research methods and paradigms, knowledge, and ways of knowing in order to continue evaluating how Native Americans are partaking in decolonization by using culturally specific forms of the theory and practice.
Part 1.6: Decolonization: Indigenous Research Methods, Paradigms, Knowledge Systems, and Ways of Knowing

The recognition of the lack of Indigenous narratives, researchers, and involvement in anthropology motivated Native Americans and Indigenous peoples to push for Indigenous research methods and paradigms. This included an array of practices conducted with, by, and for Indigenous researchers and communities to challenge anthropology’s intellectual breadth, bias towards Western Science, and to broaden practice and theory while expanding knowledge systems (Atalay 2012; Barnhardt and Kawagley 2005; Cajete 2000; Nicholas 2010; Wilson 2008). While Indigenous research methods and paradigms encourage practices with, by, and for Native American and Indigenous communities they do not simply refer to or recommend research conducted by these groups. Indigenous research methods and paradigms also include “finding ways to create counter-discourse that speaks back to the power of colonialist and imperialist interpretations of the past” by both Native American researchers and non-Native American researchers (Colwell-Chanthaphonh et al. 2010, 230). By creating counter discourses, the decolonization of dominant research methods and the creation of new research paradigms helps to reclaim control over Indigenous ways of knowing (Smith L. T. 2012; Wilson 2008). These decolonized discourses regarding researchers and research methods are equally important when referring to both methods and paradigms.

“Research is one of the ways in which the underlying code of imperialism and colonialism is both regulated and realized. It is regulated through the formal rules of the individual scholarly disciplines and scientific paradigms and the institutions that support them” (Smith L. T. 2012, 7-8). While decolonization was an overarching theory and practice not necessarily focused on Indigenous methodologies, Native Americans were mindful of the impact decolonization could have on challenging Western Science (Wilson 2008). Decolonization was
the foot in the door allowing for the expression of the Indigenous research. Yet, it was not without the persistent work of Native American and Indigenous communities, scholars, and academics which allowed for social change surrounding Indigenous research and the acceptance of the scholarly production of the Indigenous research paradigm over time into mainstream theory, practice, literature, and academia (Biolsi and Zimmerman 1997; Wilson 2008).

Indigenous research methods and paradigms are significant to Native American and Indigenous peoples because they allow for changes in social relations regarding research and development of Indigenous theory, methods, and practice. Also, because they help embrace Native American and Indigenous world views, knowledge, and ways of knowing. Additionally, Indigenous research methods and paradigms support research practices with, by, and for Native American and Indigenous communities.

The advantage of methods and paradigms that encourage practices with, by, and for Native American and Indigenous communities, whether the researcher is from the community or not, is that both practice and theory are rooted in the decolonization movement by migrating Native American and Indigenous peoples closer to the focal point of research outcomes. On the other hand, the disadvantage of practices with, by, and for Native American and Indigenous communities, especially in regard to practices by researchers from Native American and Indigenous communities present as an “insider” is they may be presented with ethical and political challenges when expected to meet both research and community expectations that might compromise the quality of data, long term research goals, and their community position (Zinn 2001). Regardless, the strength of these movements is that they support Native American and Indigenous peoples as active participants instead of passive recipients of research. Research projects involving Native Americans throughout the entire research process, from design to
dissemination, hopefully continues to increase dialogue between researchers and Native American communities to support the usefulness and pertinence of Indigenous research methods and paradigms inclusive of Native American and Indigenous world views, knowledge, and ways of knowing.

As previously discussed, “actions currently being taken by Indigenous peoples in communities throughout the world clearly demonstrate that a significant ‘paradigm shift’ is under way that recognizes Indigenous knowledge and ways of knowing as complex knowledge systems with an adaptive integrity of their own” (Barnhardt and Kawagley 2005, 9). Along with this paradigm shift away from strictly Western Science and towards the inclusion and application of Indigenous research paradigms there has also been associated efforts to rearrange margins and centers by de-centering dominant Western concepts and colonialism and re-centering Indigenous peoples and their knowledge (Atalay 2006; Barnhardt and Kawagley 2005; Harrison 2008; Smith G. H. 2002). Rearranging margins by de-centering or re-centering is a significant application of decolonization because of its ability to relocate the historically oppressed into an active instead of passive role.

Similar to the multiplicity of colonial experiences or to how decolonization is not experienced, explained, or regarded universally by those engaging in efforts to decolonize, Indigenous knowledge is a varying and complex accumulation of knowledge embracing the essence of ancestral knowing, including legacies of diverse histories and cultures (Akena 2012; Dei 2008; Ribeiro 2011). This complex combination of experience and knowledge becomes even more apparent when Western Science and Indigenous knowledge systems unite or collide. When two established world views as opposing as Western Science and Indigenous knowledge systems meet, both sides must find a way to accommodate each other because neither is invalid. Western
Science has an obligation to relinquish power and allow for variation within the context of post colonialism and decolonization. Indigenous knowledge systems have an obligation to actively contribute to and participate in decolonized forms of Western Science via Indigenous research methods and new paradigms by reasserting knowledge generated from research. Through the relinquishment of power and the reassertion of knowledge Indigenous knowledge systems and ways of knowing can reform instead of reaffirm Western Science.

Indigenous knowledge and ways of knowing have the power to influence Western Science’s paradigm by rearranging its margins, managing knowledge production, legitimizing knowledge, and reclaiming ownership of knowledge. Indigenous knowledge systems and ways of knowing are also a tools in the sense they can be used as methods to manage, produce, legitimize, reclaim, and transform knowledge through the act of “speaking back” (Akena 2012, 601; Dei 2008, 6), “writing back” (Biolsi and Zimmerman 1997, 25; Smith L. T. 2012, 7) or “talking back” (Smith L. T. 2012, 7). All are strategies to unravel systematic power relations enforcing dominating forms of Western Science through conversations on decolonization.

Participating and contributing to these challenging and difficult conversations function to contest the “discursive frameworks and practices that seemingly present unquestionable ‘truths’” about Indigenous knowledge (Dei 2008). Despite the challenging, complex, and complicated nature of Indigenous knowledge systems and ways of knowing, such systems nonetheless are important and have a place in decolonization studies in academic settings, as well as in communities where such ways of knowing are relevant to the well-being of living people.
Part 1.7: Decolonization: Indigenous Education and Well-Being

To discuss Indigenous research methods and paradigms and Indigenous knowledge without consequently acknowledging the connection between research and education is a negligent action guilty of being one of the main mechanisms controlling the subjugation of information and coloniality of knowledge. To make education on colonialism a common educational subject is to push the boundaries of postcolonial perspectives and seek to expose, provoke, deconstruct, and demystify postcolonialism and decolonization (Lavia and Mahlomaholo 2012; Yellow Bird and Waziyatawin 2012). Considering education is a setting where legacies of colonialism have always been prevalent “it is only through education that it is possible to reveal and resist colonialism’s continuing hold on our imagination” (Lavia and Mahlomaholo 2012, 7). While education as a tool to resist colonialism is imperative, especially to decolonize the mind, so are efforts to research how education and knowledge are related to well-being in Native American communities. Indigenous research methods and paradigms and Indigenous knowledge hold extraordinary potential for new educational material which can be incorporated into Native American educational systems. New culturally specific educational material based in Indigenous knowledge and knowing are of great importance to Native American communities because this knowledge has the potential to change not only education in the classroom, but also individual and community well-being.

The fields of psychology, health, education, and linguistics have built a body of research and literature around how education grounded in Native American knowledge and knowing can be a determinant of well-being in its many forms. Many of the studies incorporating well-being into psychology, health, education, and linguistics indicate colonialism is a broad social determinant limiting economic, political, and social change as well as the agency essential to create change in those environments (Czyzewski 2011; Dejaeghere et al. 2016). These studies
also recognize the diverse range of active participants and influencers of community
development and well-being ranging from the individual to the community. The range of
contributors and influencers includes but is not limited to researchers, research participants,
collaborators, youth and young adults (DeJaeghere et al. 2016), policy work (Czyzewski 2011),
ethnic identity and sense of community (Kenyon and Carter 2011), community resilience and
formal education (Gram-Hanssen 2018), and language knowledge and use (Hallet et al. 2007;
McIvor et al. 2009).

The fields of psychology, health, education, and linguistics are notable because they have
made significant contributions to scholarship regarding Native American education and well-
being. Health and language research tackling colonialism in education is undeniably important.
However, studies on Native American education and well-being in relation to culture are equally
essential. The fields of anthropology and archaeology are following in the example of
psychology, health, education, and language by beginning to address how research with, by, and
for Native American researchers and communities can affect education and well-being by using
cultural or material studies to produce knowledge that connects people and communities to
knowledge, time, place, and belonging (Schaepe et al. 2017). Studies incorporating aspects of
cultural well-being into anthropology and archaeology are also examining how research “on
rather than with” Native Americans deters well-being because of its colonialism research model
(Lambert 2014, 14). This knowledge of colonial culture and history can serve as a powerful
educational tool when creating Native American educational programs or curriculum
counteracting cultural stress and contributing to cultural confidence (Lavia and Mahlomaholo
2012; Schaepe et al. 2017). Since research and literature on anthropology and archaeology’s
relationship with Native American education and well-being is not as developed or robust as the
fields of psychology, health, education, and linguistics not as much is known about what impacts these fields have on various forms of well-being. However, existing studies suggest research with, by, and for Native American researchers and communities have the potential to improve individual and community well-being and promote “recovery from the destructive emotional, behavioral, and political effects of colonial domination” (Frank et al. 2008, 430; Schaepe et al. 2017). In doing so, these existing studies are making connections between how research with rather than on Native American communities promotes well-being in its many forms, including educational, cultural, and economic.

The field of cultural heritage, on the other hand, has not made connections to how education grounded in Native American knowledge and knowing can be a determinant of well-being like the other notable fields of research. Nor has cultural heritage begun to address how research with, by, and for Native American researchers and communities can affect education and well-being as anthropology and archaeology have. However, within the realm of cultural heritage there is recent research expressing interest in the effects of cultural heritage management education programs focused on conservation and preservation on Native American communities. Studies on cultural heritage management education programs are rooted in postcolonialism and decolonization and focus on empowering Native American communities through culturally specific forms of education. These studies stress the importance of traditional and cultural knowledge and how education has both tangible and intangible outcomes for Native American communities.

According to these studies, Native American communities are affected by cultural heritage management education programs by empowering youth through knowledge, cultural leadership, and landscape management (Guilfoyle et al. 2019) as well as integrating traditional
ecological knowledge with Western Science and mentoring or training opportunities (Carr et al. 2017). While there is interest in programs in cultural heritage management education programs, such as SCC AL, concerned with preservation and conservation of tangible and intangible forms of culture, those interests have not yet extended to the examination of the affects cultural heritage has on Native American well-being. Cultural heritage encompasses tangible materials such as artifacts, architecture, monuments, cities, and whole landscapes as well as intangible qualities such as language, traditions, practices, rituals, ceremonies, and knowledge among other intangible aspects of culture (Torre 2013). As a process, cultural heritage is complex, on-going and “includes the identification and valorization of heritage, and determines how it is used, cared for, interpreted, and by whom and for whom” (Torre 2013, 157). For the purpose of this thesis, those identifying heritage are cultural resource managers and the subject of interpretation is Native American tangible and intangible cultural heritage.

In anthropology and archaeology, cultural heritage projects are often conducted within the context of CRM laws and associated settings that requires consultation, if not outright inclusion, of public involvement and input. While CRM laws “stress public benefit and require public involvement, there are few good examples of either in relation to the volume of CRM projects” (Praetzellis and Praetzellis 2011, 87). Even though public engagement, involvement, collaboration, education, and an obligation to disseminate research to the public are all mandated by CRM laws, there seems to be a disconnect between law and action. CRM inherently has the potential to influence Native American education and well-being by involving, educating, and engaging the public, especially because of CRM’s inherent connection to the fields of anthropology and archaeology both of which are increasing their efforts to involve Native American communities. But in reality, CRM falls short.
The fields of psychology, health, education, linguistics, anthropology, and archaeology, are all engaging in innovative and inclusive research supporting education and knowledge related to well-being in Native American communities, as displayed in Table 2.1 below. However, CRM has not followed suit. Instead, researchers and cultural resource managers have been reluctant to look closely at their own personal values within CRM, as well as opposing values, further disconnecting law and action and preventing discourse on education and knowledge as they relate to Native American well-being (Byrne 2008b). Even though CRM is constructed to involve, collaborate, and educate the public, it has not recognized how Indigenous research methods and paradigms and knowledge have the potential to influence Native American education and well-being. While the following examples of research listed in Table 2.1 on well-being are not directly related to cultural heritage or CRM, they are used to show how cultural heritage as a field and cultural heritage oriented programs, such as SCC AL, have the potential to promote well-being. SCC AL is an especially pertinent example of how cultural heritage oriented programs can support research with, by, and for Native American communities to create research and educational opportunities grounded in Native American knowledge and knowing with the intention of promoting well-being.
<table>
<thead>
<tr>
<th>Author</th>
<th>Field of Research</th>
<th>Determinant of Well-Being</th>
<th>Form of Well-Being Effected by Determinant</th>
<th>Study Population</th>
<th>Related SCC AL Quality with Potential to Promote Well-Being</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenyon and Carter 2011</td>
<td>Psychology</td>
<td>Ethnic Identity, Sense of Community</td>
<td>Psychological</td>
<td>Northern Plains American Indians</td>
<td>Sense of community, tribal specific programs, incorporates traditional culture and language</td>
</tr>
<tr>
<td>Czyzewski 2011</td>
<td>Health</td>
<td>Colonial Relations, Policy Work</td>
<td>Mental Health</td>
<td>Indigenous people of Canada</td>
<td>Postcolonial and decolonized program model</td>
</tr>
<tr>
<td>Dejaeghere et al. 2016</td>
<td>Education</td>
<td>Youth Agency, Collaboration</td>
<td>Life Value</td>
<td>Global Youth and Young Adults</td>
<td>Youth and young adult program, collaborative program</td>
</tr>
<tr>
<td>Gram-Hanssen 2018</td>
<td>Education</td>
<td>Formal Education, Community Resilience</td>
<td>Empowerment, Sense of Belonging</td>
<td>Alaska Native Community</td>
<td>Sense of community, tribal specific programs, meaningful conservation projects</td>
</tr>
<tr>
<td>McIvor et al. 2009</td>
<td>Education</td>
<td>Language and Culture Use</td>
<td>Health, Wellness</td>
<td>Indigenous people of Canada</td>
<td>Incorporates traditional culture and language</td>
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<tr>
<td>Hallet et al. 2007</td>
<td>Linguistics</td>
<td>Language Knowledge</td>
<td>Mental Health</td>
<td>Aboriginal people of Canada</td>
<td>Incorporates traditional culture and language</td>
</tr>
<tr>
<td>Schaepe et al. 2017</td>
<td>Archaeology</td>
<td>Community-Based Archaeology, Heritage</td>
<td>Individual and Communal Health and Well-Being</td>
<td>Salish Descendent Communities</td>
<td>Operates community-based service programs, rooted in the culture and heritage of local tribal communities</td>
</tr>
</tbody>
</table>

Table 2.1: Examples of research on well-being in psychology, health, education, and linguistics with related qualities to cultural heritage and SCC AL which have the potential to promote well-being (Table by Author 2019)

Cultural heritage is rooted in conservation and preservation and came to be as a response to growing interest by both the professional and public realm in protecting, managing, and interpreting memories and the past. Heritage is not a thing or a historical or political movement but refers to a set of attitudes and memories of relationships with the past (Harrison 2013). The emergence of memory as a crucial concern in Western societies is one of the key cultural and political (and later on economic) phenomena of the late twentieth century giving rise to emerging memory discourses in the 1960s as a response to decolonization (Harrison et al. 2008). Memory as a concern then became attached to tangible objects and the act of preserving and conserving materiality in a “forcible act of not forgetting” (Harrison et al. 2008, 2). Through the process of not forgetting, intangible memories from the past became transposed onto tangible objects and places in the present.

Through transposition, material objects and places began to be imbued with individual and collective importance, or heritage, societies felt needed to be protected. The materiality of the past became an integral way the public could understand, interact, and interpret the past by protecting objects and places they felt were important (Harrison et al. 2008). The creation, conservation, and preservation of tangible material objects or places and intangible experiences or memories are not neutral processes. The processes of conservation and preservation in heritage “can be seen to be far more than neutral activities, but ones that are charged politically” especially in terms of ownership and interpretation (Harrison et al. 2008, 7). Cultural heritage is both tangible and intangible. Tangible and intangible heritage is created because the memories associated with them are significant to a collective memory or group of people in a society who generally agree the heritage of interest has historical or contemporary importance and want to take ownership of its interpretation.
Heritage manifests in countless forms due to its wide range of scale and form. However, not all tangible and intangible heritage can be protected, managed, or interpreted due to limited preservation and conservation resources. This means heritage must be selected for based on its cultural importance, historical or contemporary significance, and need for protection. By being selective, cultural heritage becomes complicated and reminiscent of colonialism by nature. By being inherently selective heritage should also “be seen as a discourse that is mobilized for different social and political ends,” as well as economic ends (Harrison 2013; Harrison et al. 2008, 7). Similar to how postcolonialism raises questions surrounding what period of time it refers to, where it comes from, what it is used for, and who it effects, cultural heritage raises questions such as: Whose heritage? Heritage for who? What heritage to conserve? Who is the authority of heritage?

Another similarity between postcolonialism and cultural heritage is both terms have constantly evolving definitions, practices and theories according to a constantly evolving framework with connections to the past, present, and future (Harrison 2013). Postcolonialism’s “multiplicity of colonial experiences,” does not support a universal understanding or use of postcolonialism (Dei 2000; Liebmann and Rizvi 2008, 36; Ribeiro 2011), while cultural heritage as a concept integrates memories of a wide range of scale and form is constantly evolving while always maintaining a level of ambiguity and uncertainty (Davison 2008; Harrison 2013). Relations between postcolonialism and cultural heritage are rooted in decolonization efforts that tackle tangible and intangible culture, memory discourses, and lead to conversations on knowledge such as where it comes from, who it belongs to, and how to manage it.

From cultural heritage, cultural resource management (CRM) developed as a system for cultural resource protection and management as a result of the “very rapid accumulation of
archaeological and historical site information and collected artifacts following enactment of a series of federal and state historic preservation laws since the 1960s” (Jameson 2008a, 42). In fact, “most of the CRM currently performed in the United States is a direct result of compliance with the NHPA [as] this mandate was a major catalyst in the development of tribal programs” such as historic preservation programs in the 1970s and 1980s” (Hatton and Macmanamon 2003, 266, King 2013). CRM was invented and solidified by cultural resource managers in the NPS and other federal agencies in the 1970s. This is also when the NPS embarked on an “ambitious program of public involvement and civic engagement explicitly geared to the use of heritage sites to inform the public on contemporary issues” (Kerber 2006; Praetzellis and Praetzellis 2011, 86). Recognizing CRM involved working with multiple stakeholders brought attention to the importance of consulting with Native Americans in the management of cultural resources. The 1980s “saw a dramatic rise in Indian tribal participation in governmental cultural resource management” as Native Americans started to become major players in NHPA and Section 106 litigation (King 2013, 27). As a result, NHPA mandated collaboration, consultation, and compliance became foundations of CRM that began to, and continue to, shape the field by establishing relationships between Native Americans and cultural resource managers.

CRM is a system for cultural resource protection and management and can also be understood as “encompassing the traditionally recognized legal compliance requirements with an infusion and increased emphasis on inclusiveness in education and interpretation efforts” for public and scholarly informational purposes (Jameson 2008a, 42; Kerber 2006; Praetzellis and Praetzellis 2011). Thus, one of CRM’s obligations to its innumerable stakeholders for any undertaking, including Native American communities, is public education, interpretation, and outreach. As previously mentioned, while CRM has foundations in collaboration, consultation,
and compliance supportive of Indigenous research methods and paradigms and knowledge, CRM has not yet applied its resources to useful and relevant research addressing Native American communities needs and interests. However, new federal mandates incorporating Native Americans as integral participants in CRM are enabling the definition and use of cultural heritage to broaden “from a focus on objects, features and architectural elements to less tangible items such as ‘place’, or ‘setting,’ or ‘traditional cultural property’” (Jameson 2008a, 54). This expansion of heritage, both tangible and intangible, and inclusion of Native American input and culture into CRM is an improvement bringing CRM closer to its foundations and obligations.

Cultural heritage and CRM have yet to meet their expectations or potential for usefulness to Native American stakeholders and communities. Regardless, there are many ways in which Native American communities are utilizing decolonized cultural heritage practices in culturally specific ways. For Native American communities, postcolonial and decolonized forms of cultural heritage are currently manifesting in culturally specific forms of CRM, value-based management, CBPR, and community education for well-being. These culturally specific forms of CRM are significant because they can be used to address Native American communities needs and interests to promote community benefit and betterment, such as in the case with SCC AL.
Part 2.1: Cultural Resource Management: Useful and Relevant Qualities to Native American Participation, Education, and Well-Being

With the development of the values-based approach to CRM in the 1980s other values besides research that reflected an academic bias started to be taken into consideration (Poulios 2010). Values-based management takes into consideration values such as ethics and morals, more specially it addresses cultural values referring to shared meanings, collective memories, cultural affiliations, and symbolic meanings (Scheld et al. 2014). The inclusion of cultural values in CRM conversations gave way to Indigenous knowledges previously considered unrelated to academic research or deemed incompatible with Western Science and qualitative measures. This is of importance to Native Americans because they can utilize value-based management to assert themselves as active participants and managers of not only their cultural heritage, but also the interpretation of their cultural knowledge.

“In all societies a sense of well-being is associated with the need to connect with and appreciate heritage values” (Jameson 2008b, 430). Cultural heritage work in value assessment gives way to diversified typologies including value categories such as “aesthetic, archaeological or scientific, economic, educational, historic, spiritual/religious and recreational” contributing to more comprehensive conversations on the connection of well-being and heritage (Byrne 2008a, 150). The development and adoption of values-based management strategies has also “resulted in the more democratic and far ranging treatments of cultural heritage involving comprehensive assessments based on input from a broad range of stakeholders” (Jameson 2008b, 429; Poulios 2010). Value-based management creates a space within CRM where Indigenous knowledge can contribute to cultural and community values and become part of the conservation, preservation, and management processes.
Although the Indigenous research paradigm does not only refer to research being done by Indigenous peoples, one of the main proponents of the Indigenous research paradigm is reclaiming control over Indigenous knowledge and ways of knowing through the promotion of collaborative work with Native American and descendent communities. Such collaborations have wrought a “genuine synergy where the contributions of community members as scholars create a positive result that could not be achieved without joining efforts” (Colwell and Ferguson 2008, 1). Through these joined efforts Native American community members have found a way to communicate, contribute, and achieve goals through community-based participatory research (CBPR).

Indigenous research methods and paradigms and Indigenous knowledge combine into CBPR by utilizing and focusing on research oriented collaborative practices. Chronologically, Indigenous research methods and paradigms were the product of decolonization’s critical analysis of postcolonialism, where CBPR derived from efforts to provide Indigenous research methods and paradigms with methodologies and a formal approach to involve Native American, Indigenous peoples, and descendent communities in the research process (Atalay 2012). CBPR operates by developing consultation and collaboration between researchers, descendent communities, and stakeholders. CBPR also drives debates moving anthropological research “in positive, new directions toward creating a discipline that is sensitive to, and harmonious with, the concerns and goals of Indigenous peoples and descendant communities” (Atalay 2006, 290). CBPR elevates obligatory collaboration, consultation, and compliance by applying community-based research methods that engage community participation to generate equitable research projects and results, such as this collaborative research project with SCC AL.
CBPR is descended from earlier community-based research efforts but extends past these earlier practices by stressing the importance of providing a method for communities and researchers to engage the community in research and to work together with the common goal of creating respectful research designs to engage sustainable change and benefit both entities as equal partners (Hacker 2013; Kyoon-Achan et al. 2018; Lambert 2014; Minkler and Wallerstein 2008; Stump 2013). CBPR promotes collaborative research methods by offering ways for historically oppressed groups of people to make their voices heard and demand “equality and the ability to take an active role in effective change and improvement in their own communities” (Atalay 2006, 298). CBPR draws on theoretical and methodological arguments in Native American and Indigenous studies and provides a methodology and approach to move the discussion of decolonization forward (Atalay 2012). In this way, community-based strategies such and CBPR continue to decolonize related fields of study such as anthropology, archaeology, cultural heritage, and CRM.

