House District 4

THE TWENTY-NINTH LEGISLATURE APPLICATION FOR GRANTS CHAPTER 42F, HAWAII REVISED STATUTES

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Senate District 2	CHAPTER 42F, HAWAII REVISED STATUTES			
			For Legislature's Use Only	
Type of Grant Request:				
X X□ GRANT REQ	UEST - OPERATING	GRANT REQUEST - CA	PITAL	
"Grant" means an award of state funds by permit the community to benefit from those		iation to a specified recipient, to support the ac	livities of the recipient and	
"Recipient" means any organization or per	son receiving a grant.			
		IF UNKNOWN): HAWAH DEPARTMENT OF AGRIC	ULTURE	
STATE PROGRAM I.D. NO. (LEAVE BLANK IF U	AKNOMN);			
1. APPLICANT INFORMATION:	1 	2. CONTACT PERSON FOR MATTERS INVOLVIN	G THIS APPLICATION:	
Legal Name of Requesting Organization of Hawaii Oil Seed Producers LLC	r Individual:	Name William Wallace Moekahi Steiner, I	^р н. <u>D.</u>	
Dba: HOSPRO		Title General Manager and Co-founder		
Street Address: 200 Kanoelehua Avenue # 205		Phone # <u>808-204-0750</u>		
Mailing Address: 200 Kanoelehua Avenue, # 205		Fax #		
Hilo, Hawaii 96720		E-mail wwmsteiner@gmail.com		
3. Type of business entity:		6. DESCRIPTIVE TITLE OF APPLICANT'S REQU	GST:	
XX Non Profit Corporation Inc For Profit Corporation Inc XX LIMITED LIABILITY COMPANY Sole Proprietorship/Individ Other	CORPORATED IN HAWAII	ESTABLISHING A NEW BIOF IN HAWAII II. OPERATIONS R	•	
4. FEDERAL TAX ID #		7. AMOUNT OF STATE FUNDS REQUESTED:		
5. STATE TAX ID#:		FISCAL YEAR 2018: \$268,340		
8. STATUS OF SERVICE DESCRIBED IN THIS R XX NEW SERVICE (PRESENTLY DOES NOT E EXISTING SERVICE (PRESENTLY IN OPERAT	EXIST) SPECIFY THE FINE S FINE CONTRACTOR S FINE	E AMOUNT BY SOURCES OF FUNDS AVAILABLE OF THIS REQUEST: TATE \$ EDERAL \$\$49,000 (USDA-FOR MILL-SPENT) OUNTY \$15,000 (APPLIED FOR) RIVATE/OTHER \$1,580 (ON HAND)		
TYPE		GENERAL MANAGER	JANUARY 18, 2017	



Rev 12/2/16



January 18, 2017

William Wallace Mokahi Steiner General Manager and Chair, Board of Directors Hawaii Oil Seed Producers (HOSPRO) LLC

To Whom It May Concern:

I am the General Manager, Co-Founder and Chair of the Board of Directors for a two year old organization who seeks to establish oil palms in Hawaii as a biofuel and edible oil source. You can learn more about our 501C5 Farmer's cooperative and organization at our website at hawaiioilseedproducers.com. We seek to establish the first fully productive and robust oil seed crop in Hawaii using hybrid oil palms, the phytosanitized, USDA approved seed of which comes from Costa Rica.

Please accept and consider the two proposals I am submitting for funding under the Hawaii State Grants in Aid program. One is for operations and one is for capital investment. This is a one-time request as we are close to producing and need your support to bridge our funding gap. The titles are "ESTABLISHING A NEW BIOFUEL INDUSTRY IN HAWAII I AND II. The Operations proposal is for \$268,340, and the Capital request is for \$312,000. We urgently need this funding and believe once established, hundreds of new jobs and potentially new industries can be spun off of this industry. It can be a huge contribution to fuel security in Hawaii and help reach the 2045 mandate of energy self-sufficiency. The robust vision we have for this home grown and home owned industry is one we are proud of and believe it will be a permanent fixture of future Hawaii industrialization. We hope you will feel the same way.

Please contact me at the given addresses, emails or phone numbers should you have any questions.

