

Tribal Forestry Workforce Development Report

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In collaboration with:
Intertribal Timber Council
Affiliated Tribes of Northwest Indians
Economic Development Corporation
Heritage University
United South and Eastern Tribes

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Front: Roy Ammon, Hoopa Valley Tribal Dept., examines hazel plants that have been managed for basketry and gathering. Sean Gutierrez

Ecotrust

INTRODUCTION

What tribal forestry workforce projects and programs exist?

What are the key needs, resources, and gaps for these projects and programs to succeed?

This study seeks to better understand what kind of projects and programs exist and who the leaders are in tribal forestry workforce development. This study also seeks to identify key needs, resources, and gaps for success of these projects and programs. The scope of our study was anchored in existing research and policy including National Indian Forest Resources Management Act (NIFRMA), National Congress of American Indians (NCAI) Workforce Development Toolkit (2018) and 2.0 (2020), Indian Forest Management Assessment Team (IFMAT) III (2016), and the Intertribal Timber Council Workforce Development Strategic Plan 2018-2022.

Our study used surveys, interviews, and roundtable discussions to inform our findings shared here. Many individuals from different tribes, organizations, and universities participated in this study, and we extend gratitude for their contributions and collaboration.

According to the NCAI, "[Indigenous communities] continue to experience unemployment rates well above the national average, and rates of unemployment are exacerbated by economic conditions, endemic poverty, inadequate

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& Presentations

infrastructure, and marginal education opportunities" (2019). Created through a partnership between Ecotrust, the Affiliated Tribes of Northwest Indians Economic Development Corporation, Intertribal Timber Council (ITC), Heritage University, and the United South and Eastern Tribes (USET), this project focuses on urban and community forestry workforce development for Native youth and underemployed adults as a means to address these concerns. Tribal forestry includes urban and community forestry activities and opportunities. As tribes continue to diversify their economic opportunities, both individual members of the tribe, as well as the members outside of the community, benefit (Taylor, 2019). Tribes are historically underserved communities, and most tribal communities are in rural America. Therefore, through our project's work in supporting tribes, we are also supporting adjacent communities in rural America.

In 2012, the NCAI developed the Tribal Workforce Development Toolkit. Less than a third of the surveyed participants were aware of this resource, and while aimed at tribal policy makers, the toolkit provides case studies and examples from across Indian Country of workforce development programming. A recently published assessment of tribal research needs indicates "the importance of culture in forest management and the need to both train youth and to train professionals with the competence and knowledge to understand tribal forest management practices and goals" (Dockry et al. 2022). Although themes appeared across our interview data, cultures and knowledge systems are

unique to each tribe, and a one-size-fitsall approach will not suffice to address the tribal forestry workforce development issue comprehensively. Tribes can use the toolkit, case studies, our interview data, and other texts to develop "sustainable workforce development solutions tailored to their distinct needs and ends" (NCAI 2012).

There is a growing number of research and evidence supporting strategies to recruit, retain, and train the next generation of the tribal forestry workforce.

The ITC's Workforce Development Committee released a strategic action plan for 2018-2022 (Kauffmann & Associates, Inc and Intertribal Timber Council Workforce Development Workgroup 2018). The plan identified four strategic pillars to address tribal forestry workforce development:

- 1. Develop organizational capacity to collaborate with partners to implement workforce development strategies
- 2. Support mentorship and leadership programs
- 3. Create communication initiatives that use modern technology
- 4. Develop recruitment and engagement strategies

Our project seeks to support the implementation of this plan through the following phases:

1. Gap and opportunity assessment (survey and key stakeholder interviews)

2. Education

3. Broader outreach and communications

The gap and opportunity assessment included a survey and key stakeholder interviews. The survey first provided a high-level landscape assessment of tribal forestry workforce programs and their interests, needs, opportunities, and partnerships. The key stakeholder interviews were then built from the results of the survey to provide us with a deeper understanding of desired and existing workforce projects and the general key needs, resources, and gaps to address workforce development. Roundtable discussions were held at Affiliated Tribes of Northwest Indians (ATNI) and USET convenings, as well as virtually in 2020 and 2021. These discussions not only provided feedback to inform our survey and interview questions and analysis, but they also provided the opportunity for project participants to connect with each other.

The Indigenous Forestry Mentorship Program began in April 2020 as a response to an emergent need identified by project partner Heritage University and Yakama Nation Tribal School to adapt planned inperson programming to virtual platforms. Ecotrust

and Heritage University developed a series of virtual Indigenous science and forestryrelated lesson plans to support mentors and mentees along their research journey. All topics were related to Indigenous science and forests and utilized existing wildlife cameras and other technology to engage with Yakama Nation forests virtually. This program is now in its third iteration with a cohort of matched mentor and mentee students.

During the process of developing lesson plans, Ecotrust and Heritage University convened a network of Indigenous science and forest educators also seeking support in adapting in-person activities for socially distanced or virtual engagement. Participants met for two virtual workshops for a total of six hours to share curriculum materials and activities they use and adapt for forestry-related lesson plans. Participants also discussed successes, challenges, and resources needed for distance learning. Future Indigenous science and forest educator convenings are being planned.

In 2022, Heritage University coordinated and led the Intertribal Field Experience program for their undergraduate students. The students visited host tribes and engaged in service learning activities related to urban and community forestry throughout their two-week trip. The trip visited the Kalispel, Spokane, and Warm Springs reservations, and students had an opportunity to engage with Deschutes National Forest staff to learn about pests and pathogen management. Student experiences were posted in a series of blog posts, which are included in Appendix D.

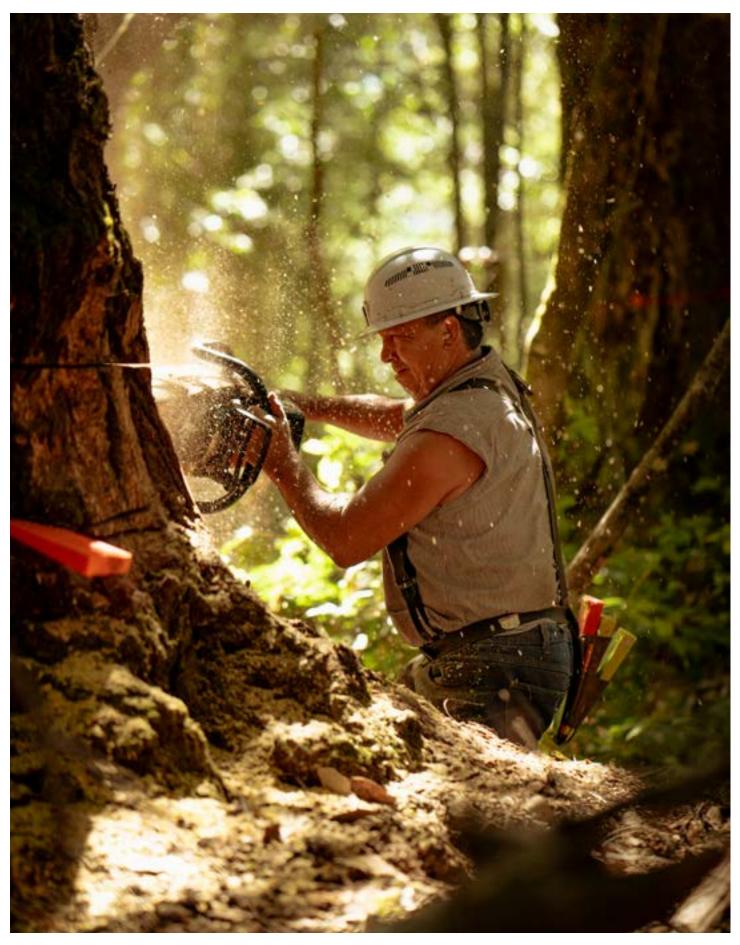
We are excited to continue our support and growth of the program and network to include Indigenous agroforestry practices as topics for students and educators to explore together. Heritage University staff and mentors continue to lead the Indigenous Forestry Mentorship Program.

Broader outreach and communications continued throughout the project.

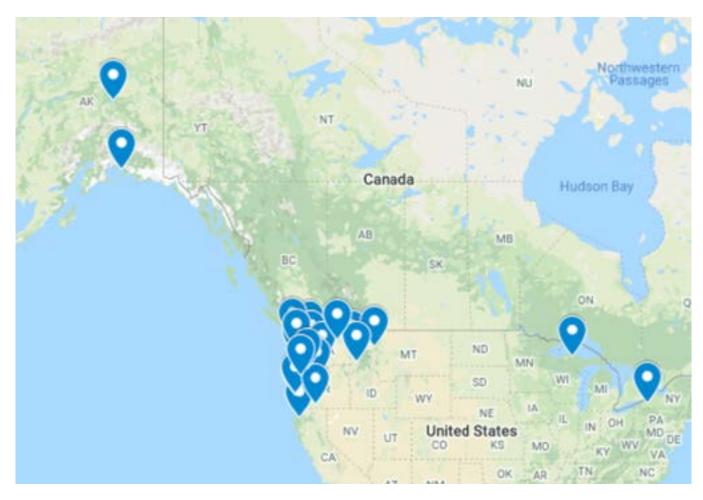
Presentations were made at conferences such as the ITC Annual Symposiums, Affiliated Tribes of Northwest Indians winter and annual conventions, USET annual convention, and the Tribal Forestry Student Summit. Outreach was performed through our partner networks to increase awareness and participation in our project.



Overview of Hoopa Forest Industries milling facilities. Sean Gutierrez



 $David\ Lewis\ preparing\ to\ log\ a\ tree.\ \textbf{Sean\ Gutierrez}$



A Google Map image capture of the geographic distribution of survey responses.

SURVEY FINDINGS

The tribal forestry workforce development survey (known as "the survey" moving forward) supports addressing the challenges of communication across tribal programs, initiatives, and stakeholders by identifying employment and learning/training opportunities in tribal forestry and green infrastructure. Project partners distributed the survey through their networks and at regional and national conferences and events throughout 2019. We received 42 responses to surveys. 23 tribes were represented by survey participants. Most participants and tribes that responded were based in Oregon and Washington.

With guidance from our steering committee members, we focused our analysis on the following areas: K-12 and community education opportunities, outreach and recruitment, training, and forestry and other natural resource-related camps focused on engaging youth. For complete survey results, see Appendix A.

