HAWAI'I STAT	URTH LEGISLATURE E LEGISLATURE GRANTS & SUBSIDIES	Log No: 246-0
***************************************	AI'I REVISED STATUTES	For Legislature's Use Only
Type of Grant or Subsidy Request:		
☐ GRANT REQUEST — OPERATING ☐ GRANT	REQUEST - CAPITAL SU	BSIDY REQUEST
"Grant" means an award of state funds by the legislature, be activities of the recipient and permit the community to bene		sipient, to support the
"Subsidy" means an award of state funds by the legislature appropriation, to reduce the costs incurred by the organizated members of the public.	e, by an appropriation to a recipient s tion or individual in providing a servi	specified in the ce available to some or
"Recipient" means any organization or person receiving a g	grant or subsidy.	
STATE DEPARTMENT OR AGENCY RELATED TO THIS REQUEST (I LAND AND NATURAL RESOURCES, DIVISION OF FOREST STATE PROGRAM I.D. NO. (LEAVE BLANK IF UNKNOWN):		PROGRAM
1. APPLICANT INFORMATION:	2. CONTACT PERSON FOR MATTER APPLICATION:	S INVOLVING THIS
Legal Name of Requesting Organization or Individual: West Hawaii Wildfire Management Organization	Name GAIL BYRNE	
Dba: Hawaii Wildfire Management Organization	Title Executive Director	
Street Address: 64-067 Mamalahoa Hwy, c-4, Kamuela, HI 96743	Phone # 808-885-0900; cell 808-938 Fax # 808-885-0922	<u>-8880</u>
Mailing Address: same	e-mail <u>gailbyrne@hawaii.rr.com</u>	
3. Type of business entity:	7. DESCRIPTIVE TITLE OF APPLICA	NT'S REQUEST:
 Non profit Corporation For profit Corporation Limited Liability Company Sole Proprietorship/Individual 	Hawaii Wildfire Management conducting mitigation including hazardous vegeta installation, community risk assessme accurate fire behavior modeling, innounderstand wildfire best management conditions, etc.	itive management, dip tank nts, GIS analysis to support vative research to better
	(Maximum 300 Characters)	
4. FEDERAL TAX ID	8. FISCAL YEARS AND AMOUNT OF	STATE FUNDS REQUESTED:
5. STATE TAX ID #: 6. SSN (IF AN INDIVIDUAL):	FY 2008-2009 \$ <u>. 🕬 6 15,</u>	000
· · · · · · · · · · · · · · · · · · ·	PECIFY THE AMOUNT BY SOURCES OF FUTUE TIME OF THIS REQUEST: STATE \$ 0 FEDERAL \$ 0 COUNTY \$ 0 PRIVATE/OTHER \$ 0	JNDS AVAILABLE

GAIL BYRNE , EXECUTIVE DIRECTOR

TYPE NAME & TITLE OF AUTHORIZED REPRESENTATIVE:

Application for Grants and Subsidies

If any item is not applicable to the request, the applicant should enter "not applicable".

I. Background and Summary

This section shall clearly and concisely summarize and highlight the contents of the request in such a way as to provide the State Legislature with a broad understanding of the request. Include the following:

1. A BRIEF description of the applicant's background; Hawaii Wildfire Management Organization (HWMO), a 501(c)(3) non-profit, is the only organization of its kind in Hawaii and offers the best cross-disciplinary wildfire expertise in the State. HWMO's experience in hazard assessment, mitigation planning, and project implementation is unparalleled.

HWMO is dedicated to protecting Hawaii Island's communities, irreplaceable dryland forests, and cultural resources from wildfire. HWMO was founded in 2002 by a diversity of stakeholders including scientists, land managers, representatives of State and Federal agencies, ranchers, environmentalists, and fire fighters who came together to characterize wildfire threats and develop and implement strategies to mitigate those threats.

2. The goals and objectives related to the request;
Goal #1: Determine the appropriate species composition and feasibility of living fuel breaks at higher elevations.