The field of cultural heritage has yet to make concrete connections articulating how education grounded in Native American knowledge and knowing can foster well-being. This could be partly due to how postcolonialism and cultural heritage are both terms that have constantly evolving definitions as cultural heritage and well-being are both terms used differently depending on what context of field or research they are being applied to. Nevertheless, studies and programs utilizing concepts such as cultural heritage, education, and well-being are becoming increasingly common. Considering that these studies incorporate education, they frequently focus on the role of youth or young adults in educational settings. Native American educational models, such as those used by SCC AL, are utilizing decolonization studies “informed by Indigenous theory, history, epistemology, and futurity” and are seeking to
regenerate ways of knowing and research to craft educational for Indigenous peoples, by Indigenous peoples (Smith, L. T. 2018, xl). Native American youth and young adults play a large role in creating educational spaces because they are actively influencing the development of community, identity, and well-being which consequently shape and re-generate these spaces.

Youth and young adults demonstrate their influence and agency not only in how they change or navigate their lives but also in how they understand and respond to cultural forces in which they are situated and construct their identities (DeJaeghere et al. 2016). By constructing their own identities youth and young adults also contribute to cultural and community identity shaping educational spaces. Just as educational spaces are constantly generating and changing based on the construction of identity, well-being is dynamic in nature because of how it changes in accordance with real-world forces effecting applicability and functionality (DeJaeghere et al. 2016; Dodge et al. 2012). Therefore, in generating educational spaces, Native American youth and young adults contribute to their individual success as well as their communities by supporting empowerment, resilience, and well-being aligned with community needs.

Culture, identity, and language studies are of interest when it comes to Native American youth and young adults, especially because these areas of study are producing quantifiable research examining the relationships between health and well-being. Similar studies examining possible parallels between well-being and education are not as common. While education is frequently mentioned in studies on health and well-being, education is usually written off as a secondary variable with complimentary instead of direct influence on well-being. Decolonization studies in Native American education are useful to address because of their potential implications for supporting educational models and spaces which facilitate individual and community well-being. Decolonizing studies apply CBPR and culturally specific forms of
decolonization to create educational research capable of continuing to decolonize education by incorporating Indigenous knowledge systems and ways of knowing (Smith, L. T. 2018). This is of relevance to Native American communities because although current research in education and well-being lack measurable variables by Western Science standards, decolonizing studies may be able to examine the relationship between education and well-being to produce measurable variables more aligned with Indigenous research methods and paradigms.

Complexities regarding measurables are a common theme throughout this thesis. Beginning with postcolonialism definitions, usages, and experiences are obscured by convoluted applications of the term. To add to this convolution, colonialism and decolonization are complex terms explained and applied circumstantially according to who is choosing to apply their practices or theories. Cultural heritage further underwrites definitions with its conceptual nature of constantly evolving while simultaneously maintaining ambiguity and uncertainty. Due to these complexities, convolutions, and ambiguities culturally specific forms of postcolonialism and decolonization in Native American management, participation, and education need to actively shift away from presumed generalities.

Instead these forms of postcolonialism and decolonization need to confront the challenge of creating culturally specific terms to fit their needs of measurables and definitions. By doing so, adjusting for conditions where Indigenous research methods and paradigms and Indigenous knowledge and ways of knowing can create diverse, flexible, and culturally appropriate and competent definitions. These new definitions would then have the applicability and ability to create the research environments and educational opportunities needed to directly impact the well-being of Native American communities.
Chapter 3: Collaborative and Interpretive Methods

I think that this [survey] will be a great resource for us and our partners, we are supportive of sending this survey out to our adult participants. Thank you for considering us and partnering with us.
- Chas Robles, Southwest Conservation Corps Ancestral Lands Regional Director, 2018

As previously discussed, the application of decolonization to postcolonial theory arose to address the effects of lingering colonialism including lack of collaboration, inclusion, and involvement of Native American and Indigenous researchers in planning, design, fieldwork, publication/dissemination, and education-oriented, academic programs. The Southwest Conservation Corps Ancestral Lands (SCC AL) Program is an example of how Native American Conservation Corps programs are addressing the lack of research and Native American involvement in the field by providing opportunities for young adults to participate in conservation and preservation projects on Native and public lands. To compliment SCC AL’s efforts to address the lack of Native American involvement in the field, this thesis employs Indigenous research methods and paradigms that encourage practices with, by, and for Native American communities in research and academia.

A priority for this thesis is to engage in collaborative research and methods where the researcher and community work together with a common goal of creating respectful research designs and results to promote sustainable change and equitable benefits for both partners (Kyoon-Achan et al. 2018; Lambert 2014; Minkler and Wallerstein 2008; Stump 2013). Indigenous research methods encourage practices with, by, and for Native American communities (Atalay 2012). However, research does not have to be done only by Native Americans or Indigenous researchers, it can also be done by outside researchers for and with Native American communities. This thesis is guided by Indigenous research methods and
intentions to produce an equitable and collaborative research project that supports SCC AL’s program model and growth. These intentions, and their associated efforts, are reflected in the collaborative and interpretive methods throughout this chapter.

Part 1: Collaborative Methods: Foundation and Background

While this thesis research was not mandated by cultural resource management (CRM) law procedures, it builds on the potential of CRM to benefit collaborative and equitable research. More specifically, the methods used to carry out this thesis drew from CRM examples that emphasize the importance of meaningful rather than procedural consultation. By doing so, the voluntary nature of consultation is deepened beyond procedural consultation or legislated ethics to substantially address the concerns of those being consulted with (Ritchie 2013; Silliman and Ferguson 2010).

In Native American and Indigenous languages there is often “no word that has a similar concept to the English word ‘research’” and as previously discussed, from the vantage point of the colonized “the term 'research' is inextricably linked to European imperialism and colonialism” (Lambert 2014, 13; Smith L. T. 2012, 1). By acknowledging cultural and epistemological contrasts between Western Science and Native Science this thesis aims to recognize and alleviate decolonization, cultural heritage, and CRM’s connections to colonialism by using research methods supportive of decolonized methodologies, Indigenous ways of knowing, community-based participatory research, and research equitability (Atalay 2012; Cajete 2000). Conducted in partnership with SCC AL, the research carried out in this thesis was heavily influenced by decolonizing methodologies and applying a decolonizing lens to data gathering and analysis, with an emphasis on decolonizing methodologies representing the types of CRM “best practices” that assist in the creation of a cultural heritage-oriented collaborative
The methods implemented to address the overall thesis objectives, uphold the spirit of collaboration, and contribute to the theoretical and practical issues noted in the literature review, were subsequently borrowed from Nissley and King’s (2014) best practices in consultation and inspired by their practical approach to the following: consulting, seeking, discussing, considering, and seeking agreement. These terms are defined in Table 3.1.

<table>
<thead>
<tr>
<th>CRM Best Practices in Consultation, Brief Definitions</th>
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<tbody>
<tr>
<td>Consultation</td>
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<tr>
<td>formulation, scoping, data gathering and analysis, making decisions, implementation, continuity</td>
</tr>
<tr>
<td>Seeking</td>
</tr>
<tr>
<td>building relationships, determining when to start, considering differing interests, sharing information</td>
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<tr>
<td>Discussing</td>
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<tr>
<td>correspondence, setting up meetings, preparing yourself for professional communication, documentation</td>
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<tr>
<td>Considering</td>
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<tr>
<td>addressing alternatives, accommodating, accessibility</td>
</tr>
<tr>
<td>Seeking Agreement</td>
</tr>
<tr>
<td>negotiating, consent, delivering</td>
</tr>
</tbody>
</table>

Table 3.1: CRM Best Practices in Consultation, Brief Definitions (Nissley and King 2014) (Table by Author 2019)

Additionally, CRM methods related to value-based management and community-based participatory research were also used here because it was equally important for this thesis’ methods to reflect the collaborative, value-based, and community-based program models associated with both SCC AL and CRM, while also remaining grounded in research on Native American cultural heritage programs. SCC AL and CRM terminology equivalents are defined in Table 3.2. The intent of drawing methods was to ensure that this thesis had/has relevance to the growing body of research connecting Native American studies, cultural heritage values, and CRM.
<table>
<thead>
<tr>
<th>CRM</th>
<th>SCC AL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultation, Collaboration</td>
<td>Collaborative</td>
</tr>
<tr>
<td>Value-Based Management</td>
<td>Value-Based</td>
</tr>
<tr>
<td>Community-Based Participatory Research</td>
<td>Community-Based</td>
</tr>
</tbody>
</table>

Table 3.2: SCC AL and CRM Terminology Equivalents (Table by Author 2019)

The intention to collaborate with SCC AL from the beginning/planning phase of this project is something that heavily influenced the development of this research during all stages of this thesis. Given this interest and intent to collaborate with SCC AL, it was necessary to subscribe to the community-based participatory research models (e.g., as demonstrated by Atalay 2012). As a result of these research foundations, the questions being asked at the beginning of this research were different than the final questions being asked and examined in this thesis. For example, because question development was due to the use of CRM qualities emphasizing meaningful consultation, the collaborative nature of this research project, and working with a community-based participatory research model, SCC AL was asked to review the first draft of the survey questions. As a result, the Southwest Conservation Corps Ancestral Lands Adult Program Online Participant Survey (SCC AL Survey) itself was revised to better accommodate the research values and interests of both SCC AL and this thesis, but also to ensure the SCC AL Survey aligned with the SCC AL program model’s long term plans and growth. The development of this research project’s questions and corresponding survey are explained in the following sections on methods used to create the SCC AL Survey.
Part 1.1: Beginning Stages: Southwest Conservation Corps Ancestral Lands Adult Program Online Participant Survey

Research interests for this thesis derived from inquiries extending beyond the research capacity of the NPS satisfaction survey created for a visiting SCC AL crew at CAGR during the Summer of 2017. From the 2017 NPS satisfaction survey, interests in the SCC AL program grew to include questions on why SCC AL participants valued their time with the program and how cultural heritage-oriented programs, such as SCC AL, benefited participants. This interest and growing list of additional questions led to the pursuit of a collaborative research project with SCC AL that resulted in the creation of the SCC AL Survey as an integral component of this thesis. The motivation behind this thesis and SCC AL Survey was [and still is] not only to contribute to the growing body of research making connections between Native American cultural heritage and CRM, but also to produce substantial academic and applied research useful to SCC AL that contribute to their program model and growth.

Considering the interests in constructing a thesis that could investigate a collaborative process, capable of producing equal ways of examining the SCC AL program from the perspective of both the organization and the participants in the program, the intent from the beginning was to ensure methods-based decisions were collaborative actions in their own right. Thus, before contacting SCC AL to propose a collaborative research project, a proposal to submit to SCC AL was prepared, requesting their permission to proceed and detailing the vision(s) of how this research might benefit their program.

From working at CAGR and creating the NPS satisfaction survey, observations were made on how surveys could be a productive tool for gathering information on visiting SCC AL crews. However, because the developing research questions of interest could not be answered by a quantitative satisfaction survey alone, a mixed methods survey capable of accommodating in-
depth research questions and interests was more suitable. To answer these questions, it became apparent more substantial responses in greater quantities would need to be gathered than what could be collected by administering the survey personally to visiting SCC AL crews at Glen Canyon National Recreation Area (GLCA) during the summer of 2018, similar to what was done during the summer of 2017 at CAGR. While personal administration of surveys worked at CAGR, to answer the questions related to this thesis a larger more accessible format, more responses from SCC AL participants, and a platform supportive of a mixed methods survey were necessary. Examples of the mixed methods necessary for this collaborative research undertaking are outlined in Table 3.3 below.

<table>
<thead>
<tr>
<th>Mixed Methods Qualities Accommodating of Research Questions and Interests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collects and analyzes persuasively and rigorously both qualitative and quantitative data (based on research questions)</td>
</tr>
<tr>
<td>Mixes (or integrates or links) the two forms of data concurrently by combining them (or merging them), sequentially by having one build on the other, or embedding one within the other</td>
</tr>
<tr>
<td>Gives priority to one or to both forms of data (in terms of what the research emphasizes)</td>
</tr>
<tr>
<td>Uses these procedures in a single study or in multiple phases of a program or study</td>
</tr>
<tr>
<td>Frames these procedures within philosophical worldviews and theoretical lenses</td>
</tr>
<tr>
<td>Combines the procedures into specific research designs that direct the plan for conducting the study</td>
</tr>
<tr>
<td>Addresses the need to employ a theoretical stance</td>
</tr>
<tr>
<td>Considers how a one or multiple theoretical perspectives can guide an entire research design</td>
</tr>
</tbody>
</table>

Table 3.3: Mixed Methods Qualities Accommodating of Research Questions and Interests (Creswell 2009, 208; Creswell 2011, 5) (Table by Author 2019)

In the beginning stages of creating the SCC AL Survey it was decided due to the nature of the SCC AL crew participants and program structure the SCC AL Survey should be selectively administered to SCC AL adult crew participants only. The main issue that influenced
this decision was the fact that informed consent was required for SCC AL young adult and adult crews who were often traveling to work in locations away from their home and parents, which impacted the logistics and timing associated with obtaining informed consent. Since SCC AL young adult crews consisted primarily of participants ages 14-18, their participation in the SCC AL Survey would require parental consent. Parental consent from SCC AL young adult crew participants who were traveling and working in locations away from their home and parents was neither convenient nor plausible. Therefore, it was decided the SCC AL Survey would be created specifically for adult crew participants because as adults aging from 18-30, they were able to consent to taking the survey for themselves.

To reach as many SCC AL adult crew participants as possible and to gather substantial responses in greater quantities than what could be gathered by administering the survey in person, it was decided the SCC AL Survey was best suited as a web-based survey. A web-based survey was not only convenient but advantageous because it could collect data rapidly in a cost effective manner, provide ample time to the respondents, support confidentiality and security, and reach the desired research population for the data analysis (Rea 2005). The web-based survey also allowed for completed surveys to be stored on a secure online server. Most importantly, the web-based survey was most appropriate because it had potential to be flexible and collaborative in how it could be created, shared, and administered.

After determining the research population, deciding on a web-based survey and considering both research and survey needs essential to create a more accessible, response encouraging and supportive survey, it was decided the Qualtrics Survey Software would be used because of its accessibility, user-friendliness, and its mixed methods research capabilities. Once the Qualtrics Survey Software was selected both qualitative and quantitative research questions
underpinning the research questions were designed. At this point, SCC AL had not been contacted. Before contacting SCC AL about a collaborative research project, a first draft of the SCC AL Survey ready for sharing, discussion, and collaboration needed to be created.

**Part 1.2: Preparation: First Draft of Southwest Conservation Corps Ancestral Lands Adult Program Online Participant Survey**

When creating the first draft of the SCC AL Survey, designing and conducting a mixed methods research survey inclusive of a variation of multiple choice and short answer response questions with the potential for “multiple ways of seeing” was critical for addressing multiple interests and research needs (Creswell 2011, 4). Multiple ways of seeing was important to the mixed methods design because both SCC AL and this thesis interests would need to be included in the SCC AL Survey. Knowing the SCC AL Survey would not be offering incentives and was completely voluntary, creating a survey of an appropriate length and time investment that would not discourage responses was also important. Lastly, when creating the first draft of the SCC AL Survey it was important to consciously kept in mind questions addressing the research values and interests relevant at the time on SCC AL and NPS satisfaction, SCC AL’s influence on college and career decisions, cultural heritage, anthropology, and archaeology. While simultaneously trying to keep in mind how these questions reflected the collaborative, value-based, and community-based program models of SCC AL, as well how the responses to these questions could support their program model and growth. However, for the SCC AL Survey to be useful for both this thesis research and SCC AL, it needed to first be effective.

Prior to creating the first draft mindful thought was put into the effectiveness of the SCC AL survey by targeting a reasonable research population and using an accessible and user-friendly format capable of mixed methods research. When developing a mixed methods research
design that included multiple choice and short answer response survey questions effectiveness was also kept in mind by keeping the SCC AL Survey as “concise as possible while still covering the necessary range of subject matter required in the study” (Rea 2005, 46). This meant being careful to “resist the temptation of developing questions that may be interesting but are peripheral or extraneous to the primary focus of the research project” (Rea 2005, 46). Using Qualtrics, the first draft consisted of 17 multiple choice and 1 ranking question for a total of 18 close ended questions, along with 3 short answer and 1 comments section, for a total of 4 open ended questions, with an overall total of 22 questions taking approximately 10 minutes to complete. Questions for the SCC AL Survey were designed by defining conceptual and constructive variables according to research questions and objectives (Gideon 2012). Defining the variables, (which at the time were SCC AL and NPS satisfaction, SCC AL’s influence on college and career decisions, cultural heritage, anthropology, and archaeology) conceptually and constructively according to research objectives and questions was important to support the research goal and variables being examined during the analyses of survey responses.

While designing the questions for the first draft of the SCC AL Survey, the length, time investment, fluidity, and format needed to be taken into consideration as it would be directly related to the response rate considering the survey was voluntary and would not be offering incentives. Considering the length of the survey was an intentional effort to mitigate respondent reluctance towards a lengthy or tedious survey, “thereby jeopardizing the response rate” (Rea 2005, 46). At 22 questions long, a majority of the questions being multiple choice, and taking approximately 10 minutes, the first draft of the SCC AL Survey was not considered to be excessively cumbersome in a discouraging way. However, to further ensure the length would not discourage participation, the SCC AL Survey was formatted into sections as well. On Qualtrics,
the 22 questions were separated into blocks of related questions. The 22 questions were arranged according to a logical flow or sequence to avoid confusion and to have questions build upon each other (Gideon 2012; Rea 2005). The question blocks followed a logical flow and consisted of Introduction and Instructions (consent form), Preliminary Questions (1-3), National Park Service Questions (4-10), Ancestral Lands- Southwest Conservation Corps Questions (11-18), and General Questions (19-22). In order to be further effective, repetitiveness was avoided, consistency in vocabulary was maintained, simple and direct language was used, and technical jargon was clarified when present.

When developing the SCC AL Survey questions using conceptual and constructive variables in accordance with research questions and objectives, efforts were made to keep in mind how questions could simultaneously reflect SCC AL’s collaborative, value-based, and community-based program models. Throughout this process, if the intention was to partner and collaborate with SCC AL on this thesis, variables affecting participation and response rate of the survey, as well as how to create a survey and questions supportive of SCC AL’s program model and growth, had to be properly considered. As previously mentioned, the intention of this research project was to construct a thesis capable of producing equitable research considering the interests of both SCC AL and this thesis. This product was impossible without support of and collaboration with SCC AL.

Two underlying theories to why respondents participate in surveys are 1) commitment or involvement and 2) reciprocity. The commitment or involvement theory suggests “a person who is highly committed to an activity, such as responding to survey requests, is less likely to terminate the activity than one who is uncommitted” (Albaum 2012, 188). The reciprocity theory fits within the domain of social exchange theory suggests positive actions are responded to with
another positive action (Albaum 2012). By creating a relatable survey and questions, then blending them with the interests of this thesis, the SCC AL Survey was expected to reflect commitment, involvement, and reciprocity towards SCC AL, as well as to serve as a foundation for an equitable and collaborative research project which would encourage SCC AL to work in partnership with this thesis. Table 3.1 below demonstrates the rational used to ensure the SCC AL Survey questions appropriately addressed both SCC AL’s and this thesis’ values and interests.

<table>
<thead>
<tr>
<th>Block</th>
<th>Question</th>
<th>Satisfaction with SCC-AL as a program</th>
<th>How/If working with SCC-AL is influencing decisions on college and careers</th>
<th>Cultural Heritage, Anthropology, and Archeology</th>
<th>SCC-AL Education</th>
<th>Satisfaction with NPS sites visited on assignment</th>
<th>How/If working with SCC-AL inspires pursuits of future opportunities with the NPS</th>
<th>SCC-AL Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary Questions</td>
<td>1</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>National Park Service Questions</td>
<td>2</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Ancestral Lands-Southwest Conservation Corps Questions</td>
<td>3</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>General Questions</td>
<td>4</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Table 3.4: Southwest Conservation Corps Ancestral Lands Adult Program Online Participant Survey first draft research values and interests with their associated questions (Table by Author 2019)

Once the first draft of the SCC AL Survey was complete, collaboration with SCC AL began with initial communication via email by contacting Chas Robles (Mr. Robles), who at the time was the SCC AL Program Director, and Anthony Ciocco (Mr. Ciocco), the SCC AL Program Coordinator. The initial email to Mr. Robles and Mr. Ciocco included an introduction, reported on this thesis’ research topic and the draft survey progress, and inquired if they would be interested in collaborating by having SCC AL participants take part in the SCC AL Survey. Shortly after the initial communication email was sent, a response was received from Mr. Robles expressing the positive reaction that SCC AL would be happy to have their participants take part in the SCC AL Survey. Mr. Ciocco did not respond and was not part of correspondence during the remainder of the project.

At this point, following the direction of Nissley and King’s (2014) best practices in consultation, documentation began by recording correspondence and communication with SCC AL using a timeline to note dates, actions taken, and personal spoken to, this timeline is located in Appendix A. Once word was received from SCC AL about their interest in the SCC AL Survey and collaborating on this research project, email correspondence continued by sending the first draft of the SCC AL Survey to SCC AL for review. After SCC AL had time to review the SCC AL Survey, a phone call meeting was scheduled with Mr. Robles to discuss edits, suggestions for additional questions, questions of particular interest, and how the survey could best support their program model and growth. During the phone call meeting, Mr. Robles expressed the following edits, suggestions, and questions of particular interest, which are detailed in Table 3.5 below.