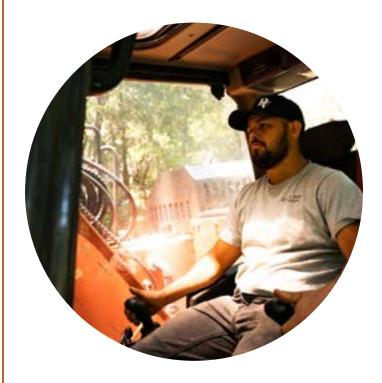
Key Insights

- Of the tribes surveyed, three times as many tribes were interested in creating workforce development plans than the number of tribes with existing workforce development plans.
- Although many tribes responded that they had dedicated full-time tribal forestry staff to implement their forest management program, this does not indicate that tribes have enough staff to implement their programs successfully. In IFMAT reports and in follow-up interviews with tribal staff, many cited staff capacity as a major concern and challenge. Only four tribes had on-site training for community members, and many staffed their programs with seasonal employees and external contractors.
- Many tribes surveyed had existing education, community events, youth camps, and training opportunities available to community members. While there does not appear to be a gap in these events, further research should be done to determine community interests, needs, and success of these opportunities. For example, are the types of education and training events offered in alignment with both tribal forestry program and community needs, interests, and goals? And what is needed for both the community and the program to evaluate an event as successful?
- At least 20 tribes had working relationships with the Bureau of Indian Affairs (BIA) and/or a nonprofit. In order of

- most to least contact, these tribes worked with the following entities: BIA, nonprofit, US Forest Service Specialist, Consultant, University Extension Specialist, Bureau of Land Management, US Forest Service Tribal Liaison.
- Many of these working relationships (over 20) supported tribal forest management. Over 15 working relationships included staff training. While the types of staff training were not indicated in the survey option, one tribe noted that staff attendance at conferences and symposiums was counted as staff training. Another tribe noted that many of these working relationships exist through "projects" that were not necessarily continuous or ongoing beyond the defined project partnership. Challenges around partnerships and more information about partners are included in the interview inventory and thematic analysis sections.
- Thirteen tribes surveyed had existing student internships or similar programs for forestry or natural resources. Seven tribes were interested in creating these programs. Over 15 tribes did not answer this question.
- Only nine of the tribes surveyed were aware of the National Congress of American Indians' "Tribal Workforce Development: A Decision-Framing Toolkit." This may suggest that more direct outreach, communication, adaptation, and application of workforce development resources are needed for tribal forestry programs.

- The top three resources used by tribes surveyed for forestry job postings were: (1) tribal website, (2) tribal newsletter, (3) social media, (4) flyers, and (5) other organizations. This may suggest that internet connectivity is important for accessing information about jobs and that most tribes conduct outreach for jobs within the community first, indicated by tribe-specific websites and newsletters being the top two means for advertising jobs. For external recruitment, social media, flyers, or contacting other organizations for outreach may support increasing and diversifying the applicant pool.
- The survey participants indicated the three best ways to communicate with the tribe's community were through (1) tribal newsletters, (2) Facebook, and (3) email.
- Over 20 survey respondents indicated that an intertribal website containing vital information about natural resources and links to relevant organizations for all tribes in the US would be useful for staff. Five survey respondents indicated that some challenges would be to address the unique needs of the Lower 48 and Alaska at the same time and the maintenance and upkeep of the website.
- Most survey respondents indicated that their tribe is interested in green building and design, such as low-impact development, LEED certification, traditional structures, and urban forestry.

- Three tribes indicated that they have existing green infrastructure plans, and over half of the tribes indicated interest in urban forestry. Only five tribes had implemented urban forestry practices.
- Survey results also indicate an opportunity to increase awareness of K-12 educators of available forestry education resources. There also exists an opportunity to create videos and other engaging content for curriculum development related to tribal forestry workforce development. Examples and challenges of K-12 and higher education are further discussed in the interview themes section.



Forestlands managed by Hoopa Valley Tribe. Sean Gutierrez

Opportunities

- Support tribes in creating workforce development plans. One way to support tribes in creating workforce development plans as an initial step would be to contact the tribes with existing plans and better understand their process, partners, and the capacity needed to develop, implement, and tailor the workforce plan to tribal forestry needs.
- Support tribes in developing or participating in onsite training for community members. An initial step would be to contact the tribes with existing onsite training and better understand their process, partners, and the capacity needed to develop, implement, and tailor the workforce plan to tribal forestry training needs.
- Connect tribes with existing training and educational programs at neighboring tribes or through other partner organizations and/or agencies using the database information gathered through the interviews.
- > Support tribes in developing or participating in a student internship or similar program for forestry or natural resources. An initial step would be to contact the tribes with existing programs and better understand their process, partners, and the capacity needed to develop, implement, and tailor the program to tribal forestry training needs.

- Better understand how existing education, community events, youth camps, and training opportunities are funded or staffed by tribal forestry programs.
- ➤ Connect a large population of offreservation Native students to their tribal communities through forestry career and learning opportunities. The following are existing programs and organizations that may support opportunities for offreservation Native youth populations to learn and engage in tribal forestry workforce development opportunities:

Green Workforce Academy

Forest Park Conservatory

Friends of Tryon Creek

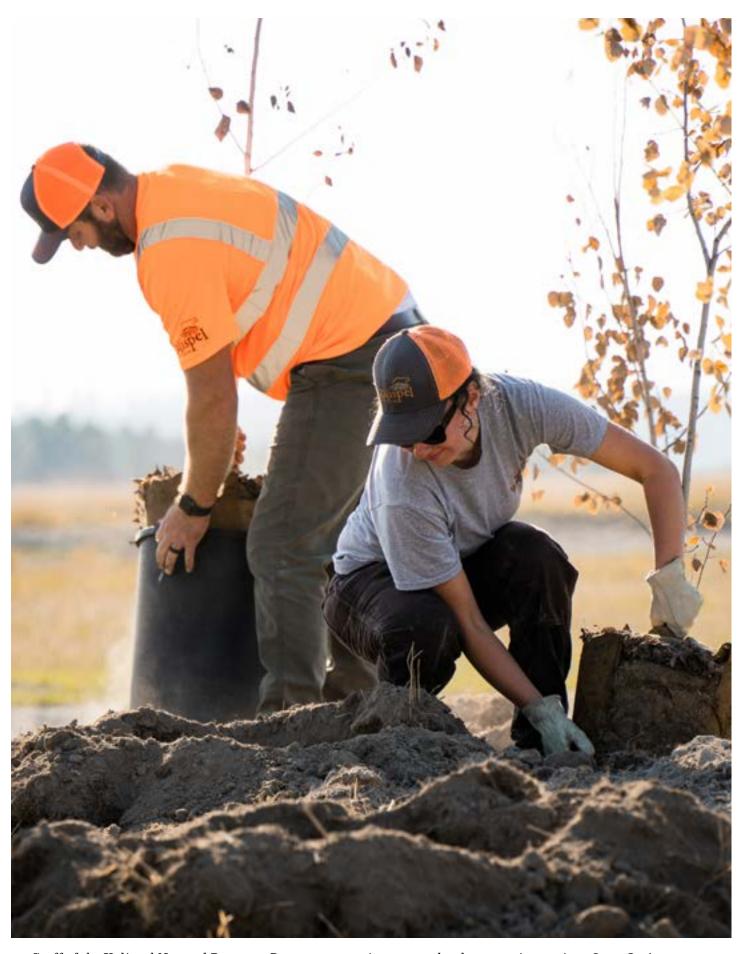
Wisdom of the Elders Workforce

Oregon Metro/Parks and

Recreation

EcoStudies Institute

Environmentors •



 $Staff\ of\ the\ Kalispel\ Natural\ Resource\ Department\ assist\ on\ a\ wetland\ restoration\ project.\ \textbf{Sean}\ \textbf{Gutierrez}$

INTERVIEW FINDINGS

Key stakeholder interviews were conducted over the course of September 1, 2021 through March 1, 2022. The interviews were meant to provide a deeper understanding of desired and existing workforce projects and the general key needs, resources, and gaps to address workforce development. Interview questions were informed by the survey, project partners, and recent literature.

The primary research questions the interviews sought to answer were:

- 1. What tribal urban and community forestry, education, workforce development, and green infrastructure projects and programs exist?
- 2. What are the key needs, resources, and gaps in workforce capacity, training, and access to appropriate tools and technologies to establish and expand enabling conditions that increase job opportunities and career pathways in tribal urban and community forestry for young and underemployed Native Americans?

To investigate these research questions, the project team conducted qualitative research through interviews with tribal representatives, education institutions, and affiliated organizations and enterprises. The interviews were 45-minutes long and semistructured, with participants falling into one or more of three affinity groups for this interview process: Tribal Representatives, Educational Institutions, and Affiliated Programs and Enterprises. Interview questions were adapted to meet the unique perspectives of each affinity group. Our outreach to participants were informed by survey participants, project partners, and recommendations from existing interview participants.

We completed 27 interviews. Interviews were coded using the following categories: project/program, needs, partnerships, urban and community forestry, and other. We further differentiated the data into subcategories to count unique mentions of programs, projects, policy, resources, and partners. Themes of leadership, partnership, and education emerged from our analysis, as well as enthusiastic descriptions of "dream programming" from interview participants, are described in the following sections. For a complete description of interview methods and questions, please refer to Appendix B.

Existing Tribal Forestry Workforce Development Partner & Resource Inventory List

An inventory of tribal forestry workforce development-related programs/projects, policy, resources, and partners titled "Tribal Forestry Workforce Development Partner

& Resource Inventory List" can be found in Appendix C. This database is not meant to be a comprehensive resource or list, but rather it inventories and catalogs unique mentions and counts of programs/projects, policies/legislation, resources, and partners referenced by interview participants in our study. It is important to note that while we had intended to differentiate between programs, projects, policy, and other types of legislation, the interview participants did not make differentiations between our categories, so we combined the categories as reflected below. We encourage this inventory list to be used as a starting point; further outreach and continued development of this inventory list into a database may be helpful and would support communication and collaboration on addressing workforce development needs.

Programs and Projects

In total, interview participants mentioned 87 unique programs and projects related to tribal forestry workforce development. The most mentioned program/project related to workforce development was the TREES program housed at Salish Kootenai College. The TREES program supports the BIA Pathways program, where BIA Pathways "offers paid internships and scholarships for emerging leaders who are seeking degrees in natural resources management, forestry and other related environmental and biological science fields" (SKC TREES 2017). The "[TREES] programs place college students in science-based internships with the Bureau

of Indian Affairs, Tribal Forestry and Fire Depts., and other qualified partners. [They] also provide opportunities for continuing education to technicians and other working professionals" (SKC TREES 2017). For more information about the TREES and BIA Pathways programs, visit http://skctrees.org/ and https://www.bia.gov/bia/ots/pathways.

Policy and Legislation

In total, interview participants mentioned 9 policies/legislation. The most referenced policy/legislation related to workforce development was Public Law 93 638, the Indian Self-Determination and Education Assistance Act. Linked here is a publication of Public Law 93 638 regulations from the BIA site.

Resources

In total, interview participants mentioned 38 unique resources. Resources were identified as funding sources for workforce development, including student scholarships, grant programs, and other funding entities. The Native American Natural Resource Research Scholarship (Truman Picard Scholarship) was mentioned the most frequently by interview participants. More information about this and other scholarships, internships, and financial aid opportunities can be found on the ITC website: https://www.itcnet.org/about_us/ scholarships.html.

Partners

Interview participants mentioned 181 unique partners. The three most frequently mentioned partners were the US Forest Service, BIA, and ITC. It is important to note that the majority of the partners mentioned were only referenced 1-3 times throughout the interviews, while the Forest Service was referenced 14, BIA 13, and ITC 8 times. A broader discussion of partnerships is described in the thematic analysis below.