Mahalo ,
William Wallace Moekahi Steiner, Ph.D.

HOSPRO

I. Background and Summary of operational grant: ESTABLISHING A NEW BIOFUEL INDUSTRY IN HAWAII II. OPERATIONS REQUEST

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. Please include the following:

1. A brief description of the applicant's background.

The applicant is Dr. William Wallace Moekahi Steiner, is former Dean of the College of Agriculture, Forestry and Natural Resource Management at the University of Hawaii. Dr. Steiner stepped down from the College Deanship in 2012 and is also a retiree of the Department of Interior Biological Resources Division of the USGS. He previously served as USGS Director of the Pacific Island Ecosystems Research Center from 1995-2005, as a research geneticist for the USDA Agricultural Resource Service (1984-1995) with a joint appointment as Associate Professor at the University of Missouri, as Associate Research Scientist at the University Natural History Survey (1981-1984) and as Assistant Professor of Genetics at the University of Illinois (1974-1981). He obtained his Ph.D. from the University of Hawaii-Manoa (1974), a M.S. equivalency in Systems Engineering from the USDA Graduate School, Beltsville, a B.S. in Zoology from UHM (1970) and an A.S. in Agriculture (1964) from Boise State University when it was still known as Boise State College, Born in Honolulu his mother is of Punahele, Veracruz, Haleakala, Kahalepaiwi and Machado descent, and his father is of a Swiss-French homesteading family from the mainland and came to Hawaii in 1941 to work on the Navy's Redhill underground storage tanks. Dr. Steiner grew up on the 16,000 acre Steiner family cattle, hay and grain ranch in Owyhee County Idaho where he helped mill wheat and barley into meal for cattle and horse feed.

Since retiring as Dean at UHH in 2014, Dr. Steiner co-founded the Hawaii Oil Seed Producers (HOSPRO) LLC as a nonprofit 501C5 agricultural cooperative whose aim is to establish the first fully functional bio-oil producing crop in Hawaii on abandoned sugar cane lands beginning with Hawaii Island and moving up the island chain. Dr. Steiner is General Manager of the cooperative and represents HOSPRO LLC for this proposal.

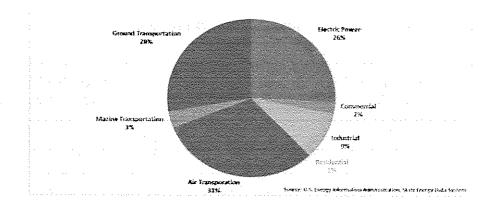
2. The goals and objectives related to the request.

The objective of this request is to obtain operational funding to enable HOSPRO operate an oil extraction mill to generate an immediate income and to begin expansion of the oil palm business from its current 8,000 trees. This request is to help purchase phytosanitized seed, ship these to Hawaii, and obtain the tropical soil mix and chemicals needed to germinate and grow this seed out to young palms for transplant. Salaries and benefits are also requested for those who will be involved in this endeavor. An accompanying Capital funding request is in a separate proposal for purchase of an 11-acre palm farm with warehouse, housing for intern support, some equipment and a large shade house, facilities important to meet the above objectives. The phase II goal of this expansion will provide oil palms for a list of farmers who want to participate.

3. The public purpose and need to be served.

Hawaii's economic growth rate for 2017 is projected to be 1.9% compared to 2.2% for the USA overall (DBEDT report on Hawaiian economy, August 2016). One source

FIGURE 1. Source: Hawaii State Energy Office, Nov. 2016



2016 Total crude oil imports (million barrels per year) ⁷	39.0	2016 Fuel for electricity production (million gallons per year) ⁸	394
2016 Total petroleum use (million gallons per year) ⁹	1,639	2016 Fuel for air transportation (i.e. jet fuel) (million gallons per year) ¹⁰	569
2016 Hawaii's rank among 50 states for energy prices ¹¹	1	2016 Fuel for ground transportation (million gallons per year) ¹²	468

helping suppress growth is the high cost of energy in Hawaii, considered to be the highest in the nation. Hawaii imports 93% of its energy used. The information sheet for Hawaii from the U.S. Energy Information Agency (IEA-updated in December of 2014) and the Hawaii Energy Facts and Figures November (2016)¹ shows the total cost of energy in Hawaii's economy is about \$6.1 billion. This is money that largely leaves the state and pays for import of 42.5 million barrels of oil (1,785,000,000 gallons) where each 42-gallon barrel produces 12 gallons of biodiesel and 19 gallons of gasoline. This does not include ethanol imports from the mainland US or Brazil.