Objective #1: Hawaii Wildfire Management will convert at least one acre of an existing, traditional fuelbreak at Pu'u Wa'awa'a or Pu'uAnahulu, Kona and Waipahoanoa, Kohala to a living fuelbreak and evaluate various species of non-invasive cacti and native plants for their effectiveness as living fences and fuelbreaks at higher altitudes

Fuelbreaks are areas of reduced vegetation that can slow or stop a wildfire. They are used to protect communities and important habitats. Traditionally fuelbreaks have been created by mechanically and chemically (poisoning) reducing vegetation. Living power highly flammable vegetation (fuels) to vegetation that is less likely to carry fire, such as succulents or native plants. These living fuelbreaks mitigate wildfire threat while re-establishing important eco-system values and native plants. Importantly, once established, living fuel breaks require little or no maintenance compared to the costly mechanical and chemical maintenance of traditional fuelbreaks.

Output #1: HWMO will create a resource manual for creating living fuelbreaks and fences at higher elevations (>2,000 ft). This information may also be useful for restoration projects that need to exclude animals to protect habitats.

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Goal #2: Document and better understand the function of well-managed grazing in reducing hazardous fuel loads in critical habitat, especially in dryland habitats and forests, to protect these areas from being wiped out by wildfire.

Objective #2: HWMO, with its partnering experts, implement a grazing plan in critical dryland habitat that will protect habitat by reducing wildfire fuels and produce an important agricultural product.

As part of an effort to protect the remaining dryland ecosystems, grazing has been removed from much of this area. Although well intentioned, the removal of grazing has resulted in a build-up hazardous fuels, which will eventually fuel a wildfire and wipe out much of the remaining habitat, including critical Palila areas. To avoid this catastrophe, the hazardous fuels need to be managed. Mechanically and chemically (poisoning) reducing the fuels on a landscape scale is not possible. Grazing must be re-evaluated for the role it can play in feasibly saving critical habitat.

Objective #2: HWMO will work with experts in habitat restoration and grazing management including the University of Hawaii Cooperative Extension, the Natural Resources Services (NRCS), the Department of Land and Natural Resources, and as well as local grazers to design and pilot a grazing management system with the dual objectives of protecting critical habitat by reducing wildfire fuels and producing an important agricultural product.

Outputs #2: Outline of important factors to incorporate/address in grazing management with wildfire management and habitat protection objectives. Evaluation of the costs, roles and responsibilities of the grazer, technical assistance providers, and those charged to manage habitat restoration and the grazer.

3. State the public purpose and need to be served;
Both of these projects will assist in expanding our understanding of how to feasibly prevent wildfire disaster. Homes and other structures have been lost to wildfires. We are lucky that no one has been killed by wildfire. Importantly, sixty-five percent (65%) of our Island's dryland forests have been lost primarily due to wildfire. These native habitats support many Hawaiian cultural activities.

Preventing and quickly suppressing wildfires is much more cost effective than relying on suppression alone. Both of these projects will help us to reduce the cost of wildfire mitigation and the need for costly suppression.

- 4. Describe the target population to be served; and Kohala and North Kona although all communities in the dry, leeward area of the Islands will benefit from the outputs of this project.
- 5. Describe the geographic coverage.

 These projects will be implemented in Kona and Kohala, Hawaii Island. However, the outputs of these projects will benefit the entire State.

II. Service Summary and Outcomes

The Service Summary shall include a detailed discussion of the applicant's approach to the request. The applicant shall clearly and concisely specify the results, outcomes, and measures of effectiveness from this request.

