

# CHARACTERIZING HAWAI'I'S NATURAL RESOURCES MANAGEMENT SECTOR:

JOBS, EDUCATION, SALARIES & EXPENDITURES

# 2024

An update to the 2019 report

USDA

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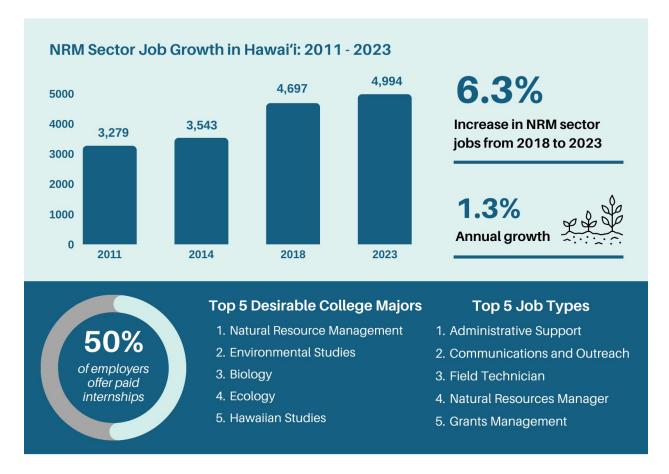
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## **Executive Summary**

The 2024 *Characterizing Hawai'i's Natural Resources Management Sector: Jobs, Education, Salaries, and Expenditures* report provides an update to the 2019 report of the same name published by The University of Hawai'i Economic Research Organization (UHERO).<sup>1</sup> With support from Hau'oli Mau Loa Foundation and The Nature Conservancy, SMS Research surveyed 125 natural resources management agencies across the state to collect data on employment, education, salaries, and expenditures in Hawai'i's natural resources management (NRM) sector.



#### Key findings of the NRM sector survey include:

• **NRM jobs in Hawai'i are growing:** Hawai'i's NRM jobs were at least 4,994 in 2023, 6.3% higher than reported for 2018, which is equivalent to an annual growth rate of approximately 1.3%.



<sup>&</sup>lt;sup>1</sup> Characterizing Hawai'i's Natural Resources Management Sector: Jobs, Education, Salaries, and Expenditures, 2019. (<u>https://uhero.hawaii.edu/wp-content/uploads/2019/09/UHEROHMLReport2019.pdf</u>)

- The top five job types in the sector were: Administrative support, communications and outreach, field technician, natural resources manager, and grants management.
- Starting salaries continue to increase: Ninety percent (90%) of NRM administrative salaries and 82% of field technician salaries were \$41K or higher, 91% of professional or managerial salaries were \$51K or higher, and 90% of executive salaries were \$61K or higher.
- Maximum salaries show potential for pay increases within NRM job types. For example, the most commonly reported starting salary for administrative employees was \$41-50K, compared with a maximum salary of \$61-80K.
- A **bachelor's degree** was the most commonly reported education level for NRM administrative, field or technical, and professional or managerial employees. A **master's degree** was the most commonly reported education level for NRM executives.
- The top 5 desired college majors in the sector were: Natural Resource Management, Environmental Studies, Biology, Ecology, and Hawaiian Studies.
- **Paid internships** were offered by 50% of agencies surveyed compared to 47% in 2018. **Paid fellowships** were offered by 22% of agencies surveyed compared to 17% in 2018.
- **NRM expenditures** were approximately \$714 million, with state agencies having the highest average expenditures.

These findings suggest opportunities to enhance workforce development efforts in Hawai'i's NRM sector, including by expanding access to in-demand postsecondary education programs, increasing paid internship and fellowship opportunities, ensuring salaries are competitive to attract and retain local talent, and addressing shared challenges through partnerships and sector-wide collaboration. Ongoing data collection on employment in Hawai'i's NRM sector is essential to informing policy decisions and shaping the state's future NRM workforce.