---

2 When initially contacted in April 2018 Mr. Robles was the SCC AL Program Director. In August 2019 Mr. Robles transitioned into the SCC AL Regional Director position. For the remainder of this thesis Mr. Robles is referred to as the SCC AL Regional Director.
<table>
<thead>
<tr>
<th>SCC AL Edits, Suggestions for Additional Questions, and Questions of Particular Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SCC AL Survey Edits</strong></td>
</tr>
<tr>
<td>Change Title</td>
</tr>
<tr>
<td>From Ancestral Lands- Southwest Conservation Corps Adult Program Participant Survey</td>
</tr>
<tr>
<td>To Southwest Conservation Corps Ancestral Lands Adult Program Participant Survey</td>
</tr>
<tr>
<td>Change Question: Which Southwest Conservation Corps Ancestral Lands Program are you a part of?</td>
</tr>
<tr>
<td>Add Albuquerque and Southwest Conservation Corps Ancestral Lands Program</td>
</tr>
<tr>
<td>Clarify Question: Was your time working with various National Park Service sites on hitches this year educational when it came to Cultural Heritage?</td>
</tr>
<tr>
<td>Add Cultural Heritage Definition: the legacy of tangible and intangible attributes of a group or society that are inherited from past generations, maintained in the present and preserved for the benefit of future generations.</td>
</tr>
<tr>
<td>Clarify Question: Was your time working with various National Park Service sites on hitches this year educational when it came to Cultural and Natural Resource Management?</td>
</tr>
<tr>
<td>Add Cultural Resource Management Definition: the practice of managing cultural resources such as the arts, language, tradition and heritage.</td>
</tr>
<tr>
<td>Add Natural Resource Management Definition: the practice of managing natural resources such as land, water, soil, plants and animals.</td>
</tr>
<tr>
<td>Clarify Question: Was your time working with various National Park Service sites on hitches this year educational when it came to Anthropology and Archaeology?</td>
</tr>
<tr>
<td>Add Anthropology Definition: the study of human culture and societies in the past and present.</td>
</tr>
<tr>
<td>Add Archaeology Definition: the study of human history and prehistory through analysis of artifacts and other physical remains</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Suggestions for Additional Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Include more questions on the benefits, community, and education SCC AL has to offer</td>
</tr>
<tr>
<td>Include questions on if working with Southwest Conservation Corps Ancestral Lands is benefiting participants financially or economically</td>
</tr>
</tbody>
</table>
Questions of Particular Interest

<table>
<thead>
<tr>
<th>Question</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q11: Did you enjoy your hitches/visits to various National Park Service sites this year?</td>
<td></td>
</tr>
<tr>
<td>Q12: What parts of the Southwest Conservation Corps- Ancestral Lands program do you value the most?</td>
<td></td>
</tr>
<tr>
<td>Q20: Has working with Southwest Conservation Corps- Ancestral Lands positively benefited you financially or economically? (This question was of particular interest because of how data could assist in grant applications)</td>
<td></td>
</tr>
<tr>
<td>Q23-Q24: Do you feel that the experience you are gaining this summer is valued by your tribal community? How?</td>
<td></td>
</tr>
</tbody>
</table>

Table 3.5: SCC AL Survey Edits, Suggestions for Additional Questions, and Questions of Particular Interest (Table by Author 2019)

Using the phone call meeting notes on edits, suggestions, and questions of particular interest, the author integrated SCC AL’s requested revisions into the second draft of the SCC AL Survey. While working on the second draft of the SCC AL Survey, additional revisions were made in accordance with SCC AL requests. This time was also used as an opportunity to further evaluate the length, time investment, fluidity, and format of the survey. When reviewing the SCC AL Survey questions, areas where improvements could be made to a series of questions by phrasing them more clearly and/or by being more consistent in language were noted and changes were made accordingly. This time was also used to continue assessing how well the SCC AL Survey questions reflected SCC AL’s collaborative, value-based, and community-based program model. Similar to the first draft, the second draft featured survey questions based on SCC AL’s values, interests and suggestions while also blending them with this thesis’ interests. In the spirit of genuine collaboration, the second draft of the SCC AL Survey expanded to include values and questions outside the original thesis interests in SCC AL and NPS satisfaction, SCC AL’s influence on college and career decisions, cultural heritage, anthropology, and archaeology. Through collaboration the second draft of the SCC AL Survey evolved to reflect shared values and interests between SCC AL and this thesis such as community-based learning and the educational, professional, personal, and economic participant benefits of SCC AL, as detailed in Table 3.6 below.
Table 3.6: Southwest Conservation Corps Ancestral Lands Adult Program Online Participant Survey second and final draft research values and interests with their associated questions (Table by Author 2019)

After making both collaborative and individual changes to the questions and formatting of the survey the second draft of the SCC AL Survey was published on Qualtrics consisting of 19 multiple choice and 1 ranking question, for a total of 20 close ended questions and 4 short answer and 1 comments section, for a total of 5 open ended questions, with an overall total of 25 questions taking approximately 15 minutes to complete; the SCC AL Survey questions are shown in Appendix B. The second draft question blocks followed the same logical flow as the first draft and consisted of Introduction and Instructions (consent form), Preliminary Questions (1-3), National Park Service Questions (4-11), Ancestral Lands- Southwest Conservation Corps Questions (12-19), and General Questions (20-25). While the second draft included 3 additional questions and would take approximately 5 minutes longer to complete than the first draft, the SCC AL Survey was still not considered to be excessively cumbersome in a discouraging way.
Once the second draft of the SCC AL Survey was complete, it was sent to SCC AL via email for a second review. Similar to email correspondence on the first draft, SCC AL responded promptly with their approval of the second draft. After SCC AL approved the second draft, the final review and fine-tuned edits were completed. Then the final draft of the SCC AL Survey was published on Qualtrics. The final draft of the SCC AL Survey included the following questions, as displayed in Table 3.7 below.
### Table 3.7: Southwest Conservation Corps Ancestral Lands Adult Program Online Participant Survey Questions (Table by Author 2019)

<table>
<thead>
<tr>
<th>Question</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which SCC-AL Program were you a part of?</td>
<td>Q14</td>
</tr>
<tr>
<td>Which NPS Sites did you visit on hitches this year?</td>
<td>Q17</td>
</tr>
<tr>
<td>Are you and your affiliated tribe associated with any of the NPS sites that you visited on hitches this year?</td>
<td>Q18</td>
</tr>
<tr>
<td>Was your time working with various NPS sites on hitches this year educational when it came to Cultural Heritage? (1-10)</td>
<td>Q19</td>
</tr>
<tr>
<td>Was your time working with various NPS sites on hitches this year educational when it came to Cultural and Natural Resource Management? (1-10)</td>
<td>Q20</td>
</tr>
<tr>
<td>Was your time working with various NPS sites on hitches this year educational when it came to Anthropology and Archaeology? (1-10)</td>
<td>Q21</td>
</tr>
<tr>
<td>Was your time working with various NPS sites on hitches this year educational when it came to NPS Employment/Volunteer Opportunities? (1-10)</td>
<td>Q22</td>
</tr>
<tr>
<td>Has working with the NPS and SCC-AL encouraged you to pursue future opportunities with the NPS?</td>
<td>Q23</td>
</tr>
<tr>
<td>Did you enjoy your hitches/visits to various NPS sites this year? (1-10)</td>
<td>Q24</td>
</tr>
<tr>
<td>What parts of the SCC-AL program do you value the most? (Rate 1-5)</td>
<td>Q25</td>
</tr>
<tr>
<td>Do you feel that SCC-AL has prepared you to be successful when it comes to attending college or pursuing a degree?</td>
<td>Q14</td>
</tr>
<tr>
<td>If YES, how has working with SCC-AL prepared you to be successful when it comes to attending college or pursuing a degree?</td>
<td>Q14</td>
</tr>
<tr>
<td>If YES, how has working with SCC-AL prepared you to be successful when it comes to pursuing a career? If NO, how could SCC-AL have better prepared you to be successful when it comes to attending pursuing a career?</td>
<td>Q15</td>
</tr>
<tr>
<td>If YES, how has working with SCC-AL prepared you to be successful when it comes to pursuing a career? If NO, how could SCC-AL have better prepared you to be successful when it comes to pursuing a career?</td>
<td>Q16</td>
</tr>
<tr>
<td>If YES, how has working with SCC-AL prepared you to be successful when it comes to pursuing something you are passionate about and want to succeed in?</td>
<td>Q17</td>
</tr>
<tr>
<td>If YES, how has working with SCC-AL prepared you to be successful when it comes to pursuing something you are passionate about and want to succeed in?</td>
<td>Q18</td>
</tr>
<tr>
<td>How likely are you to recommend the SCC-AL to friends or family? (1-10)</td>
<td>Q19</td>
</tr>
<tr>
<td>Has working with SCC-AL positively benefited you financially or economically?</td>
<td>Q20</td>
</tr>
<tr>
<td>Do you think you will apply for the SCC-AL or similar programs next summer?</td>
<td>Q21</td>
</tr>
<tr>
<td>Do you feel that the experience you are gaining this summer will inspire other youths and young adults from your community to participate in similar programs?</td>
<td>Q22</td>
</tr>
<tr>
<td>Do you feel that the experience you are gaining this summer is valued by your tribal community?</td>
<td>Q23</td>
</tr>
<tr>
<td>How do you feel the experience you are gaining this summer is valued by your tribal community?</td>
<td>Q24</td>
</tr>
<tr>
<td>Optional: Any other comments...</td>
<td>Q25</td>
</tr>
</tbody>
</table>
Although SCC AL had formally approved the SCC AL Survey, it still needed to be approved by the University of Montana Institutional Review Board (IRB) before the SCC AL Survey could be administered via email to SCC AL adult crew participants. After receiving approval from SCC AL on the final draft and publishing the SCC AL Survey on Qualtrics, the Application to the IRB for Review was submitted to the University of Montana who is responsible for oversight of all research activities involving human subjects to ensure the protection of human subjects in research. The application to the IRB review included project information on human subjects protection training, project funding, purpose of the research project, IRB oversight, subject information, information to be compiled, and informed consent. After review, the application to the IRB review for the SCC AL Survey was approved under the “exempt” category because the risk level associated with the SCC AL Survey was deemed minimal, the IRB application and approval documentation are located in Appendix C and D.

Once approval from both SCC AL and the University of Montana IRB was granted, the SCC AL Survey could technically be administered. However, before the SCC AL Survey could be distributed, further collaboration with SCC AL was necessary in order to confirm logistics of how the survey would be administered and to educate SCC AL employees and participants on the importance of supporting the voluntary survey through their participation.
Part 1.4: Administration: Southwest Conservation Corps Ancestral Lands Adult Program Online Participant Survey

To request participation in the SCC AL Survey, plans were made to present SCC AL participants with an email containing the survey and a clear description of the research project. Since the SCC AL Survey would be administered through email with the help of SCC AL, steps were taken to ensure SCC AL adult crew participants were aware of it. In order to draft an email containing a request to take the SCC AL Survey and inform SCC AL adult crew participants of the upcoming survey collaboration with SCC AL was again necessary. In preparation for sending the request to take the SCC AL Survey an email addressed to SCC AL adult participants inviting them to take part in the survey was drafted. The email explained how their participation would benefit the SCC AL’s betterment and efforts to create and maintain programs which connect Native American young adults to ancestral communities through cultural heritage stewardship opportunities. It also stated the SCC AL Survey should take no longer than 15 minutes and their participation would be greatly appreciated on behalf of SCC AL and this thesis.

The email clarified how participation in the SCC AL Survey would be completely voluntary and responses would remain anonymous. An Informed Consent Form was also attached to the email including the University of Montana IRB approval, the IRB determination for a minimal risk level, an explanation of the SCC AL Survey, and a Subject Information and Informed Consent Form. The SCC AL Survey itself was included in the email as a visual and hyperlink directing respondents to the Qualtrics survey. Once the first draft of the email containing the invitation and link to participate in the SCC AL Survey was completed the draft was sent to SCC AL for approval. Soon after, SCC AL approved the email invitation to participate in the SCC AL Survey via email.
Next, to inform SCC AL adult crew participants of the upcoming SCC AL Survey a teleconference during one of SCC AL’s weekly program staff meetings was arranged by Mr. Robles where the survey could be discussed with SCC AL adult crew leaders and members. Speaking with SCC AL adult crew leaders about the SCC AL Survey was critical because during assignment preparation or de-brief they were in the position to remind and encourage their crew members to take the survey. During the phone call meeting SCC AL adult crew leaders were informed on why the SCC AL Survey was important to SCC AL, when they should expect to receive the survey via email, and what the survey would entail question and time wise. This time was also used to stress the importance of SCC AL adult crew leaders reminding and encouraging their crew members to take the SCC AL Survey when they had access to email and computers during assignment preparation or de-brief. During the phone call meeting, the author’s contact information was provided to SCC AL crew leaders in case they had any questions regarding the SCC AL Survey in the future.

Once the email containing the invitation to take the SCC AL Survey was approved by SCC AL and the SCC AL adult crew participants were informed of the upcoming survey, collaboration began with SCC AL to determine how best to administer the SCC AL Survey. Both Mr. Robles and the author decided it would be best if the email invitation for the SCC AL Survey was sent directly from Mr. Robles from a conservationlegacy.org email account to the SCC AL adult program list serve. As SCC AL Staff, it was reasoned Mr. Robles’ name would carry more weight and credibility which would encourage more SCC AL adult crew participants to respond to the SCC AL Survey than if the author were to send it. A strategy was then formed to send out the email invitation for the SCC AL Survey two times over the course of summer 2018, mid-June and mid-July, and one time towards the end of Summer 2018 season in August.
This schedule was fitting because it coordinated with when SCC AL adult crew participants would be towards the middle or end of their season and would most likely have access to a computer. Out of the 65 adult crew participants participating in SCC AL Program during the summer of 2018, the goal response rate to the SCC AL Survey was a 50% (or approximately 33 participants).

However, after the email invitation for the SCC AL Survey had been sent out via email three times by Mr. Robles at the end of the 2018 season, the response rate was still low. As of August 8th, 2018, the SCC AL Survey had only received 9 responses. To gather more responses, a fourth email invitation for the SCC AL Survey was arranged to be sent out by Mr. Robles on September 18th, 2018. Due to unknown variables, the fourth email invitation for the SCC AL Survey solicited no additional responses. Again, hoping for more responses but also considering it was well past the end of the season, the fifth and last email invitation for the SCC AL Survey was sent out by Mr. Robles on October 8th, 2018. For the last email invitation, in addition to an email from the conservationlegacy.org email account, an additional email invitation for the SCC AL Survey was also sent from the author’s personal email to the SCC AL adult program list serve. In unison, Mr. Robles and the author each sent an email to the SCC AL adult program list serve stressing the last call for surveys and how valuable their participation in the SCC AL Survey was. The fifth and last joint email invitation for the SCC AL Survey was highly successful and produced 28 additional responses. In total 37 responses, for a 57% response rate, to the SCC AL Survey were collected. The first SCC AL Survey was received June 27th, 2018 and the final survey was received on December 12th, 2018, over two months after the last call email invitation for the SCC AL Survey was sent out on October 8th, 2018. Overall, 37 of the 65 SCC AL adult crew participants working with SCC AL during the summer of 2018 responded to
the SCC AL Survey. Table 3.8 below summarizes the various email invitations for the SCC AL Survey and their associated responses.

<table>
<thead>
<tr>
<th>Attempt #</th>
<th>Date Sent (2018)</th>
<th>Sent From</th>
<th>New Responses</th>
<th>Total Responses</th>
<th>Response Rate (n=65)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>June 21(^{st})</td>
<td>Chas Robles</td>
<td>2</td>
<td>2</td>
<td>3%</td>
</tr>
<tr>
<td>2</td>
<td>July 12(^{th})</td>
<td>Chas Robles</td>
<td>5</td>
<td>7</td>
<td>10%</td>
</tr>
<tr>
<td>3</td>
<td>August 8(^{th})</td>
<td>Chas Robles</td>
<td>2</td>
<td>9</td>
<td>14%</td>
</tr>
<tr>
<td>4</td>
<td>September 18(^{th})</td>
<td>Chas Robles</td>
<td>0</td>
<td>9</td>
<td>14%</td>
</tr>
<tr>
<td>5</td>
<td>October 8(^{th})</td>
<td>Chas Robles, M. Machuca</td>
<td>28</td>
<td>37</td>
<td>57%</td>
</tr>
</tbody>
</table>

Table 3.8: Timeline of Southwest Conservation Corps Ancestral Lands Adult Program Online Participant Survey email invitations for the survey and responses (Table by Author 2019)

Part 1.5: Conclusion: Thesis Graduate Committee and Meaningful Consultation

At the end of the 2018 season, the author scheduled a teleconference with Mr. Robles and Mike Wight (Mr. Wight), who was the SCC AL Regional Director at the time, to discuss what SCC AL would like to take away from the SCC AL Survey, determine if there were any new specific questions they would like answered from the survey, and discuss how results could best be framed in useful ways for SCC AL. While this discussion was relatively the same as the first phone call meeting, the intention was to continue correspondence on how the SCC AL Survey could support SCC AL program model and growth. Around the same time as the second phone call meeting, an invitation via email was sent to Mr. Robles asking if he would consider being part of this thesis’ graduate committee as an outside observer, outside of the University of Montana’s Department of Anthropology, whose faculty members comprise the core of this thesis’ graduate committee. Shortly after, Mr. Robles accepted the invitation to be on the thesis graduate committee via email. Procedures then began for submitting a Petition to the Graduate Dean to have a thesis committee member from outside the University of Montana system serve on the thesis graduate committee.
Mr. Robles inclusion in the thesis graduate committee was desired because as the SCC AL Regional Director his role on the thesis graduate committee was integral to accurately and respectively representing SCC AL throughout this thesis and research. By being part of the thesis graduate committee Mr. Robles would be able to provide invaluable assistance with editing, revising, and evaluating this thesis. Also, Mr. Robles was expected to provide SCC AL program specific input ensuring the results of this thesis serve SCC AL equitably and in the long term. Soon after the Petition to the Graduate Dean was submitted it was approved and Mr. Robles officially became an outside committee member of the thesis graduate committee. From this point onward Mr. Robles was in regular communication via email as SCC AL reports and materials were frequently sent as references and chapters of this thesis were incrementally sent for review.

Although this thesis project was not a result of procedures mandated by CRM laws, the research still utilized many qualities and practices of meaningful consultation in the CRM world. Indeed, stakeholder consultation was essential to create and implement a beneficial and equitable collaborative research product that would serve the needs of SCC AL and the requirements of the thesis graduate committee, while contributing to a growing body of research underscoring the connections between Native American cultural heritage, CRM undertakings, and the importance of effective, meaningful and usable consultation. In order to achieve the desired level of equitability based on intentions to span the needs and interests of various stakeholders, it was critical that this thesis’ research methods engage meaningful consultation practices to transcend procedural and obligatory efforts to collaborate and consult. As described in this chapter on collaborative methods with SCC AL, this thesis’ research process was influenced by a variety of scholarly (e.g., Atalay 2012) and CRM practices (e.g., Nissley and King 2014) implemented to
produce a research project which shaped a corresponding survey created equitably with both SCC AL and this thesis’ best interests in mind. Nissley and King’s CRM best practices of consultation such as consulting, seeking, discussing, considering, and seeking agreement were not only borrowed but applied to this nonmandated thesis project. Their work and recommendations inspired and ensured the methods of this project were designed to cultivate collaborative, value-based, and community-based program models and practices of both SCC AL and CRM possible by serving as the foundation for the needs of a collaborative research project.

As noted earlier, the preliminary intention to collaborate with SCC AL heavily influenced research development during all stages of this thesis. The success of this research as collaboration with SCC AL developed was undeniably due to collaboration enabling qualities of CRM practices of consultation. CRM practices of consultation, along with ideas gleaned from scholarly approaches to collaborative cultural heritage research, inspired this research project to take on its collaborative framework. Consultation is especially important to CRM-oriented decision-making relevant to Native American cultural heritage because of, even if it is not required, the potential for CRM practices of consultation to produce meaningful, beneficial, and equitable collaborative outcomes that genuinely integrate stakeholder feedback into any number of undertakings. Due to SCC AL’s collaborative, value-based, and community-based program model, in order to create a meaningful, beneficial, and equitable collaborative research project reflective of the SCC AL program both consultation and collaboration were necessary. Therefore, throughout this thesis’ methods, CRM best practices of consultation were voluntarily and consciously engaged to not only compliment but contribute to the research values and interests of both SCC AL and this thesis.
While research is defined simply by the Scientific Method, research is also a craft and research methods are constantly evolving as researchers become more skilled at their craft (Bernard 2011). Anthropologists especially have been known to be “prodigious inventors, consumers and adapters of research methods” (Bernard 2011, 2). A few particular adaptations influential to this research and methods are efforts to involve Native American communities in the research process, consideration of research outcomes that provide value to the community, and helping to build the capacity for equitable, beneficial and collaborative research efforts (Lambert 2014; Wilson 2008). Within the fields of anthropology and cultural heritage the paradigm is shifting towards the acceptance and application of collaborative methods and community involvement contributive to both empirical and scientific applications of collaboration (Silliman and Ferguson 2010). However, for continued growth and relevance this paradigm shift towards collaboration requires methodological guidance from further research that prioritizes collaboration by allowing it to guide methods. Regardless of whether/or not these research methods are not traditionally consultative, hopefully they reflect a shifting paradigm in post-colonial and decolonizing methodologies adapting to be more accepting of intentionally equitable research by creating research opportunities in collaboration with those being researched instead of research at their expense. Optimistically, these research methods will contribute to the crafting and guidance of future collaborative methods.
Part 2: Interpretive Methods: Foundation and Background

The interpretive methods for the data gathered from the SCC AL Survey was rather straightforward using mixed methods quantitative and qualitative data analysis procedures. Data analysis followed the following steps:

1. Preparing the Data
2. Exploring the Data
3. Analyzing the Data
4. Representing the Data Analysis
5. Interpreting the Results (Creswell 2011, 205)

Overall, throughout the mixed methods quantitative and qualitative data analysis, an “Explanatory Design” was used. This design was chosen because of its ability to utilize data analysis to explain results (Creswell 2011, 2017). Data analysis steps in the Explanatory Design include:

1. Collect the quantitative data
2. Analyze the quantitative data quantitatively using analytic approaches best suited to the quantitative research questions
3. Design the qualitative strand based on the quantitative results
4. Collect the qualitative data
5. Analyze the qualitative data qualitatively using analytic approaches best suited to the qualitative and mixed methods research questions
6. Interpret how the connected results answer the quantitative, qualitative, and mixed methods questions (Creswell 2011, 2018)

Part 2.1: Preparing the Data

To prepare the data from the SCC AL Survey responses were manually transferred from Qualtrics to Microsoft Excel and Word. Although Qualtrics offers export options such as CSV, TSV, XML, and Google Drive the manual transfer method was used because Word and Excel formats was preferable for familiarity, accessibility, and utility. Using Excel and Word, two documents containing the SCC AL Survey data were created to be used for reference throughout
the remaining steps of data analysis: the SCC AL Survey Raw Data Spreadsheet Excel and SCC AL Survey Responses to Qualitative Questions Word document.

**Part 2.2: Exploring the Data**

The SCC AL Survey Raw Data Spreadsheet Excel and SCC AL Survey Responses to Qualitative Questions Word documents were used initially to explore the data from the SCC AL Survey. Using these documents, data was thoroughly evaluated, inspected, and noted for initial trends and patterns. At this time observations were also made on the quality and length of the short answer responses, including where and how often “No Responses” were recorded. Additional data investigation occurred while fact checking the Excel and Word documents containing the SCC AL Survey data against Qualtrics to address any user errors that may have occurred while transferring the data.

**Part 2.3: Analyzing the Data**

To analyze the SCC AL Survey responses the Qualtrics reports results tool and data analysis text search tool were used to create two more documents to be used for reference during steps 3-5 of data analysis, the SCC AL Survey Results and SCC AL Survey Qualitative Questions Coding Sheet Excel documents.

First, the SCC AL Survey Results Excel was created by gathering data from the Qualtrics reports results tool to record responses to the survey questions by again transferring data from Qualtrics to Excel. The SCC AL Survey Results Excel included two tabs, one for quantitative questions and one for qualitative questions. With the exception of the short answer questions which were recorded in the SCC AL Survey Responses to Qualitative Questions Word document, the multiple choice and ranking questions were recorded in the SCC AL Survey
Results Excel by recording the number of responses/percentage of responses for each selection, means, and total number of responses for each question, all of which were provided by Qualtrics. Once the data transfer was complete visuals, models, figures, and tables could be created using Excel for the following results chapter of this thesis.

During this step, responses to multiple choice questions formatted as rate on a scale of 1-10 questions were analyzed by categorizing responses into new response types. Instead of the Qualtrics response types which included Detractor (0-6), Passive (7-8), and Promoter (9-10), rate on a scale of 1-10 questions were analyzed by categorizing responses into three new response types: Negative (1-3), Neutral (4-6), and Positive (7-10). The labels of the response types then changed throughout the SCC AL Survey according the rate on a scale of 1-10 question being asked. Due to the nature of rate on a scale of 10 questions the new response types were used instead of the original Qualtrics types in order to more evenly distribute the range of positive and negative responses.

Next, the SCC AL Survey Qualitative Questions Coding Sheet Excel was created to code the short answer responses to the qualitative questions in the SCC AL Survey. The SCC AL Survey Qualitative Questions Coding Sheet Excel was organized with participant responses for the row category and noted terms and themes for the column category. Short answer responses were then coded by reading responses manually noting repeatedly used words. Then the Qualtrics data analysis text search tool was used to search responses for noted words to quantify how many times they occurred (including misspelled forms of the word).

Lastly, through this process the number of times a certain word was used and the responses it was used in was determined and coded in the SCC AL Survey Qualitative Questions Coding Sheet Excel. Using the SCC AL Survey Qualitative Questions Coding Sheet Excel, the
data from the short answer questions was transferred to and recorded in the SCC AL Survey Results Excel on the qualitative questions page by recording the number of times repeatedly used words occurred. An important note on coding the short answer responses to the qualitative questions is for each qualitative question the coded words were different according to its responses. As a result of coding the different qualitative questions a variety of themes began to arise which are introduced in Chapter 4: Results and discussed in Chapter 5: Discussion and Conclusion.

Part 2.4: Conclusion: Representation and Interpretation of Data

The remaining mixed methods quantitative and qualitative data analysis procedures are discussed in the upcoming chapters. Following step 4, to represent the data analysis, Chapter 4: Results simultaneously examines and represents data gathered during data analysis by presenting results in visual, model, figure, and table form. Then, fulfilling step 5, interpreting the results, Chapter 5: Discussion and Conclusion interprets the data analysis to explain how the results address and inform this thesis’ research questions and hypotheses.