THEMES

Leadership

Many interview participants expressed leadership development as a challenge and need. IFMAT and ITC's strategic workforce development plan also confirm leadership development opportunities and skills as key priorities for tribal forestry workforce development. Although leadership skills and development programs are mentioned in these documents and from interview participants, little information was described about what programs or skills, qualities, attitudes, or experience define leadership in a tribal forestry context. In a similar vein, the term "soft skills development" was identified as a sub-theme of leadership and as a need for both early-career and seasoned leaders.

"... when it comes to soft skills development with our young crews or crews of all ages in the villages, part of it too, is that the people running the program also have to train themselves to be more understanding..."

To further define what leadership and upperlevel management skills look like in a tribal forestry setting, first we need to define what this may look like at an entry-level position. In a study by Dixon, Eitel, and Zhu (2019), entry-level competencies for forestry and fire management included descriptions of general attitudes and professional and cultural conduct/responsibility as duties and tasks that are asked of entry-level staff. These "soft skills" contribute to the success of securing and sustaining a job in forestry.



Stephanie Gutierrez and Elisha Flores at a logging site in forestlands managed by Hoopa Valley Tribe. Sean Gutierrez

Table 1. Future Trends and Attitudes

Future Trends General Attitudes

Global climate changes	Team player	Flexible
Alternative energy	Conscientious	Trustworthy
Aging workforce	Respectful	Motivated
Policy changes	Dependable	Proactive
Funding sources	Willing to ask questions	Positive
Water rights	Enthusiastic	Common sense
Changing data technology	Honest	Organized
Land acquiescing	Accountable	Open-mind
Changes in technology	Detail Oriented	Self-Starter
Drug use policies	Ability to Work Under Pressure	Tactful
Increase cost to do business	Optimistic	Self-Awareness
		Multitask

Excerpt from Dixon, Eitel, and Zhu (2019, 20)

The study identified the following duties and tasks related to "soft skills" that can be integrated into middle and high school curriculum to support tribal forestry

workforce development. The study was designed with Nez Perce students but can be adapted for each tribe.

Table 2. Relevant duties & tasks for middle & high school curriculums

Duties and Tasks

A. Appreciate Nimiipuu Culture & Values **B.** Demonstrate Professionalism A-1. Attend Culture Training B-1. Exhibit good work attitude A-2. Appreciate Nez Perce heritage B-2. Follow instructions A-3. Share Nez Perce Vision B-3. Work effectively with others A-4. Know the content of the Nez Perce B-4. Respect management Treaties A-5. Understand the impact of the Nez B-5. Practice good work ethic Perce treaties B-6. Be timely B-7. Display personal responsibility B-8. Communicate with internal & external stakeholder B-9. Comply with Tribal Policies & Procedures

Excerpt from Dixon, Eitel, and Zhu (2019, 21)

While some leadership development programs in natural resource management exist, interview participants did not mention tribal forestry specific or tribal specific leadership programs. The AgForestry Leadership Program and American Indian Science and Engineering Society Mentorship Programs were the two most mentioned programs that interview participants discussed participating in and/ or were aware of that address leadership development topics. Many other programs that were mentioned were associated with oneoff trainings, workshop offerings, or through university extension and were more tailored to technical assistance or training, rather than leadership skills or development program opportunities.

Other leadership programs and networking opportunities of note referenced by interview participants include:

- Professional Development and Agricultural Literacy Northern Arizona University
- Native Student Professional Development Program - Wildlife Society
- Native American Forest and Rangeland Management Program, Ecological Institute, Northern Arizona University
- Oregon State University Traditional **Ecological Knowledge Conference**
- American Indian Science and Engineering Society (AISES) Leadership Summit
- **AISES Annual Conference**
- ITC Annual Symposium

AISES's mentorship program was the only Native-specific leadership program mentioned during the interviews. It is important to note that at the time of the interviews, interviewees mentioned leadership development for women as a need. Since then, three events and/

or mentorship programs have emerged for women in sciences, technology, engineering, and mathematics (STEM); forestry; and more broadly natural resources. These events and programs include:

- Rematriation: Indigenous Womxn in STEM Leadership Program
- Women's Forest Congress
- Native Women in Agriculture and Natural Resources Symposium

A literature review conducted by James and colleagues (2021) on the engagement of women in conservation and natural resource management indicated a recurring pattern of marginalization of women in these spaces:

"forestry research shows that women's roles in forestry management are still restricted by a 'masculine gender order' (Richardson et al. 2011, 525) that tends to marginalize women's contributions and participation, especially in leadership and decision making"

(Varghese and Reed 2011; Evans et al. 2017; Kenfack Essougong, Foundjem-Tita, and Minang 2019).

Each of these events and programs offering women-specific spaces are in their first year of development. None specifically address the unique intersectionality of women in tribal forestry programs, especially Native women in tribal forestry programs. A recent review highlights both the benefits of having women in leadership and decision making roles in forestry, as well as the challenges that women face throughout their careers in natural resource management and conservation (James et al. 2021). The review also provides specific recommendations for creating a more inclusive space for women in natural resource management and conservation careers and leadership, which may support the recruitment and retention of women in tribal forestry programs:

"Women often interact with, use, understand and value the environment differently than men" (e.g., Aswani, Flores, and Broitman 2015; Purcell et al. 2016; Allendorf and Yang 2017; Yang et al. 2018).

"Several authors noted that decision-making bodies need to include at least 30% women for them to effectively influence decisions" (Agarwal 2010; Butler 2013).

Seven concluding recommendations from review by James and colleagues (James et al. 2021, 865) clearly speak to the needs we have identified in this report as well:

- 1. Gender and systems analysis at project and program level to ensure inclusion of women
- 2. Internal gender audits should be conducted within conservation and natural resource management organizations, which could include setting targets for women's representation in high-status science and leadership positions
- 3. Better understand what women's leadership and empowerment means
- 4. Actively encourage women to lead research and publish findings

- **5.** Efforts are required to value women's knowledge, and to enable them to share their knowledge and experience regardless of their formal education
- **6.** Specific efforts and resources need to be directed towards engaging women who are excluded by conservation projects
- 7. Work with men to improve understanding of negative impacts of gender inequality to be accountable in addressing these challenges

The following are suggestions to better understand how to support the recruitment and retention of women in tribal forestry programs:

- Conduct an assessment of women foresters in tribal forestry programs to better understand their experiences, barriers, and needs in order to feel empowered
- Conduct internal gender audit in tribal forestry and related programs, projects, and assessments
- Based on audit findings, set target for women's representation in decision making processes, leadership, and management positions
- Host free webinars and other learning opportunities on topics such as gender and inequity to learn directly from women in tribal forestry programs about their experiences and leadership
- Create women-affinity spaces at conferences, events, and other networking opportunities



 $Swinomish\ Indian\ Tribal\ Community.\ \textbf{Sean\ Gutierrez}$

Education

Interview participants frequently mentioned K-12, youth summer camps, after-school programs, and higher education, as well as various challenges and needs associated with tribal forestry-related education opportunities. From one recent graduate's perspective, one of the main challenges with recruiting Native students into forestry is a general misunderstanding and lack of awareness of career opportunities in forestry. This recent graduate also highlighted how widespread assumptions about clear cutting, especially in the Pacific Northwest, may deter Native students from forestry career opportunities.

"...forestry isn't like this field that I feel like, there's a clear understanding of what it is like to be like a forester, that career path as an opportunity. And so I think partly it comes down to sort of that classic misunderstanding of what forestry is, and I think a lot of folks still associate it to, like clear cutting in the Pacific Northwest, but it's so much more than that..."

Integrating forestry into curriculum and other learning opportunities early can foster a better understanding of forestry career opportunities and its relationship to community and tribal forest management practices. For youth and K-12 programming, the interview participants reflected that their first entrypoint into

forestry was through cultural and other youth-centered summer camps. These camps usually run for one to two weeks and do not exclusively focus on forestry, but have a variety of topics. Interview participants identified that sustained funding and staffing for these camps is a main challenge in hosting and maintaining the camps over a number of years. An example of this is exemplified with the Hoopa Valley Tribe, where the forestry and other natural resource departments held a youth camp during a summer. An interviewee from the Tribe attributed the success of this camp to adequate funding to staff a full-time role responsible for outreach, planning, and coordination of the camp. However, once the grant funding ran out, the position could not be sustained, and the culture camp was discontinued. As a different example, San Carlos Apache Tribe has successfully run a Natural Resources Youth Practicum each summer. Further research should be done to learn more about this program and better understand their challenges, successes, and needs.

As part of this tribal forestry workforce development project, we also had supported the development of online lesson planning for Environmentors programming at Yakama Nation Tribal School. More information about Environmentors and our involvement in the project can be found in Appendix D. As part of this project, we also convened Indigenous science and forest educators in a series of online workshops, where educators shared knowledge on lesson planning and

engaged in solutions-oriented conversations around similar challenges they faced. More information about this convening can be found in Appendix D.

Yakama Nation Natural Resources department has also partnered with Project Learning Tree to train teachers in adapting and delivering the curriculum for their students. In all of these projects, including the youth camps, Environmentors, and Project Learning Tree curriculum, students' educational and career pathways should be tracked to support a better understanding of how to recruit Native students in tribal forestry.

In higher education settings, building relationships with neighboring universities to increase awareness of tribal forestry stewardship and workforce opportunities can help recruit Native youth to tribal forestry careers.

"Exposing university students to Indian forestry practices can provide them with a better understanding of the role that tribal vision and culture plays in guiding forest practices and the overall importance of natural resources to tribal communities."

(Hoagland et al. 2017)

Some of the broad challenges that Native students face in higher education, especially STEM and natural resource management, are described in an article by Gervais and

colleagues (2017), including:

- Personal relationships to land and community as motivation
- Lack of faculty as mentors in tribal issues
- Insufficient instruction in tribal issues and [traditional ecological knowledge]
- Campus culture: being asked or obliged to represent Native communities
- Social and cultural supports
- Financial supports
- Barriers to pursuing graduate education

In our interviews, one recent graduate described how mentors, cohorts, and Nativespecific scholarships in forestry programs contributed to their success in completing the program:

"That's always what made the biggest difference to me... having this support and the people just mentors and even like, friend level, because, you *know...part of the reason why* I was encouraged to apply [to Oregon State University] is because there was a scholarship that was specific for Native students [in the...] sustainable forest management program. And then we had our little cohort that we live together...it always comes down to like the

support and the people and just having that available."

These challenges were echoed by our interview participants, who described that at the time of the interviews, tribal forestry classes did not exist at the four-year universities they attended. In one participant's experience, the tribal forestry course was lumped under the federal forestry course, which didn't capture the history and differences of various tribal forestry programs. Interviewees also described how students are left to figure out how to piece together classes to address their needs, such as taking both forestry and Native American studies classes. Because of the absence of these courses, recent graduate students are forced to learn "on the job" how tribal forestry programs are structured, the laws and policies they will have to navigate, and how to engage in grant-writing and reporting as more tribal forestry programs collaborate with partners to fund their programs and projects. Interview participants described that the most important resource and need would be to have Native representation in higher education.