# Introduction

The natural resources management (NRM) sector is vital to Hawai'i's natural environment, economy, and culture. Understanding the employment opportunities, educational requirements, salaries, and expenditures in the NRM sector is key to guiding policy decisions. This 2024 report, *Characterizing Hawai'i's Natural Resources Management Sector: Jobs, Education, Salaries, and Expenditures*, provides an update to the 2019 report of the same name published by the University of Hawai'i Economic Research Organization (UHERO)<sup>2</sup>.

With support from The Nature Conservancy and Hau'oli Mau Loa Foundation, UHERO previously published three reports (in 2012, 2015, and 2019) to characterize the natural resources management (NRM) sector in Hawai'i based on survey data collected from agencies identified as being part of the NRM sector. In 2023, SMS Research partnered with The Nature Conservancy and Hau'oli Mau Loa Foundation to conduct the NRM sector survey for the fourth time and produce this 2024 report on Hawai'i's NRM sector. For the 2024 report, the scope was narrowed to focus exclusively on NRM and did not include the agriculture and energy sectors.



<sup>&</sup>lt;sup>2</sup> Characterizing Hawai'i's Natural Resources Management Sector: Jobs, Education, Salaries, and Expenditures, 2019. (<u>https://uhero.hawaii.edu/wp-content/uploads/2019/09/UHEROHMLReport2019.pdf</u>)

## **Methods**

This report outlines various trends within Hawai'i's Natural Resources Management (NRM) sector, including four primary indicators: employment, salaries, education levels, and expenditures. In 2023, the survey (see Appendix B) was circulated for the fourth time to 248 organizations actively involved in one or multiple aspects of natural resources management in Hawai'i. Data was collected from December 2023 to March 2024. Table 1 shows the distribution of respondents by organization type and their response rate. Of all the contacted organizations, 125 organizations participated in the 2023 survey, equating to a 50% overall response rate, an increase from 106 total responses (42% response rate) to the 2018 survey.

The 2023 survey comprised a total of 12 questions, addressing areas such as employment, employee characteristics, educational backgrounds, and salary structures. In the 2023 survey, a question was added on maximum salaries for different job types to better understand salary ranges in the sector. While the 2023 results are emphasized in this report, some of the 2011, 2014, and 2018 survey results are included for comparison.

The question on organizational expenditures was made optional in the 2023 survey due to the complexity of gathering and reporting data on organizational expenditures and to encourage a higher survey response rate. The data on expenditures is included in Appendix A for reference.

Category	Distributed	Completed	Response Rate			
Overall	248	125	50%			
State	7	5	71%			
Academic	35	16	46%			
Federal	30	15	50%			
Nonprofit	107	53	50%			
Partnership <sup>3</sup>	14	13	93%			
Private	48	19	40%			
County	7	4	57%			

#### Table 1: NRM Survey Response Rate by Category

<sup>&</sup>lt;sup>3</sup> The "partnership" category includes watershed partnerships (e.g., Koʻolau Watershed Partnership) and invasive species committees (e.g., Kaua'i Invasive Species Committee) throughout the state.

### Natural resources management sector overview

In this report, *natural resources management* (NRM) refers to the activities and employees that support and care for natural lands, air, freshwater and marine systems in Hawai'i. This includes fieldwork, science, research, regulation, planning, protection, management, hazard mitigation, climate change mitigation and adaptation, communications, outreach, decision-making, policy, education, training, and administrative support.

### **Employment in the NRM sector**

In 2023, NRM jobs totaled 4,994 or 40 jobs on average per organization, with a standard deviation of 122. Total FTE employees ranged from 157 for partnership agencies to 1,745 for state agencies, while average FTE ranged from 9.8 per private agency to 349 per state agency. The number of jobs for each subcategory are detailed in Table 2 and illustrated in Figure 1.