Just as the “the term 'research' is inextricably linked to European imperialism and colonialism”, data analysis procedures are undeniably connected to colonial research methods that subjugate Indigenous and Native ways of knowing (Smith L. T. 2012, 1). Especially the representation and interpretation steps. With this in mind, the following Results and Discussion and Conclusion chapters continue to apply a postcolonial and decolonial framework by supporting practices with, by, and for Native American communities in research and academia, and prioritizing respectful, equitable, and collaborative research to address both this thesis’ and SCC AL’s research objectives and questions.
Chapter 4: Results

This program has helped me gain self-confidence, better knowledge, and has opened my eyes helping me to see that this is more than just a job or work but is helping me to prepare for that next step in life.
-Anonymous, Southwest Conservation Corps Ancestral Lands Participant, 2018

This chapter summarizes responses to the Southwest Conservation Corps Ancestral Lands Adult Program Online Participant Survey (SCC AL Survey). The chapter begins by briefly describing the demographics of the SCC AL Survey participants, followed by an investigation of response results in numerical order, categorized into parts according to SCC AL Survey question blocks including: Preliminary Questions (1-3), National Park Service Questions (4-10), Ancestral Lands- Southwest Conservation Corps Questions (11-18), and General Questions (19-22). Following Creswell’s (2011) data analysis procedure #4, response results begin with the straightforward quantitative responses and then transition into qualitative response results gathered from coding the responses to the short answer questions.

As previously mentioned in this thesis, the Southwest Conservation Corps Ancestral Lands (SCC-AL) Program’s questions of particular interest were included in the SCC AL Survey with the intention of producing equitable research and addressing SCC AL’s areas of interest. SCC AL represents one of many entities that are products, if not hallmarks, of ongoing processes of postcolonial awareness and decolonization. As noted in previous chapters, the theoretical framework for this project engages postcolonialism, decolonization, and cultural heritage. Due to the fact that the existence and philosophy of the SCC AL is a result of an increasingly decolonized [but still contentious] social and political environment, this organization represented an ideal means of testing the efficacy of an organization such as SCC AL. The SCC AL Survey results presented in this chapter are intended to explore the ways in
which SCC AL represents a postcolonial outcome of well-defined and active participation in practices such as education (Lavia and Mahlomaholo 2012), cultural leadership and landscape management (Guilfoyle et al. 2019), integrating traditional ecological knowledge (Carr et al. 2017), engaging the public, and conserving and preserving heritage (Harrison et al. 2008).” Accordingly, response examination focuses on and displays data from the surveys relevant to both this thesis and SCC AL’s research objectives and questions.

**Part. 1: Preliminary Questions: Q1-Q3**

Questions 1-3 (Q1-Q3) in the Preliminary Question block asked participants which SCC AL Program they were a part of, their sex, and their age (Figure 4.1-4.3). Q1-Q3 were intended to maintain consistency with information gathered by SCC AL annually for their Conservation Legacy National Park Service Fiscal Year reports.

**Figure 4.1: Q1: Which SCC AL Program were you part of? (Figure by Author 2019)**
Figure 4.2: Q2: Sex. “Other” and “I Choose Not to Answer” were also available response options. (Figure by Author 2019)

Figure 4.3: Q3: Age (Figure by Author 2019)
**Part 2: National Park Service Questions: Q4-Q11**

Questions 4-11 (Q4-Q11) in the National Park Service Question block involved inquiries focused on whether working with the NPS has been educational and to what extent, whether/how working with the NPS has encouraged participants to pursue future opportunities with the NPS, and SCC AL participant satisfaction with the NPS. Q4-Q11 included 8 multiple choice questions in the form of 3 traditional multiple choice questions and 5 rate on a scale of 1-10 questions. These questions were asked to inform thesis research questions 2 and 4 and SCC AL research questions 3 and 4. Since the NPS hosts SCC AL and is the main educational source for participants, these questions were valuable for gathering quantitative data useful for both this thesis and SCC AL to gauge what role the NPS plays in providing not only educational but also professional, personal, and economic benefits for SCC AL participants. Responses to these questions were also valuable to address how education provided by the NPS in natural and cultural resource management could be related to SCC AL’s mission of supporting cultural and ecological well-being.

**Part 2.1: Q4-Q5**

Questions 4-5 (Q4-Q5) in the National Park Service Question block asked which NPS sites participants visited during the 2018 season and whether their tribe was culturally affiliated with any of those NPS locations. More often than not, Q4-Q5 multiple choice questions were answered incorrectly or skipped. This was most likely due to the question text being phrased in a confusing manner and the resulting user error. Additionally, responses to this question were incomplete as some participants completed the SCC AL Survey mid-season and had not yet visited all assigned NPS locations. As these questions are not directly related or relevant to either
this thesis or SCC AL’s research objectives and questions, they were removed from data analysis and are not included in discussion of the response results.

Part 2.2: Q6-Q9

Questions 6-9 (Q6-Q9) in the National Park Service Question block asked whether a participant’s time working with various NPS sites was educational when it came to cultural heritage, natural and cultural resource management, anthropology and archaeology, and NPS employment and volunteer opportunities. Q6-Q9 were formatted so respondents could rate their experiences using a scale of 1-10. Responses were analyzed by categorizing responses into three response types: Not Educational (1-3), Neutral (4-6), and Educational (7-10). Due to the nature of rating on a 1-10 scale-type questions, these response types were used instead of the Qualtrics types, which included Detractor (0-6), Passive (7-8), and Promoter (9-10) in order to more evenly distribute the range of positive and negative responses.

Responses to these questions were rather consistent (Figure 4.4-4.7). For all four questions regarding whether their time working with the NPS was educational, in each of the four areas posed by the questions over 50% of participants responded “educational”, with “neutral” responses being in the 30% range, and the “not educational” responses remaining below 10%. While these questions produced relatively consistent responses, the most varied response came from Q8 regarding how educational participants’ experiences working with the NPS in the fields of anthropology and archaeology. Q6, Q7 and Q9’s “educational” responses were over 60% and means were 7.26-7.47 (which means the respondents had an educational experience as opposed to a non-educational or neutral experience). Whereas, Q8’s “educational” responses were slightly lower at 53% with a mean of 6.64 (Figure 4.6), placing those responses in the “neutral” range.
This is most likely a result of the overall limited NPS locations focused on archaeology and sensitivity of anthropological of archaeological projects. Thus, there was limited exposure to work or education on anthropology and archaeology-related projects for participants. However, despite limitations associated with providing anthropological and archaeological education, there is great potential for providing education on these topics during future seasons considering many of the NPS locations SCC AL participants visit such as Aztec Ruins National Monument, Bandelier National Monument, Chaco Canyon National Historical Park, El Morro National Monument, Mesa Verde National Park, Pecos National Historical Park, and Petroglyph National Monument offer rich and unique cultural and archaeological resources.

Q6: Was your time working with various NPS sites on hitches this year educational when it came to cultural heritage? (1-10)
(n=34, Mean 7.47)

- Not Educational (1-3)
- Neutral (4-6)
- Educational (7-10)

Figure 4.4: Q6: Was your time working with various NPS sites on hitches this year educational when it came to cultural heritage? (1-10) (Figure by Author 2019)
Q7: Was your time working with various NPS sites on hitches this year educational when it came to cultural and natural resource management? (1-10)  
(n=34, Mean 7.47)

Figure 4.5: Q7: Was your time working with various NPS sites on hitches this year educational when it came to cultural and natural resource management? (1-10) (Figure by Author 2019)

Q8: Was your time working with various NPS sites on hitches this year educational when it came to anthropology and archaeology? (1-10)  
(n=34, Mean 6.64)

Figure 4.6: Q8: Was your time working with various NPS sites on hitches this year educational when it came to anthropology and archaeology? (1-10) (Figure by Author 2019)
Part 2.3: Q10-Q11

Questions 10-11 (Q10-Q-11) in the National Park Service Question block asked whether working with the NPS has encouraged participants to pursue future opportunities with the NPS and also about SCC AL participant satisfaction with the NPS. Q10 was formatted as a multiple choice question and Q11 was formatted as rate on a scale of 1-10 question, similar to Q6-Q9. However, Q11 is different because its response types were changed to: Not Enjoy (1-3), Neutral (4-6), and Enjoyed (7-10). The same rationale applied to Q6-Q9 was used to create these response types instead of Qualtrics categories for responses in order to more evenly distribute the range of positive and negative responses as applicable to participant satisfaction.

Responses to Q10 and Q11 were overwhelmingly positive (Figure 4.8-4.9). For Q10, 64% of participants responded “yes”, indicating that working with the NPS and SCC AL has encouraged them to pursue future opportunities with the NPS. While 36% of participants responded to the same question as “maybe”, 0% responded with “no”. Similar to Q10, for Q11, which was a question of particular interest for SCC AL, 91% of participants responded they...
enjoyed their visits to various NPS sites during their season only 9% responded neutrally, and 0% responded they did not enjoy their visits reflecting a very high satisfaction rating from participants for both the NPS and SCC AL.

**Q10: Has working with the NPS and SCC AL encouraged you to pursue future opportunities with the NPS?**

(n=36)

- Yes: 64%
- No: 9%
- Maybe: 0%

Figure 4.8: Q10: Has working with the NPS and SCC AL encouraged you to pursue future opportunities with the NPS? (Figure by Author 2019)

**Q11: Did you enjoy your hitches/visits to various NPS sites this year?** (1-10)

(n=35, Mean 9.2)

- Did Not Enjoy (1-3)
- Neutral (4-6)
- Enjoyed (7-10)

91% Enjoyed, 9% Neutral, 0% Did Not Enjoy

Figure 4.9: Q11: Did you enjoy your hitches/visits to various NPS sites this year? (1-10) (Figure by Author 2019)
Part 3: Southwest Conservation Corps Ancestral Lands Questions: Q12-Q19

Questions 12-19 (Q12-19) in the Ancestral Lands- Southwest Conservation Corps Question block asked questions focused on what SCC AL participants value about the program, how SCC AL is preparing participants to be successful, and how likely participants are to recommend SCC AL. Q12-Q19 included 1 rating question, 4 multiple choice questions (consisting of 3 traditional multiple choice questions and 1 rate on a scale of 1-10 question), and 3 short answer questions. These questions were asked to inform thesis research question 3 and SCC AL research questions 1 and 2. Considering this thesis represents a project carried out in partnership with SCC AL with the intention of being supportive of their program model and growth, these questions were valuable for gathering both quantitative and qualitative data on topics and questions of particular interest expressed by SCC AL when collaborating on the SCC AL Survey. Also, responses to these questions were especially useful in ascertaining advantageous outcomes of educational, professional, and personal participant benefits of SCC AL on an individual level to compliment community benefits discussed in the General Question block section later in this chapter.

Part 3.1: Q12

Question 12 (Q12) in the Ancestral Lands- Southwest Conservation Corps Question block, which was a question of particular interest for SCC AL, asked what parts of the SCC AL program participants value the most (Table 4.1). Q12 was formatted as a rating question asking participants to rate the parts of SCC AL they value the most with 1 being the highest value of importance and 5 being the lowest value of importance. Values listed in Q12 came directly from SCC AL’s program model. Responses to Q12 showed participants valued both forms of work experience the most, followed by use of traditional culture and language, then building
community relationships, and lastly conservation projects on new lands. Participants valuing work experience with the NPS the most correlates with responses to Q11 (Figure 4.9) where 91% of participants responded they enjoyed their visits to various NPS sites during their season reflecting a very high satisfaction rating from participants.

<table>
<thead>
<tr>
<th>#1</th>
<th>Work Experience with the National Park Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>#2</td>
<td>Work Experience Related to Cultural and Natural Resource Management</td>
</tr>
<tr>
<td>#3</td>
<td>Traditional Culture and Language as Part of Crew Lifestyle and Project Work</td>
</tr>
<tr>
<td>#4</td>
<td>Building Community Relationships and Connections</td>
</tr>
<tr>
<td>#5</td>
<td>Conservation Projects on Native Lands</td>
</tr>
</tbody>
</table>

Table 4.1: Q12: What parts of the SCC AL program do you value the most? (Rate 1-5) (n=29) (Table by Author 2019)

**Part 3.2: Q13-Q18**

Questions 13-18 (Q13-Q18) in the Ancestral Lands- Southwest Conservation Corps Question block asked whether participants felt SCC AL has prepared them to be successful when it came to pursuing college or a degree, a career, or something they are passionate about (Figure 4.11-4.16, Table 4.2-4.4). Q13-Q18 included 3 multiple choice questions and 3 short answer questions. Q13, Q15, and Q17 were formatted as multiple choice questions each with a different theme and Q14, Q16, and Q18 were formatted as short answer questions associated with each of the different multiple choice question themes. As short answer questions, Q14, Q16 and Q18 allowed participants to explain why or why not they felt SCC AL has prepared them to be
successful when it came to pursuing college/degree, a career, or something they are passionate about. As all questions in the SCC AL Survey were optional and the short answer questions were the most time intensive questions, the response rate to the short answer questions did not match the response rate of their associated multiple choice question (Figure 4.10). Regardless, participants who did respond to the short answer questions invested a considerable amount of effort as reflected by the mean word count of the responses being 34 words for Q14, 35 words for Q16, and 37 words for Q18.

![Figure 4.10: Q13-Q19 Response Rates (Figure by Author 2019)](image)

Q13, Q15, and Q17 are also examples of the overwhelmingly positive responses to SCC AL displayed throughout the SCC AL Survey thus far. For all three questions, over 90% of participants responded “yes”, indicating they felt SCC AL has prepared them to be successful for each of the themes the questions posed (Figure 4.11, 4.13, 4.15). While positive responses to Q13, Q15, and Q17 are telling, associated responses to short answer questions Q14, Q16, and Q18 are complimentarily invaluable. Text responses to Q14, Q16, and Q18 were quantified by reading responses manually noting repeatedly used words (Figure 4.12, 4.14, 4.16) then using the
Qualtrics data analysis text search tool to examine responses for noted words and record how many times they occurred (including misspelled forms of the word). Noted words directly and indirectly referred to benefits SCC AL participants were receiving from the program as a result of how SCC AL was preparing them to be successful. Accordingly, from these noted words themes were formed to categorize the different kinds of benefits SCC AL participants were expressing in their responses (Table 4.2-4.4). Benefit themes observed are as follows: educational, professional, and personal. How these themes inform thesis research question 3 and SCC AL research question 2 is a topic that is addressed in the Discussion and Conclusion chapter of this thesis.

Q13: Do you feel that SCC AL has prepared you to be successful when it comes to attending college or pursuing a degree?
(n=32)

Yes 94%
No 5%

Figure 4.11: Q13: Do you feel that SCC AL has prepared you to be successful when it comes to attending college or pursuing a degree? (Figure by Author 2019)
Figure 4.12: Q14: If YES, how has working with SCC AL prepared you to be successful when it comes to attending college or pursuing a degree? If NO, how could SCC AL have better prepared you to be successful when it comes to attending college or pursuing a degree? (Figure by Author 2019)

<table>
<thead>
<tr>
<th>Q14: Examples of Responses with Noted Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being on time, time management, staying organized, and following up on things as well as communication with other humans.</td>
</tr>
</tbody>
</table>

Ancestral Lands has taught me to be very responsible with my time management and leadership skills.

I feel the conservation corps has given me different skills that can be put to use in the workforce. Along with being given the tools to be adaptable in life no matter the situation.

Table 4.2: Q14: Examples of Responses with Noted Words (Table by Author 2019)
Q15: Do you feel that SCC AL has prepared you to be successful when it comes to pursuing a career?
(n=32)

- Yes: 94%
- No: 6%

Figure 4.13: Q15: Do you feel that SCC AL has prepared you to be successful when it comes to pursuing a career? (Figure by Author 2019)

Q16
(n=27)

- Skill/Tool: 5
- NPS/Government: 5
- Leadership: 3

Figure 4.14: Q16: If YES, how has working with SCC AL prepared you to be successful when it comes to pursuing a career? If NO, how could SCC AL have better prepared you to be successful when it comes to attending pursuing a career? (Figure by Author 2019)
Q16: Examples of Responses with Noted Words

<table>
<thead>
<tr>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>This program from the beginning has always opened doorways to careers in the NPS and other branches in outdoor type work. Ancestral lands is supportive to make sure your aspirations are heard and goals are set in order to work towards a career you want to experience.</td>
</tr>
<tr>
<td>SCC has taught me how to use my skills to complete tasks and projects that have benefited my leadership skills in order to run a successful program.</td>
</tr>
</tbody>
</table>

Table 4.3: Q16: Examples of Responses with Noted Words (Table by Author 2019)

Q17: Do you feel that SCC AL has prepared you to be successful when it comes to pursuing something you are passionate about and want to succeed in?

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>97%</td>
</tr>
<tr>
<td>No</td>
<td>3%</td>
</tr>
</tbody>
</table>

Figure 4.15: Q17: Do you feel that SCC AL has prepared you to be successful when it comes to pursuing something you are passionate about and want to succeed in? (Figure by Author 2019)
Figure 4.16: Q18: If YES, how has SCC AL prepared you to be successful when it comes to pursuing something you are passionate about and want to succeed in? If NO, how could SCC AL have better prepared you to be successful when it comes to pursuing something you are passionate about and want to succeed in? (Figure by Author 2019)

<table>
<thead>
<tr>
<th>Q18: Examples of Responses with Noted Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have been prepared to be successful by allowing my mentors and colleges teach me what I haven't already learned. New and fresh perspectives allowed me to be receptive to new and broader topics or teachings that I didn't seem to view clearly before. It allowed me to see what I was already seeing, but in a new light.</td>
</tr>
<tr>
<td>Yes Ancestral Lands has pushed me to be better not only for myself, but the people around me.</td>
</tr>
</tbody>
</table>

Table 4.4: Q18: Examples of Responses with Noted Words (Table by Author 2019)

Part 3.4: Q19

Question 19 (Q19) in the Ancestral Lands- Southwest Conservation Corps Question block asked how likely participants were to recommend SCC AL to friends or family (Figure 4.17). Q19 was formatted as a rate on a scale of 1-10 question, similar to Q6-Q9 and Q11. However, Q19 is different because its response types were changed to: Not Likely (1-3), Neutral (4-6), and Likely (7-10). The same rationale applied to Q6-Q9 and Q11 was used to create these response types instead of Qualtrics types in order to more evenly distribute the range of sentiments on likelihood participants would recommend SCC AL.
Similar to the overwhelmingly positive responses to Q11 (Figure 4.9) responses to Q19 were exceptionally positive, with 97% of participants “likely” to recommend SCC AL to family or friends, 3% “neutral”, and 0% “not likely.” The mean response to Q19 was also notably high at 9.38, placing those responses in the high “likely” range. Participants being nearly 100% likely to recommend SCC AL to family and friends is probably attributed to the culmination of sentiments which led to the results of Q11 where 91% of participants responded they enjoyed their visits to various NPS sites, as well as the results of Q13, Q15, and Q17 where over 90% of participants for all three questions felt SCC AL has prepared them to be successful academically, professionally, and personally.

Q19: How likely are you to recommend SCC AL to friends or family? (1-10)
(n=31, Mean 9.38)

Figure 4.17: Q19: How likely are you to recommend SCC AL to friends or family? (1-10) (Figure by Author 2019)
Part 4: General Questions: Q20-Q25

Questions 20-25 (Q20-Q25) in the General Question block asked queries focused on financial benefits, interest in reapplying, and community and tribal support for SCC AL. Q20-Q25 include 4 multiple choice questions and 2 short answer questions. These questions were asked to inform SCC AL research questions 2, 3, and 5. Similar to the Ancestral Lands-Southwest Conservation Corps Question block the General Question block included SCC AL questions of particular interest especially useful for examining advantageous outcomes of educational, professional, personal, and economic participant benefits of SCC AL on a community level to compliment previous questions focused on the individual level. Considering SCC AL is a value-based and community-based program that attributes its success to community investment and support on a tribal and local level inquiring about how the tribal community is benefiting from SCC AL is critical for promoting continued program support and growth.

Part 4.1: Q20-Q21

Questions 20-21 (Q20-Q21) in the General Question block built off SCC AL program satisfaction questions from the Ancestral Lands- Southwest Conservation Corps Question block. Q20-Q21 were formatted as multiple choice questions (Figure 4.18-4.19). To Q20, which was a question of particular interest for SCC AL, 97% of participants responded “yes”, indicating that working with SCC AL has benefited them financially or economically. Only 1 participant out of 31 responded “no” to Q20. However, the participant did not offer an explanation as to why they provided this response anywhere in their short answer responses. To Q21, which asked whether participants thought they would apply for SCC AL or similar programs next summer, 66% of participants responded “yes” and 34% of participants responded “no.” A majority “yes” response rate is significant because according to Regional Director Mr. Robles returning participants are
one of the main reasons for SCC AL’s success and growth. Taking this into consideration, SCC AL actively encourages returning participants is “very intentional in moving members into Assistant Crew leader positions and then moving those folks into Crew Leader and staff member positions” (Chas Robles, email correspondence, November 11, 2019).

**Q20: Has working with SCC AL positively benefited you financially or economically?**

![Pie chart showing 97% Yes and 3% No](image)

Figure 4.18: Q20: Has working with SCC AL positively benefited you financially or economically? (Figure by Author 2019)

**Q21: Do you think you will apply for SCC AL or similar programs next summer?**

![Pie chart showing 66% Yes and 34% No](image)

Figure 4.19: Q21: Do you think you will apply for SCC AL or similar programs next summer? (Figure by Author 2019)
Part 4.2: Q22-24

Questions 22-24 (Q22-Q24) in the General Question block, which were questions of particular interest for SCC AL, asked participants whether they felt experience they gained with SCC AL will inspire other youths and young adults from their community to participate in programs similar to SCC AL and whether/how they felt their experience with SCC AL is valued by their tribal community (Figure 4.20-4.22). Q22-Q24 included 2 multiple choice questions and 1 short answer question. Similar to Q13-Q18 in the National Park Service Question block, Q23 was formatted as a multiple choice question and Q24 was formatted as a short answer question associated with Q23. Again, the response rate to the short answer question did not match the response rate of the associated multiple choice question. For Q23-Q24, Q24 received 31 responses and Q24 received 24 responses. As shown earlier in the SCC AL Survey for short answer questions, despite lower response rates participants who did respond to the short answer questions invested a considerable amount of effort as reflected by the mean word count for Q24 being 24.

In the most overwhelmingly positive response in the whole SCC AL Survey, 100% of participants responded “yes” to Q22, indicating that all participants felt the experience they gained with SCC AL during summer will inspire other youths/young adults from their community to participate in programs similar to SCC AL (Figure 4.20). This was then supported by responses to Q23 where 90% of participants responded “yes”, demonstrating that they felt experience they gained from SCC AL is valued by their tribal community. While positive responses to Q22 are undeniably notable, Q23 and the associated responses to short answer question Q24 are complimentarily crucial for examining how SCC AL participant benefits are translating into their communities. Text responses to Q24 were quantified by reading responses,
manually noting repeatedly used words (Figure 4.22), and then using the Qualtrics data analysis text search tool to examine responses for the noted words to record how many times they occurred. How Q24’s responses and noted words inform SCC AL research question 5 is a topic that is addressed in the Discussion and Conclusion chapter of this thesis.

Q22: Do you feel that the experience you are gaining this summer will inspire other youth and young adults from your community to participate in similar programs? (n=31)

- Yes: 100%
- No: 0%

Figure 4.20: Q22: Do you feel that the experience you are gaining this summer will inspire other youths and young adults from your community to participate in similar programs? (Figure by Author 2019)

Q23: Do you feel that the experience you are gaining this summer is valued by your tribal community? (n=31)

- Yes: 90%
- No: 10%

Figure 4.21: Q23: Do you feel that the experience you are gaining this summer is valued by your tribal community? (Figure by Author 2019)
Figure 4.22: Q24: How do you feel the experience you are gaining this summer is valued by your tribal community? (Figure by Author 2019)

<table>
<thead>
<tr>
<th>Question 24: Examples of Responses with Noted Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would like to think that my will to explore and reach out into a different area of study fills them with hope that our young and younger folks today, will one day return to the study of who we really are and what life was like for our ancestors, as well as our higher purpose in life.</td>
</tr>
<tr>
<td>It is valued by allowing our young adults what they are capable of accomplishing. It really brings the greatness out in those who truly want and love what the program has to offer.</td>
</tr>
<tr>
<td>I know that our tribal government sees the work being accomplished as a whole unit and are proud of it as well, I can only hope that many others in my community, especially the youth have the chance to experience a program such as ancestral lands to really understand what we as natives are working towards and respect the values we still have in our homes.</td>
</tr>
</tbody>
</table>

Table 4.5: Q24: Examples of Responses with Noted Words (Table by Author 2019)

Part 4.3: Q25

Question 25 (Q25) in the General Question block provided the option to provide any other comments and was formatted as a short answer question. To Q25, 11 participants responded and 72%, 8 participants, of those expressed their gratitude to SCC AL by thanking the
program for an enjoyable experience and for an opportunity to improve themselves.