Partnership

Interview participants described staff turnover at both the program and agency levels as significant challenges, impacting the success of tribal forestry programs and workforce development. The rapid turnover from agencies makes it hard to build authentic and trusted partnerships. Trust within tribal forestry programs and between tribal

forestry programs may impact retention and recruitment as well.

A recent article by Coleman and colleagues (2021) describes how to mitigate turnover through planning and development of forestry programs. These recommendations include:

- Identify potential leaders and cultivate to build leadership pipeline
- Plan overlap between individuals
- Onboarding and mentoring programs
- Build a culture of collaboration
- Use transition memos to provide institutional memory and to bridge gaps in personnel

More than 180 entities related to tribal forestry workforce development were mentioned throughout the interviews. In addition, our interviews identified that collaborating across so many partnerships and within tribal forestry programs is a challenge—a challenge affirmed by the ITC Workforce Development Strategic Plan. One interview participant described the challenges of both having too many and too few partners. This participant asked all these partnerships, "Who is the hub?" while also expressing concern over concentrating decision making and information flow through one person and the need to distribute power and workload. This may tie back to trust within and among tribal forestry programs, agencies, and other organizations. Furthermore, tribes must often fund their programs through grants and other

projects, due to the underfunding of tribal forestry programs. The subsequent proposal writing, reporting, and other administrative and bureaucratic processes all contribute to staff burnout and decrease in capacity of tribal programs.

An interview participant names the dominoeffect of burnout and fatigue experienced by staff in tribal forestry programs:

"...we got caught in the trap of when we lose a staff member... [another staff member] gets drawn into responding to that emergency, and it ended up taking away from their capacity at their job...And so then when they turned around to try to catch back up with their job, it was overwhelming. And they couldn't do it and felt they felt inadequate in doing it and so they ended up resigning."

Dream Programs

Assessments and research to better understand the challenges, needs, and resources tribal forestry programs face in workforce development are needed. At the same time, tribes have the opportunity to define how they want the future of workforce development to look. The following descriptions are gathered from interview participants' responses to, "What would

your dream program related to workforce development look like?" Many participants were enthusiastic for this opportunity to define what they want the future to look like.

Interviewees described a workforce development program that would include families, with participants who would be self-motivated and self-selecting. Partner organizations should work with tribal forestry programs and staff to realize a program that centers the community's vision, not the funders' or partners'. With trusted partnerships, a program would have many regional programs and partners. These hubs would have experienced and local experts to guide, lead, and facilitate regional learning spaces for participants. Gatherings would be seasonal, to help as needed on the landscape and to learn from each other.

To address misunderstandings and increase awareness of tribal forestry as a viable career pathway, tribal forestry programs should collaborate with cultural, foods, wildlife, and water tribal programs to show how forestry intersects with them.

In a future workforce development program, the program should ensure year-round work. Some opportunities to realize this may include bridging seasonal work such as "wildfire, mitigation awareness, working with homeowners and landowners for hazardous fuels reduction" and tribal forest management or service, repair, and maintenance.

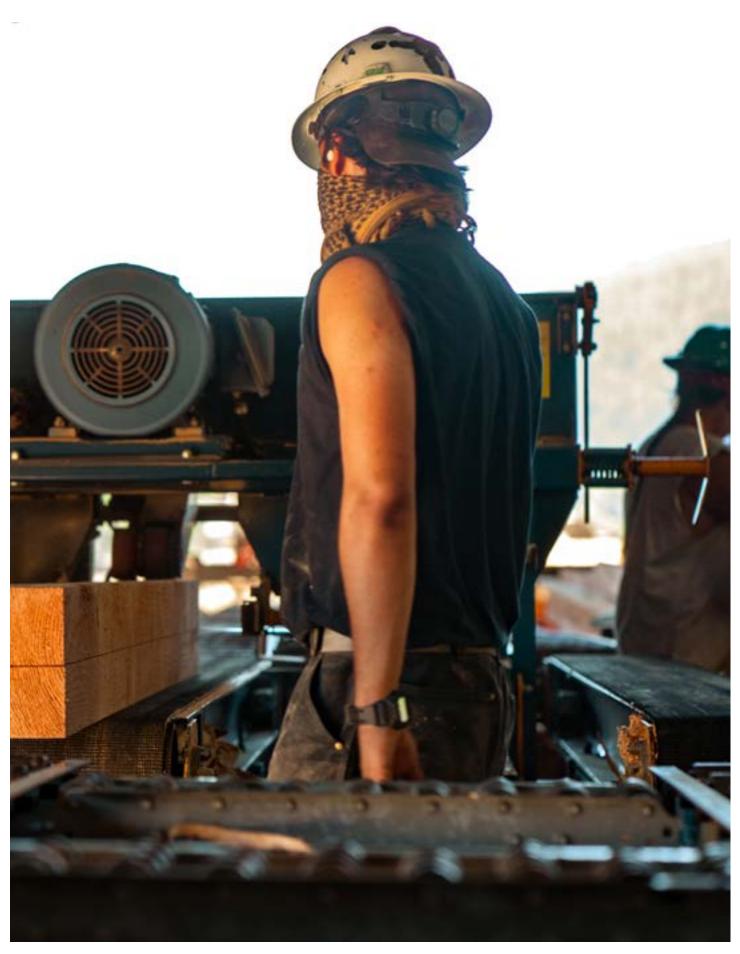
While in-person opportunities are important for workforce development, virtual opportunities and workforce development programming should exist as well, specifically, a virtual class or cohort for Native women foresters. This would be a place for Native women in tribal forestry programs to connect, learn new skills, and work toward a goal that benefits the cohort, the field, and the profession.

Another idea for recruiting Native youth to tribal forestry careers is to develop an applied forestry curriculum during the summer, where a cohort of youth spend up to a month in various regions of the US (e.g., Pacific Northwest, Southwest, Alaska) to learn about different types of forests and ecosystems. •





Top: Swinomish Indian Tribal Community. Bottom: The Hoopa Valley Tribe forestlands. Sean Gutierrez



 $Lumber\ being\ processed\ at\ the\ Hoopa\ Forest\ Industries\ Mill.\ \textbf{Sean}\ \textbf{Gutierrez}$

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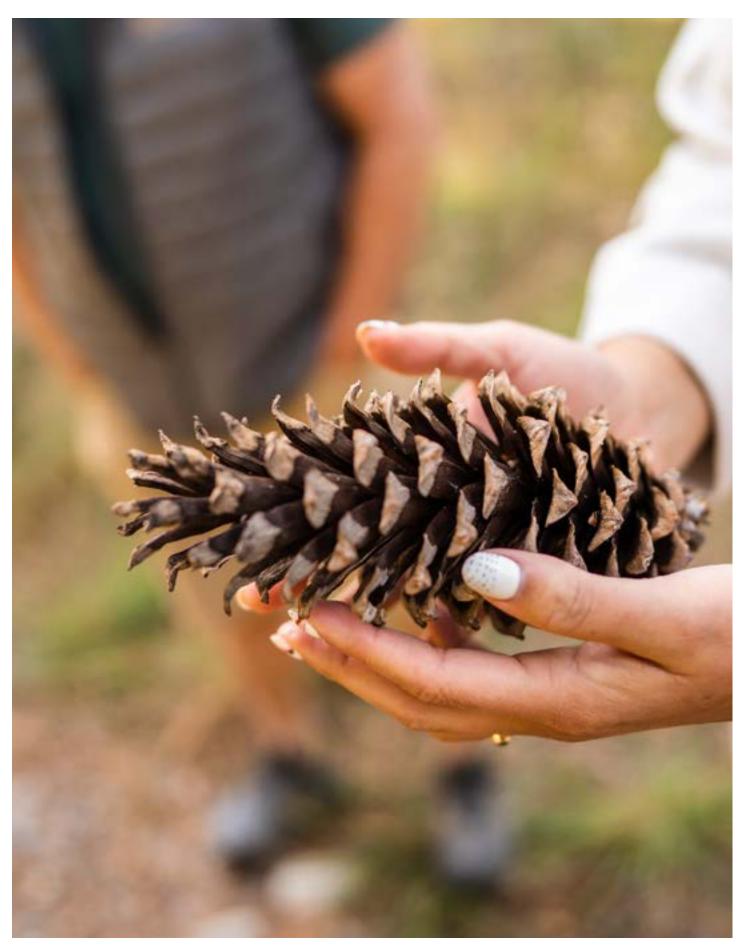
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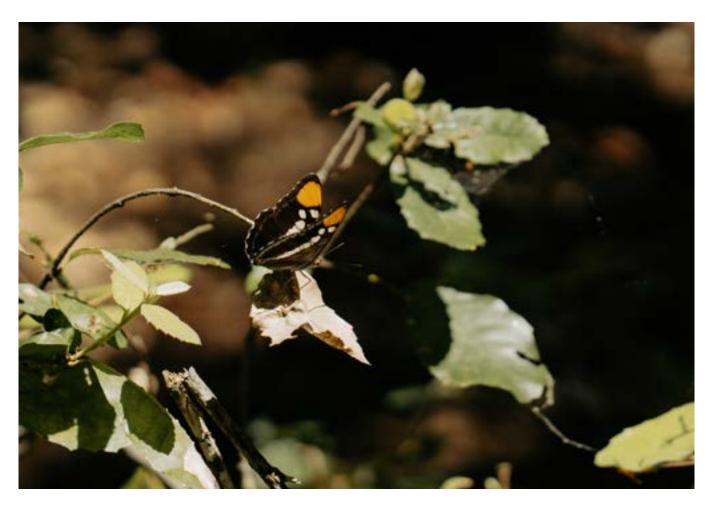
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 $The \ Kalispel \ Tribe \ of \ Indians \ forestlands. \ \textbf{Sean Gutierrez}$



Forestlands managed by Hoopa Valley Tribe. Sean Gutierrez

APPENDICES

a. Survey Report	31
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 $Tsemeta\ Forest\ Nursery,\ Hoopa\ Valley\ Tribe\ nursery.$ Sean Gutierrez