For the entire NRM sector, 297 FTE positions were gained since 2018, a 6.3% increase overall which is equivalent to a 1.3% annual growth rate. This is slightly higher than the 0.54% growth rate predicted by survey respondents in 2018. It should be noted that the positions gained may be attributed in part to the 18% increase in survey respondents from 2018 to 2023. Looking forward, 2023 survey respondents expect jobs will continue to grow by 1% annually over the next five years, equivalent to 256 FTE positions.

Category	Respondents	FTE	Mean	Std. Deviation
Entire NRM Sector	125	4,994	40.0	121.5
State <sup>4</sup>	5	1,745	349.0	454.5
Academic <sup>5</sup>	16	618	38.6	85.2
Federal <sup>6</sup>	15	1,104	73.6	98.5
Nonprofit	53	585	11.0	21.9
Partnership	13	157	12.1	10.4
Private	19	189	9.8	10.8
County <sup>7</sup>	4	596	149.0	196.7

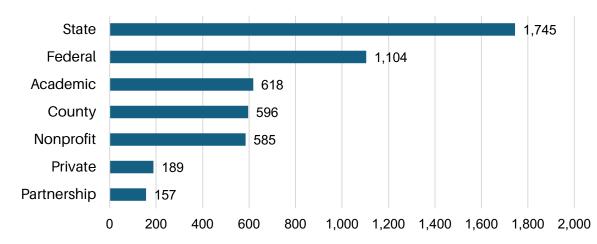
#### Table 2: Employment (FTE) in the NRM Sector, 2023

<sup>&</sup>lt;sup>4</sup> The FTE estimate for the State Department of Health was obtained from the <u>State Executive Biennium</u> <u>Budget</u>.

<sup>&</sup>lt;sup>5</sup> The FTE count for academic positions is significantly lower than previous years, potentially due to a lower response rate within this category.

<sup>&</sup>lt;sup>6</sup> The FTE estimate for the National Park Service was obtained from the <u>FY 2024 Budget Justifications</u>.

<sup>&</sup>lt;sup>7</sup> The FTE estimate for the Honolulu Board of Water Supply was obtained from the <u>FY 2024 Budget</u>.



#### Figure 1: Employment (FTE) in the NRM Sector, 2023

Respondents were also asked which of 20 NRM job categories were included within their respective employee groups. The most selected categories included administrative support (77), communications/outreach (68), field technicians (67), grant managers (66), and natural resource managers (66), similar to the results in the 2018 NRM report (see Table 3).

Survey participants were also allowed to submit "other" job types not captured by the suggested categories. Responses to this question included the following: agriculture specialist, aquarium biologist, front desk receptionist, gift shop manager, volunteer manager, coordinator, culture and equity director, land operations, project manager, procurement, engineer, facilitators, evaluators, field assistant, team leaders, fisher, horticulturists, human resources, nursery specialists, plant nursery, wildlife medical staff and farmers. The diversity of responses truly highlights the breadth of job opportunities in the sector.

Job Type	Number of organizations
Administrative support	77
Communications and outreach	68
Field technician	67
Natural resources manager	66
Grants management	66
Educator	59
GIS/data manager	56
Scientist	48
Cultural practitioner	44
Planner	41
Research/Analyst	39

#### Table 3: Job types in the NRM sector, 2023

Job Type	Number of organizations
Fundraiser	36
Bookkeeper	35
Accountant	35
Government policy	35
Training	29
Technical information systems	25
Lawyer	17
Lab technician	14
Hunter	11
Construction personnel	10

The number of NRM employers surveyed that offer internships and fellowships is illustrated in Figure 2. Half (50%) of NRM employers surveyed (n = 62) offered paid internships<sup>8</sup>, a slight increase from 47% of employers surveyed in 2018. Longer-term paid fellowships<sup>9</sup> were offered by 22% of NRM employers (n = 28) compared to 17% in 2018. However, 39% of NRM employers surveyed (n = 49) do not offer any internships, and 74% (n = 92) do not offer any fellowships. Continuing to increase the number of paid internship and fellowship opportunities in Hawai'i's NRM sector is essential to local workforce development.