1. Describe the scope of work, tasks and responsibilities;

HWMO will be responsible for the overall management and coordination of both projects. The tasks and responsibilities for both projects are presented below:

Project #1 Determine the appropriate species composition and feasibility of living fuel breaks at higher elevations

- Delineate fuelbreak area to be converted HWMO w/Living Systems
- Refine species list to be planted HWMO w/Living Systems
- Install any temporary irrigation for establishment, if needed HWMO w/Living Systems
- Plant using established micro-climates where they exist HWMO w/Living Systems
- Monitor project and adjust HWMO w/Living Systems
- Summarize findings HWMO w/Living Systems

Project #2 Grazing pilot to reduce fuelloads to protect critical habitat

- Choose pilot area (Pu'u Wa'awa'a or Pu'u Mali). HWMO develops criteria for selection and organizes meeting w/DLNR, UH, the NRCS, and potential ranchers, restoration scientists.
- Develop multi-objective grazing plan to protect habitat by reducing wildfire fuels, and produce an important agricultural product. - HWMO w/above partners.
- Pre-grazing habitat survey, if needed. HWMO w/above experts
- Implement grazing plan. Grazers with above experts including restoration scientists.
- · Monitor grazing area and herd. HWMO, partners, grazers
- Evaluate project. HWMO w/partners
 - 2. The applicant shall provide a projected annual timeline for accomplishing the results or outcomes of the service; 2008

Project #1 Determine the appropriate species composition and feasibility of living fuel breaks at higher elevations

- Delineate fuelbreak area to be converted Aug 2008
- Refine species list to be planted Sept 2008
- Install any temporary irrigation for establishment, if needed Oct 2008
- Plant using established micro-climates where they exist Nov Dec 2008
- Monitor project and adjust Dec 2008 Oct 2009
- Summarize findings Nov/Dec 2009

Project #2 Grazing pilot to reduce fuelloads to protect critical habitat

- Choose pilot area (Pu'u Wa'awa'a or Pu'u Mali) August 2008
- Develop multi-objective grazing plan Aug Dec 2008
- Pre-grazing habitat survey, if needed Jan Feb 2008
- Implement grazing plan Mar, 2009 Feb 2010
- Evaluate project Throughout project, write-up in March 2010

3. The applicant shall describe its quality assurance and evaluation plans for the request. Specify how the applicant plans to monitor, evaluate, and improve their results; and.

Evaluation Benchmarks and Methods

Project #1 Determine the appropriate species composition and feasibility of living fuel breaks at higher elevations

nigher elevations		
BENCHMARKS -	MEASUREMENT	INFORMATION COLLECTED
SUCCESS INDICATORS	METHOD(S)	
Costs for establishing fuelbreak per	Compare projections w/actual	Costs for pilot study extrapolated to per
unit area are aligned with projected/	expenses.	acre costs, e.g. plants, water, man hours.
budgeted expenses for pilot (1 acre)		
Survival rate for pilot plantings is at	Observation and/or representative	Number of plants established during pilot
least 80%.	transects.	; number of plants that perished.
Planting and establishment strategies	Strategies are documented and the	Steps and reasons for each strategy;
refined during pilot to ensure success	plant viability (%survival) for each	Factors influencing establishment for
for larger projects	strategy is compared.	each strategy.
By the end of year one, ground cover is	Observation and/or representative	% of pilot area w/fused ground cover.
established and fused over 100% of the	transects.	
pilot area.		
By the end of year three, dappled	Observation and/or representative	% of pilot area w/ dappled shade.
canopy is established over 100% of the	transects	·
pilot area.	Review aerial photo of fuelbreak.	
By year five, rare and/or endangered	Observation and/or representative	Number and type of plants
plants have been established within the	transects.	Relative health of plants
fuelbreak.		Degree of independence from any care,
		e.g. irrigation, bug control, etc.
By year seven, fuel break costs have	Compare costs for weedwhacking	Expenses for establishing fuelbreak and
been recouped through decreased	and spot spraying to costs to	any maintenance.
maintenance costs.	establish fuelbreak and any on-	
	going costs.	