GROWING THE TRIBAL FORESTRY WORKFORCE IN THE PNW AND BEYOND

Compilation of Survey Responses

Collected Summer 2019 March - August

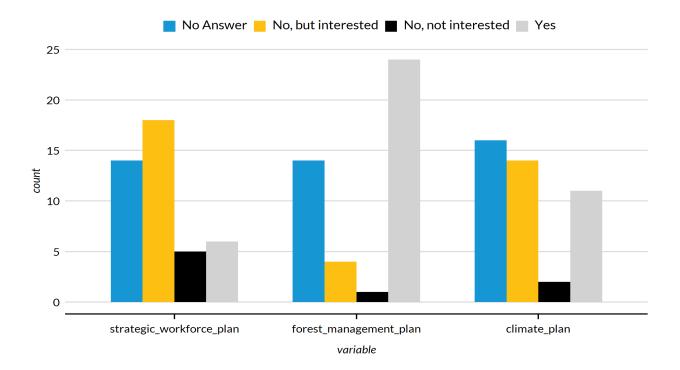
Created November 2020

CONTENTS

QUESTION 1 confidential
Tribal name and contact information
QUESTION 2 2
Please indicate the appropriate columns in the Tribe's experience with the following areas: strategic workforce
plan, forest management plan, climate adaptation/mitigation plan.
QUESTION 3 2
Please tell us about the status of the Tribe's forestry program.
QUESTION 4 3
How are current Tribal forestry projects staffed?
QUESTION 5 3
Please indicate the Tribe's experience with and/or interest in the following Tribal forestry areas:
QUESTION 6 4
Are there forestry education or other learning/training opportunities offered for the Tribal community?
QUESTION 7
Does the Tribe have a working relationship with any of the following?
QUESTION 8 5
If you checked any of the above, please tell us the nature of each relationship.
QUESTION 9 5
Does the Tribe have an active student internship or similar program in forestry or natural resources?
QUESTION 10 6
Is the Tribe aware of NCAI's "Tribal Workforce Development: A Decision-Framing Toolkit"?
QUESTION 11 6
What resources does the Tribe use for forestry job postings?
QUESTION 12 confidential
What is the best method to contact and continue communcation with Tribal Staff?
QUESTION 13
Please indicate the 3 best ways to communicate with the Tribe's community?
QUESTION 14
Would an inter-tribal website for all Tribes in the US that contains vital information about natural resources
and links to relevant organizations be useful to your staff?
QUESTION 15 8
Would you or someone else associated with the Tribe be interested in participating further in our project?
QUESTION 16 8
Does your Tribe have a green infrastructure strategic plan?
QUESTION 17
Green Building and Design
QUESTION 18
Storm water management
QUESTION 19
Waste Management

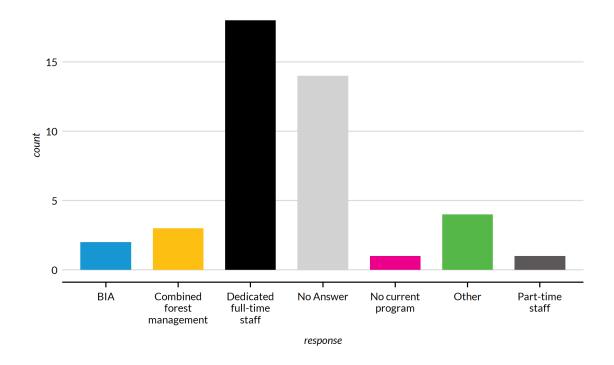
QUESTION 2:

Please indicate the appropriate columns in the Tribe's experience with the following areas: strategic workforce plan, forest management plan, climate adaptation/mitigation plan.



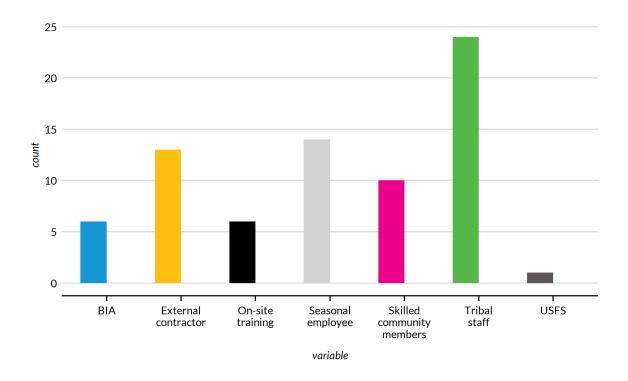
QUESTION 3:

Please tell us about the status of the Tribe's forestry program.



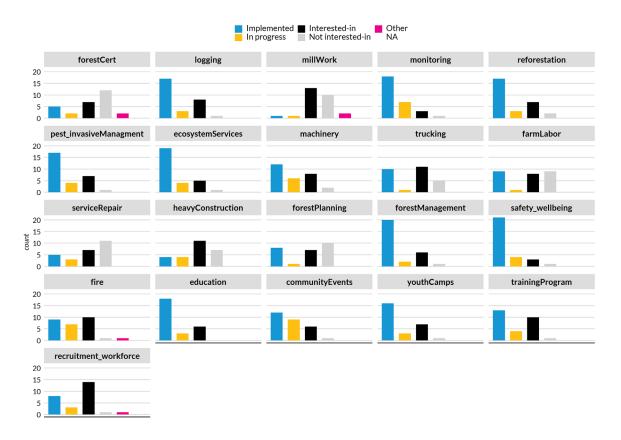
QUESTION 4:

How are current Tribal forestry projects staffed?



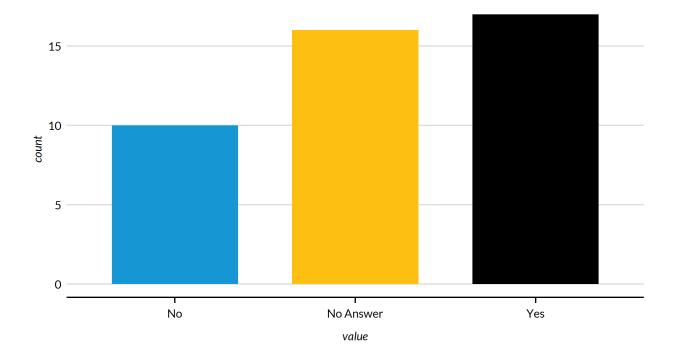
QUESTION 5:

Please indicate the Tribe's experience with and/or interest in the following Tribal forestry areas:



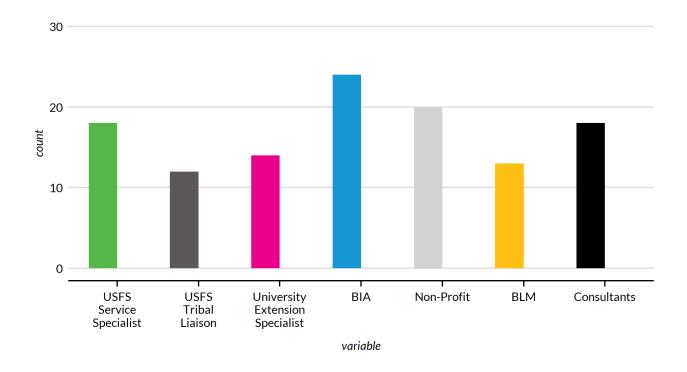
QUESTION 6:

Are there forestry education or other learning/training opportunities offered for the Tribal community?



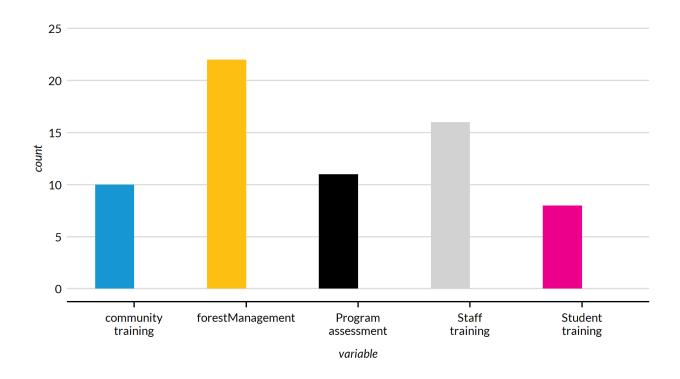
QUESTION 7:

Does the Tribe have a working relationship with any of the following?



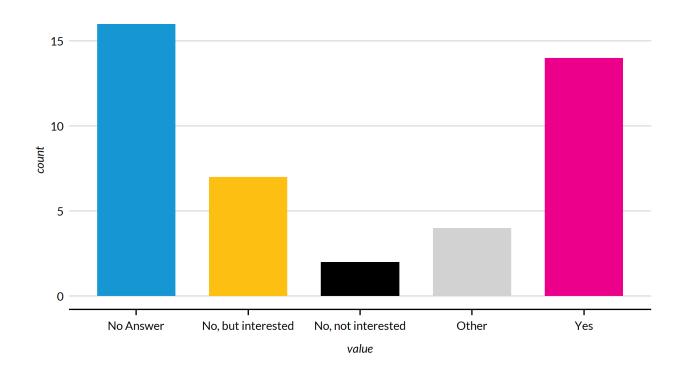
QUESTION 8:

If you checked any of the above, please tell us the nature of each relationship.



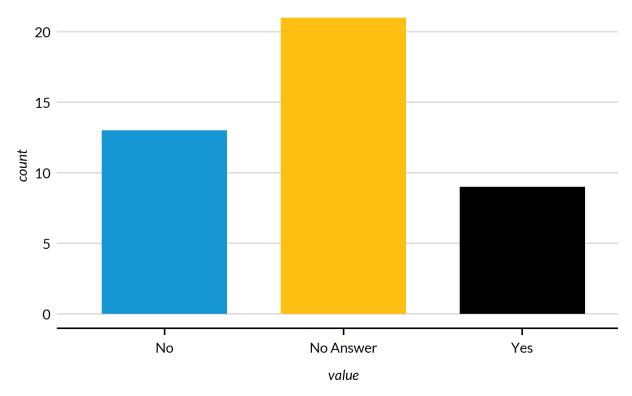
QUESTION 9:

Does the Tribe have an active student internship or similar program in forestry or natural resources?



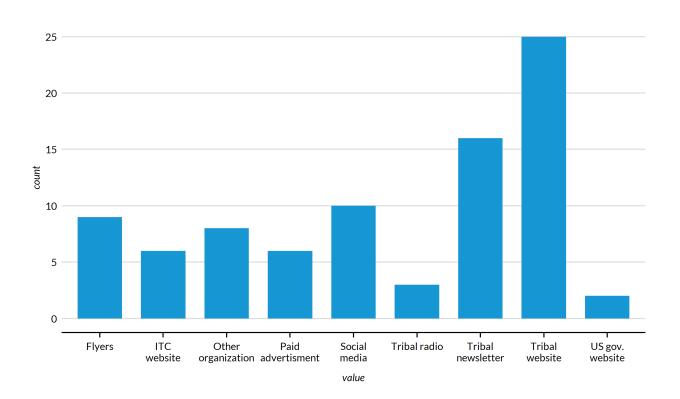
QUESTION 10:

Is the Tribe aware of NCAI's "Tribal Workforce Development: A Decision-Framing Toolkit"?



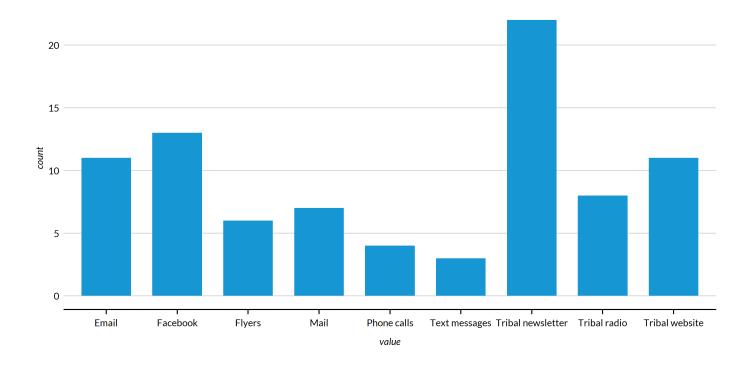
QUESTION 11:

What resources does the Tribe use for forestry job postings?