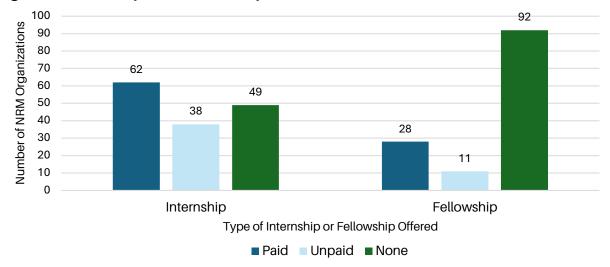


Figure 2: Internships and fellowships in the NRM sector, 2023\*

\*Note: This question allowed for multiple responses, as some NRM organizations surveyed offer both paid and unpaid internships and/or fellowships.



<sup>&</sup>lt;sup>8</sup> Internships are defined as short term (1-6 months) educational opportunities.

<sup>&</sup>lt;sup>9</sup> Fellowships are defined as medium term (>6 months) professional development opportunities.

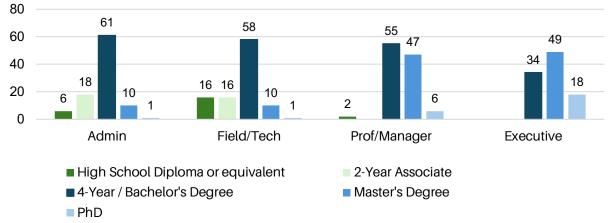
### **Education in the NRM sector**

Survey participants were asked about the average education level for each of the following job categories: administrative, field or technical, professional or managerial, and executive. Seventy-five percent (75%) of employees who provide administrative support and 68% of field technicians completed at least four years of postsecondary education, while 48% of managers and 66% of executives hold a master's degree or higher. The overall distribution, summarized in Table 4 and Figure 3, is similar to what was reported in 2018.

able 4. Education by job type in the NRM sector, 2023								
Number of times education level indicated by respondents								
Admin Field/Tech Prof/Manager Executive								
< HS Diploma or equivalent	0	0	0	0				
High School Diploma or equivalent	6	16	2	0				
2-year Associate Degree	18	16	0	0				
4-year / Bachelor's Degree	61	58	55	34				
Master's Degree	10	10	47	49				
PhD	1	1	6	18				

#### Table 4: Education by job type in the NRM sector, 2023

### Figure 3: Education by job type in the NRM sector, 2023



Survey participants were also asked about the types of college majors they look for when considering potential employees. The majority of the top five spots remained dominated by natural sciences: Natural Resources Management, Environmental Studies, Biology, and Ecology (see Table 5). Notably, Hawaiian Studies ranked fifth on the list for 2023, while it just missed the top 5 in previous years. This suggests that NRM agencies are increasingly recognizing the importance of cultural values and practices tied to natural resources in Hawai'i.

Desirable College Majors	Number of organizations
Natural resource management	99
Environmental studies	97
Biology	84
Ecology	83
Hawaiian studies	78
Botany	70
Geography	58
Marine biology	55
Communications	53
Soil science/agronomy	42
Geology	42
Urban and regional planning	40
Environmental law	40
Business	38
Oceanography	38
Accounting	36
Hydrology	33
Computer science	28
Political science	25
Economics	25
Anthropology	18
Chemistry	17
Physics	9

#### Table 5: Desirable college majors in the NRM sector, 2023

For the top five desirable college majors reported by NRM agencies, several degree programs are available in the University of Hawai'i system, including at 2-year and 4-year institutions, as shown in Table 6. From 2018 to 2023, the number of UH graduates from bachelor's degree programs has increased in Natural Resources and Environmental Management (8%), Hawaiian Studies (11%) and Global Environmental Science (50%), indicating growing student interest in these majors.<sup>10</sup> However, the number of UH graduates with bachelor's degrees in Biology declined by 16% during this period.

