

Helping County of Maui Build a Better Tomorrow.



Disaster Recovery Management

Received at 03/19/2024 GREAT Committee Meeting

Tetra Tech is a global company solving complex challenges with sustainable solutions.



WORKS IN
100+
COUNTRIES
7
CONTINENTS

WORKS ON
100,000
PROJECTS
ANNUALLY
550 OFFICES
WORLDWIDE

22,000 CLIENTS

28,000 EMPLOYEES



#1
ENR
Engineering News-Record

Water
20 years in a row

Environmental Management
15 years in a row

Treatment/Desalination
10 years in a row

Tetra Tech's disaster recovery practice offers industry-leading insight to support the County of Maui.



25 YEARS POST-DISASTER RESPONSE EXPERIENCE

\$51B POST-DISASTER GRANTS

95+ MAJOR DISASTERS IN 23 STATES & 2 US TERRITORIES



650+ FEDERAL GRANT-FUNDED PROJECTS

27 YEARS OF EXPERIENCE IN HAWAII

22 PROJECTS IN HAWAII



Tetra Tech has been engaged for Disaster Recovery Management Services.



Advisory Services
and Management

Financial Management
and Compliance

Relationship
Management and
Communication

Data and Records
Management

Grant Application
and Management

Mitigation and
Infrastructure
Development

Individual, Household,
and Long-term
Housing Recovery
Support

Interagency
Recovery Coordination
and Long-term
Recovery Support

Training
and Education



Community Engagement and Outreach is our Priority

Experience

We have experience with culturally sensitive issues and working in diverse communities.

Stakeholders

We are familiar with the many stakeholders and their concerns.

Building Trust

We are developing an outreach and community engagement plan to build trust with the stakeholders and facilitate dialogue and collaboration.



Our team is dedicated to serving the County and its residents as a trusted partner in recovery.



Serve the County.

**Promote local-led,
survivor-focused
recovery.**

**Act as a compass to
navigate complex
requirements.**

**Earn trust with
sustainable and
informed advocacy.**

The recovery process is long, but progress is already being made.

Permanent disposal site survey completed

Established Relationships and Lines of Communication with **Federal and State Partners**

Provided **Staff Support** for Immediate Needs: Debris Alt Program and EOC Staff Augmentation

Rules for **expedited permits** reviewed and refined

\$5.2 M Expedited Project Worksheet

Requested **Consolidation** for 14 Applicants to Become One County Applicant

Developed Initial Long Term Recovery **Cost Estimates**

Initiated public infrastructure **Site Inspections**

Permanent Disposal Site Survey

Purpose: Support efforts to identify a permanent disposal site location for the debris from the devastating fires in Lāhainā—provide reliable data that accurately reflects community sentiment as input into the County’s decision of where to place the landfill.

Methodology:

- 1. Scientific random sample survey** of 430 Maui residents, conducted online and via phone from 01/31/24 to 02/12/24, resulting in a margin of error of +/- 4.73% at the 95% level of confidence.
- 2. Publicly accessible online survey** of 2,327 Maui residents, conducted from 01/31/24 to 02/15/24.

RESULTS		SURVEY	
		Scientific	Publicly Accessible
Proximity	Safe distance from natural/ environmental features	82%	80%
	Has a buffer zone between the site and residential areas, schools, hospitals, etc.	79%	83%
Consultation	Considers recommendations from subject matter experts	70%	67%
	Considers public input	67%	70%
	Considers concerns about cultural resources	64%	61%
Logistics	Road safety concerns when trucking debris	58%	51%
	How long it will take to make site ready to receive debris	49%	45%
	Increase in traffic congestion when trucking debris	40%	40%

We provide Federal Procurement Compliance guidance and training.



- Conducted Procurement Training on February 27th
- Over 40 Attendees from departments County-wide
- Set framework for review of all fire related procurements to minimize risk of future audit issue
- Positive Outcome: Over \$12M in additional eligible expenditures identified in follow up conversations to date