About 93% of this energy goes into the transportation sector with approximately 1/3 each going to citizen use, tourism and military use. The only production in Hawaii comes from refining of used cooking oil by Pacific Biodiesel, and this amounts to about 4 million gallons/year. In the meantime, the State has mandated a biofuel production capacity of 350 million gallons by 2025; only nine years away. There is enough abandoned sugar cane and pineapple land in the state to produce 60 million gallons or (\$180 million worth) of fuel. Everything we grow is money that stays in Hawaii's economy.

Although hundreds of millions of dollars have been spent in Hawaii to developing pilot

projects for transportation biofuel, investments in algae, grass, corn, sunflowers, wood and Jatropha has not resulted in significant production to offset the millions of gallons of petroleum Hawaii imports each year for transportation fuel. Some 120,000 acres of agricultural land lies mostly fallow or underutilized growing mostly invasive weeds and grasses. Though some is leased for coffee and cacao plantations. These lands could grow oil palm crops with cacao, coffee and tea inter-planted between the trees. Oil palms on these lands would <u>not</u> dislocate native forest or forest species as occurs in SE Asia and Indonesia.

Dr. William Steiner, formerly a Dean at UHH, has just finished a proof of concept study using 8,000 oil palm trees planted around the Big Island with the help of collaborating small farmers.² He has determined that the trees grow well on the Big Island, are able to fight off local insect pests and fungal pathogens, that the optimum elevations for for planting lie between sea level and 3,000°, which of 3 hybrid strains being tested is best to use, and that most Hawaii soils will accept the trees. Oil palm nuts are a proven source of oil and in Central America, Africa and SE Asia where they produce as high as 750 gallons/acre of oil, about 14X more than soybeans can on the mainland.

Hawaii is aiming to have 100% renewable energy by 2045. Hawaii has and is suffering job losses from the closing down of the sugar and pineapple industries on various islands, leaving thousands of acres of land available for other agricultural purposes. An oil palm industry would create new jobs while bringing some level of energy security to the islands. This new industry could also provide spin-off industries in composting, animal feed, cosmetics, pharmaceuticals and even plastics further reducing outflow of our dollars. This new industry would be centered on growing and harvesting the fruit of the hybrids of the American and African Oil Palms, Elucis oleifera and Elacis guinensis. In the past year HOSPRO has verified that production is already at 500 gallons/acre on trees that will mature in 2018. This oil also makes an edible cooking oil for which it was originally developed over its 2,000-year history. Currently, there are 80 acres of oil palms planted by half a dozen growers recruited by Dr. Steiner for his studies that are now beginning to produce. A list of another 20 growers would like to obtain trees and one large landowner on the Big Island has offered 2,000 acres on the Hamakua coast for further expansion. Pacific Biodiesel has agreed to purchase at \$3/gallon all raw vegetable oil HOSPRO can produce to refine into biodiesel which in turn will ensure a sustainable biodiesel source in the islands. We estimate that, like sugar in its heyday, this industry can produce a minimum of one job for every 20 acres planted.

4. Describe the target population to be served.

The target population is all the people of Hawaii who depend on diesel to operate their trucks, tractors and production engines. It will also benefit the farmers participating in the Cooperative who are growing the oil palms. All island populations can benefit since land to grow palm trees for biofuel or a spin off industry is available on each. In addition, it is possible that the Department of the Defense will find a use for this fuel (e.g.; see the news excerpts of the "Green Fleet" of the past few years and/or greenfleet.dodlive.mil) as

might the Hawaii Electric Companies (HECO), who funded a portion of the Proof of Concept studies mentioned above.