Project #2 Grazing pilot to reduce fuelloads to protect critical habitat

BENCHMARKS – SUCCESS INDICATORS	MEASUREMENT METHOD(S)	INFORMATION COLLECTED
Fuel loads are reduced by at least 60%.	Estimates from photos and field observations.	Mass of fuel before and post grazing
No important habitat lost due to grazing.	Field observations, photos.	Condition of habitat before and post grazing
No financial loss for grazers – production not greatly impacted by multiple grazing objectives	Monitor condition of animals and track costs to grazers	Animal health, viability, and grazers' expenses

4. The applicant shall list the measure(s) of effectiveness that will be reported to the State agency through which grant funds are appropriated (the expending agency). The measure(s) will provide a standard and objective way for the State to assess the program's achievement or accomplishment. Please note that if the level of appropriation differs from the amount included in this application that the

measure(s) of effectiveness will need to be updated and transmitted to the expending agency.

Please see the measures of effectiveness (benchmarks) in the above tables along with how the measures will be determined and with what information.

III. Financial

Budget

1. The applicant shall submit a budget utilizing the enclosed budget forms as applicable, to detail the cost of the request.

See enclosed spreadsheets.

2. The applicant shall provide its anticipated quarterly funding requirements for the fiscal year 2008-2009.

Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total Grant
\$7,000	\$5,000	\$2,500	\$ 500	\$12,000

IV. Experience and Capability

A. Necessary Skills and Experience

The applicant shall demonstrate that it has the necessary skills, abilities, knowledge of, and experience relating to the request. State your experience and appropriateness for providing the service proposed in this application. The applicant shall also provide a listing of verifiable experience of related projects or contracts for the most recent three years that are pertinent to the request.

Hawaii Wildfire Management Organization has the following expertise: natural resource management, biology, fire suppression and wildfire mitigation, and grazing and range management.

HWMO has very solid experience in implementing projects and piloting research related to mitigating wildfire and protecting natural resources:

- 2005 -2006 Joint Fire Sciences Study 2005-2006 evaluated multiple wildfire mitigation measures
- 2007-2008 Coastal Living fuelbreak pilot 2007 evaluating the effectiveness of living fuelbreaks in the dry, leeward coastal areas.
- 2007 Pu'u Wa'awa'a Assessment of Fuels to Inform Grazing Management HWMO informed project and funded this UH project
- 2007 Community Wildfire Protection Plan for Northwest Hawaii Island identified hazards and appropriate mitigation, including the need to pilot grazing in critical habitat areas

2005-2008 Maintenance of Pu'uAnahulu fuelbreaks
2007 Puako Forest Management Plan - Wildfire Mitigation – hired Living Systems design to
develop comprehensive mitigation plan

B. Facilities

The applicant shall provide a description of its facilities and demonstrate its adequacy in relation to the request. If facilities are not presently available, describe plans to secure facilities. Also describe how the facilities meet ADA requirements, as applicable.

N/A since the funding request is for field projects. HWMO's office in Waimea is ADA compliant and HWMO has the needed equipment and GIS and mapping expertise to support this project.

V. Personnel: Project Organization and Staffing

A. Proposed Staffing, Staff Qualifications, Supervision and Training

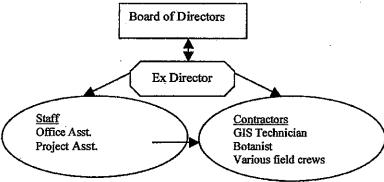
The applicant shall describe the proposed staffing pattern and proposed service capacity appropriate for the viability of the request. The applicant shall provide the qualifications and experience of personnel for the request and shall describe its ability to supervise, train and provide administrative direction relative to the request.

HWMO Executive Director, Gail Byrne, has over 18 years experience as an engineer in natural resource management. She has managed a variety of projects including research and monitoring pilots. Gail will be responsible for the logistics of both projects, while the HWMO Board will provide the expertise and technical assistance required to implement the projects.

The coordinator for Living FuelBreak Project will be Neil Logan, an ethnobotanist who has worked on fuelbreak projects in South America and is directing the establishment of the first low elevation fuelbreak in the State.

B. Organization Chart

The applicant shall illustrate the position of each staff and line of responsibility/supervision. If the request is part of a large, multi-purpose organization, include an organizational chart that illustrates the placement of this request.