Executive Level Reporting

Maui Wildfires Disaster Recovery Executive Summary



HOUSING RECOVERY

NON-CONGREGATE SHELTERING SUMMARY

13
Hotels providing NCS

1,436
Households living in NCS

FEMA HOUSING ASSISTANCE

1308
Households eligible for FEMA IA

43
Households ineligible for FEMA IA

376
Direct lease licensed units in use

CURRENT PERMANENT HOUSING STATUS

1,062
Permanent Housing Units Under Construction



DEBRIS OPERATIONS

SITES CLEARED OF PHYSICAL DEBRIS

413
Debris removal in progress

75
Consolidated Debris removal complete



INFRASTRUCTURE RECOVERY

COUNTY ESTIMATES FOR FUNDING NEEDS

60
Estimated Projects

\$1.06B
FEMA PA Estimate Totals

\$1.8M
FEMA PA reimbursement totals to State

0
FEMA PA reimbursement totals to County

March 14, 2024 Version 1

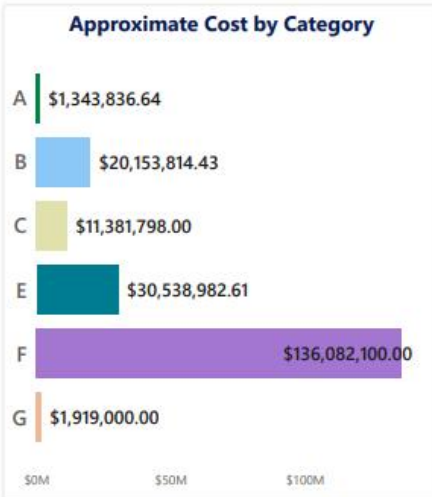
DR-4724 Maui County Wildfires: Damage Inventory Dashboard



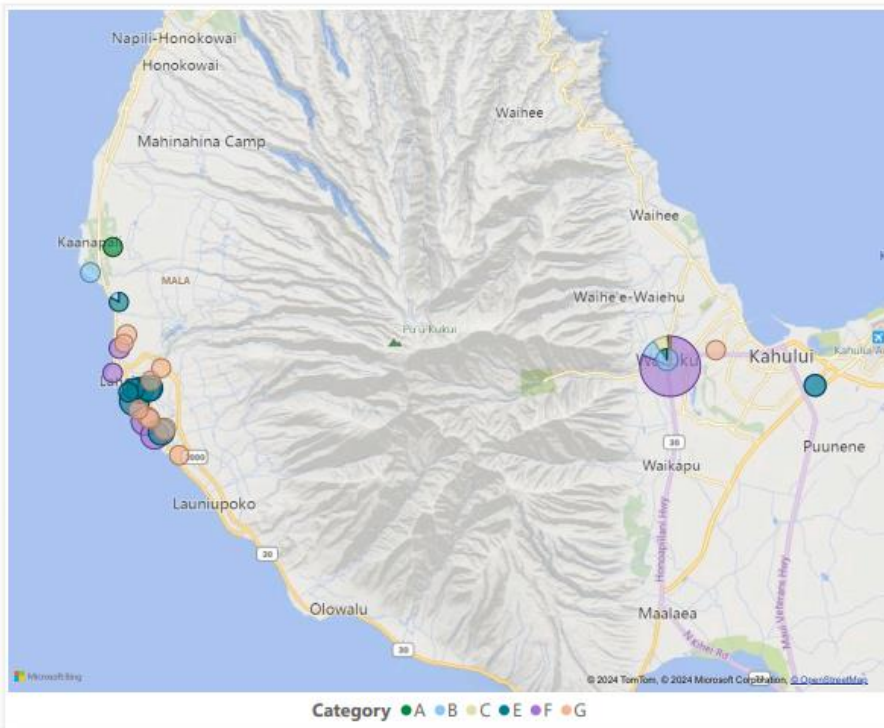
\$201,419,531.68 **68**

Approximate Damage Cost Damage Inventory Count

Name of Damage/Facility: All |
 Category of Work: All |
 Address: All |
 Department: All



Department	Approx. Cost	Damages
Environmental Management	\$142,423,349.40	9
Housing and Human Concerns	\$25,817,686.00	8
Public Works	\$15,130,781.99	4
Fire and Public Safety	\$4,116,479.56	5
Emergency Management	\$2,900,000.00	3
Water Supply	\$2,082,776.80	8
Parks and Recreation	\$2,019,000.00	14
Transportation	\$1,975,540.25	4
Department of Management	\$1,935,562.54	4
Economic Development	\$1,864,230.16	5
Police	\$1,113,358.23	2
Prosecuting Attorney	\$36,965.75	1
Finance	\$3,801.00	1
Total	\$201,419,531.68	68