5. Describe the geographic coverage.

This request is to fund set up and operation on the Big Island of an extraction mill we now own (see facilities below for a complete description in section IV B.). The mill has been purchased with a USDA Development grant and currently is sitting in storage. A portion of the warehouse purchase proposed in this proposal will be used to set up incubators to germinate the thousands of seeds we need to begin the expansion effort. It has on site a shade house with a water system to enable grow seedlings to 2.5' height, and then harden the young oil palms before moving them to participating farms for grow out and production. Once established, this nursery can supply thousands of acres on the Big island for this new industry.

Future expansion beyond this Phase 2 effort will see the building of future mills and nurseries on Maui, Oahu and other islands to serve those island systems. Phase 3 will depend on how fast we can obtain a profitable picture for funding (e.g. our current production income based on 80 acres of trees and 80% of trees producing oil is estimated at \$90,000/year once the mill is operating. Expansion to 2,000 acres will bring in \$1.3 million/year after 4 years. These estimates do not include income from composting waste material, or making animal feed from crushed nut meal but do include sales of oil palm seedlings to participating farmers (see section VI. D, Table 1). This project is self-supporting after Year 1.

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. The applicant shall:

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

The scope of work includes purchasing the 11 acre-warehouse-shade house site in HOSPRO's name, moving the mill components to this site and setting it up, repairing waterlines and drip irrigation systems, repairing greenhouse tables, replacing shade house screening where necessary, and setting up incubators. We will need a tractor with frontend loader to lift mill components into place, move potting soil mixes, unload trucks of oil palm nuts, etc. We will need a soil sanitizer to steam treat potting soil mixes in order to reduce fungal infections in palm sprouts, and incubators to germinate and start oil palm seeds.

2. Provide a projected annual timeline for accomplishing the results or outcomes of the service;

In this Operations funding proposal the first order of business (G) is to purchase the oil palm seeds. This is normally a 2-4 week process under Hawaii and Federal (USDA) import regulations regarding import of alien plant material. The second priorty (H) is to have the seeds shipped to Hilo via Florida to Honolulu and on to Hilo. This will require freight forwarders in Florida and Honolulu and will take about 3 weeks. By this time the soil sanitizer and incubators should be in place to prepare soft medium to raise the germinating seeds so this activity will have to be coordinated with the request for funding in the operations proposal. Germination (I) takes place in the plastic bags of the shipping containers and the germinated seeds are then transplanted (J, age about 14 weeks) into 1 quart, heavy mill plastic rearing bags until they reach 6-8"(see Figure 2), when they are transplanted (K-about 20 weeks) into larger 2 gallon bags containing the tropical mix soil blend (note: plastic bags are 1/4 the cost of plastic planters). At this stage they have 4 small leaves. A final transplantation (L) into 4 gallon



Figure 2.

Young oil palm plants grown by Dr.
Steiner in his proof of concept study at
UHH in 2009. These trees are about 4
months old and well on their way to the
hardening stage and are twice as big as
the 4 leaf stage which was 3 months

bags takes place when the plants reach 18" and after a few weeks they are moved (M) out of the shade house and into the sun for hardening. At 30" height (10 months) and with 8-10 leaves they will be sold (N) to the farmers they are designated for in the Phase 2 expansion. When they reach 60" in height (36 months) with a cluster of 12-16 leaves or more they should begin the reproductive process. Soil amendments including fertilizers and pesticides are used sparingly throughout stages (I) to (M) with only nutrients being used thereafter as the plants are big enough and mature enough to protect themselves from virtually all pests Hawaii Island has at the present time. Six months into the buildout we anticipate being fully operational and taking orders on oil palms.

Timeline:
$$\stackrel{\downarrow}{V}$$
 Week ..22 23 24 24 25 26 27 28 29 30 31 32 33 34 \rightarrow 40 \rightarrow 45 \rightarrow 54 event (G)...(H) ...(I)......(J).......(K).....(L).....(M)...(N)

Note: this timeline is a continuation of the timeline shown in the Capital Proposal request. Weeks 1-21 are taken up by Capital improvements outlined in the Capital Proposal.