It is worth noting that associate degree programs for NREM, Environmental Studies, and Ecology are not currently offered by the UH Community Colleges (UHCCs). Providing associate degree programs for these in-demand majors could make earning a bachelor's degree more accessible and affordable for Hawai'i residents who plan to transfer from a UHCC to a 4-year UH institution.

<sup>&</sup>lt;sup>10</sup> University of Hawai'i System Institutional Research, Analysis & Planning Office. (<u>https://data.hawaii.edu/</u>)

Major	Associate Degree	Bachelor's Degree	Graduate Degree
Natural Resource Management		BS in Natural Resources & Environmental Management at UH Mānoa	MS, MEM and PhD at UH Mānoa
Environmental Studies	Note: Several UHCCs offer Academic Subject Certificate in Sustainability	BS in Global Environmental Science and BS in Interdisciplinary Studies (emphasis on environmental studies) at UH Mānoa	
Biology	AS-NS in Biological Sciences at Hawaiʻi, Honolulu, Kauaʻi, Kapiʻolani, Leeward, Maui, Windward UHCCs	BA and BS in Biology at UH Mānoa and UH Hilo BS in Natural Science at UH West Oʻahu	MS in Tropical Conservation Biology at UH Hilo
Ecology		Note: Ecology courses may be included in NREM BS	Graduate specialization in Ecology Evolution & Conservation Biology at UH Mānoa
Hawaiian Studies	AA in Hawaiian Studies at Hawai'i, Honolulu, Kapi'olani, Kaua'i, Leeward, Maui, Windward UHCCs	BA in Hawaiian Studies at UH Mānoa and UH Hilo	MA in Hawaiian Studies at UH Mānoa

#### Table 6: Availability of top five desirable college majors in the UH system, 2023

**Source:** UH System Degrees and Programs (<u>www.hawaii.edu/degrees-and-programs/</u>). Please note that the certificates and degree programs listed in Table 6 may not be comprehensive. Prospective students should consult an academic advisor at their college for the most current information on certificates and degree programs.

### Salaries in the NRM sector

Average starting salaries in the NRM sector have risen across the board since the last report in 2018 (see Table 7). In 2023, 90% of agencies reported having administrative support employee salaries starting at \$41,000 or higher (compared to 59% in 2018), 82% reported having field technician salaries starting at \$41,000 or higher (compared to 49% in 2018), 91% reported having professional and managerial salaries starting at \$51,000 or higher (compared to 77% in 2018), and 90% reported having executive salaries starting at \$61,000 or higher (compared to 77% in 2018).

Despite the increase in starting salaries over the last five years, pay remains a concern for many NRM professionals in Hawai'i. A 2022 survey of NRM professionals in Hawai'i (n = 77) found that 40% faced financial barriers in their career journey due to the high cost of living in Hawai'i and relatively low salaries.<sup>11</sup>

The majority of starting salaries reported by 2023 survey respondents are higher than the ALICE annual survival budget of \$36,912 for a single adult in Hawai'i. However, the ALICE

<sup>&</sup>lt;sup>11</sup> Natural Resources Careers in Hawai'i, KUPU (2023).

survival budget represents the bare-minimum income needed to afford the cost of household essentials.<sup>12</sup> Moreover, NRM starting salaries in the \$41-50K range and some salaries in the \$51-60K range are below the MIT living wage of \$56,841 for a single adult with no children in Hawai'i. <sup>13</sup> These wage thresholds suggest that many NRM professionals in Hawai'i are still struggling to make ends meet, particularly administrative employees and field technicians. Ensuring NRM professionals are able to earn a living wage in Hawai'i is critical to recruiting and retaining the local workforce.