Interestingly, out of the 8 participant responses expressing gratitude to SCC AL, 3 responses included the use of thank you in their tribal language, for example “Elah’kwa”, “Hoo-eh”, and Hoo-eh, Ku-Kwai.”

**Part 5: Conclusion: Interpretation of Data**

This Results chapter addressed how different question blocks informed this thesis and SCC AL research questions. Answers to additional thesis and SCC AL research questions and a review of the data from the SCC AL Survey relevant to both this thesis and SCC AL’s research objectives are presented in the following Discussion and Conclusion chapter to relate SCC AL Survey responses to the hypotheses being examined by this thesis and form conclusions. Discussion of quantitative data was recognizably the focus of this Results chapter with appropriate mention yet limited discourse on what can be learned from the qualitative data. Throughout this Results chapter, short answer question qualitative response results were discussed only to the extent of their relation to quantitative information and themes gathered from coding. Hence, in the following chapter qualitative information and themes are used to interpret the data according to data analysis procedure #5 (Creswell 2011), to compliment quantitative data, to address both thesis and SCC AL research questions (Table 4.6-4.7), and to address how answering these research questions inform conclusions regarding the hypotheses (Table 4.8).
### Thesis Research Questions

1. How do Native American conservation corps programs fuse postcolonialism, decolonization, and cultural heritage into their program model?

2. How are Native American communities engaging CRM qualities such as values-based management and community-based participatory research to support cultural heritage oriented projects and programs?

3. What are the advantageous outcomes of educational, professional, personal, and economic participant benefits of Native American conservation corps programs to individuals and community?

4. How do Native American conservation corps programs support cultural and ecological well-being?

Table 4.6: Thesis Research Questions (Table by Author 2019)

### SCC AL Research Questions

1. What parts of SCC AL do participants value the most?

2. How does working with SCC AL benefit participants?

3. Are SCC AL participants satisfied with the SCC AL program?

4. Are SCC AL participants satisfied with their NPS assignment locations?

5. Does SCC AL have community support?

Table 4.7: SCC AL Research Questions (Table by Author 2019)

<table>
<thead>
<tr>
<th>Question Block</th>
<th>Thesis Research Questions</th>
<th>SCC AL Research Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Preliminary Questions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Park Service Questions</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Ancestral Lands-Southwest Conservation Corps Questions</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>General Questions</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.8: Southwest Conservation Corps Ancestral Lands Adult Program Online Participant Survey breakdown of how survey question blocks address thesis and SCC AL research questions (Table by Author 2019)
Chapter 5: Discussion and Conclusion

The SCC AL Program has allowed certain voices/energies to be heard and felt. Leading by example has been AL's way of spreading a positive ripple effect. ... By walking the walk, AL showcases the pride and integrity bestowed upon us by our Ancestry.
-Anonymous, Southwest Conservation Corps Ancestral Lands Participant, 2018

Part 1: Discussion

Incorporating the previous chapters of this thesis, the following discussion and conclusion chapter addresses both thesis and the Southwest Conservation Corps Ancestral Lands (SCC AL) Program research questions and presents conclusions to the hypotheses testing by revisiting the literature review and theoretical framework, reviewing the collaborative and interpretive methods, and applying the results. Thesis and SCC AL research questions are guided by their objectives and addressed in numerical order. Discussions on the SCC AL case study are then built upon to form conclusions after reviewing the results of hypotheses testing to determine if participant benefits of Native American conservation corps programs directly influence and contribute to individual and/or community well-being. This chapter closes with a discussion of data sharing plans, research limitations and challenges, suggestions for future research, and the valuable lessons learned from this thesis’ collaborative research project.

Part 1.1: Thesis Research Questions

Question 1: How do Native American conservation corps programs fuse postcolonialism, decolonization, and cultural heritage into their program model?

The application of decolonization to postcolonial theory arose to address the effects of lingering colonialism including the lack of collaboration, inclusion, and involvement of Native American researchers in planning, research design, fieldwork, data/evidence analysis, reporting and publication, and dissemination. Native American conservation corps occupy a postcolonial
and decolonial niche addressing the historical lack of collaboration, inclusion, and involvement
of Native Americans in the field specifically by providing opportunities for young adults to
participate in conservation and preservation projects on Native and public lands. Additionally,
SCC AL specializes this niche by focusing on the use of traditional practices and language in the
field to promote and preserve cultural heritage. Furthermore, through this thesis research, SCC
AL reinforces its presence in this niche by not only participating in postcolonial and decolonial
research which makes use of Native American knowledge and ways of knowing but also by
directing the creation of new research paradigms and collaborative methods that help to reclaim
control over these forms of ways of knowing (Lavia and Mahlomaholo 2012; Smith L. T. 2012;
Wilson 2008). Thus, the knowledge this niche produces dynamically influences different bodies
of knowledge and sciences, such as Western Science, because “Indigenous knowledges do not
`sit in pristine fashion’ outside of the effects of other knowledges” (Dei 2000, 113).

By participating in and directing the creation of new research paradigms and
collaborative methods using Native ways of knowing, SCC AL is an example of how Native
American Conservation Corps programs can elucidate underlying codes of imperialism and
colonialism regulated through research, that if left unimpeded contribute to regenerated forms of
imperialism (Agnani et al. 2007; Lavia and Mahlomaholo 2012; Smith L. T. 2012). Imperialism
and colonialism are apparent in the subjugation of Native American knowledge in postcolonial
and decolonial methodological and research practices. Through this collaborative research
project SCC AL ensured both their knowledge and interests were not subjugated but instead
autonomous by stressing the importance that this research project be equitable, collaborative, and
conducted by and for them in the spirit of Indigenous research methods.
Despite incorporating beneficial qualities of postcolonialism, decolonization, and cultural heritage into participation and practice, and avoiding obstructing qualities of lingering colonialism such as subjugation of knowledge, Native American conservation corps programs seem to be a product of these theories instead of an intentional manifestation of them. For example, SCC AL engages postcolonialism, decolonization, and cultural heritage through well-defined and active participation in practices such as education (Lavia and Mahlomaholo 2012), cultural leadership and landscape management (Guilfoyle et al. 2019), integrating traditional ecological knowledge (Carr et al. 2017), engaging the public, and conserving and preserving heritage (Harrison et al. 2008). However, “Decolonization is the intelligent, calculated, and active response to the forces of colonialism that perpetuate the subjugation and/or exploitation of our [Native American] minds, bodies, and lands, that is engaged for the ultimate purpose of overturning the colonial structure and realizing Indigenous liberation” (Yellow Bird and Waziyatawin 2012, 3).

While SCC AL engages postcolonialism, decolonization, and cultural heritage through participation and practice their program does not seem to be calculated or created with a postcolonial or decolonial agenda. Instead, SCC AL seems to be a product of a sociopolitical environment that is consciously and subconsciously influenced by processes of decolonialization and postcolonial discourse opposing colonialism. These theories and conditions allowed for the circumstances conducive for forming Native American specific conservation corps programs. Therefore, although Native American conservation corps programs, such as SCC AL, may not be intentional manifestations of postcolonialism, decolonization, and cultural heritage, they fuse these theories in daily practice by supporting a clear and well-defined program model which actively engages participation rooted in the culture and heritage of Native communities.
Question 2: How are Native American communities engaging CRM qualities such as values-based management and community-based participatory research to support cultural heritage oriented projects and programs?

CRM laws and qualities inherently have the potential to influence Native American education and well-being by involving, educating, and engaging the public. Yet while CRM laws “stress public benefit and require public involvement there are few good examples of either in relation to the volume of CRM projects” (Praetzellis and Praetzellis 2011, 87). There are especially few good examples of this in regard to involvement or collaboration with Native Americans. Similar to how Native American conservation corps programs occupy a postcolonial and decolonial niche addressing the lack of collaboration, inclusion, and involvement of Native Americans in the field they also occupy a niche addressing the shortage of projects for Native Americans that provide public benefit and involvement. SCC AL specifically does this by organizing projects that involve, educate, and engage the public and community by working with public land management agencies to provide community-based experiences intended to benefit participants and their communities.

Similar to this research, while SCC AL is not mandated by CRM law procedures, it does voluntarily utilize qualities of CRM such as value-based management and CBPR to support cultural heritage oriented projects. As discussed, when examining how SCC AL fuses postcolonialism, decolonization, and cultural heritage into their program model, SCC AL is also a product of decolonized awareness which brings attention to CRM practices such as value-based management. While theoretically CRM is both mandated and obligated to benefit and involve the public it rarely does. Even rarer does CRM examine the beneficial outcomes projects have on the Native American communities they undeniably affect. Although CRM frequently leaves Native American communities out of research and conversation on both the theoretical and applied
level, Native American communities have taken it upon themselves to determine the beneficial qualities and outcomes of CRM, such as value-based management and CBPR, and use them for community benefit. Value-based management creates a space within CRM where Indigenous knowledge can contribute to cultural values and become part of the conservation and preservation processes. Similarly, SCC AL utilizes value-based management to connect youth to their heritage and cultural values in order for them to contribute to their projects’ conservation and preservation processes. As a result, during these processes SCC AL participants gain program benefits in order to better themselves and their communities.

As for CBPR, SCC AL participates in this form of research by being open to collaborative research projects, such as this thesis, that engage in research where the researcher and community work together with a common goal of creating respectful research designs and results to promote sustainable change and equitable benefits for both partners (Kyon-Achan et al. 2018; Lambert 2014; Minkler and Wallerstein 2008; Stump 2013). While SCC AL is open to collaborative research projects with partners, cooperators, and communities who can assist them in supporting cultural heritage oriented projects and programs as a program they do not conduct research on their program outside of a program satisfaction survey at the end of each season. This is understandable considering research is not an imperative of SCC AL’s mission or charge. However, if SCC AL were to conduct research on their program they could more fully support CBPR by applying research conducted with, by, and for Native American communities to support cultural heritage oriented projects and programs. This possibility is discussed further in the suggestions for future research section of this chapter.

SCC AL is an example of how Native American conservation corps program can engage unmandated CRM qualities such as value-based management and CBPR to the extent in
which it is useful to meet their program and community goals. In doing so, SCC AL is voluntarily fulfilling CRM’s obligation to benefit and involve the public and also exemplifying outcomes of postcolonial and decolonization scholarship like Carr et al. (2017), Guilfoyle et al. (2019), Harrison et al. (2008), and Lavia and Mahlomaholo (2012). Even though Native American conservation corps programs are not mandated by CRM law, such programs can utilize CRM qualities and best practices in their own capacities to set exemplary standards for how their values should guide collaborative research and support cultural heritage oriented projects and programs.

**Question 3: What are the advantageous outcomes of educational, professional, personal, and economic participant benefits of Native American conservation corps programs to individuals and community?**

While there are plentiful cultural heritage programs and conservation corps programs across the United States available to the general public, there are very limited cultural heritage oriented programs for Native Americans whose communities could benefit deeply from the experience, education, and exposure these programs have to offer. In the Southwest Conservation Corps Ancestral Lands Adult Program Online Participant Survey (SCC AL Survey) benefits were ascertained by asking if participants felt SCC AL had prepared them to be successful in pursuing college or a degree (Q14), a career (Q16), or something they are passionate about (Q18). Based on repeatedly used words from short answer questions Q14, Q16, and Q18 themes were formed to categorize the different kinds of benefits SCC AL participants were expressing in their responses. Along with repeatedly used words which were quantified according to how many times they occurred, less frequently used words or statements related to the repeatedly used words were documented from the SCC AL Survey responses to create the
participant benefit themes for each of the short answer questions. Benefit themes formed are as follows: educational (Q14), professional (Q16), and personal (Q18). Using participants’ words the benefits of SCC AL, according to theme, are as follows in Table 5.1 below.

<table>
<thead>
<tr>
<th>SCC AL Program Benefits</th>
<th>Q14- Educational Benefits</th>
<th>Q16- Professional Benefits</th>
<th>Q18- Personal Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pursue my education in preserving our heritage and culture, strength to better myself educational wise, prepared me mentally to finally pursue a degree, higher education, currently seeking a degree, also helped me really get a grip on what I want to study when I do go to school, preparation, experience.</td>
<td>responsibility, time management, communication, create a resume, work ethic, hands on experience, organization, meeting deadlines, teamwork, gain colleagues, build connections, maintain relationships, decision making, asking questions, speak up, problem solve, offer solutions, career options, accountable, use my skills to complete tasks and projects</td>
<td>new and fresh perspectives allowed me to be receptive to new and broader topics or teachings, become strong mentally striving for my goals and achieving them, explore my options, given me more confidence, brought out a different side to me, time to reflect upon myself, confidence in my decision making and overall open mindedness, stronger mentally, physically, and spiritually self-betterment, confidence, perspective</td>
</tr>
</tbody>
</table>

Table 5.1: SCC AL Program Benefits According to Theme (Table by Author 2019)

For all three questions asking if SCC AL had prepared them to be successful in pursuing college or a degree, a career, or something they are passionate about over 90% of participants responded “yes” to the quantitative multiple choice questions. However, more substantial answers regarding advantageous outcomes and benefits of Native American conservation corps programs were found in associated qualitative short answer responses. According to the themes, advantageous outcomes of Native American conservation corps programs are educational, professional, and personal participant benefits to the individual in the many forms detailed by participants in Table 5.1. In addition, to Q20 97% of participants responded “yes” to if working with SCC AL has benefited them financially or economically. However, unlike Q13, Q15, and Q17, Q20 did not have an associated qualitative short answer question to form a theme from.
Regardless, throughout Q14, Q16, and Q18 many participants mentioned financial benefits in the form of scholarships and awards. In fact, for Q14 repeatedly used words included scholarship/award/financial. Similar to educational, professional, and personal participant benefits, statements of economic benefits were referred to on an individual level.

In the case of SCC AL, results reflected individuals are directly benefiting from the experience, education, and exposure Native American conservation corps programs have to offer while communities are indirectly benefiting from individual participant benefits. Thus, the advantageous outcomes and benefits of Native American conservation corps programs to the community such as natural and cultural resource management, employment, and reclaiming of traditional culture and practices are dependent on participant benefits on the individual level.

**Question 4: How do Native American conservation corps programs support cultural and ecological well-being?**

While the field of cultural heritage has yet to articulate how cultural heritage, education, and well-being are connected, it has recognized that youth and young adults play an important role in facilitating the connection between these variables. SCC AL is rooted in cultural heritage and focused on Native youth leading tribal nations back to ecological and cultural well-being by engaging Native youth and young adults in meaningful conservation projects on Native and public lands. As exemplified in the both quantitative and qualitative SCC AL Survey responses on preparedness (Q13-Q18), SCC AL is undeniably preparing their participants to better themselves by being successful.

The working definition of well-being as defined by this thesis is the state of being balanced and grounded in well-being; also prepared, equipped, and knowledgeable about how to continue bettering oneself and others by engaging well-being. Considering participants were not
asked directly if their well-being was influenced by working with SCC AL, conclusions cannot be made on whether participants feel they are engaging well-being for personal or community betterment. However, from numerous short answer responses on preparedness it can be inferred SCC AL participants feel the education and experience they are gaining from the program are preparing them to better themselves and their communities. For example, in the qualitative SCC AL Survey responses on preparedness (Q14, Q16, and Q18) participants responded:

- Southwest Conservation Corps- Ancestral Lands has prepared me to be successful when pursuing a career because the program allowed me to become part of the land and my environment.
- [SCC AL] They have prepared me to pursue my education in preserving our heritage and culture for our next [generation] to come.
- I am passionate about giving out a helping hand in my community.
- People look at us and compliment that were not doing this just for us we are doing it for the tribe the younger generations to feel inspire and take [that] next step up to carry on from generation to generation. We are looking for change to go back to thriving tremendously.

The unique educational opportunity SCC AL provides for young adults is significant in relation to well-being because youth and young adults play a large role in creating educational spaces in which they actively influence the development of knowledge, community, identity, and well-being which consequently shape and re-generate these places (Smith, L. T. 2012). By being an educational program focused on creating spaces to learn about and apply Native American culture SCC AL contributes to the development of knowledge, community, identity, and well-being for their participants. These developments are a necessary foundation for young adults to assert their influence and agency by not only participating in educational spaces but also constructing them. Thus, SCC AL supports cultural and ecological well-being by creating the educational spaces necessary for youth and young adults to develop a sense of community and identity while learning and teaching about well-being, in turn perpetuating it.
Additionally, SCC AL supports general well-being by incorporating determinants of well-being established by psychology, health, education, linguistics, and archaeology in their program such as sense of community, heritage, youth agency, collaboration, and language and culture use (Table 2.1). Suggesting Native American conservation corps programs focused on cultural heritage have the potential to elucidate previously undetermined connections between cultural heritage, education, and well-being similar to how other fields of research such as psychology, health, and education have made connections to well-being using comparable determinants.

Part 1.2: SCC AL Research Questions

Question 1: What parts of SCC AL do participants value the most?

SCC AL participants value qualities of SCC AL, listed in numerical ratings in Table 5.2:

<table>
<thead>
<tr>
<th>#1</th>
<th>Work Experience with the National Park Service</th>
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<tbody>
<tr>
<td>#2</td>
<td>Work Experience Related to Cultural and Natural Resource Management</td>
</tr>
<tr>
<td>#3</td>
<td>Traditional Culture and Language as Part of Crew Lifestyle and Project Work</td>
</tr>
<tr>
<td>#4</td>
<td>Building Community Relationships and Connections</td>
</tr>
<tr>
<td>#5</td>
<td>Conservation Projects on Native Lands</td>
</tr>
</tbody>
</table>

Table 5.2: Q12: What parts of the SCC AL program do you value the most? (Rate 1-5) (Table by Author 2019)

The order of these selections correlates with responses to Q11 where 91% of participants responded they enjoyed their visits to various NPS sites during their season reflecting a very high satisfaction rating from participants. Also, Q7 where 65% of participants responded working with the NPS was educational when it came to cultural and natural resource management as compared to 62% cultural heritage (Q6) and 53% anthropology and archaeology (Q8). Then
lastly, Q16 and Q18 where numerous participants responded the professional and personal benefits of working with SCC AL were building connections, gaining colleagues, and maintaining relationships.

**Question 2: How does working with SCC AL benefit participants?**

Working with SCC AL benefits participants educationally, professionally, personally, and economically. More specifically SCC AL benefits participants by preparing them with the skills they need to pursue college or a degree, a career, or something they are passionate about. Significantly, 94% of SCC AL participants felt SCC AL has prepared them to be successful for attending college or pursuing a degree (Q13). Additionally, 94% of SCC AL participants felt SCC AL has prepared them to pursue a career (Q15); 96% of SCC AL participants felt SCC AL has prepared them to pursue something they are passionate about (Q17); and 97% of participants felt SCC AL has benefited them financially or economically (Q20). Skills SCC AL participants felt prepared to apply when pursuing either these college or a degree, a career, or something they are passionate about included time management, communication (Q14), leadership, decision making, responsibility, flexibility (Q16), confidence, and motivation (Q18).

**Question 3: Are SCC AL participants satisfied with the SCC AL program?**

Yes, SCC AL participants are satisfied with the SCC AL program as 97% of SCC AL participants answered “likely” to recommended SCC AL to friends and family (Q19). Additionally, 66% of SCC AL participants responded “yes” they think they will apply for SCC AL or similar programs next summer (Q21). Furthermore, 100% of SCC AL participants felt...
their experience gained during the 2018 season will inspire other youths and young adults from their communities to participate in programs similar to SCC AL (Q22).

**Question 4: Are SCC AL participants satisfied with their NPS assignment locations?**

Yes, SCC AL participants are satisfied with their NPS assignment locations, with 91% of SCC AL participants reporting they enjoyed their visits to various NPS sites during the 2018 season (Q11). To reinforce the 91% NPS satisfaction rate, 65% of participants found working with the NPS educational when it came to NPS employment/volunteer opportunities (Q9) and 64% of participants responded working with the NPS and SCC AL has encouraged them to pursue future opportunities with the NPS (Q10).

**Question 5: Does SCC AL have community support?**

Yes, SCC AL has community support and is valued by tribal communities as community support for SCC AL comes in the form of tribal communities valuing the experience SCC AL participants gain from the program and 90% of SCC AL participants felt the experience they gained during the 2018 season was valued by their tribal community (Q23). In the short answer responses to Q24, SCC AL participants elaborated they felt their experience was valued by their tribal community because:

- I would like to think that my will to explore and reach out into a different area of study fills them with hope that our young and younger folks today, will one day return to the study of who we really are and what life was like for our ancestors, as well as our higher purpose in life.
- The community has started to see what our office is doing and continuing to lend their support.
- It's teaching the youth and adults how to be self-efficient, having [initiative]. That nobody is going to hold your hand for the rest of your life. You need to do stuff on your own.
- I feel like the experience I gained this summer will be valued because the tribal community will be happy that we are young natives who are employed and being educated about the land and how to manage everything for a healthy environment.

**Part 1.3: Addressing the Hypotheses**

Upon review of the case study on SCC AL, the following observations were made. First, SCC AL benefits individuals directly and communities indirectly. Thus, community benefits are dependent on participant benefits on the individual level. While conclusions can’t be made on whether/how direct participant benefits and indirect community benefits contribute to well-being, it can be inferred that SCC AL participants feel the benefits they are gaining from SCC AL are preparing them to better themselves and their communities. However, SCC AL supports preparedness as it relates to this thesis’ definition of well-being as well as a more general definition of well-being by incorporating determinants of well-being into their program from more established fields of research. Also, SCC AL supports well-being by creating the educational spaces necessary for youth and young adults to learn, teach, and perpetuate community, identity, and well-being. This suggests Native American conservation corps programs focused on cultural heritage have the potential to influence and contribute to individual and/or community well-being by making connections between cultural heritage, education, and well-being. The case study on SCC AL also demonstrated participants are receiving tangible (economic) and intangible (educational, professional, personal) benefits which they bring back into their communities. Additionally, the SCC AL case study evidenced through these benefits participants are being prepared to pursue their goals. Lastly, according to SCC AL participants their SCC AL experience and the benefits they receive from the program are supported by the tribal community. These findings are essential components for testing this thesis’ hypotheses.
This thesis began by suggesting three hypotheses: the main (1), alternative (2), and null (3). Each hypothesis was a variation of the main hypothesis by altering the variables of benefits returning to the community and the presence of participant benefits to evaluate the relationship between Native American conservation corps programs and well-being, as defined by this thesis. As discussed in the synopsis of the findings, SCC AL participants are receiving tangible and intangible benefits from the program meaning hypothesis 3, the null hypothesis, is rejected. Also, the tangible and intangible benefits SCC AL participants are receiving from the program are preparing participants to pursue their goals. These benefits are also brought back into their communities and are supported by the tribal community meaning hypothesis 2, the alternative hypothesis, is rejected. Additionally, SCC AL supports this thesis’ definition of well-being, general well-being, and educational spaces which promote well-being. Therefore, this thesis’ research concludes the main hypothesis, hypothesis 1.

**Hypothesis 1:** Participant benefits of Native American conservation corps programs directly influence and contribute to individual and/or community well-being by providing participants with tangible and intangible educational, professional, personal, and economic benefits that are brought back into the community and by preparing participants to pursue personal goals in regard to college, career, and passions.

Visual 5.1: Review of Hypothesis 1 with stipulation for community well-being (Visual by Author 2019)
While this thesis’ research supports hypothesis 1 it is important to clarify one stipulation, as shown in Visual 5.1. Hypothesis 1 claims participant benefits of Native American conservation corps programs directly influence and contribute to individual and/or community well-being. By finding Native American conservation corps programs benefit individuals directly and communities indirectly and community benefits are dependent on individual benefits this thesis’ findings are limited to concluding participant benefits of Native American conservation corps programs directly influence and contribute to only individual well-being.