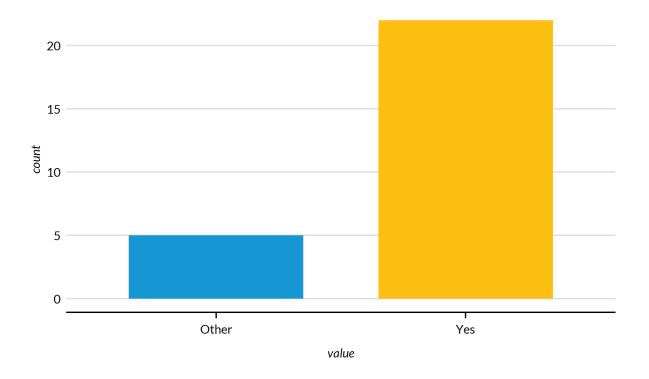
QUESTION 13:

Please indicate the 3 best ways to communicate with the Tribe's community?



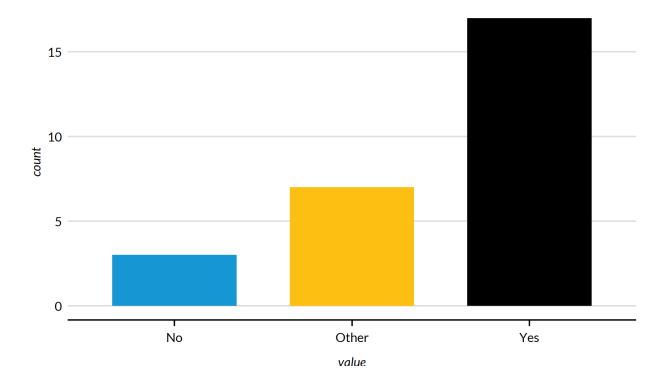
QUESTION 14:

Would an inter-tribal website for all Tribes in the US that contains vital information about natural resources and links to relevant organizations be useful to your staff?



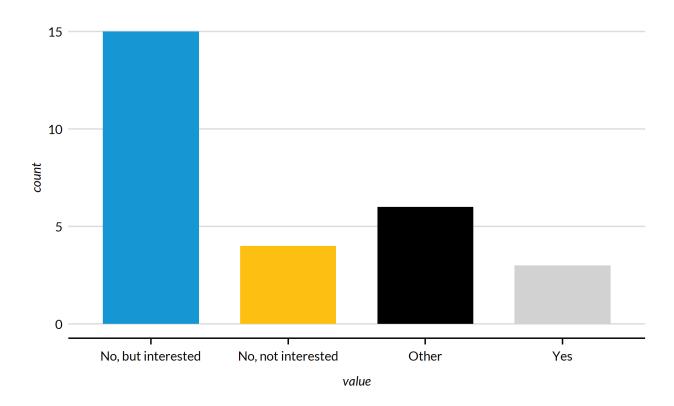
QUESTION 15:

Would you or someone else associated with the Tribe be interested in participating further in our project?



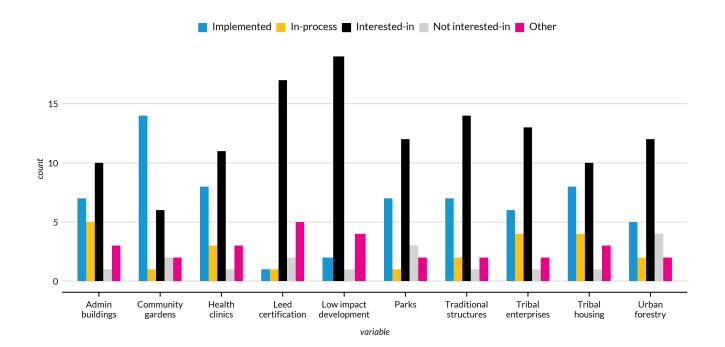
QUESTION 16:

Does your Tribe have a green infrastructure strategic plan?



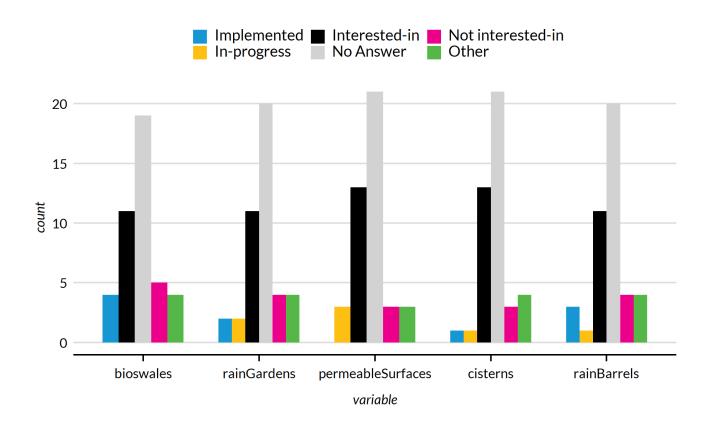
QUESTION 17:

Green Building and Design



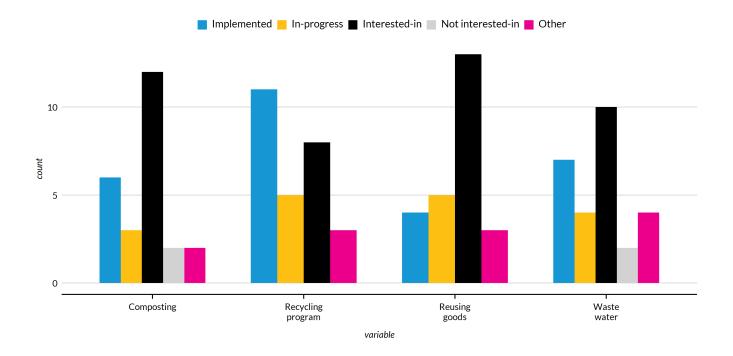
QUESTION 18:

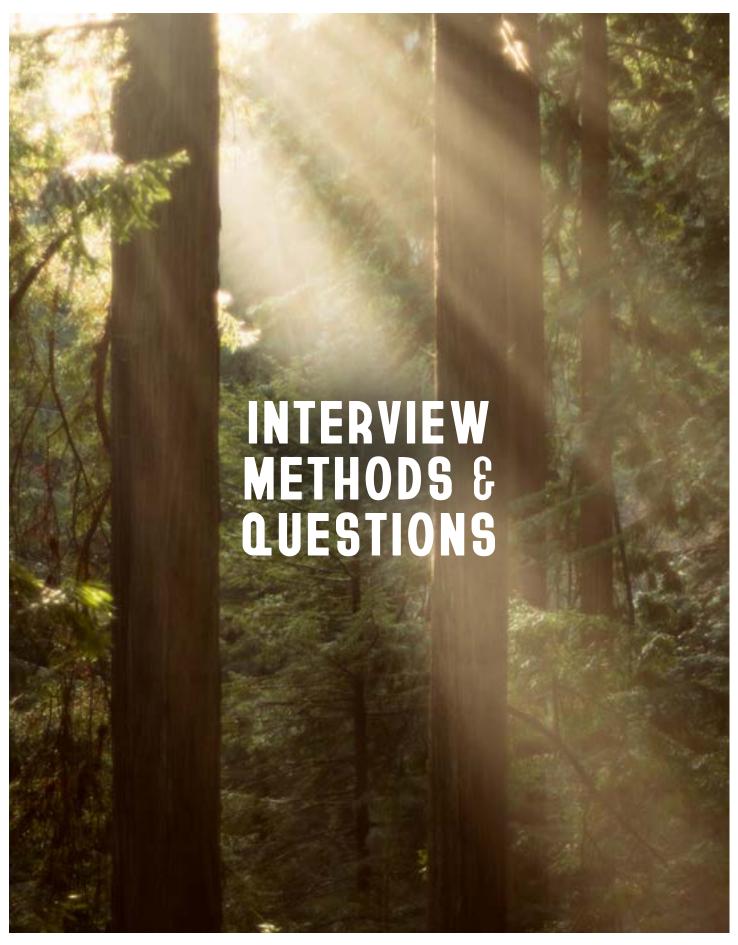
Storm water management



QUESTION 19:

Waste Management





Forestlands managed by Hoopa Valley Tribe. Sean Gutierrez

Overview

The Tribal Forestry Workforce (TFW) survey had a total of 41 respondents from 30 different Tribes. The TFW survey was open from January 2019-December 2019. TFW survey participation was solicited through project partner email, social media, and event network opportunities. NCAI Workforce Development Toolkit (2018), IFMAT III (2016), Jobs and Equity in the Urban Forest (2018), and the Tribal Rangeland Management Workforce Development Survey (2018) as well as input from the Tribal Forestry Workforce Steering Committee informed the development of the TFW survey.

The TFW survey provided an inventory of potential urban and community forestry education, workforce development, and green infrastructure tribal projects and programs. A series of key stakeholder interviews will provide a deeper understanding of these projects and programs and support program and project evaluation.

Objectives

We propose to evaluate existing tribal urban and community forestry education and workforce development programs, identify urban and community forestry leaders, and inventory current and potential urban and community forestry and green infrastructure projects in Indian Country.

We will evaluate the programs and projects to identify key needs, resources, and gaps in workforce capacity, training, and access to appropriate tools and technologies to establish and expand enabling conditions that increase job opportunities and career pathways in tribal urban and community forestry for young and underemployed adults from Native American communities across the country.

Motivation

We are looking to better understand which communities are intentionally growing their urban and community forests, what successes and challenges they have had, and where the most interest is and greatest opportunities exist in Indian County.

We further intend to enhance the capacity of regional tribes and tribal institutions to design, implement, and share their successes and challenges from their experiences with growing their urban and community forests and their training and mentorship programs for tribal youth and underemployed adults.

Primary Research Questions

- 1. What urban and community forestry education, workforce development, and green infrastructure tribal projects and programs exist?
- 2. What are the key needs, resources, and gaps in workforce capacity, training, and access to appropriate tools and technologies to establish and expand enabling conditions that

increase job opportunities and career pathways in tribal urban and community forestry for young and underemployed Native Americans?

To investigate these research questions, our project team will conduct qualitative research through interviews with tribal representatives, education institutions, and affiliated organizations and enterprises.

Interview Methodology

Affinity Groups

We will conduct 45-minute semi-structured interviews with numerous individuals that fall into one or more of the affinity groups described below.

Tribal Representatives

We will interview at least 10 participants chosen from the pool of survey participants who answered "yes" to survey question 15 "Would you or someone else associated with the Tribe be interested in participating further in our project?"