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Number of times starting salary level indicated by respondents								
Average Starting Salary	Average Starting Salary Admin Field/Tech Prof/Manager Executive							
\$40k or below	9	17	0	1				
\$41-50K	44	46	9	2				
\$51-60K	18	18	32	6				
\$61-80K	15	14	47	18				
Above \$80K	3	2	17	64				

#### Table 7: Average starting salary by job type in the NRM sector, 2023

In the 2023 survey, agencies were also asked to report their *approximate maximum salaries* for each job category to better understand salary ranges in the sector (see Table 8). The starting and maximum salary ranges most commonly reported by respondents for each job category are illustrated in Figure 4. For both administrative support employees and field technicians, \$41,000-\$50,000 was the most commonly reported starting salary range, while \$61,000-\$80,000 was the most commonly reported maximum salary range for these job categories. For professional and managerial employees, the most commonly reported starting salary range of \$81,000-\$100,000. For executives, the most commonly reported starting salary was more than \$80,000, while the maximum salary range was more than \$140,000. The variation between starting and maximum salaries demonstrates opportunities for advancement and pay increases both within and across different job types in the NRM sector.

Number of times maximum salary level indicated by respondents						
Approximate Maximum Salary	Admin	Field/Tech	Prof/Manager	Executive		
\$40k or below	2	1	0	0		
\$41-50K	9	12	1	1		
\$51-60K	20	23	5	1		
\$61-80K	27	29	25	6		
\$81-100K	15	14	28	12		
\$101-120K	8	7	19	18		
\$121-140K	2	5	10	17		
Above \$140K	2	0	12	31		

#### Table 8: Approximate maximum salary by job type in the NRM sector, 2023

<sup>&</sup>lt;sup>12</sup> <u>ALICE in the Crosscurrents</u>, Aloha United Way (2023).

<sup>&</sup>lt;sup>13</sup> <u>MIT Living Wage Calculator</u>



Figure 4: Approximate starting to maximum salary ranges by job type in the NRM sector, 2023



### **Recommendations**

The findings of this report suggest several opportunities to enhance workforce development efforts in Hawai'i's NRM sector. The following recommendations aim to strengthen support for local NRM employment and training based on the unique characteristics and needs of Hawai'i's economic landscape and cultural heritage.

- 1. Education Program Expansion: Implement associate degree programs in in-demand fields such as Natural Resource Management, Environmental Studies, and Ecology at community colleges to make education more accessible and provide clear transfer pathways to 4-year degrees.
- 2. **Cultural Curriculum Enhancement**: Strengthen educational content by integrating Hawaiian cultural studies into environmental majors, reflecting the increased employer demand for such knowledge in the NRM sector.
- Salary Adjustments for Competitiveness: Address the issue of low salaries in the NRM sector, especially in light of Hawai'i's high cost of living, to attract and retain qualified professionals.
- Workforce Development Initiatives: Increase investment in paid internships and fellowships to develop the local workforce and provide valuable on-the-job training for aspiring NRM professionals.
- 5. **Career Pathway Development**: Develop clear career advancement pathways within NRM organizations, allowing for professional growth and salary increases.
- 6. **Data-Driven Policy and Program Development**: Maintain and enhance the regular collection and analysis of employment data within the NRM sector to inform policy decisions and the development of educational programs.
- 7. **State and Federal Job Accessibility**: Improve the accessibility and visibility of state and federal job applications to local applicants and ensure that job preparation and promotion are attuned to these significant employment opportunities.
- 8. **Cultural Integration in Resource Management**: Continue to integrate Hawaiian cultural values and practices more deeply into the management and stewardship of natural resources, as this is recognized as increasingly important by employers in the sector.
- 9. Leveraging Sector Partnerships: Utilize networks like the Natural Resources Sector Partnership (NRSP) to encourage sector-wide industry and education collaboration to tackle common challenges and align workforce training with industry needs.
- 10. **Promotion of NRM Careers**: Actively promote NRM career opportunities to raise awareness among potential local candidates and prepare them for available roles, with a particular focus on the prominence of state and federal positions.

# **Appendix A: Expenditures in the NRM Sector**

In total, NRM expenditures in 2023 amounted to \$713.7 million or \$10.1 million per organization on average. The \$46.2 million standard deviation suggests, however, that the average is being inflated by large government agencies. When organizations are separated into sub-categories, average expenditures range from a low of \$0.8 million for partnership government agencies to a high of \$198.8 million for state government agencies. Total and average expenditures for each sub-category are detailed in Table 9.