VI. Other

A. Litigation

The applicant shall disclose any pending litigation to which they are a party, including the disclosure of any outstanding judgement. If applicable, please explain.

N/A

B. Licensure or Accreditation

Specify any special qualifications, including but not limited to licensure or accreditation that applicant possesses relevant to this request.

HWMO's diverse Board of Directors is comprised of the best cross-disciplinary wildfire expertise in the State. The Board's collective experience in hazard assessment, mitigation planning, and project implementation is unparalleled.

The Board includes scientists, land managers, representatives of State and Federal agencies, ranchers, consultants and natural resource managers, and fire fighters. Many of the Board have been incident commanders on large Island fires, including a DLNR representative and the current Fire Chiefs for the National Park Service and US Army Pohakloa Training Center.

BUDGET REQUEST BY SOURCE OF FUNDS

(Period: July 1, 2008 to June 30, 2009)

App Hawaii Wildfire Management Organization

,	SUDGET	Total State			1
1	CATEGORIES	Funds Requested			
`	AIDORIEG	(a)	(b)	(c)	(d)
A.	PERSONNEL COST		·		<u> </u>
```	1. Salaries		7,000		
1	Payroll Taxes & Assessments		7,000		
ſ	3. Fringe Benefits	· · · · · · · · · · · · · · · · · · ·			
	TOTAL PERSONNEL COST		7,000	•	
	<del></del>		1,000		<del>                                     </del>
В.	OTHER CURRENT EXPENSES				1
1	Airfare, Inter-Island     Insurance		800		<del>                                     </del>
	Lease/Rental of Equipment		000		
1	Lease/Rental of Equipment     Lease/Rental of Space			<del> </del>	
	Staff Training				
1	6. Supplies	<del></del>	1,000		
ļ	7. Telecommunication	<del>                                     </del>	50	· · · · · · · · · · · · · · · · · · ·	<del>                                     </del>
1	8. Utilities			•	
	9. Expert Enthnobotanist	5,000		· · · · · · · · · · · · · · · · · · ·	
l	10. Native plants	5,000			
Į	11. Graduate Student stipend	5,000			
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	14	· ·			
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	18			,	
	19				
	20				
	TOTAL OTHER CURRENT EXPENSES	15,000	1,850	<del></del>	
C.	EQUIPMENT PURCHASES		500		
D.	MOTOR VEHICLE PURCHASES			'	
E.	CAPITAL				
то	TAL (A+B+C+D+E)	15,000	9,350		
			Budget Prepared B	Bv:	
60	TIPCES OF ETHIRING		got. Jopanou L		·
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	(a) Total State Funds Requested	15,000	Gail Byrno HG WGII Name (Please type or pr	Wildtire Managed	-808-938-8880
	(b) Hawaii Wildfire Mangement	<b>7</b> ,350	Name (Please type or pr	int) <u>O</u> rganteo	han Phone
	(c)				1-8-08 30,155
	(c) (d)		Signature of Authorized	Official	Date
			Executive Director . (	acil Byrne	
TO	TAL REVENUE	<del>24,5</del> 50	Name and Title (Please I	vpe or print)	
-		24,350			
L.		- 1,000			

### BUDGET JUSTIFICATION PERSONNEL - SALARIES AND WAGES

Applicant: __ _Hawaii Wildfire Management Organization____ Period: July 1, 2008 to June 30, 2009

JUSTIFICATION/COMMENTS:					A COLUMN TO THE PROPERTY OF TH							Office Assistant	Project Assistant	Executive Director	POSITION TITLE
		A CANADA	The state of the s						The second secon	Ale and the second seco		tant	stant	irector	H.
		A COLUMN TO THE PARTY OF THE PA										0.25	0.5		FULL TIME EQUIVALENT
		4 (100)	ALANA, The state of the state o				A COLOR OF THE COL			And the second s		\$8,000.00	\$24,000.00	\$45,000.00	ANNUAL SALARY A
			The state of the s									0.00% \$	0.00%	0.00% \$	BUDGETED TO REQUEST B