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

Quality assurance will result from monitoring progress on purchasing obtaining seed orders in a timely manner, shipping of same, and hitting specific dates on seed growth stages, replanting at different plant stages, and orders for palms. Timing is critical in all these areas and these will be the first monitoring tools in terms of meeting the timeline. As long as the timeline is being met, the process should flow smoothly. The critical factor is site purchase (see Capital proposal); without a site to buildout the mill and prepare for seed germination and growth the project comes to a dead halt. All other processes have some days or weeks leeway to reach operational states. University of Hawaii College of Agriculture will provide two interns to aid as workers in this project and an experienced palm grower will provide mentorship and leadership. Successfully hitting the timeframe points for each order of business will keep the project on track. Improvement can result from obtaining an early accomplishment of steps (A) through (F- Proposal on Capital) being finished within 8 weeks, and having plants mature ahead of allotted time spans. The latter is

4. List the measure(s) of effectiveness that will be reported to the State agency through which grant funds are appropriated (the expending agency).

Measures of effectiveness include (1) meeting timeline parameters; (2) meeting planting deadlines, and (3) obtaining actual orders for oil palm trees. These are all tangible product measurements.

II. Financial

Budget

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

Budget forms are attached.

2. The applicant shall provide its anticipated quarterly funding requests for the fiscal year 2018.

	Quarter I	Quarter 2	Quarter 3	Quarter 4	Total Grant	- Company
-	\$90,988.33	\$58,488.33	\$90,988.33	27,875.00	\$268,340.00	

- 3. The applicant shall provide a listing of all other sources of funding that they are seeking for fiscal year 2018.
 - a. Crowdfunding on the AgFunding platform, to be submitted; \$500,000.
 - b. Grant from County of Hawaii, to be submitted; \$15,000
 - c. Grant request to 2017 SBIR Small Business Opportunities, inquiry sent.
 - d. Energy Accelerator request for 2017 oil palm expansion, inquiry sent.

4. The applicant shall provide a listing of all state and federal tax credits it has been granted within the prior three years and shall provide a listing of all state and federal tax credits to which they are applying.

There are no anticipated federal or state tax credits available for this project.

5. The applicant shall provide a listing of all federal, state, and county government contracts and grants it has been and will be receiving for program funding.

HOSPRO received on in Fall of 2014 a USDA Rural Development grant to purchase an oil extraction mill for palm oil; this is the only grant or contract received.

6. The applicant shall provide the balance of its unrestricted current assets as of December 31, 2016.

The current balance of unrestricted current assets (\$\$) in First Hawaiian Bank HOSPRO account 20-135441 is \$1,580,16

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.

HOSPRO was founded in 2014 and has a Board of Directors who are participating in the buildout and expansion of the oil palm mill and the nursery expansion. These include:

William W.M. Steiner, Ph.D. (Genetics), is Chair of the Board. Dr. Steiner's credentials are listed in I.1. above. He has obtained funding support for the oil palm proof of concept study from HECO and from several private donors including U.S. Biodiesel LLC when they had an office in Kona. U.S. Biodiesel provided the funding to purchase the oil palm seeds for the study, and HECO provide the funding to grow the seedlings to tree stage and farm them out to local small farmers. Dr. Steiner has over 90 scientific publications to his credit, has attended and sponsored many scientific professional forums and symposia, and writes poetry and music in his spare time. He has over 20 units of federal management courses to his credit. He has served on the Boards of several educational and scientific societies and foundations including Hawaii Agricultural Tourism Foundation, Na Pua No'eau, Polestar Collaborative, and the Hawaii Academy of Arts and Sciences. He co-founded the Global Ecology Foundation and the Island Prosperity Foundation. The other Directors and their backgrounds include:

Curtis Beck (B.S. Engineering Physics-Washington U. St. Louis and M.S. Mechanical Engineering-Stanford U.) worked at the Battelle National Laboratory prior to coming to Hawaii 30 years ago and retired from HELCO in 2013. He ended his career as a manager at HELCO and has a management degree from University of Idaho. He is a co-partner at Mahilani Farms above Hilo which grows oil palm, cacao, sweet potato, coffee and other fruit crops. He is a co-Founder of HOSPRO and is involved in community services such as Big Brothers and Big Sisters of Hawaii Island, Hawaii United Way, Hospice of Hilo and served on the Mayor's Energy Advisory Committee.