Category	Respondents	Total	Mean	Std. Deviation				
State 14	2	383.5	191.8	267.3				
Federal <sup>15</sup>	8	139.8	17.5	12.9				
County 16	2	96.4	48.2	55.9				
Nonprofit	30	38.5	1.3	2.3				
Private	13	36.5	2.9	3.2				
Academic	5	9.8	2.0	2.3				
Partnership	11	9.2	0.8	0.5				
Total	71	713.7	10.1	46.2				

#### Table 9: Expenditures in the NRM sector (millions of dollars), 2023\*

\***Note:** As the question regarding expenditures was made optional in the 2023 survey, the number of respondents (n = 71) was significantly lower than the overall number of survey respondents (n = 125).



<sup>&</sup>lt;sup>14</sup> The expenditures estimate for the State Department of Health was obtained from the <u>State Executive</u> <u>Biennium Budget</u>.

<sup>&</sup>lt;sup>15</sup> The expenditures estimate for the National Park Service was obtained from the <u>FY 2024 Budget</u> <u>Justifications</u>.

<sup>&</sup>lt;sup>16</sup> The expenditures estimate for the Honolulu Board of Water Supply was obtained from the <u>2024</u> <u>Budget</u>.

### **Appendix B: Natural Resources Management Sector Survey**

#### Introduction

The Nature Conservancy (TNC), Hau'oli Mau Loa Foundation and SMS Research Hawai'i are conducting this survey of organizations in Hawai'i engaged in one or more aspects of natural resources management. This is the fourth time this survey has been conducted in Hawai'i, in order to quantify the size and economic importance of the state's natural resources management sector. This survey is an important part of documenting the significance of the natural resources management sector in Hawai'i's economy.

Report findings will be shared with policy makers and decision makers so that they can better understand the depth and breadth of Hawai'i's sustainability sector. Information collected also helps the next generation of "green job" seekers to better understand the natural resources (including conservation & mālama 'āina) sector, trends, and the job market. Please answer questions 1 through 9 to provide critical data for assessing the size of Hawai'i's natural resources management sector. Though questions 10 through 12 are optional, we would greatly appreciate your responses that will provide greater depth to this research.

All individual responses will be kept strictly confidential. The survey has been conducted in 2011, 2015, and 2018. The results from the 2018 survey are included in a report available <u>here</u>. Summarized findings that do not identify individual organizations will be available to all survey participants and may be shared with policy makers, others in natural resources management, the media, and the general public. While types or names of organizations may be identified as survey participants, no individual responses or data will be released.

Whether you are part of a large federal regulatory agency, a for-profit corporation, or a community-based effort to protect the environment (mālama 'āina or 'āina based organization), we hope to document your important contributions in this study.

*Note:* \* *Indicates a required question.* 

#### Definition

FOR THE PURPOSES OF THIS SURVEY, NATURAL RESOURCES MANAGEMENT IS DEFINED AS:

Activities and employees that support and care for natural lands, air, freshwater and marine systems in Hawai'i. This includes fieldwork, science, research, regulation, planning, protection, management, hazard mitigation, climate change mitigation and adaptation, communications, outreach, decision-making, policy, education, training, and administrative support.

**1)** Please provide your contact information so that we can reach you with any questions about your responses. Your individual responses will be kept confidential.\*

Name:	
Company / Organization:	
Email Address:	
Phone Number:	

**2)** How many full-time (FT) or full-time equivalent (FTE) natural resources management employees currently work in your organization in Hawai'i? You may use the most recent year/fiscal year for which you have data.