and the second s	49	49	69	<b>€</b>	es	<del>G</del>	<del>G)</del>	<del>69</del>	€9	<del>69</del>	49	<b>€</b>	<del>(A</del>	<del>49</del>	BUDGETED IN REQUEST A x B
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Application for Grants and "haidles

# **BUDGET JUSTIFICATION - EQUIPMENT AND MOTOR VEHICLES**

Applicant: __Hawaii Wildfire Management Organizatic Period: July 1, 2008 to June 30, 2009

DESCRIPTION EQUIPMENT	NO, OF	COST PER	TOTAL
N/A - Hawaii Wildfire will purchase equipment necessary for projects			\$
			\$
			\$
			\$
			\$
TOTAL:			

				N/A	
TOTAL:					DESCRIPTION OF MOTOR VEHICLE
					NO. OF VEHICLES
	•				COST PER VEHICLE
	€ <del>9</del>	\$ <del>\$</del>	49	<b>€9</b>	TOTAL

Justification/comments: Hawaii Wildfire Management Organization is only requesting funding for native plants for living fur

# **BUDGET JUSTIFICATION - EQUIPMENT AND MOTOR VEHICLES**

TOTAL BUDGETED

elbreak.

### BUDGET JUSTIFICATION CAPITAL PROJECT DETAILS

Applicant: Hawaii Wildfire Management Organiz
Period: July 1, 2008 to June 30, 2009

	FUNDIN	FUNDING AMOUNT REQUESTED	QUESTED			
TOTAL PROJECT COST	ANY OTHER SOURCE OF FUNDS RECEIVED IN PRIOR YEARS	JRCE OF FUNDS PRIOR YEARS	STATE STATE	STATE FUNDS	FUNDING A	YEARS
	FY: 2005-2006	FY: 2006-2007	FY:2007-2008	FY:2008-2009	FY:2009-2010	EY:2010-2011
PLANS						
LANDACQUISITION	,					
DESIGN						
CONSTRUCTION						
EQUIPMENT			,			
TOTAL:						
JUSTIFICATION/COMMENTS:	•	ļ				
N/A						

### DECLARATION STATEMENT APPLICANTS FOR GRANTS AND SUBSIDIES CHAPTER 42F, HAWAI'I REVISED STATUTES

The undersigned authorized representative of the applicant acknowledges that said applicant meets and will comply with all of the following standards for the award of grants and subsidies pursuant to section 42F-103, Hawai'i Revised Statutes:

- (1) Is licensed or accredited, in accordance with federal, state, or county statutes, rules, or ordinances, to conduct the activities or provide the services for which a grant or subsidy is awarded;
- (2) Comply with all applicable federal and state laws prohibiting discrimination against any person on the basis of race, color, national origin, religion, creed, sex, age, sexual orientation, or disability;
- (3) Agree not to use state funds for entertainment or lobbying activities; and
- (4) Allow the state agency to which funds for the grant or subsidy were appropriated for expenditure, legislative committees and their staff, and the auditor full access to their records, reports, files, and other related documents and information for purposes of monitoring, measuring the effectiveness, and assuring the proper expenditure of the grant or subsidy.

In addition, a grant or subsidy may be made to an organization only if the organization:

- (1) Is incorporated under the laws of the State; and
- (2) Has bylaws or policies that describe the manner in which the activities or services for which a grant or subsidy is awarded shall be conducted or provided.

Further, a grant or subsidy may be awarded to a non-profit organization only if the organization:

- (1) Has been determined and designated to be a non-profit organization by the Internal Revenue Service; and
- (2) Has a governing board whose members have no material conflict of interest and serve without compensation.

Further, the undersigned authorized representative certifies that this statement is true and correct to the best of the applicant's knowledge.

_Hawaii Wildfire Management Organization		
(Typed Name of Individual or Organization)		· · · · · · · · · · · · · · · · · · ·
	1-8-08	•
(Signature)	(Date)	
·	GB	Executive Director
Gail Byrne		EXECUTIVE DIRECTOR
(Typed Name)	(Title)	