Atto Assi (B.S. Petrochemical Engineering, U. of Bucharest Romania) grew up on the Ivory Coast in Africa where his family has very large plantations of oil palm. After obtaining his degree he worked at the Ivorian Crude Oil Refinery and then in Detroit at Exxon Mobile operations and fuel retailing. He is a co-Founder of HOSPRO after retiring in 2005, settled in Hawaii as co-owner of an integrated coffee, oil palm, honey, poultry and piggery farm where he is off-grid and makes his own electricity using solar and a biodiesel run generator from vegetable oil he gathers and refines himself. His service to the larger community includes hosting work study students from Europe during the summer and conducting organic growing courses with the support of the County of Hawaii nonprofit program.

Steve Shropshire was raised in the nursery business in S. Florida. At the age of 18 he started the Green Connection, the largest tropical foliage leasing and maintenance business in the State of Alaska with annual revenues of \$3 million. He sold the company in 2001. He assisted former Alaska governor Walter J. Hickel in establishing the Northern Forum, an NGO of the United Nations in which he served as Executive Director. The organization consisted of 31 reginal governors throughout the Arctic world. He served as President of Shropshire International, a company involved in export trade between the USA and Russia which focused on food and beverage products. He later formed Aloha Green LLC, a diversified agriculture operation based on the Hamakua Coast of the Big Island growing tropical ornamentals, exotic fruit, heart of palm, timber and livestock on former sugar cane land. He also formed a real estate holding company Shrophsire Group with over 1,400 acres on the Hilo-Hamakua Coast. His community service includes Founder of Green Star (1990) a nonprofit that encourages businesses to practice waste reduction, energy conservation and pollution prevention. He is a member of the Rotary. the Hawaii Island Chamber of Commerce, Hawaii Export Nursery Association, Alaska Horticultural Association, and others and was named Entrepreneur of 1989 (Alaska), Rotarian of the year 1996 and Farmer of the year (1999) among other honors. He brings a sharp business acumen to the HOSPRO organization.

Dan Davis graduated Magna Cum Laude from UC Monterey Bay. He has worked for Navitas Naturals in e-commerce and design, as a property manager and maintenance expert, and he learned mechanic skills by revamping old cars to resell as a sideline hobby. He has an interest in physical health and muscular systems of the human body and worked for a while in massage therapy and spa management conducting customer care, product merchandising, customer scheduling and employee management. He returned to the family farm near Mt. View and has assumed management of the fruit and oil palm production systems there. His extensive skills in graphic design software, digital design, web design and computer architecture will serve HOSPRO well as Communications Director for the LLC

Steve Jacquer is a Ph.D. candidate (Biology-University of Alaska Fairbanks) and holds teaching certificates (Alaska Programs), an M.S. (1989) in Village Ecology from Cal State Stanislaus, a Bachelors in Biological Sciences with a Chemistry minor from CAL State Stanislaus (1984), and an Associates in Biological Sciences from Modesto Jr. College (1979). He has worked in education serving from elementary to adjunct professor at various schools in Alaska and elsewhere. He has studied or taught in non-degree programs at various state and international Universities including Ohio State, Rutgers, Berkeley and the Indonesian Institute of Ecology. He has served on many state, national and technical educational committees. He is a member of many professional organizations including the Hawaii Island Rat Lungworm Disease Research Team, College of Pharmacy UH-Hilo. He has won many awards for his service, including twice winner of the Baan O Yeel Kon Native Traditional Council Award for work on preventing FAS through science education in Alaska (1993, 1998). He has been involved in developing educational opportunities for native Alaskans and was a finalist for the 1999-2000 USA TODAY First Teacher Team award. Since coming to Hawaii he has been involved in his working farm partnerships with D&S Aloha LLC and D&S LLC and with providing educational consulting through his Northern Educational Consulting LLC service. He has worked with a variety of fruit trees (peaches, almonds) and operated his own nursery and landscape business growing orchids among other jobs. He is a member of the Big Island Self Sufficiency group, the Big island Society for Creative Anachronism, the Center for Spiritual Living of East Hawaii, Friends of Puna's Future, Hawaii Island Palm Society, Ka Pilina Interactive Arts Society, and a supporter of local charter schools and Palace Theatre among other things. He is very aware of Hawaii's need for ecological restoration and grows oil palms on his land near Pahoa.