\*Note: Individual responses will be kept strictly confidential.\*

**3)** Please identify the kinds of jobs in your organization that support your natural resources management work in Hawai'i. (Check all that apply)\*

[] Scientist

[] Field technician

[] Hunter

[] Natural resources manager

[] Cultural practitioner

[] Construction personnel

[] GIS/data manager

[] Technical information systems

[] Bookkeeper

[] Accountant

[] Grants management

[] Fundraiser

[] Government policy

[] Administrative support

[] Communications and outreach

[] Lawyer

[] Planner

[] Research/Analyst

[] Training

[] Lab technician

[] Educator

[] Other (please specify):

**4)** Please identify the kinds of undergraduate college majors that your organization looks for in your employees to support natural resources management work in Hawai'i. (Check all that apply)\*

16

[] Accounting

[] Anthropology

[] Biology

[] Botany

[] Business

[] Chemistry

[] Other (please specify):
----------------------------

5) What is the average	education level for th	e following ca	tegories of na	atural res	sources
management employe	es in your organization	n in Hawai'i? (	Select only o	ne in ea	ch row)*

\*

	Less than a High School Diploma or equivalent	High School Diploma or equivalent	2-year Associates	4-year / Bachelors	Masters	PhD	N/A
Administrative	()	()	()	()	()	()	()
Field/ Technical	()	()	()	()	()	()	()
Professional/ Managerial	()	()	()	()	()	()	()
Executive	()	()	()	()	()	()	()



**6)** What is the average starting salary for the following categories of full-time natural resources management employees in your organization in Hawai'i? (Select only one in each row)\*

	\$40k or below	\$41- 50K	\$51- 60K	\$61- 80K	Above \$80K	N/A
Administrative	()	()	()	()	()	()
Field/Technicial	()	()	()	()	()	()
Professional/Managerial	()	()	()	()	()	()
Executive	()	()	()	()	()	()

**7)** What is the approximate maximum salary for the following categories of full-time natural resources management employees in your organization in Hawai'i? (Select only one in each row)\*

	\$40k or below	\$41- 50K	\$51- 60K	\$61- 80K	\$81- 100K	\$101- 120K	\$121- 140K	Above \$140K	N/A
Administrative	()	()	()	()	()	()	()	()	()
Field/ Technicial	()	()	()	()	()	()	()	()	()
Professional/ Managerial	()	()	()	()	()	()	()	()	()
Executive	()	()	()	()	()	()	()	()	()

**8)** Does your organization currently offer natural resources management internships in Hawai'i, e.g., paid or unpaid short term (1-6 mos.) educational opportunities? (Check all that apply)\*

[] Yes, we offer paid internships

[] Yes, we offer unpaid internships

[] No, we don't offer internships

[] Other (please specify):

**9)** Does your organization currently offer natural resources management fellowships in Hawai'i, paid or unpaid medium term (>6 mos.) professional development opportunities? (Check all that apply)\*

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[] Yes, we offer paid fellowships

[] Yes, we offer unpaid fellowships [] No, we don't offer fellowships [] Other (please specify):

10) Approximately how many full-time (FT) or full-time equivalent (FTE) natural resources management positions has your organization lost or gained in Hawai'i in the last 3-5 years? You may express your answer as a percentage or a number of positions, e.g., 15% loss or lost 3 jobs. Gained: \_\_\_\_\_

Lost:

11) Approximately how many full-time (FT) or full-time equivalent (FTE) natural resources management positions does your organization expect to lose or gain in Hawai'i in the next 3-5 years? You may express your answer as a percentage or a number of positions, e.g., 5% gain or gain 1 job. Expect to gain: \_\_\_\_\_

Expect to lose:

12) Please complete the following chart with information on your organization's approximate annual expenditures for natural resources management in Hawai'i. You may use the most recent year/ fiscal year for which you have data. \*Note: Individual responses will be kept strictly confidential.

Salaries and wages:

Fringe benefits (may be expressed in dollars or as a percentage of salaries and wages):

Grants, contracts, and "pass through" to other entities:

Capital improvement projects (e.g. buildings, roads, fences, etc.):

All other expenditures:

TOTAL (this should be equal to the sum of the expenditure values inputted above):