Top 10 Damages

Cat.	Name of Damage/Facility	Approx. Cost
F	Wastewater Collection System	\$118,020,100.00
C	Damaged Roadway & Components	\$11,381,798.00
E	Buildings and Equipment. Lahaina Crossroads Apartment	\$11,000,000.00
F	Pump Station #5	\$8,028,000.00
B	Damage for Project [736370] Emergency Protective Measures	\$7,920,000.00
F	Pump Station #6	\$7,548,000.00
E	The Historic Pioneer Mill Office Building	\$5,000,000.00
E	Buildings and Equipment. Komohana Hale Apartments	\$4,959,055.00
E	Buildings and Equipment. West Maui Senior Center	\$4,227,450.00
B	Damage for Project Emergency Protective Measures - Contract	\$2,248,983.99

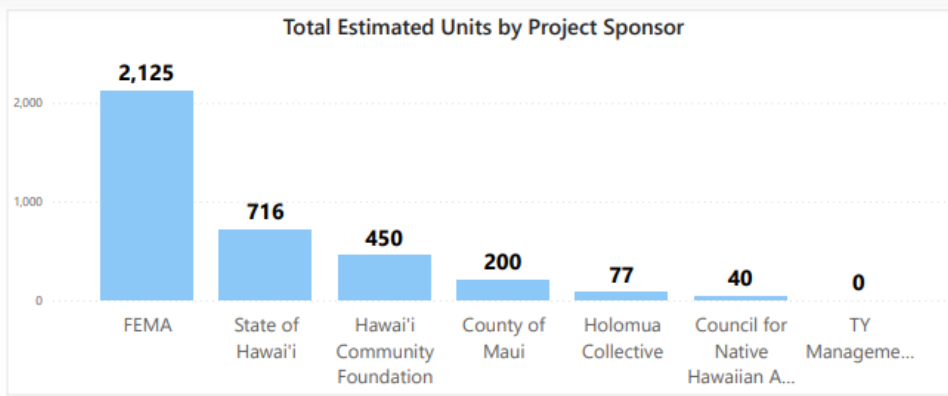
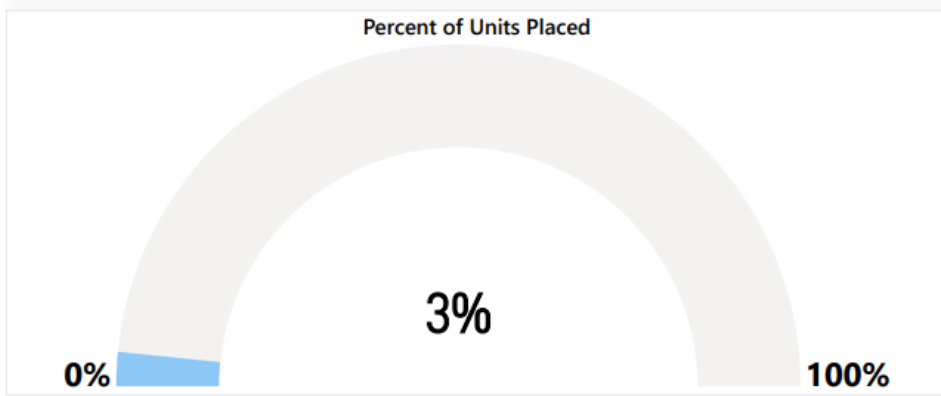
DR-4724 Maui County Wildfires: Interim Housing Project Summary



Interim Housing Project Summary | Interim Housing Project List | Complete Deliverables | In Progress Deliverables | Planned & Ongoing Deliverables | Cancelled Deliverables

3,608 Total Estimated Units	116 Total Units Placed	3,492 Total Estimated Units Remaining	17 Total Projects
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Project Sponsor: |
 Project Stage: |
 Project Lead POC: |
 Project Name:



Project Sponsor	Project Name	Estimated Unit Count	Units Placed	% Units Placed	Units Remaining	Estimated Project Cost	Proposed Date of Completion	Project Stage	Project Lead
Council for Native Hawaiian Advancement	Forgiveable ADU Loan Program	40	0	0%	40	\$2,000,000.00		Planning	Kuhio Lewis
FEMA	Waikapu Country Town Temporary Housing	400	0	0%	400	\$100,000,000.00		On Hold	Forrest Lanning
Total		3,608	116	3%	3,492	\$554,320,000.00			

Disclaimer: The figures presented in this dashboard are based on external party reporting data. Tetra Tech cannot guarantee the accuracy of the data provided by external parties. This dashboard will be updated daily at 7:00AM HST.