Part 2: Conclusion
Part 2.1: Data Sharing
In the results chapter of this thesis, data from the SCC AL Survey was discussed, presented, and displayed as thoroughly and concisely as possible. However, considering the author’s intention of producing equitable research and addressing SCC AL’s areas of interest to promote program support and growth along with this thesis the author also created separate PDF documents using the online infographic platform Visme containing data from the SCC AL Survey in a more approachable, visual, presentable, and sharable format, which is located in Appendix E. These separate PDF documents were created according to predetermined collaborative data sharing plans. These SCC AL Survey data sharing documents were then disseminated to SCC AL over email to Mr. Robles and Mrs. McDermott, the Southwest Conservation Corps Grants and Agreements Manager, with an understanding that they should be used to the advantage of SCC AL in whatever capacity is most useful to the program.
Part 2.2: Research Limitations and Challenges

The collaborative methods detailed in the methods chapter adapted research methods to support postcolonial and decolonizing methodologies. In contrast, the interpretive methods followed more straightforward mixed method data analysis procedures and did not entail collaboration. As previously mentioned, this thesis’ intention is to be an equitable and collaborative research project with SCC AL. However, after the collaborative creation and administration of the SCC AL Survey, SCC AL had little to no involvement in data analysis or formulation of the results. Therefore, this collaborative research project was limited because it was not entirely collaborative. While collaboration on data analysis and results was never discussed with SCC AL as a collaborative opportunity, their omission from these processes could be argued as a research limiting variable, counterproductive to collaborative efforts, or discounting of the theoretical foundation of this thesis, post colonialism and decolonization. To complicate matters, autonomous research had to be carried out to demonstrate the ability to independently accomplish a Master of Arts-level (MA-level) research project from start to finish. To address any issues that might arise from this limiting but crucial variable, a representative from SCC AL was asked to review the thesis and sit as a formal member on the thesis graduate committee.

In terms of collaboration, “there is a difference between sharing knowledge and sharing surface information” which points out the necessity of sharing the “theories and analysis which inform the way knowledge and information were constructed” (Lambert 2014, 66). Although, the results of this collaborative research project have been disseminated to SCC AL in both this thesis and a separate, more program specific document it would have been further collaborative if SCC AL was involved in construction of the foundation theories, results, and analysis. In doing so, this collaborative research project would have further contributed to creating counter
discourses and supported the decolonizing process of creating new research paradigms to help reclaim control over Indigenous or Native ways of knowing (Smith L. T. 2012; Wilson 2008).

Another challenge and a contributing factor to the acknowledged lack of collaboration throughout every facet of this thesis was time constraints. While collaborative goals and opportunities discussed with SCC AL from the beginning were accomplished, due to time constraints it was difficult to implement new collaborative ideas within the timeframe of the average MA thesis project. For example, by the time the author had realized the lapse in collaboration and thought about including SCC AL’s input into the analysis, results, and discussion, neither the author nor SCC AL had the time available to properly execute this collaborative idea based on the deadlines set for this thesis and graduation. Suggestions to address this challenge are discussed in the following section on suggestions for future research.

Also, while the SCC AL research objective to learn about how SCC AL is benefiting their participants in order to gain insight that assists in the growth and success of their program was addressed as intended, this collaborative research project was limited because it did not actually conclude whether this research is capable of assisting in the growth and success of SCC AL’s program. This limitation is due to the fact that an evaluation of this capability extends beyond the timeframe of this thesis, especially considering that the information presented herein merely represents a brief snap-shot in time from the 2018 SCC AL season. Evaluating the capability of this research to assist in the growth and success of the SCC AL program requires observations from numerous additional seasons and funding periods, as well as continued collaboration with SCC AL to discuss how the program is changing over time.

Lastly, the issue of evolving definitions has been a common theme throughout this thesis. Postcolonialism, decolonization, cultural heritage, and well-being are all terms with a
multiplicity of experiences and understandings or are terms used differently depending on what field of research they are being applied to (Liebman and Rizvi 2008). Well-being especially is difficult to define and even harder to measure (Thomas 2009). However, as interest in well-being grows, there is a greater necessity to be clear about not only how to measure well-being but also what is being measured, as well as how resulting data should be interpreted, in order to undertake a fair and valid assessment of what well-being is and means (Dodge et al. 2012). While this thesis offered a working definition of well-being for the purposes of this thesis and amounted the transmission of well-being to practice, preparation, and perpetuation, it did not measure it, leaving the question of what well-being really is and means incomplete.

**Working Definition of Well-Being:** the state of being balanced and grounded in well-being; also prepared, equipped, and knowledgeable about how to continue bettering oneself and others by engaging well-being

Visual 5.2: Review of Working Definition of Well-being (Visual by Author 2019)

Just as postcolonialism and decolonization struggle with definitions, there are other struggles associated with conflicting measurables between Indigenous/Native and Western Science ways of knowing. Considering cultural heritage and well-being are products of postcolonialism and decolonization they are in the same predicament. However, with well-being being a generally defined, widely applied, and growing area of research, the following questions remain: Is well-being tangible or intangible? If tangible, can it be measured and how? Does quantification go against well-being’s roots in postcolonialism and decolonization? If intangible, what does well-being equate to? Leaving these questions unanswered is a research limitation of this thesis and will continue to limit future research on the topic of well-being.
Part 2.3: Suggestions for Future Research

In support of decolonizing research, the author suggests SCC AL carries on this research from design to dissemination in the capacity most useful and relevant to them whether it be continuing on the topic of well-being, continuing to assess what participants value about the program, or more generally as a program satisfaction survey. This suggestion comes after considering and analyzing the influence the author played in the research process as a facilitator and realizing there were ways in which the research could have further supported the paradigm shift towards decolonization and Indigenous research methods. With the author as the research facilitator this collaborative research project was done with and for Native American communities. However, if SCC AL were to carry on the research it would be research done with, by, and for communities, further migrating Native American communities closer to the focal point of research outcomes and supporting Native American peoples as active participants instead of passive recipients of research. In this way, if SCC AL were to continue this research they would be engaging in Indigenous research methods with the potential for more relevancy and applicability to their Native communities.

According to Stapp and Burney (2002), if you are trying to do meaningful and sincere consultation, anticipate the project will take longer than expected. Hence, the author suggests addressing the challenge of time constraints by anticipating projects will take longer expected and be more time intensive than predicted. When planning and putting together a time frame for a collaborative research project the author also recommends incorporating time to build relationships with research partners as this can be one of the more time intensive research responsibilities.

Considering meaningful and sincere consultation, or collaborative research projects, may take longer than expected and time constraints can be a challenge for future collaborative
research projects, the author believes it would be useful to create a collaborative plan very early on in the research process. This collaborative plan should specifically lay out how collaboration will take place during all stages of research, from design to dissemination. Instead of having a general intention to collaborate during the entirety of the collaborative research project, which was the method utilized by the author. Creating the collaborative plan would need to take place at the beginning of a collaborative research project so an appropriate time frame could be set and the level of involvement from both research parties could be established. This way a lapse in collaboration, such as missing input on results as discussed earlier in the research limitations and challenges section, can be avoided and collaboration can be more evenly distributed throughout the entirety of a collaborative research project.

**Part 2.4: Valuable Lessons Learned**

In the very beginning stages of this thesis the following quote was a large part of the inspiration for an equitable and collaborative research project:

> We must ask ourselves questions… It is not what the community can do for you… to write the dissertation; but what does your research do for the community? How does the research empower the community? Our research must be a respectful collaboration with members of each community. (Lambert 2014, 64)

While Lambert’s quote does not mention consultation as a necessary practice for conducting respectful collaboration, as exemplified by this thesis, CRM practices of consultation are applicable to collaborative research projects to establish respect, equitability, and collaboration. Using Nissley and King’s (2014) CRM best practices of consultation such as consulting, seeking, discussing, considering, and seeking agreement, consultative practices were not only borrowed but applied to this nonmandated thesis project in the form of collaborative methods and practices designed to promote respectful and equitable research, as detailed in Table 5.3 below.
<table>
<thead>
<tr>
<th><strong>Applied CRM Best Practices of Collaboration and Consultation</strong></th>
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<tbody>
<tr>
<td><strong>Consultation</strong></td>
</tr>
<tr>
<td><strong>Seeking</strong></td>
</tr>
<tr>
<td><strong>Discussing</strong></td>
</tr>
<tr>
<td><strong>Considering</strong></td>
</tr>
<tr>
<td><strong>Seeking Agreement</strong></td>
</tr>
</tbody>
</table>

Table 5.3: Applied CRM Best Practices of Collaboration and Consultation (Nissley and King 2014) (Table by Author 2019)

Although this collaborative research project and process was completely voluntary as an academically simulated consultative experience instead of a real world mandated consultative process, it was still immensely educational because the author was exposed to real world CRM scenarios throughout the process of the simulation such as sticking to a timeframe, constant communication and updating, changes in tribal representation (Mr. Robles transitioning from Program to Regional Director, Mr. Wight leaving SCC AL), appropriate data sharing, and having
sincere intentions. In the words of Stapp and Burney when describing tribal CRM, “in the end, if you consult with sincerity, you will succeed” (Stapp and Burney 2002, 151). Ultimately, this collaborative research project yielded valuable real-world data for SCC AL, as did the process real world lessons for the author showing how the collaborative process can be just as valuable and informative as the results it produces. Now, at the end of this thesis and collaborative research project, looking back on Lambert’s quote, it is clear that respectful collaboration must not come from a place of obligation but instead be intentionally sincere and meaningful, highly involved, grounded in and open to community needs, and most importantly aim to benefit the community.
Bibliography

Agnani, Sunil, Fernando Coronil, Gaurav Desai, Mamadou Diouf, Simon Gikandi, Susie Tharu, and Jennifer Wenzel

Akena, Francis Adyanga

Albaum, Gerald

Atalay, Sonya
2012 *Community-Based Archaeology Research With, By, and For Indigenous and Local Communities*. Berkeley: University of California Press.

Atalay, Sonya

Barnhardt, Ray, and Angayuqaq Oscar Kawagley

Bernard, H. Russel

Biolsi, Thomas, and Larry J. Zimmerman

Brown, Michael F.

Byrne, Denis

Byrne, Denis
Cajete, Gregory

Campisteguy, Maria Elena, Jennifer M. Heilbronner, and Corinne Nakamura-Rybak
2018 Reclaiming Native Truth Research Findings: Compilation of All Research. :1-76.

Carr, Tish, Laura Kenefic, and Darren Ranco

Chambers, Iain, and Lidia Curti

Childs, Peter, and Patrick Williams
1997 *An Introduction to Post-Colonial Theory*. Prentice Hall Europe.

Clammer, John

Colwell, Chip, and T. J. Ferguson
2008 *Collaboration in Archaeological Practice: Engaging Descendant Communities*. Lanham, Md.: AltaMira Press.

Colwell-Chanthaphonh, Chip, T. J. Ferguson, Dorothy Lippert, Randall H. McGuire, George P. Nicholas, Joe E. Watkins, and Larry J. Zimmerman

Creswell, John W.

Creswell, John W.

Czyzewski, Karina

Davison, Graeme
Dei, George J. Sefa

Dei, George J. Sefa

DeJaeghere, Joan G., Jasmina Josić, Kate S. McCleary, and Jasmina Josić

Dodge, Rachel, Annette P. Daly, Jan Huyton, and Lalage D. Sanders

Fassin, Didier

Frank, Gelya, Sheila Murphy, Heather J. Kitching, Duane M. Garfield Sr., and Nancy McDarment

Freire, Paulo

Gideon, Lior

Gram-Hanssen, Irmelin

Guilfoyle, David, Genevieve Carey, Andy Rogers, Michael Bernard, and Raven Willoya-Williams

Haber, Alejandro

Hacker, Karen
2013 *Community-Based Participatory Research*. Thousand Oaks, Calif.: SAGE.
Hallett, Darcy, Michael J. Chandler, and Christopher E. Lalonde

Hamilakis, Yannis, and Philip Duke

Harrison, Rodney

Harrison, Rodney

Harrison, Rodney, Graham Fairclough, John H. Jameson Jnr., and John Schofield

Hassel, Ron, and Alex Tremble

Hatton, Alf, and Francis P. Macmanamon

Jameson Jnr., John H.

Jameson Jnr., John H.

Kempf, Arlo

Kenyon, DenYelle Baete, and Jessica S. Carter

Kerber, Jordan E.

King, Thomas F.
Kovach, Margaret  

Kyoon-Achan, Grace, Josée Lavoie, Kathi Avery Kinew, Wanda Phillips-Beck, Naser Ibrahim, Stephanie Sinclair, and Alan Katz  

Lambert, Lorelei A.  

Lavia, Jennifer, and Sechaba Mahlomaholo  

Liebmann, Matthew, and Uzma Z. Rizvi  
2008 *Archaeology and the Postcolonial Critique*. Lanham, MD: AltaMira Press.

McClintock, Anne  
1992 The Angel of Progress: Pitfalls of the Term "Post-Colonialism". *Social Text* 10(2):84.

McIvor, Onowa, Art Napoleon, and Kerissa Dickie  

McNiven, Ian J.  

Menozzi, Filippo  

Minkler, Meredith, and Nina Wallerstein  

Montana Conservation Corps  
2019 “Montana Conservation Corps- Additional Opportunities for Native Americans.”  

Mulcahy, Kevin V.  

Native Conservation Corps  
Nicholas, George P.
2010 *Being and Becoming Indigenous Archaeologists*. Walnut Creek, Calif.: Lest Coast Press.

Nissley, Claudia, and Thomas F. King

Northwest Youth Corps

Poulios, Loannis

Praetzellis, Mary, and Adrian Praetzellis

Rea, Louis M.

Ribeiro, Gustavo Lins

Ritchie, Kaitlin

Schaepe, David M., Bill Angelbeck, David Snook, and John R. Welch

Scheld, Suzanne, Dana H. Taplin, and Setha M. Low

Shah, Hetan, and Nic Marks

Silliman, Stephen W., and T. J. Ferguson

Smith, Caroline, Mike Wight, Ron Hassel, Rose Clements, Jenna Rosengren, Chas Robles, Emily Swartz, Kyle Trujillo, Marshall Masayesva, Aaron Lowden, and Ryan Aguilar

Smith, Graham H.

Smith, Linda Tuhiwai

Southwest Conservation Corps

Southwest Conservation Corps Ancestral Lands

Stapp, Darby C., and Michael S. Burney
2002 Tribal Cultural Resource Management: The Full Circle to Stewardship. Walnut Creek, CA: AltaMira Press.

Stump, Daryl

Thomas, J.

Thomas, Nicholas

Torre, De La

Trivedi, Harish, and Meenakshi Mukherjee

Tsing, Anna Lowenhaupt

Van Dommelen, Peter
Whitt, Laurelyn  

Williams, Patrick, and Laura Chrisman  

Wilson, Shawn  

Yellow Bird, Michael, and Waziyatawin  

Zinn, Maxine Baca  
Appendix A

Southwest Conservation Corps Ancestral Lands Communication and Collaboration Timeline
Southwest Conservation Corps Ancestral Lands Communication and Collaboration Timeline

2018
April
April 19th, 2018: Initial email sent to Chas Robles and Anthony Ciocco regarding Southwest Conservation Corps Ancestral Lands Adult Program Online Participant Survey

April 24th, 2018: Chas Robles responds that SCC AL would “be happy to have our participants take part in this survey” via email

April 24th, 2018: First draft of Southwest Conservation Corps Ancestral Lands Adult Program Online Participant Survey sent to SCC AL for review via email

May
May 3rd, 2018: Phone call meeting with Chas Robles to discuss the first draft of the Southwest Conservation Corps Ancestral Lands Adult Program Online Participant Survey

May 3rd, 2018: Changes made to first draft Southwest Conservation Corps Ancestral Lands Adult Program Online Participant Survey requests

May 3rd, 2018: Second draft of Southwest Conservation Corps Ancestral Lands Adult Program Online Participant Survey sent to SCC AL for approval via email

May 4th, 2018: Final draft and changes to Southwest Conservation Corps Ancestral Lands Adult Program Online Participant Survey approved by SCC AL via email

May 11th, 2018: Southwest Conservation Corps Ancestral Lands Adult Program Online Participant Survey approved by University of Montana Institutional Review Board (IRB) under the “Exempt” category

May 29th, 2018: Teleconference with SCC AL during their weekly program staff meeting to inform crew leaders of the Southwest Conservation Corps Ancestral Lands Adult Program Online Participant Survey. Encouraged crew leader to remind their crew members to take the survey when they have access to the computer on assignment preparation or de-brief

June
June 5th, 2018: Draft email containing the invitation and link to participate in the Southwest Conservation Corps Ancestral Lands Adult Program Online Participant Survey sent to SCC AL for approval

June 5th, 2018: Southwest Conservation Corps Ancestral Lands Adult Program Online Participant Survey invitation email approved by SCC AL via email
June 21st, 2018: Chas Robles sends first email request to SCC AL participants to complete Southwest Conservation Corps Ancestral Lands Adult Program Online Participant Survey during assignment preparation or de-brief

June 27th, 2018: First Southwest Conservation Corps Ancestral Lands Adult Program Online Participant Survey response received

July
July 6th, 2018: Visited SCC AL Gallup, New Mexico office

July 12th, 2018: Chas Robles sends second email request to SCC AL participants to complete Southwest Conservation Corps Ancestral Lands Adult Program Online Participant Survey during

July 13th, 2018: Nolan Notah, Ancestral Lands GIS Coordinator, sends Mapping Plant Species Throughout Ancestral Lands: Native American Young Adults Engaging in Conservation Practices and Using GIS Technologies to Promote a Better Positive Community poster

July 13th-15th, 2018: Supervised and was point of contact for visiting SCC AL Hopi Young Adult Crew at Glen Canyon National Recreation Area

August
August 8th, 2018: Chas Robles sends third email request to SCC AL participants to complete Southwest Conservation Corps Ancestral Lands Adult Program Online Participant Survey during assignment preparation or de-brief

September
September 18th, 2018: Chas Robles sends fourth email request to SCC AL participants complete Southwest Conservation Corps Ancestral Lands Adult Program Online Participant Survey during assignment preparation or de-brief

October
October 8th, 2018: Invitation sent to Chas Robles requesting he be part of my thesis graduate committee as an outside observer via email

October 8th, 2018: Chas Robles accepts invitation to be on my thesis graduate committee as an outside observer via email

October 8th, 2018: Teleconference with Chas Robles and Mike Wight about what SCC AL would like to take away from the Southwest Conservation Corps Ancestral Lands Adult Program Online Participant Survey, any specific questions they would like answered, and how I can best frame the research and results in ways that are useful to SCC AL

October 8th, 2018: Mike Wight sends 2016, 2017, and 2018 WASO NPS reports via email

October 8, 2018: Chas Robles and Michaelle Machuca send fifth and last call request to SCC AL participants to complete Southwest Conservation Corps Ancestral Lands Adult Program
Online Participant Survey during assignment preparation or de-brief, or whenever it is most convenient

November

November 2\textsuperscript{nd}, 2018: Chas Robles sends Harvard Undergrad SCC AL Study via email

November 14\textsuperscript{th}, 2018: Thesis Committee Composition Form sent to Chas Robles via email

November 19\textsuperscript{th}, 2018: Thesis Committee Composition Form returned by Chas Robles with signature via email

November 14\textsuperscript{th}, 2018: Petition to the Graduate Dean regarding Committee Member submitted to Graduate Dean

November 20\textsuperscript{th}, 2018: Petition to the Graduate Dean regarding Committee Member approved

November 20\textsuperscript{th}, 2018: Complete Thesis Committee Composition Form submitted to Chair of Department of Anthropology

December

December 12\textsuperscript{th}, 2018: Last Southwest Conservation Corps Ancestral Lands Adult Program Online Participant Survey response received

2019

February

February 23\textsuperscript{rd}, 2019: Chapter 1- Introduction and Chapter 4- Southwest Conservation Corps Ancestral Lands of thesis sent to Chase Robles for review via email

June

June 24-28\textsuperscript{th}, 2019: Supervised and was point of contact for visiting SCC AL Hopi Young Adult Crew at Glen Canyon National Recreation Area

July

July 16\textsuperscript{th}, 2019: Chapter 1- Introduction and Chapter 4- Southwest Conservation Corps Ancestral Lands of thesis resent to Chase Robles for review via email

October

October 11\textsuperscript{th}, 2019: Chapter 4- Southwest Conservation Corps Ancestral Lands of thesis received from Chas Robles with first round of edits via email

October 18\textsuperscript{th}, 2019: Chapter 4: Results of thesis and SCC AL Survey Results Excel sent to Chas Robles for review via email

November

November 10\textsuperscript{th}, 2019: SCC AL Data Sharing Documents (6) containing SCC AL Survey results sent to Chas Robles and Roseann McDermott for review via email
November 11th, 2019: Chas Robles confirms availability for Thesis Defense

November 12th, 2019: Thesis Defense scheduled for December 9th, 2019 from 1:00-3:00pm

November 12th, 2019: Defendable Thesis and Defense Date/Time/Place sent to Chas Robles for review via email

December

December 9th, 2019: Thesis Defense with Chas Robles, Greg Campbell, and Kelly Dixon. Final revisions and comments noted from thesis graduate committee

December 10th, 2019: Final electronic version of thesis submitted to the University of Montana Graduate School
Appendix B

Southwest Conservation Corps Ancestral Lands Adult Program Participant Survey
Southwest Conservation Corps- Ancestral Lands Adult Program Participant Survey

Survey Instruction Southwest Conservation Corps- Ancestral Lands Adult Program Participant Survey Conducted by: Michaelle Machuca with the use of Qualtrics For: Southwest Conservation Corps- Ancestral Lands and University of Montana
You are invited to participate in a research project by completing this short participant survey based on your experience with the Southwest Conservation Corps- Ancestral Lands and National Park Service during the summer of 2018. The results of this participant survey provide insightful information into how young adult involvement with the National Park Service and Youth Conservation Corps programs impact future aspirations and career objectives.

This online survey consists of 19 Multiple Choice questions, 1 Ranking question, 4 Short answer questions and 1 comments section and should take about 10 minutes to complete. Participation is completely voluntary, and responses will be kept anonymous to the degree permitted by the technology being used. Participation in this participant survey presents minimal risks with the only possible discomfort being student anxiety about participant survey questions. Benefit is to the entities that contribute to the participant survey.

You have the option to not respond to any questions that you choose. Participation or non-participation will not impact your relationship with Southwest Conservation Corps- Ancestral Lands or the University of Montana in any way. Entry into and submission of the survey will be interpreted as your informed consent to participate and that you affirm that you are at least 18 years of age.

If you have any questions about the research, please contact the Principal Investigator, Michaelle Machuca, via email at michaellemachuca92@gmail.com or the Faculty Advisor Kelly Dixon, Ph.D. at kelly.dixon@msoumt.edu. If you have any questions regarding your rights as a research subject, please contact the UM Institutional Review Board (IRB) at (406) 243-6672.

Your participation is greatly appreciated! Please print or save a copy of this page for your records.

* I have read the above information and agree to participate in this research project. By selecting
"Yes" I voluntarily agree to take part in the Southwest Conservation Corps- Ancestral Lands Adult Program Participant Survey.

☐ Yes (1)

☐ No (2)

End of Block: INTRODUCTION AND INSTRUCTIONS

Start of Block: PRELIMINARY QUESTIONS

Q1 Which Southwest Conservation Corps- Ancestral Lands Program are you a part of?