This will help inform our objectives of evaluating existing tribal urban and community forestry education and workforce development programs, identifying native urban and community forestry leaders, pinpoint barriers to implementation, and flesh out the inventory of current and potential urban and community forestry and green infrastructure projects in Indian County that we collected via the survey.

Sampling method: Interview participants were selected based on participation in the survey and indication of consent to continue in the broader project through responses to question 15.

Educational Institutions

We will conduct X number of interviews with representatives from educational institutions with experience, or interest, in staffing, education and implementation of tribal urban and community forestry programs and green infrastructure development projects.

These interviews will inform our objectives of gathering information concerning upcoming projects and initiatives, success stories, and notable barriers to successful implementation of educational forestry programs, and flesh out an inventory of colleges and universities that have, or would like to, develop urban and community forestry educational programs and internship opportunities.

Sampling method: Identified by steering committee members and as suggested by the original survey participants

Affiliated programs and enterprises

We will conduct X number of interviews with representatives from affiliated programs and enterprises with experience, or interest, in staffing, education and implementation of tribal urban

Tribal Forestry Interview Methods and Questions

and community forestry programs and green infrastructure development projects, such as Yakama Forest Products.

These interviews will inform our objectives of gathering information concerning upcoming projects and initiatives, success stories, and notable barriers to successful implementation of urban and community forest programs.

Sampling method: Identified by steering committee members and as suggested by survey and interview participants

Team roles

- Scheduler Stephanie
- Lead interviewer Stephanie
- Co-interviewer and notetaker Emilie Chen
- <u>Transcript processor</u> Cleaning up transcript and coding the interviews to highlight themes in a systematic way to remove bias (Stephanie and Emilie)
- Report writer Responsible for translating findings from interviews into a report (Stephanie and Emilie)
- Reviewing report Steering Committee

Coordinating and tracking interviews

The Lead Interviewer will outreach to survey participants and use Calendly to schedule interviews. We anticipate the interview outreach and scheduling to take place throughout September and early October for this initial group. The Co- and Lead Interviewers will track interviews through the <u>interview tracking spreadsheet</u>. The interview tracking spreadsheet will be updated regularly.

Pre-interview communications (administrative)

Co- and Lead Interviewers will populate interview questions based on the affinity group.

Interview Questions

Tribal Representative Affinity Group

Existing Tribal Forestry and Natural Resource Workforce, Training, Education Programs

- Could you tell us about any past or existing tribal workforce, education, or professional development/training programs in natural resources and/or forestry that you offer?
 - Who administers or oversees the implementation of the program?
 - What funding resources were or are used to support these programs and projects?
 - Why were or are funding for these programs successful and/or a challenge?
- Are there any of these programs or opportunities at other Tribes, universities, or through other organizations that you find inspiring and/or successful?
- In your dream world, what would you want a workforce, education, and/or training program(s) to look like?

Challenges, Successes, Resources

- How would you define success for these programs?
- What are the resources and conditions needed to achieve this success?
- What are some of the immediate and long term challenges you encounter/foresee in implementing these programs and why?
- Do you have any suggestions for solutions to these challenges?
- How does administrative capacity impact the success of these programs and why?

Partnerships and Collaboration

- Could you describe the partnerships and collaboration needed to implement these programs?
- How and why were these partnerships and collaborations successful and/or challenging?
- Is there anyone within your Tribe or outside of the Tribe you would like to partner with on forestry education, workforce, and/or training projects and programs and why?

Urban and Community Forestry

Part of our project is scoping the interest and opportunities for Indigenous communities to engage with urban and community forestry.

- Could you describe any urban and community forestry projects or opportunities within your community that exist? Is there general interest among the community; why/why not?
- Is there anyone that you would recommend that we should talk to about urban and community forestry at your Tribe?

Wrap up

- Do you have any recommendations for individuals at your own or other Tribes, education
 institutions, and/or affiliated organizations and/or enterprises that we should talk to in
 order to gain a deeper understanding of existing tribal urban and community forestry and
 green infrastructure projects and programs as well as gaps, opportunities, needs, and
 resources that exist?
- Is there anything we didn't cover in this interview that you'd like to share with us?

Affiliated Programs and Enterprises

Tribal Forestry Workforce, Education, and Training Programs and Projects

- Could you tell us about your organization, role, and its relationship to tribal forestry education, training, and/or workforce?
- What are some of the most pressing challenges to tribal forestry workforce development and why?
- What resources are needed to address the above mentioned challenges?
- What past or existing Tribal-led or Native-serving projects and programs are working to address tribal forestry workforce development?
 - Who administers or oversees the implementation of the program?

- What funding resources were or are used to support these programs and projects?
- Why were or are funding for these programs successful and/or a challenge?
- How could these projects and programs be improved to better address the needs of Tribes?
- In your dream world, what would you want one workforce, education, and/or training program(s) to look like? (who are the partners, what resources are used, what are the outcomes? Who are the teachers and what content is learned?)
 - How would you define success for these programs?
 - What are the resources and conditions needed to achieve this success?
 - How does administrative capacity impact the success of these programs and why?

Partnerships and Collaboration

- Are there any untapped partnerships between Tribes, affiliated programs and enterprises, education institutions, and other organizations that you could see working together to address tribal forestry workforce needs?
 - Why do you think this collaboration and partnership would be successful and/or challenging?
- Anything else you'd like to share with us about partnerships and collaboration?

Urban and Community Forestry

Part of our project is scoping the interest and opportunities for Indigenous communities to engage with urban and community forestry.

- Could you describe any Tribal urban and community forestry projects or opportunities you are aware of? Do you believe there is general interest; why/why not?
- Is there anyone that you would recommend that we should talk to about urban and community forestry within your network?

Wrap up

- Do you have any recommendations for individuals within your network that we should talk to in order to gain a deeper understanding of existing tribal urban and community forestry and green infrastructure projects and programs as well as gaps, opportunities, needs, and resources that exist?
- Is there anything we didn't cover in this interview that you'd like to share with us?

Education Organizations

Tribal Forestry Workforce, Education, and Training Programs and Projects

- Could you tell us about your role and your experience with tribal forestry (professional and/or personal)?
- What past or existing programs, events, courses, etc. are offered related to tribal forestry? What was successful about these programs? What could have been improved?
 - Who administers or oversees the implementation of the program?
 - What funding resources were or are used to support these programs and projects?

- Why were or are funding for these programs successful and/or a challenge?
- What challenges or barriers exist to supporting tribal forestry workforce and why?
- What resources are needed to address the above mentioned challenges?
- How could these projects and programs be improved to better address the needs of Tribes?
- In your dream world, what would you want one workforce, education, and/or training program(s) to look like? (who are the partners, what resources are used, what are the outcomes? Who are the teachers and what content is learned?)
 - How would you define success for these programs?
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Wrap up

- Do you have any recommendations for individuals within your network that we should talk to in order to gain a deeper understanding of existing tribal urban and community forestry and green infrastructure projects and programs as well as gaps, opportunities, needs, and resources that exist?
- Is there anything we didn't cover in this interview that you'd like to share with us?



Swinomish Indian Tribal Community. Sean Gutierrez

The unique count, represents the number of unique items in a category mentioned by participants. The count represents the number of mentions of the item by interview participants. The grand total, represents the total number of mentions of all items by interview participants. While the inventory list differentiates between project and program, this is based off of how interview participants described the item mentioned. We left the inventory list as such to accurately portray the information shared, however for our analysis we did not differentiate between project and program, as there wasn't a consistent, differentiated use of either term by participants.

Unique Programs 73

Program	Count
Fruman Picard Scholarship	
Fribal Research, Education, and Ecosystem Sciences (TREES)	
/akama Tribal Forestry - Salish Kootenai College Hybrid /akama Technician Development Program	
Willamette Valley Fire Program	
Wildland Fire - Task Books	
Washington State University - Extension	
Jniversity of Washington - Diversity Program	
Jniversity of Alaska Fairbanks - forestry program - inactive	
Fribal Temporary Assistance for Needy Families (TANF)	
TREX	
TERO program	
Sustainable Southeast Partnership	
Summer Youth	
State of Alaska - Cooperative Agreement - fire dispatch	
Salmon Corps	
Salish Kootenai College - Forestry Training onsite in Alaska	
Reserve Treaty Rights Lands Program	
Professional Development and Agricultural Literacy - PDAL - NAU	
Portland Parks and Rec Dregon Youth Corps	
Dregon Youth Conservation Corps	
Dregon Tradeswomen	
NRCS - forestry programs	
Northwest Indian College	
Natural Resource Conservation Service	
Native Student Professional Development Program - Wildlife Society	
Native American Forest and Rangeland Management Program, Ecological Institute,	I
Native American Community Advisory Council - Portland	
National Advancement of Sllvicultural Program (NASP)	
Monitoring hazardous fuels reduction, university of Alaska Anchorage	
Menominee Tribal Forestry	
.EAD program - South Amerricans Indians for Opportunities	
Keex'Kwaan Community Forest Partnership	
ndian Forest Management Assessment Team (IFMAT) Hoopa youth summer forestry camp (inactive)	
Hoopa youth summer forestry camp (inactive)	
Heritage University - Environmental Sciences	
neadstart	
Green Workforce Academy	
Green Workforce Academy	
Good Neighbor Authority Agreement with Forest Service	
Forestry Internship Scholarship	
Forestry courses, Heritage University (not active)	
Forestry Bachelors, University Alaska Fairbanks (not active)	
orestry BA, Salish Kootenai College (SKC)	
Forestry AS, Alaska Vocational Tech Institute (not active)	
Forest Service RAP Resource Assistance Program	
Forest Service Cooperative Timber Cruising Agreement	
Forest Ecology Club (active)	
Firestry Associates, Southwest Oregon Community College	
Firefighter Training Program, Tanana Chiefs (not active)	
Fire service exchange/training - chugachmiut Federally Recognized Tribes Extension Program (FRTEP)	
ederally Recognized Tribes Extension Program (FRTEP) Environmentors	
invironmental Sustainable Prisons Project, Washington, Evergreen College (status	
Endowed Scholarship - University of Washington	
Coquille Tribal Youth Forestry Program (ACTIVE)	
Constructing Hope	
DFI, Juneau	
BIA Technician Program, Warm Springs (inactive)	
BIA Pathways Internship Program	
BIA Internship Program, Warm Springs (inactive)	
All Lands All Hands working group	
Alaska Youth Stewards	
Alaska Pacific University tribal college status (pending)	
griculture and natural resources outreach educator	
Ag Forestry Leadership Program - Washington	
AA Forestry, College of the Redwoods (pending)	
A&A program	
IH Positive youth development	
I01 Program	
30 by 30 initiative	