Infrastructure



Project Name	County Dept.	FY25	FY26	FY27
		Total	Total	Total
Traffic Signal Replacement	DPW	\$ 3,000,000		
Front Street Repairs	DPW	\$ 5,000,000		
Roadway and Sidewalk Repairs and Verification of Survey Monuments	DPW	\$ 7,000,000	\$ 4,000,000	
Debris Removal	DPW	\$ 2,000,000	\$ 7,500,000	
Roadway Connectivity for Disaster Evacuation	DPW	\$ 12,000,000	\$ 10,000,000	
Roadway Connectivity for Disaster Evacuation (Land Acquisition)	DPW	\$ 8,000,000		
Road Resurfacing/Reconstruction	DPW			\$ 25,000,000
Storm Drainage, Flood Control, and Water Quality Improvements	DPW	\$ 8,000,000		
Expedited Permitting	DPW	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000
Water Supply Infrastructure Repairs and Replacements	DWS	\$ 10,000,000	\$ 20,000,000	
Fire Flow Improvements to Water System	DWS	\$ 10,000,000		
Honokowai to Wahikuli Water Line Extension	DWS		\$ 20,000,000	
Permanent Disposal Site	DEM	\$ 38,000,000		
Pump Station temporary repairs	DEM	\$ 5,000,000		
Wastewater Collection System repairs	DEM	\$ 11,000,000	\$ 20,000,000	\$ 5,000,000
Wastewater Collection System Laterals and Cleanouts	DEM	\$ 9,000,000		
Pump Station Replacement	DEM		\$ 25,500,000	
Wahikuli Sewer Installation	DEM		\$ 29,000,000	
Kahului WWTP 4th Aeration Basin	DEM	\$ 15,000,000	-	
Lahaina WWTP Upgrade	DEM		\$ 9,500,000	
West Maui Recycled Water System	DEM		\$ 11,500,000	

Recovery Timeline



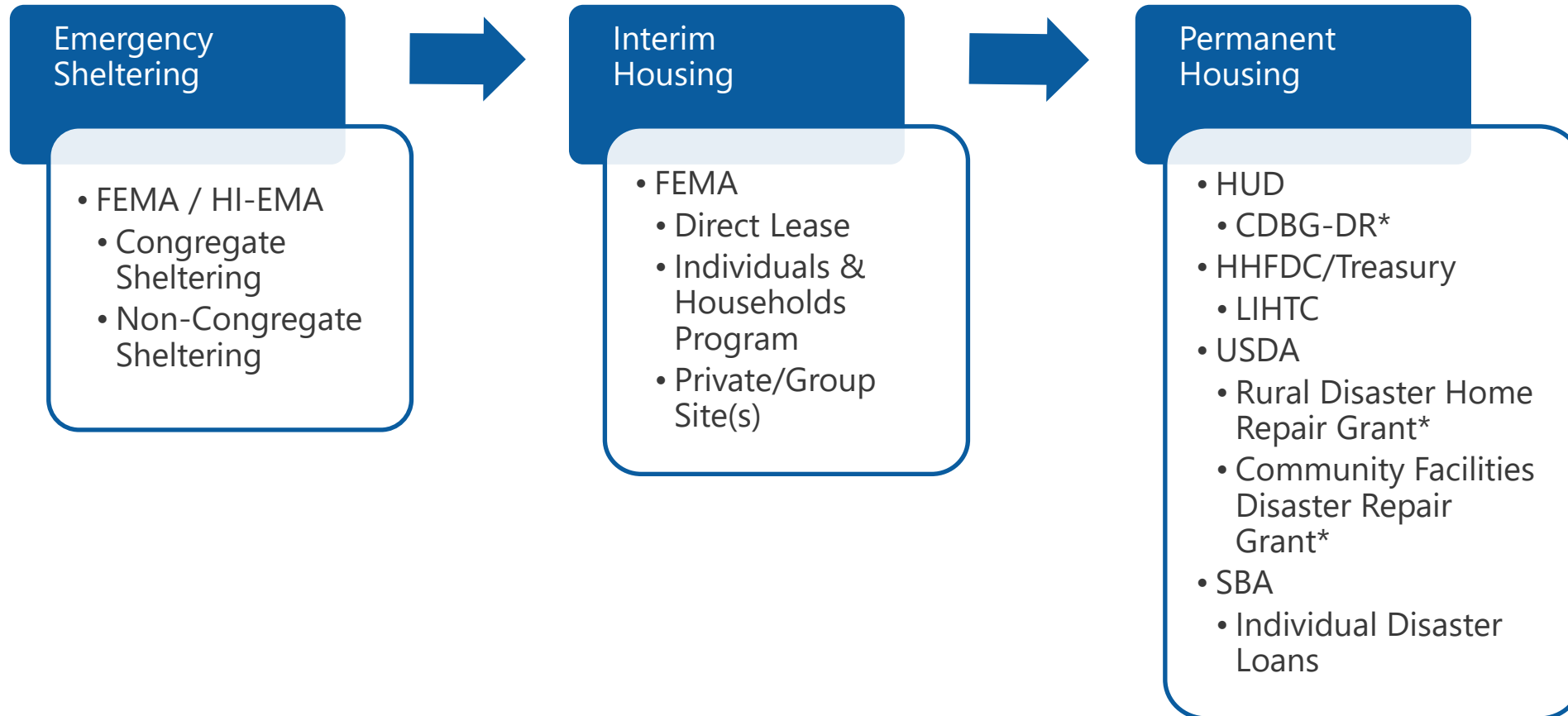
FEMA PA funds available for Infrastructure recovery.