☐ Acoma Pueblo Program (1)

☐ Navajo Nation Program (2)

☐ Zuni Pueblo Program (3)

☐ Hopi Program (4)

☐ Albuquerque Program (5)

☐ Southwest Conservation Corps Ancestral Lands National Program (6)

Q2 Sex:

☐ Male (1)

☐ Female (2)

☐ Other (3)

☐ I Choose Not to Answer (4)
Q3 Age:

- 18-19 (1)
- 20-21 (2)
- 22-23 (3)
- 24-45 (4)
- 25+ (5)

End of Block: PRELIMINARY QUESTIONS

Start of Block: National Park Service Questions
Q4 Which National Park Service sites did you visit on hitches this year? (Choose all that apply)

☐ AZRU- Aztec Ruins National Monument (1)
☐ BAND- Bandelier National Monument (2)
☐ CACH- Canyon de Chelly National Monument (3)
☐ CHCU- Chaco Canyon National Historical Park (4)
☐ ELMA- El Malpais National Monument (5)
☐ ELMO- El Morro National Monument (6)
☐ GLCA- Glen Canyon National Recreation Area (7)
☐ GRCA- Grand Canyon National Park (8)
☐ HUTR- Hubbel Trading Post National Historic Site (9)
☐ JOTR- Joshua Tree National Park (10)
☐ MEVE- Mesa Verde National Park (11)
☐ MUWO- Muir Woods National Monument (12)
☐ PECO- Pecos National Historical Park (13)
☐ PEFO- Petrified Forest National Park (14)
☐ PETR- Petroglyph National Monument (15)
Q5 Are you and your affiliated tribe associated with any of the National Park Service Sites that you visited on hitches this year?
(Choose all that apply)

☐ AZRU- Aztec Ruins National Monument (1)
☐ BAND- Bandelier National Monument (2)
☐ CACH- Canyon de Chelly National Monument (3)
☐ CHCU- Chaco Canyon National Historical Park (4)
☐ ELMA- El Malpais National Monument (5)
☐ ELMO- El Morro National Monument (6)
☐ GLCA- Glen Canyon National Recreation Area (7)
☐ GRCA- Grand Canyon National Park (8)
☐ HUTR- Hubbel Trading Post National Historic Site (9)
☐ JOTR- Joshua Tree National Park (10)
☐ MEVE- Mesa Verde National Park (11)
☐ MUWO- Muir Woods National Monument (12)
☐ PECO- Pecos National Historical Park (13)
☐ PEFO- Petrified Forest National Park (14)
☐ PETR- Petroglyph National Monument (15)

Q6 Was your time working with various National Park Service sites on hitches this year educational when it came to Cultural Heritage?
Cultural Heritage Definition: the legacy of tangible and intangible attributes of a group or society that are inherited from past generations, maintained in the present and preserved for the benefit of future generations.

(Rate on Scale of 1-10)

- 0 (0)
- 1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)
- 6 (6)
- 7 (7)
- 8 (8)
- 9 (9)
- 10 (10)

Q7 Was your time working with various National Park Service sites on hitches this year educational when it came to Cultural and Natural Recourse Management?

Cultural Resource Management Definition: the practice of managing cultural resources such as the arts, language, tradition and heritage.

Natural Resource Management Definition: the practice of managing natural resources such as land, water, soil, plants and animals.
Q8 Was your time working with various National Park Service sites on hitches this year educational when it came to Anthropology and Archaeology?

Anthropology Definition: the study of human culture and societies in the past and present.

Archaeology Definition: the study of human history and prehistory through analysis of artifacts and other physical remains.
(Rate on Scale of 1-10)

- 0 (0)
- 1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)
- 6 (6)
- 7 (7)
- 8 (8)
- 9 (9)
- 10 (10)
Q9 Was your time working with various National Park Service sites on hitches this year educational when it came to National Park Service Employment/Volunteer Opportunities? (Rate on Scale of 1-10)

- 0 (0)
- 1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)
- 6 (6)
- 7 (7)
- 8 (8)
- 9 (9)
- 10 (10)

Q10 Has working with the National Park Service and Southwest Conservation Corps- Ancestral Lands encouraged you to pursue future opportunities with the National Park Service?

- Yes (1)
- Maybe (2)
- No (3)
Q11 Did you enjoy your hitches/visits to various National Park Service sites this year?  
(Rate on Scale of 1-10)

- 0 (0)
- 1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)
- 6 (6)
- 7 (7)
- 8 (8)
- 9 (9)
- 10 (10)

End of Block: National Park Service Questions

Start of Block: Ancestral Lands- Southwest Conservation Corps

Q12 What parts of the Southwest Conservation Corps- Ancestral Lands program do you value the most?  
(Rate in order: 1 being Highest Importance and 5 being Lowest Importance)

- Work Experience Related to Cultural and Natural Resource Management (1)
- Work Experience with the National Park Service (2)
- Traditional Culture and Language as Part of Crew Lifestyle and Project Work (3)
- Conservation Projects on Native Lands (4)
- Building Community Relationships and Connections (5)
Q13 Do you feel that Southwest Conservation Corps- Ancestral Lands has prepared you to be successful when it comes to attending college or pursuing a degree?

○ Yes (1)

○ No (2)

Q14 If YES, how has working with Southwest Conservation Corps- Ancestral Lands prepared you to be successful when it comes to attending college or pursuing a degree?

If NO, how could Southwest Conservation Corps- Ancestral Lands have better prepared you to be successful when it comes to attending college or pursuing a degree?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Q15 Do you feel that Southwest Conservation Corps- Ancestral Lands has prepared you to be successful when it comes to pursuing career?

○ Yes (1)

○ No (2)

Q16 If YES, how has working with Southwest Conservation Corps- Ancestral Lands prepared you to be successful when it comes to pursuing a career? If NO, how could Southwest Conservation Corps- Ancestral Lands have better prepared you to be successful when it comes to attending pursuing a career?
Q17 Do you feel that Southwest Conservation Corps- Ancestral Lands has prepared you to be successful when it comes to pursuing something you are passionate about and want to succeed in?

- Yes (4)
- No (5)

Q18 If YES, how has Southwest Conservation Corps- Ancestral Lands prepared you to be successful when it comes to pursuing something you are passionate about and want to succeed in?

If NO, how could Southwest Conservation Corps- Ancestral Lands have better prepared you to be successful when it comes to pursuing something you are passionate about and want to succeed in?

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________
Q19 How likely are you to recommend the Southwest Conservation Corps- Ancestral Lands to friends or family?  
(Rate on Scale 1-10)

- 0 (0)
- 1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)
- 6 (6)
- 7 (7)
- 8 (8)
- 9 (9)
- 10 (10)

End of Block: Ancestral Lands- Southwest Conservation Corps

Start of Block: General

Q20 Has working with Southwest Conservation Corps- Ancestral Lands positively benefited you financially or economically?

- Yes (4)
- No (5)
Q21 Do you think you will apply for the Southwest Conservation Corps- Ancestral Lands or similar programs next summer?

- Yes (1)
- Maybe (2)
- No (3)

Q22 Do you feel that the experience you are gaining this summer will inspire other youths and young adults from your community to participate in similar programs?

- Yes (1)
- No (2)

Q23 Do you feel that the experience you are gaining this summer is valued by your tribal community?

- Yes (1)
- No (2)

Q24 How do you feel the experience you are gaining this summer is valued by your tribal community?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Q25 Optional: Any other comments...

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

End of Block: General
Appendix C

The University of Montana- Missoula Institutional Review Board (IRB) Application for IRB Review
At the University of Montana (UM), the Institutional Review Board (IRB) is the institutional review body responsible for oversight of all research activities involving human subjects as outlined in the U.S. Department of Health and Human Services’ Office of Human Research Protection and the National Institutes of Health, Inclusion of Children Policy Implementation.

**Instructions:** A separate application must be submitted for each project. IRB proposals are approved for no longer than one year and must be continued annually (unless Exempt). Faculty and students may email the completed form as a Word document to [IRB@umontana.edu](mailto:IRB@umontana.edu), or submit a hardcopy (no staples) to the IRB office in the Interdisciplinary Sciences Building, room 104. Student applications must be accompanied by email authorization by the supervising faculty member or a signed hard copy. All fields must be completed. If an item does not apply to this project, write in: N/A. Questions? Call the IRB office at 243-6672.

1. **Administrative Information**

<table>
<thead>
<tr>
<th>Project Title</th>
<th>UM Position</th>
<th>Office location</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOUTHWEST CONSERVATION CORPS- ANCESTRAL LANDS ADULT PROGRAM ONLINE PARTICIPANT SURVEY</td>
<td>Graduate Student</td>
<td>N/A</td>
</tr>
</tbody>
</table>

   **Principal Investigator:** Michaeleen Machuca
   **Department:** Anthropology
   **Work Phone:** N/A
   **Cell Phone:** (253) 227-1027

2. **Human Subjects Protection Training** *(All researchers, including faculty supervisors for student projects, must have completed a self-study course on protection of human research subjects within the last three years and be able to supply the “Certificate(s) of Completion” upon request.)*  

<table>
<thead>
<tr>
<th>Name</th>
<th>Email</th>
<th>DATE COMPLETED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michaeleen Machuca</td>
<td><a href="mailto:michaellemachuca92@gmail.com">michaellemachuca92@gmail.com</a></td>
<td>02/09/2018</td>
</tr>
<tr>
<td>Kelly Dixon</td>
<td><a href="mailto:kelly.dixon@mso.umt.edu">kelly.dixon@mso.umt.edu</a></td>
<td>02/26/2017</td>
</tr>
</tbody>
</table>

3. **Project Funding** *(If federally funded, you must submit a copy of the abstract or Statement of Work.)*

<table>
<thead>
<tr>
<th>Agency</th>
<th>Grant No.</th>
<th>e-Prop #</th>
<th>Start Date</th>
<th>End Date</th>
<th>PI on grant</th>
</tr>
</thead>
</table>

   **Has grant proposal received approval and funding?**  
   [ ] Yes (If yes, cite sponsor on ICF if applicable)  
   [ ] No

**IRB Determination:**

[ ] Not Human Subjects Research

[ ] Approved by Exempt Review, Category ____________ (see memo)

[ ] Approved by Expedited Review, Category ____________ (see Note to PI)

**Note to PI:** Non-exempt studies are approved for one year only. Use any attached IRB-approved forms (signed/dated) as “masters” when preparing copies. If continuing beyond the expiration date, a continuation report must be submitted. Notify the IRB if any significant changes or unanticipated events occur. When the study is completed, a closure report must be submitted. Failure to follow these directions constitutes non-compliance with UM policy.
_____ Full IRB Determination
   _____ Approved (see Note to PI)
   _____ Conditional Approval (see memo) - IRB Chair Signature/Date: __________________________
   _____ Conditions Met (see Note to PI)
   _____ Resubmit Proposal (see memo)  Risk Level:
   _____ Disapproved (see memo)

Final Approval by IRB Chair/Manager: __________________________ Date: _______________ Expires: __________________
4. **Purpose of the Research Project:** Briefly summarize the overall intent of the study. Your target audience is a non-researcher. Include in your description a statement of the objectives and the potential benefit to the study subjects and/or the advancement of your field. Generally include are literature related to the problem, hypotheses, and discussion of the problem’s importance. Expand as needed.

Research Project Background:
Within anthropology, especially archeology, there is a contemporary and urgent need to not only recognize but actively contest undeniable colonial roots through culturally inclusive education and the support of diverse researchers and research paradigms. When considering anthropological youth programs as a form of essential education, there are plentiful programs available to the general public, however, there is an undisputable lack of accessible youth programs for marginalized populations; most notably Native Americans who have been subject to centuries of overt and covert forms of colonialism and whose communities could benefit deeply from experience, education, and exposure to anthropological youth programs.

To address this problem and deficiency of equal opportunity, this research project will examine the current relationship between Native American youth programs, cultural heritage and archeology with the intention of producing data to assist in the creation of accessible, effective and relevant educational youth programs that encourage tribal youth to participate in cultural heritage and anthropological youth programs, as well as to enhance education and career opportunities for Native American students related to anthropology and archeology. This research project will focus on the Southwest Conservation Corp’s Ancestral Lands program that engages the younger generation of young adults in forms of cultural heritage, anthropology and archeology that are relevant to their culture and community.

Research Project Significance and Objectives:
The objective of this research project and of the Southwest Conservation Corp’s Ancestral Lands Adult Program Online Participant Survey is to create a resource that can be used to alter existing cultural heritage and anthropological youth and young adult programs or create new programs that are tailored to Native American populations. This resource will contribute to current efforts to create attainable programs and opportunities that encourage Native Americans to pursue anthropology, then return to their communities as anthropologists and archeologists with the ability and knowledge to conduct culturally sensitive, diverse, and inclusive research that promotes Indigenous archaeology and community-based archaeology.

This research project will be also be motivated by a holistic and pertinent research model that can be applied to other entities, including federal agencies such as the National Park Service, when endeavoring to diversify or expand inclusivity in the near future for upcoming generations of employees and visitors.

Southwest Conservation Corp’s Ancestral Lands Adult Program Online Participant Survey:
The Southwest Conservation Corp’s Ancestral Lands Adult Program Online Participant Survey provides the Southwest Conservation Corp’s Ancestral Lands (SCC AL) with an online survey that will be reflective of participant satisfaction with SCC AL as a program and with their assignment locations at various National Park Service (NPS) sites. I created the online participant survey for the Southwest Conservation Corp’s Ancestral Lands Adult program participants in order to start collecting information regarding the productivity of current Native American young adult programs founded in cultural heritage as well as the need for additional Native American youth and young adult programs founded in cultural heritage; or similar topics such as anthropology, archeology, environmental studies and cultural and natural resource management.

I created this participant survey, and the questions included in the participant survey, with the Southwest Conservation Corp’s Ancestral Lands mission statement in mind. The SCC AL mission statement is outlined below to present the institutional foundations of this survey and research project.

Southwest Conservation Corp’s Ancestral Lands Mission Statement:
The Ancestral Lands division of the Southwest Conservation Corp was created with the intention of engaging Native youth and young adults in meaningful conservation projects on Native Lands. Ancestral Lands includes program in Acoma Pueblo, Hopi Nation, Navajo Nation, and most recently Zuni Pueblo. Ancestral Lands crews work on projects from historical preservation, traditional agriculture, chainsaw crews, hiking clubs, stream...
restoration, fencing, trail construction and more and aims to incorporate traditional culture and language as part of crew lifestyle and project work.

The Southwest Conservation Corps - Ancestral Lands Adult Program Online Participant Survey will serve as a resource for the Southwest Conservation Corps - Ancestral Lands program that they can use to evaluate participant satisfaction with their program and make changes if seen necessary based on the participants reviews, suggestions and needs. Considering that the SCC AL is a relatively new program that started in 2013 and is currently still growing to include more Native American communities, this online participant survey can be extremely beneficial and helpful to the SCC AL program when it comes to expansion and creating a program that is enjoyable, educational, valuable and culturally relevant for its participants.

Considering that the SCC AL programs spend the majority of their summers working on National Park Service sites on assignment, another purpose of the online participant survey is to provide insight into how young adult involvement with the NPS may affects future aspirations and career objectives associated with the NPS or other federal agencies. SCC AL involvement with the NPS is very important to both entities. Firstly, because SCC AL program participants visit locations that their tribes are traditionally culturally affiliated with. And secondly, because of the NPS’s current objective of reaching a younger and more diverse generation that will ultimately replace the large number of long time park employees that are scheduled to retire within the next 10 years. The questions in the online participant survey regarding the NPS are additionally valuable and beneficial because they start to address the NPS’s objective of diversifying its work force while gathering information on whether young adult programs are an effective way of introducing NPS opportunities and careers to the younger generation. Especially those who have been traditionally marginalized with little representation within the NPS, such as Native Americans. As the Southwest Conservation Corps- Ancestral Lands stresses, Native American involvement is especially important because of their cultural affiliation to numerous NPS sites and existing lack of Native American representation in the NPS work force. This online participant survey is structured to address this issue.

4.1 What do you plan to do with the results? If not discussed above, include considerations such as whether this is a class project, a project to improve a program/school system, and/or if the results will be generalized to a larger population, contribute to the general field of knowledge, and/or be published/presented in any capacity.

The analyzed results of the Southwest Conservation Corps- Ancestral Lands Adult Program Participant Survey will be distributed to the Southwest Conservation Corps- Ancestral Lands, various National Park Service sites and results will be included in my M.A thesis.

<table>
<thead>
<tr>
<th>Is this part of a thesis or dissertation?</th>
<th>☑️ Yes</th>
<th>☐️ No</th>
<th>If yes and other than the PI's, then whose?</th>
</tr>
</thead>
</table>

5. IRB Oversight

Is oversight required by other IRB(s) [e.g., tribal, hospital, other university] for this project? ☑️ Yes ☐️ No

If yes, please identify IRB(s):

N/A

6. Subject Information:

6.1 Human Subjects (identify, include age/gender):

Subjects of the Southwest Conservation Corps- Ancestral Lands Adult Program Online Participant Survey will be participants of the SCC AL Adult Program who were employed by the SCC AL during the Summer of 2018. Participants will be males and females. Participants will be adults over the age of 18 and between the ages of 18-25.

6.2 How many subjects will be included in the study? +/- 100

6.3 Are minors included (under age 18, per Montana law)? ☑️ Yes ☐️ No

If yes, specify age range: to

6.4 Are members of a physically, psychologically, or socially vulnerable population being specifically targeted? ☑️ Yes ☐️ No
If yes, please explain why the subjects might be physically, psychologically or socially vulnerable:

N/A

6.5 Are there other special considerations regarding this population? Yes No
If yes, please explain:

N/A

6.6 Do subjects reside in a foreign country? Yes Specify country: No
If yes, please fill out and attach Form RA-112, Foreign Site Study Appendix (http://www.umt.edu/research/compliance/IRB/Docs/foreign.doc).

6.7 How will the subjects be selected or recruited? Include a bulleted list of inclusion/exclusion criteria. (Attach copies of all flyers, advertisements, etc., that will be used in the recruitment process as these require UM-IRB approval)

Permission will be granted to the researcher to provide Southwest Conservation Corps- Ancestral Lands with the Southwest Conservation Corps- Ancestral Lands Adult Program Online Participant Survey that will be sent out via email to program participants. The researcher and SCC AL will reach an agreement that the SCC AL will send out the Southwest Conservation Corps- Ancestral Lands Adult Program Online Participant Survey via email to summer program participants in late June/early July and late summer/early fall program participants in early September.
(For Written Permission regarding Online Surveys see Appendix C)

Subjects of the Southwest Conservation Corps- Ancestral Lands Adult Program Online Participant Survey will be selected through their involvement with and employment by the SCC AL Adult Program during the Summer of 2018. If the subject was employed by SCC AL in an Adult Program during the Summer of 2018 they will be chosen to receive an Southwest Conservation Corps- Ancestral Lands Adult Program Online Participant Survey via email from the Southwest Conservation Corps requesting their participation in the participant survey. Summer program participants will receive the email in late June/early July and late summer/early fall program participants will receive the email in early September.

Selection Criteria:
- Must have been employed by an SCC AL Adult Program
- Must have been employed by an SCC AL Adult Program during the Summer of 2018
- Must be over the age of 18 years old

6.8 How will subjects be identified in your personal notes, work papers, or publications: (may check more than one)

- Identified by name and/or address or other
  (Secure written [e.g., ICF] or verbal permission to identify; if risk exists, create a confidentiality plan.)

- Confidentiality Plan
  (Identity of subjects linked to research, but not specific data [e.g., individuals identified in ICF but not included in publications]; identification key kept separate from data; or, data collected by third party [e.g., Select Survey, SurveyMonkey, etc.] and identifiers not received with data.)

- Never know participant’s identity
  (An ICF may be unnecessary [e.g, anonymous survey, paper or online] unless project is sensitive or involves a vulnerable population.)

6.9 Describe the means by which the human subject’s personal privacy is to be protected, and the confidentiality of information maintained. If you are using a Confidentiality Plan (as checked above), include in your description a plan for the destruction of materials that could allow identification of individual subjects or the justification for preserving identifiers.
The Southwest Conservation Corps- Ancestral Lands Adult Program Online Participant Survey will be created using the Qualtrics Software that is supported by the University of Montana. Participant responses will be kept anonymous to the degree permitted by the technology being used. Transport Layer Security (TLS) will be utilized through Qualtrics to and ensure data is transmitted in an encrypted fashion.

Participants will not be identified by name, address or any other type of information that is considered an identifier and could connect them to their survey responses. The Southwest Conservation Corps- Ancestral Lands Adult Program Online Participant Survey will be anonymous because identifying information will not be collected and no IP addresses are to be obtained.

| 6.9a | Will subject(s) receive an explanation of the research – separate from the informed consent form (if applicable) – before and/or after the project? | ☑ Yes (attach copy and explain when given)  ☒ No |

### 7. Information to be Compiled

#### 7.1 Explain where the study will take place (physical location not geographic). If permission is required to conduct the research at the location or to use any of the facilities, indicate those arrangements and attach copies of written permission:

The Southwest Conservation Corps- Ancestral Lands Adult Program Online Participant Survey will take place where it is most convenient for the participant to take the participant survey. Since the Southwest Conservation Corps- Ancestral Lands Adult Program Online Participant Survey will be sent out over email and will be available in an online format the participant will need to take the participant survey on a computer or smart phone.

(For the Southwest Conservation Corps- Ancestral Lands Adult Program Online Participant Survey see Appendix D)

#### 7.2 Will you be working with infectious materials, ionizing radiation, or hazardous materials? Please specify. (Do not include here standard biological samples, such as blood, buccal cells, or urine; specify those in #7.6.)

N/A

#### 7.3 Subject matter or kind(s) of information to be compiled from/about subjects:

The Southwest Conservation Corps- Ancestral Lands Adult Program Online Participant Survey will collect initial information regarding specific Adult Program involvement, sex and age. Then, the Southwest Conservation Corps- Ancestral Lands Adult Program Online Participant Survey will go on to include questions focused on the following categories: satisfaction with National Park Service sites visited on assignment, satisfaction with SCC AL as a program, how/if working with the SCC AL is influencing adult participants decision about college and career paths, and whether involvement with the program inspires them to pursue future opportunities with the NPS.

(For the Southwest Conservation Corps- Ancestral Lands Adult Program Online Participant Survey see Appendix D)

#### 7.4 Activities the subjects will perform and how the subjects will be used. Describe the instrumentation and procedures to be used and kinds of data or information to be gathered. Provide enough detail so the IRB will be able to evaluate the intrusion from the subject’s perspective (expand box as needed):

The Southwest Conservation Corps- Ancestral Lands Adult Program Online Participant Survey will take place where it is most convenient for the participant to take the participant survey. Since the Southwest Conservation Corps- Ancestral Lands Adult Program Online Participant Survey will be sent out over email and will be available in an online format the participant will need to take the participant survey on a computer or smart phone. The participant survey will entail completing 19 Multiple Choice questions, 1 Ranking question, 4 Short answer questions and 1 comments section and should take about 10 minutes to complete.
The Southwest Conservation Corps- Ancestral Lands Adult Program Online Participant Survey will collect initial information regarding specific Adult Program involvement, sex and age. Then, the Southwest Conservation Corps- Ancestral Lands Adult Program Online Participant Survey will go on to include questions focused on the following categories: satisfaction with National Park Service sites visited on assignment, satisfaction with SCC AL as a program, how/if working with the SCC AL is influencing adult participants decision about college and career paths, and whether involvement with the program inspires them to pursue future opportunities with the NPS.

The Southwest Conservation Corps- Ancestral Lands Adult Program Online Participant Survey will be created using Qualtrics. Participant responses will be kept anonymous to the degree permitted by the technology being used. Transport Layer Security (TLS) will be utilized through Qualtrics to and ensure data is transmitted in an encrypted fashion.

7.5 Is information on any of the following included? (check all that apply):
- Sexual behavior
- Drug use/abuse
- Alcohol use/abuse
- Illegal conduct
- Information about the subject that, if it became known outside the research, could reasonably place the subject at risk of criminal or civil liability or be damaging to the subject’s financial standing or employability.

7.6 Means of obtaining the information (check all that apply). Attach questionnaire or survey instrument, if used:
- Field/Laboratory observation
- Blood/Tissue/Ur ine/Feces/Semen/Saliva
- Sampling (IBC Application must be submitted)
- Medical records (require HIPAA form)
- Measurement of motions/actions
- In-person interviews/survey
- Telephone interviews/survey
- On-site survey
- Mail survey
- Online survey (attach Statement of Confidentiality)
- Use of standard educational tests, etc.
- Examine public documents, records, data, etc.
- Examine private documents, records, data, etc.
- Other means (specify):

7.7 Will subjects be (check all that apply):
- Videotaped
- Audio-taped
- Photographed
- N/A
- (securing an additional signature is recommended on consent/assent/permission forms)

Explain how above media will be used, who will transcribe, and how/when destroyed:

N/A

7.8 Discuss the benefits (does not include payment for participation) of the research, if any, to the human subjects and to scientific knowledge (if the subjects will not benefit from their participation, so state):

Benefits to the survey participants, involved communities and to scientific knowledge include:
- Contributing to the betterment of a path-breaking career-oriented program (SCC AL) aimed at connecting Native Americans, young people and ancestral communities with cultural heritage stewardship opportunities.
- Producing post-colonial and colonial oriented research that combines research on applied educational youth programs and the use of theory that can be used to alter existing anthropological youth programs or create new programs that are tailored to Native American youths.
- Contributing knowledge that can assist in creating attainable opportunities that encourage Native Americans to pursue anthropology, then return to their communities as anthropologists and archeologists with the ability and knowledge to conduct culturally sensitive, diverse, and inclusive research that promotes Indigenous Archeology and community-based research and archaeology.
- Focusing on Native American youth programs that engage the younger generation of youth and young adults in anthropology and archeology.
- Creating discussions on how to create the conditions and opportunities necessary for a new generation of Native American anthropologists and archeologists that are culturally connected to their research and understand the value of culturally sensitive and inclusive research.
- Opening a dialogue between Native American communities and the National Park Service on how to best include Native American input and participation with the NPS while also creating employment opportunities.
- Supporting a holistic and pertinent research model that can be applied to other entities, including federal agencies such as the National Park Service, when endeavoring to diversify or expand inclusivity of their work force in the near future (as stated in current NPS initiatives).