	Grand Total	14
	BIA WORKFORCE PLAN - WILDFIRE	1
	Community Gathering for Community	1
	ecocultural revitalization fund	1
	Intertribal Forestry Youth Camp (pending)	1
	karuk climate change projects website	1
	Keex'Kwaan Community Forest Partnership - youth crew	1
	Native Gathering Garden, Cully Park	1
	NAU with USDA - Forest and Climate Curriculum Development project	1
	Oregon State University Annual Traditional Ecological Knowledge Conference	1
	Quamish Prarie Project, led by Metroi and Wisdom of the Elders	1
	SB 13, oregon	1
	Sekwetse Tribal Forest	1
	Women's Forest Congress	1
14	Workforce Development Coordinator	1
Unique Projects	Project	

Unique Policy	Policy	Count
9	Public Law 93 638	4
	Tribal Forest Protection Act	1
	TFPA	1
	Reserve Treaty Rights Lands Agreement	1
	NEPA	1
	National Indian Forest Resource Management Act (NIFRMA)	1
	Indian Forest Management Assessment Team (IFMAT)	1
	IFMAT	1
	Alaska Native Settlement Claims Act (ANSCA)	1
	Grand Total	12

Unique		
Resources	Resources	Count
38	Truman Picard Scholarship	4
	Portland Clean Energy Fund	3
	National Science Foundation (NSF)	3
	USDA NIFA	2
	USDA Education	1
	TANF	1
	State Banks	1
	Spirit Mountain Community Fund	1
	Siletx Tribal Charitable Contribution Fund	1
	Rereea - funds natural resource cooperative extension	1
	Regional Forest and Fire Resiliency Block Grants	1
	Oregon Watershed Enhancement Board	1
	Oregon Community Foundation	1
	NRCS Equipment	1
	New Market Tax Credit	1
	Meyer Memorial Trust	1
	Kelogg Ford Foundation	1
	Infrastructure Bill	1
	Forest Service Funding	1
	Forest Service Cooperative Agreements	1
	Forest Management Deduction Funds	1
	Fish and Wildlife Service grants	1
	Federally Recognized Tribes Extension Program (FR	1
	Environmental Quality Incentives	1
	Endowed Scholarship - University of Washington	1
	Department of Natural Resources grants	1
	Collins Foundation	1
	Cobell Settlement	1
	Challenge Cost-Share Grant Agreement, Forest Service	1
	California Forest Health Fire Resiliency Programs	1
	California Fire Resiliency Funding	1
	Build Back Better Plan	1
	BIA non-recurring funds education programs	1
	BIA Hazardous Fuel project funds	1
	BIA funding	1
	BIA add-on funding	1
	Administration for Native Americans Program Grant	1
	Administration for Americans grant	1
	Grand Total	46

Unique		
Partners	Partner	Count
182	Forest Service BIA	14
	Intertibal Timber Council (ITC)	8
	Salish Kootenai College (SKC) Ecotrust	7
	University of Washington	5
	society of american foresters	4
	Metro (Portland) Wisdom of the Elders	4
	Washington State University	3
	Warm Springs	3
	Portland Parks and Rec Oregon State University	3
	Oregon State University	3
	Northern Arizona University	3
	Intertribal Timber Council (ITC) Grand Ronde	3
	Fish and Wildlife Service	3
	Confederated Tribes of Coos, Lower Um	3
	American Indian Science and Engineerin	
	University of Alaska Fairbanks The Nature Conservancy	2
	Portland Clean Energy Fund	2
	Native Gathering Garden	2
	Native American Youth and Family Cente Long Tom Watershed Council	2
	local government partners	2
	Landowners	2
	Karuk Tribe Intertribal Timber Council (ITC) - Educati	2
	Human Resource Specialists	2
	Heritage Unviersity	2
	Department of Agriculture Department Natural Resources	2
	Coquille Tribe	2
	Cooperative Extension	2
	City of Portland Affiliated Tribes of Northwest Indians	2
	Zenger Farm	1
	Yurok Tribe	1
	Yakama Nation Tribal Forestry Yakama Nation Natural Resources	1
	Yakama Nation	1
	Yakama Forestry	1
	Yakama Forest Products Women in Agriculture	1
	Wisdom Workforce, LLC	1
	Wisconsin (Stevens Point)	1
	Wildlife Society Wildlife Conservation Society	1
	Wildland Fire Crews	1
	Western Klamath Restoration Partnershi	1
	Western Governor's College Washington State Department of Agricul	1
	Washington State	1
	USDA Conservation Districts	1
	US Fish and Wildlife Service University of Oregon	1
	University of Montana	1
	University of Michigan	1
	University of Idaho University of Alaska Fairbanks - Extension	1
	University of Alaska Anchorage	1
	Umatilla Tribe	1
	Tulalip Tribe Tribal Natural Resources Program	1
	Tribal Administration	1
	Tree Ecology	1
	Tongass National Forest	1
	Tanana Chiefs Tanana Chiefs	1
	Sustainable Southeast Partnership	1
	State of Alaska	1
	Southwest Oregon Community College Southeest Alaska Land Trust	1
	South American Indians for Opportunities	1
	Society for the Advancement of Chicano	1

Social Services Sisulaw National Forest	
Siletz School	
Siletz	
SEI	
SEAALASKA San Carlos Apache Tribe	
Salish Kootenai Tribe	
Rocky Mountain Elk Foundation	
Range department	
Quinault private landowners	
private forestry nurseries	
Portland Community College	
Peace Corps	
Parks and Recreation Organized Village of Kake	
Oregon Youth Conservation Corps	
Oregon State University, College of Fore	
Oregon State University Extension	
Oregon Museum of Science and Industry	
Oregon Indian Education Association Ochoco Collaborative	
NSF	
Northwest Indian College	
North Coast Resource Partnership	
Nisqually Nez Perce	
Nesika Wilamut	
neighboring county extensions	
Natural Resource Conservation Science	
Native Conservancy Seal Trust Native American Youth Association for P	
Native American Youth Association for P	
Native American Rehabilitation Associati	
Native American Forest and Rangeland	
Native American Community Advisory Con National Park Service	
National Park Service National Congress of American Indians	
National Center for Cooperative Education	
National Advancement of Sllvicultural Pr	
Mount Tillman Fire Control	
Middle and Lower Klamath Cultural Fire Michigan Urban and Community Forest	
Michigan State University Extension	
Michigan Department of Natural Resource	
Lomakatsi Restoration	
local timber industry	
Local Native Village Corporations Keex'Kwaan Community Forest Partners	
Kake Tribal Corportation	
Johnson Creek Watershed	
Intertribal Timber Council (ITC)	
Integral Ecology Research Indigenous Peoples Burning Network	
Indigenous Guardians Network	
IFMAT Project Partners	
Humboldt State University	
Hoopa Tribe	
Hoopa Hoonah Native Forest Partnership	
Hewlett Packard	
Heritage University	
heavioral health programs	
headstart	
Great Lakes Timber Professionals Good Neighbor Authority	
Future Generations Collaborative	
Forest Service - Rocky Mountain Resear	
Forest Service - Research Station - Port	
Forest Service - Missoula Fire Sciences	
Fish and Wildlife department federal agency land managing partners	
Farm Service Agency (FSA) programs	
Evergreen College	
Ecotrust Forest Management	
Ecostudies Institute	
Ecological Restoration Institute	
Departmet of Interior Cow Creek	
Confluence	
Colville Reservation Livestock Producers	
Columbia River Tribes	
College of the Redwoods	
Chugachmiut Chugach National Forest	
Chemawa	
Chehalis Tribes	
Central Oregon Community College	
CDFI, Juneau	
CalFire	

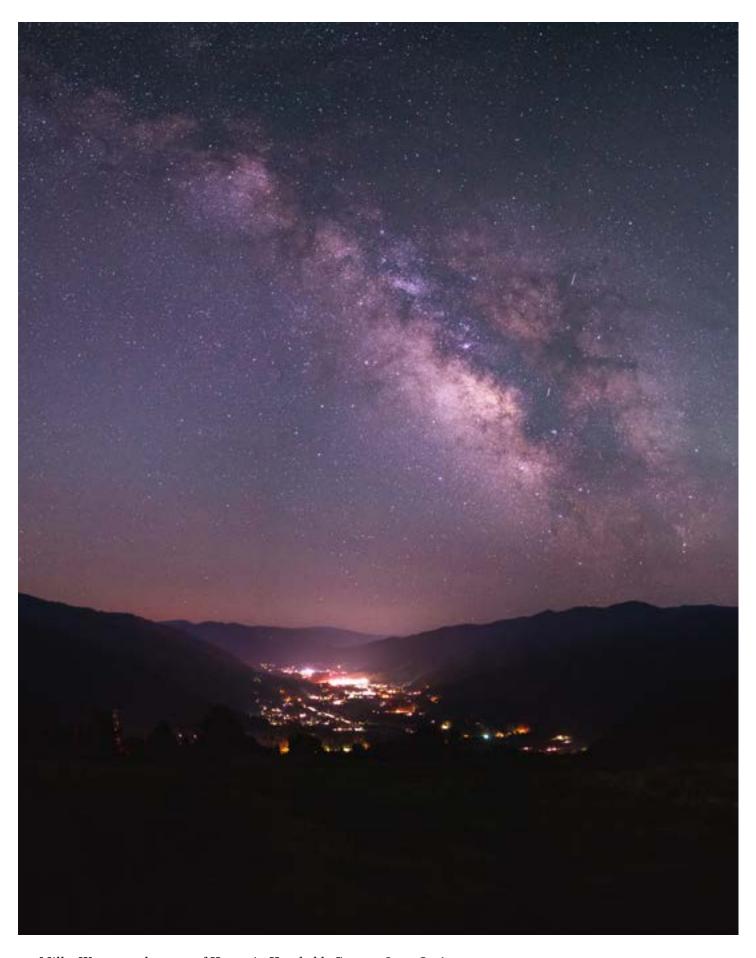
Grand Total	278
Extension Forester, Oregon State Unive	1
Alaska Bureau of Land Management	1
Alaska Forum on the Environment	1
Alaska Pacific University	1
Alaska Vocational Tech Institute (AVTEC	1
American Indian Higher Education Cons	1
BIA - Northwest Regional Office	1
BLM	1
Bureau of Environmental Services	1
Bureau of Indian Forestry	1
Bureau of Land Management (BLM)	1
Bureau of Transportation	1
Bureau of Water	1
Cal Poly Humboldt	1

LINKS TO RELEVANT **DOCUMENTS & PRESENTATIONS**

- 2019 Intertribal Timber Council Annual Symposium
- 2021 Intertribal Timber Council Annual Symposium
- 2022 Intertribal Timber Council Annual Symposium
- 2022 Intertribal Timber Council Student Summit
- Environmentors Lesson Plans
- OPB Article
- Western Forester Article
- Intertribal Field Experience Student Blog Posts

LINKS TO RELEVANT RESOURCES

- National Indian Forest Resources Management Act
- Indian Forest Management Assessment
- Tribal Workforce Development: A Decision-Framing Toolkit
- Intertribal Timber Council Workforce Development Strategic Plan
- SKC TREES Program
- Public Law 93 638
- Intertribal Timber Council Scholarships Information



 ${\it Milky~Way~over~the~town~of~Hoopa~in~Humboldt~County}.$ Sean Gutierrez