- FEMA Management Costs (Category Z)
- Maui eligible to receive up to 5% of total FEMA obligations to cover expenditures related to the FEMA PA program
- **Example:** \$1 billion PA Obligations x 5% = \$50 million FEMA management Costs available

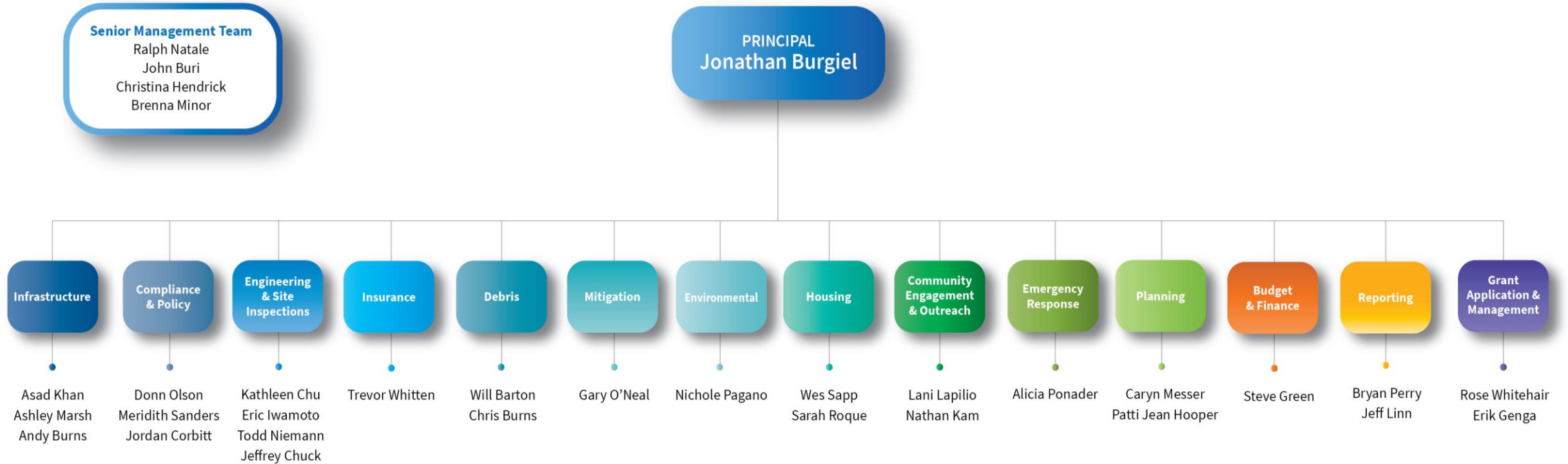
2025 Q1 Cash flow Projections:

- Total: **\$21M**
- **\$1.8M** Funds with HI-EMA
- **\$5.2M** in County of Maui Review for expedited funding request
- **\$14M** to be Submitted

Traditional Federal Grant Funding Pipeline for Housing Recovery.



Tetra Tech offers subject matter expertise in every area of recovery.



Mahalo.
We look forward to continuing to support the County of Maui.