7.9 Cite any payment for participation (payment is not considered a benefit). Include incentives of monetary value. If grant funding is not indicated in item #2, please specify the source of the funding and in what form it is to be dispersed.

| There will be no costs for taking part in the Southwest Conservation Corps- Ancestral Lands Adult Program Online Participant Survey, as well as no financial compensation or benefit. |

7.9a Outline, in detail, the risks and discomforts, if any, to which the human subjects will be exposed (Such deleterious effects may be physical, psychological, professional, financial, legal, spiritual, or cultural. As a result, one can never guarantee that there are no risks – use “minimal.” Some research involves violations of normal expectations, rather than risks or discomforts; such violations, if any, should be specified):

| Participation in the Southwest Conservation Corps- Ancestral Lands Adult Program Online Participant Survey presents minimal risks with the only possible discomfort being student anxiety about participant survey questions. |

7.9b Describe, in detail, the means taken to minimize each such deleterious effect or violation:

| In order to minimize possible discomfort associated with the questions included in the Southwest Conservation Corps- Ancestral Lands Adult Program Online Participant Survey there will be a section included on the first page of the online participant survey explicitly stating that "Participation is completely voluntary" as well as: |

| "You are invited to participate in a research project by completing this short participant survey based on your experience with the Southwest Conservation Corps- Ancestral Lands and National Park Service during the summer of 2018. The results of this participant survey will provide insightful information into how young adult involvement with the National Park Service and Youth Conservation Corps programs impact future aspirations and career objectives. |

| This online survey consists of 19 Multiple Choice questions, 1 Ranking question, 4 Short answer questions and 1 comments section and should take about 10 minutes to complete. Participation is completely voluntary, and responses will be kept anonymous to the degree permitted by the technology being used. Participation in this participant survey presents minimal risks with the only possible discomfort being student anxiety about participant survey questions. Benefit is to the entities that contribute to the participant survey. |

| You have the option to not respond to any questions that you choose. Participation or non-participation will not impact your relationship with Southwest Conservation Corps- Ancestral Lands or the University of Montana in any way. Entry into and submission of the survey will be interpreted as your informed consent to participate and that you affirm that you are at least 18 years of age. |

| If you have any questions about the research, please contact the Principal Investigator, Michaele Machuca, via email at michaellemachuca92@gmail.com or the Faculty Advisor Kelly Dixon, Ph.D. at kelly.dixon@mso.umt.edu. If you have any questions regarding your rights as a research subject, please contact the UM Institutional Review Board (IRB) at (406) 243-6672. |

| Your participation is greatly appreciated! Please print or save a copy of this page for your records. |

| * I have read the above information and agree to participate in this research project. By selecting "Yes" I voluntarily agree to take part in the Southwest Conservation Corps- Ancestral Lands Adult Program Participant Survey." |

All guidelines stated for an online survey that will never know the participants identity in the UNIVERSITY OF MONTANA-MISSOULA Institutional Review Board (IRB) for the Protection of Human Subjects in Research
ONLINE SURVEY Statement of Confidentiality will be adhered to in the Southwest Conservation Corps- Ancestral Lands Adult Program Online Participant Survey.
(For Statement of Confidentiality for Online Surveys see Appendix A)

Additionally, a copy of the SUBJECT INFORMATION AND INFORMED CONSENT FORM based off of the University of Montana Informed Consent Form Template will be included in the email sent out by Southwest Conservation Corps- Ancestral Lands Adult Program participants when requesting their participation in the Southwest Conservation Corps- Ancestral Lands Adult Program Online Participant Survey.
(For Subject Information and Informed Consent Form see Appendix B)

8. Informed Consent

An informed consent form (ICF) is usually required, unless subjects remain anonymous or a waiver is otherwise justified below. (Templates and examples of Informed Consent, Parental Permission, and Child’s Assent Forms are available at http://www.umt.edu/research/compliance/IRB/forms.php).

- A signed copy of the consent/assent/permission form must be offered to all subjects, including parents/guardians of subjects less than 18 years of age (minors).
- Use of minors
  - All minor subjects (under the age of 18) must have written parental or custodial permission (45 CFR 46.116(b)).
  - All minors from 10 to 18 years of age are required to give written assent (45 CFR 46.408(a)).
  - Assent by minor subjects: All minor subjects are to be given a clear and complete picture of the research they are being asked to engage in, together with its attendant risks and benefits, as their developmental status and competence will allow them to understand.
  - Minors less than 10 years of age and all individuals, regardless of age, with delayed cognitive functioning (or with communication skills that make expressive responses unreliable) will be denied involvement in any research that does not provide a benefit/risk advantage.
    - Good faith efforts must be made to assess the actual level of competence of minor subjects where there is doubt.
    - The Minor Assent Form must be written at a level that can be understood by the minor, and/or read to them at an age-appropriate level in order to secure verbal assent.

- Is a written informed consent form being used? [ ] Yes (attach copy) [X] No (justify below)
  ➔ Written consent means that physical, handwritten signatures will be obtained on the informed consent forms.

To waive the requirement for written informed consent (45 CFR 46.117), describe your justification: N/A

- Is a written parental permission form being used? [ ] Yes (attach copy) [X] No
  (If yes, will likely require minor assent form)

- Is a written minor assent form being used? [ ] Yes (attach copy) [X] No
  (If yes, will likely require parental permission form)

Principal Investigator’s Statement

By signing below, the Principal Investigator agrees to comply with all requirements of the University of Montana IRB, the U.S. Department of Health and Human Services Office of Human Research Protection Guidelines, and NIH Guidelines. The PI agrees to ensure all members of his/her team are familiar with the requirements and risks of this project, and has completed the Human Subject Protection Course available at http://www.umt.edu/research/compliance/IRB/hspcourse.php.

I certify that the statements made in this application are accurate and complete. I also agree to the following:

- I will not begin work on the procedures described in this protocol, including any subject recruitment or data collection, until I receive final notice of approval from the IRB.
I agree to inform the IRB in writing of any adverse or unanticipated problems using the appropriate form. I further agree not to proceed with the project until the problems have been resolved.

I will not make any changes to the protocol written herein without first submitting a written Amendment Request to the IRB using form RA-110, and I will not undertake such changes until the IRB has reviewed and approved them.

It is my responsibility to ensure that every person working with the human subjects is appropriately trained.

All consent forms and recruitment flyers must be approved and date-stamped by the IRB before they can be used. The forms will be provided back to the PI in PDF format with the IRB approval email. Copies must be made from the date-stamped version. All consent forms given to subjects must display the IRB approval date-stamp.

I understand that it is my responsibility to file a Continuation Report before the project expiration date (does not apply to exempt projects). This is not the responsibility of the IRB office. Tip: Set a reminder on your calendar as soon as you receive the date. A project that has expired is no longer in compliance with UM or federal policy.

I understand that I must file a Closure Report (RA-109) when the project is completed, abandoned, or otherwise qualifies for closure from continuing IRB review (does not apply to exempt projects).

I will keep a copy of this protocol (including all consent forms, questionnaires, and recruitment flyers) and all subsequent correspondence with the IRB.

I understand that failure to comply with UM and federal policy, including failure to promptly respond to IRB requests, constitutes non-compliance and may have serious consequences impacting my project and my standing at the University of Montana.

Signature of Principal Investigator: Michelle Machuca Date: 4/17/18

(Type for electronic submission; sign for hard copy)

NOTE: Electronic submission of this form must be sent from your University of Montana email account.

Do not leave the above line blank. Unsigned applications will not be accepted.

Attention Students: If you are submitting your application by hard copy (paper), please have your faculty supervisor sign the statement below. If you are submitting your application electronically (by email), then you must have your faculty supervisor send a separate email to the IRB affirming the statements below.

As the student’s faculty supervisor on this project, I confirm that:
1) I have read the IRB Application and attachments.
2) I agree that it accurately represents the planned research.
3) I will supervise this research project.

Faculty Supervisor: ____________________________
(Type or print name)

Faculty Supervisor Signature: ____________________________ Date: ____________________________
(Sign for hard copy)

Department: ____________________________ Phone: ____________________________
Please read the following before submitting your application.

Top reasons that IRB applications are returned for revisions:

1. Not using the most current version of the forms and templates by downloading them directly from the IRB website.
2. The instructions on the forms were not followed.
3. All items on the checklist/application were not completed.
4. The completion date(s) for the human subjects protection course for each team member, including the faculty supervisor, is missing or outdated, in which case the course needs to be re-taken. Certificates are valid for 3 years.
5. The current Informed Consent Form template was not followed, and required elements were not included.
6. Student did not obtain the signature of (or initiate email from) his/her faculty supervisor.
7. Required attachments were not provided, such as the informed consent form, any survey instruments, questionnaires, interview questions, advertisement materials (flyers), online Statement of Confidentiality form, Foreign Site Study Appendix, etc.
8. A letter of permission from external sites was not obtained or included (especially from school or government officials).
9. Contradictory or inconsistent information within the checklist and/or consent form (or between them).
10. Poor English grammar and spelling, especially in the consent form.
11. Not writing the consent form in the 2nd voice (except the very last paragraph).
12. Incomplete grant or funding information.
13. Not signing and dating the last page of the application. If submitting by email, this information may be typed-in. Do not leave this section blank.
14. Having questions, but not contacting the IRB office to get them resolved before submitting the application.

Need assistance? Please contact the IRB office at 243-6672 or email IRB@umontana.edu.
Appendix D

The University of Montana- Missoula Institutional Review Board (IRB)
Application Approval Under Exempt Under Category (b)(2)
Date: May 11, 2018

To: Michaele Machuca, Anthropology
    Dr. Kelly Dixon, Anthropology

From: Paula A. Baker, IRB Chair and Manager

RE: IRB #106-18: “Southwest Conservation Corps – Ancestral Lands Adult Program Online Participant Survey”

Your IRB proposal cited above has been APPROVED under the Exempt category of review by the Institutional Review Board in accordance with the Code of Federal Regulations, Part 45, section 101. The specific paragraph which applies to your research is:

_X_ (b)(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects’ responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects’ financial standing, employability, or reputation.

University of Montana IRB policy does not require you to file an annual Continuation Report for exempt studies, as there is no expiration date on the approval. However, you are required to notify the IRB of the following:

Amendments: Any changes to the originally-approved protocol must be reviewed and approved by the IRB before being made (unless extremely minor). Requests must be submitted using Form RA-110.

Unanticipated or Adverse Events: You are required to timely notify the IRB if any unanticipated or adverse events occur during the study, if you experience an increased risk to the participants, or if you have participants withdraw from the study or register complaints about the study. Use Form RA-111.

Please contact the IRB office with any questions at (406) 243-6672 or email irb@umontana.edu.
At the University of Montana (UM), the Institutional Review Board (IRB) is the institutional review body responsible for oversight of all research activities involving human subjects as outlined in the U.S. Department of Health and Human Services' Office of Human Research Protection and the National Institutes of Health, Inclusion of Children Policy Implementation.

Instructions: A separate application must be submitted for each project. IRB proposals are approved for no longer than one year and must be continued annually (unless exempt). Faculty and students may email the completed form as a Word document to IRB@umontana.edu or submit a hardcopy (no staples) to the IRB office in the Interdisciplinary Sciences Building, room 104. Student applications must be accompanied by email authorization by the supervising faculty member or a signed hard copy. All fields must be completed. If an item does not apply to this project, write in: N/A. Questions? Call the IRB office at 243-6572.

1. Administrative Information

<table>
<thead>
<tr>
<th>Project Title: SOUTHWEST CONSERVATION CORPS-ANCESTRAL LANDS ADULT PROGRAM ONLINE PARTICIPANT SURVEY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Investigator: Michaele Machuca</td>
</tr>
<tr>
<td>UM Position: Graduate Student</td>
</tr>
<tr>
<td>Department: Anthropology</td>
</tr>
<tr>
<td>Office Location: N/A</td>
</tr>
<tr>
<td>Work Phone: N/A</td>
</tr>
<tr>
<td>Cell Phone: (253) 227-1027</td>
</tr>
</tbody>
</table>

2. Human Subjects Protection Training (All researchers, including faculty supervisors and student projects, must have completed a self-study course on protection of human research subjects within the last three years and be able to supply the "Certificate(s) of Completion" upon request. If you need to add more for more people, use the additional researchers information.)

<table>
<thead>
<tr>
<th>All Researchers (list yourself first)</th>
<th>PI</th>
<th>Co-PI</th>
<th>Faculty Supervisor</th>
<th>Research Assistant</th>
<th>Date Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name: Michaele Machuca</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>02/09/2018</td>
</tr>
<tr>
<td>Email: <a href="mailto:michaele.machuca92@gmail.com">michaele.machuca92@gmail.com</a></td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>02/09/2018</td>
</tr>
<tr>
<td>Name: Kelly Dixon</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>02/10/2017</td>
</tr>
<tr>
<td>Email: <a href="mailto:kelly.dixon@mso.umt.edu">kelly.dixon@mso.umt.edu</a></td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>02/10/2017</td>
</tr>
</tbody>
</table>

3. Project Funding (If federally funded, you must submit a copy of the abstract or Statement of Work.)

<table>
<thead>
<tr>
<th>Agency</th>
<th>Great No.</th>
<th>e-Prop #</th>
<th>Start Date</th>
<th>End Date</th>
<th>PI on Grant</th>
</tr>
</thead>
</table>

IRB Determination:

Not Human Subjects Research

Approved by Exempt Review, Category # 2 (see memo)

Approved by Expedited Review, Category # (see Note to PI)

Full IRB Determination

Approved (see Note to PI)

Conditional Approval (see memo) - IRB Chair Signature/Date:

Conditions Met (see Note to PI)

Resubmit Proposal (see memo)

Disapproved (see memo)

For UM-IRB Use Only

Note to PI: Non-exempt studies are approved for one year only. Use any attached IRB-approved forms (signed dated) as "overt" when preparing copies. If continuing beyond the expiration date, a continuation report must be submitted. Notify the IRB if any significant changes or unanticipated events occur. When the study is completed, a closure report must be submitted. Failure to follow these directions constitutes non-compliance with UM policy.

Risk Level: Minimal

Final Approval by IRB Chair/Manager: [Signature] Date: 5/11/2018 Expires: N/A
SUBJECT INFORMATION AND INFORMED CONSENT

Research Project Title: SOUTHWEST CONSERVATION CORPS- ANCESTRAL LANDS ADULT PROGRAM ONLINE PARTICIPANT SURVEY

Investigator(s): Principal Investigator: Michaelle Machuca, michaellemachuca92@gmail.com, University of Montana and Faculty Advisor: Kelly Dixon, Ph.D., kelly.dixon@mso.umt.edu, University of Montana Anthropology Department.

Inclusion Selection Criteria: Subjects of the Southwest Conservation Corps- Ancestral Lands Adult Program Online Participant Survey have been selected through their involvement with and employment by the SCC-AL Adult Program during the Summer of 2018.

Selection Criteria:
- Must have been employed by an SCC-AL Adult Program
- Must have been employed by an SCC-AL Adult Program during the Summer of 2018
- Must be over the age of 18 years old

Purpose: You are invited to participate in a research project by completing this short participant survey based on your experience with the Southwest Conservation Corps- Ancestral Lands and National Park Service during the summer of 2018. The results of this participant survey will provide insightful information into how young adult involvement with the National Park Service and Youth Conservation Corps programs impact future aspirations and career objectives.

Procedures: The Southwest Conservation Corps- Ancestral Lands Adult Program Online Participant Survey consists of 17 Multiple Choice questions, 1 Ranking question, 3 Short answer questions and one optional comments section and should take about 10 minutes to complete. The Southwest Conservation Corps- Ancestral Lands Adult Program Online Participant Survey will take place where it is most convenient for you to take the participant survey. Since the Southwest Conservation Corps- Ancestral Lands Adult Program Online Participant Survey will be sent out over email and will be available in an online format you will need to take the participant survey on a computer or smart phone.

Risks/Discomforts: Participation in the Southwest Conservation Corps- Ancestral Lands Adult Program Online Participant Survey presents minimal risks with the only possible discomfort being student anxiety about participant survey questions.

Benefits: There will be no costs for taking part in the Southwest Conservation Corps- Ancestral Lands Adult Program Online Participant Survey, as well as no financial compensation or benefit.

Confidentiality: The Southwest Conservation Corps- Ancestral Lands Adult Program Online Participant Survey will be created using the Qualtrics Software that is supported by the University of Montana. Your responses will be kept anonymous to the degree permitted by the technology being used. Transport Layer Security (TLS) will be utilized through Qualtrics to and ensure data is transmitted in an encrypted fashion. You will not be identified by name, address or any other type of information that is considered an identifier and could connect them to their survey responses. The Southwest Conservation Corps- Ancestral Lands Adult Program Online Participant Survey will be anonymous because identifying information will not be collected and no IP addresses are to be obtained.

The University of Montana IRB
Expiration Date: 01-31-2018
Date Approved: 5-17-2018
Chair/Admin: [Signature]
Voluntary Participation/Withdrawal: Your participation in the Southwest Conservation Corps-Ancestral Lands Adult Program Online Participant Survey is completely voluntary, and you have the option to not respond to any questions that you choose. Your participation or non-participation will not impact your relationship with Southwest Conservation Corps-Ancestral Lands or the University of Montana in any way and you may withdraw from the participant survey at any time.

Questions: You may wish to discuss this with others before you agree to take part in the Southwest Conservation Corps-Ancestral Lands Adult Program Online Participant Survey. If you have any questions about the research, please contact the Principal Investigator, Michaele Machuca, via email at michaelemachuca92@gmail.com or the Faculty Advisor Kelly Dixon, Ph.D. at kelly.dixon@mso.umt.edu. If you have any questions regarding your rights as a research subject, please contact the UM Institutional Review Board (IRB) at (406) 243-6572.

Statement of Your Consent: I have read the above description of this research project. I have been informed of the risks and benefits involved, and all my questions have been answered to my satisfaction. Furthermore, I have been assured that any future questions I may have will also be answered by a member of the research team. I understand I will receive a copy of this Subject Information and Informed Consent form via email. On the first page of the Southwest Conservation Corps-Ancestral Lands Adult Program Online Participant Survey there will be a prompt that states: “I have read the above information and agree to participate in this research project. By selecting "Yes" I voluntarily agree to take part in the Southwest Conservation Corps-Ancestral Lands Adult Program Participant Survey.” By selecting “Yes” to continuing on to the participant survey I voluntarily agree to take part in this research project.
Appendix E

Southwest Conservation Corps Ancestral Lands Adult Program Participant Survey Data Sharing Documents
**PARTICIPANT DEMOGRAPHICS**

**GENDER**
- 81% Male, 19% Female

**AGE**
- 22% 18-19
- 11% 20-21
- 16% 22-23
- 24% 24-25
- 27% 25+

---

**Southwest Conservation Corps**
**Ancestral Lands**
**Adult Program**
**Online Participant Survey - 2018**

---

**Does working with Ancestral Lands positively benefit participants financially or economically?**
- Yes 97%
- No 3%

**Did Ancestral Lands participants enjoy their visits to various National Park Service sites?**
- Enjoyed 91%
- Neutral 9%
- Did Not Enjoy 0%

**Do Ancestral Lands participants think they will apply for Ancestral Lands or similar programs next summer?**
- Yes 66%
- No 34%

---

**How likely are Ancestral Lands participants to recommend Ancestral Lands to friends or family?**
- Likely 97%
- Neutral 3%
- Not Likely 0%

---

**Has working with the National Park Service and Ancestral Lands encouraged participants to pursue future opportunities with the National Park Service?**
- Yes 64%
- Maybe 36%
- No 0%

---

**Number of surveys completed: 37 | Response Rate: 57%**
Southwest Conservation Corps
Ancestral Lands Adult Program
Online Participant Survey - 2018

Was participants time working with various National Park Service sites during the summer of 2018 educational when it came to:

- Cultural Heritage?
  - Educational: 62%
  - Neutral: 35%
  - Not Educational: 3%

- Cultural and Natural Recourse Management?
  - Educational: 65%
  - Neutral: 35%
  - Not Educational: 0%

- Anthropology and Archaeology?
  - Educational: 53%
  - Neutral: 38%
  - Not Educational: 9%

- NPS Employment and Volunteer Opportunities?
  - Educational: 65%
  - Neutral: 32%
  - Not Educational: 3%

Number of surveys completed: 37 | Response Rate: 57%
Do participants feel that Southwest Conservation Corps Ancestral Lands has prepared them to be successful when it comes to pursuing:

<table>
<thead>
<tr>
<th>College or a degree?</th>
<th>A career?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes 94.0%</td>
<td>Yes 94.0%</td>
</tr>
<tr>
<td>No 6.0%</td>
<td>No 6.0%</td>
</tr>
</tbody>
</table>

Something they are passionate about and want to succeed in?

Southwest Conservation Corps Ancestral Lands Program Benefits:

- Educational
- Professional
- Personal

Yes 97.0% No 3.0%
Southwest Conservation Corps Ancestral Lands Adult Program Online Participant Survey - 2018

What parts of the Ancestral Lands program do participants value the most?

#1 Work Experience Related to Cultural and Natural Resource Management

#2 Work Experience with the National Park Service

#3 Traditional Culture and Language as Part of Crew Lifestyle and Project Work

#4: Conservation Projects on Native Lands

#5 Building Community Relationships and Connections

Number of surveys completed: 37 | Response Rate: 57%
Southwest Conservation Corps
Ancestral Lands Adult Program
Online Participant Survey - 2018

100%

of Southwest Conservation Corps Ancestral Lands participants felt that the experience they gained during the summer of 2018 will inspire other youths and young adults from their communities to participate in similar programs.
**Educational Benefits:**
pursue my education in preserving our heritage and culture, strength to better myself educational wise, prepared me mentally to finally pursue a degree, higher education, currently seeking a degree, also helped me really get a grip on what I want to study when I do go to school, preparation, experience

**Professional Benefits:**
responsibility, time management, communication, how to create a resume, work ethic, hands on experience, organization, meeting deadlines, teamwork, gain colleagues, build connections, maintain relationships, decision making, asking questions, speak up, problem solve, offer solutions, career options, accountable, use my skills to complete tasks and projects

**Personal Benefits:**
new and fresh perspectives allowed me to be receptive to new and broader topics or teachings, become strong mentally striving for my goals and achieving them, explore my options, given me more confidence, brought out a different side to me, time to reflect upon myself, confidence in my decision making and overall open mindedness, stronger mentally, physically, and spiritually self-betterment, confidence, perspective

*Benefits recorded directly from participant responses to the Southwest Conservation Corps Ancestral Lands Adult Program Online Participant Survey*

Number of surveys completed: 37 | Response Rate: 57%
Appendix F

Southwest Conservation Corps Ancestral Lands Adult Program Participant Survey Raw Data
Southwest Conservation Corps Ancestral Lands (SCC AL) Adult Program Participant Survey Raw Data was sent to SCC AL after the completion of this thesis and will be kept on record securely in the Southwest Conservation Corps Albuquerque Office in digital form. Raw data will also be kept on record securely with the author in both physical and digital form.

Southwest Conservation Corps Ancestral Lands Adult Program Participant Survey Raw Data Available Upon Request from:

Michelle Machuca
michaellemachuca92@gmail.com
(253) 227-1027

Southwest Conservation Corps Ancestral Lands
https://sccorps.org/contact
(970) 216-5988