<u>Ina Wolfe</u> is a registered CPA with over 30-years experience in public and private accounting services. She serves as Director of Special Projects with Taketa, Iwata, Hara and Associates in Hilo where she assists clients in solving business issues such as software implementation, inventory management and internal control assessments. She provides traditional tax and reporting services as well. She has held Controllership positions in a variety of companies including automobile and motorcycle dealerships, a fitness equipment and training company, a private equity firm, a city government and a union. Ina received her BBA from UHH and has been licensed as a CPA in HI and CA. In her spare time, she enjoys gardening and attending musical events. She serves as HOSPRO accountant and comptroller.

The experience HOSPRO brings to this the request for support is large and ranges from agriculture, genetics and engineering, to entrepreneurship and management. Several members of the Board have previous exposure to growing oil palms, working in nurseries and working in energy programs for large corporations. These backgrounds and experiences benefit the program to establish and expand oil palm as a secure biofuel and energy source in Hawaii, establishing a new sustainable resource to benefit the Hawaii economy and her people.

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.

The site we wish to purchase is an 11 acre, graded and gated site on Pohoiko (Mango) road in lower Puna about 4 miles from Pahoa on the Big Island. This site was used to grow palms for

yard landscaping some 15 years ago. The site is well maintained and clean and contains many palm trees including about 40 royal palms of great structure and many and varied fruit trees. This site houses a 4,400 sq. ft. concrete floored warehouse with a delivery dock and a with metal roof. The warehouse contains a 450 sq.ft. office, a conference room and a large room now used for tool storage but which could be adapted over to seed germination with installation of incubators. Above the warehouse is a 1.25 acre shade house with gradated screening to allow sunshine through, ranging from 40% to 65% shade cloth. About 20% of the shade cloth needs replacing. There are tables throughout the shade house and a water delivery system from which County Water can be used to water young growing oil palm trees. About 1/3 of the tables need some repair and the water system needs to be adapted over to drip irrigation. Outside the shade house and nearby are concrete cinder, gravel and soil holding areas where these accourrements can be directly delivered. There are cleared terraces for transplanting and holding young oil palm trees as they harden. Removed from these work facilities about 100 yards is a two story, wooden house with one bedroom and kitchen but with open spacing to add more bedrooms on the lower level. This would make a great structure to house student interns, or student trainees. The nurseryman who has worked there for some 25 years growing palms for previous owners would like to continue working there and would be an excellent mentor and manager of trainees as he has done this sort of thing for many years and he knows palm trees. The price on this site is \$550,000 of which \$200,000 is requested up front to buy out the current (sub) owner who will go into foreclosure by the title owner if they do not move it soon. The real owner has sold this place twice before to people who did not have a good set of plans in place to make a go there. The real owner is also interested in investing in HOSPRO and may commit once we have the property in escrow. Figures 3-9 below serve to give some perspective of the facilities.

V. Personnel: Project Organization and Staffing

A. Proposed Staffing, Staff Qualifications, Supervision and Training

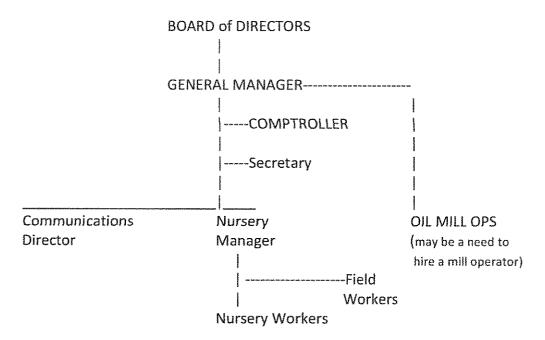
The first year staff shall consist of:

1 (one) general manager for operations who will provide vision, planning, fund-raising, sales, mill operations and oversight of all activities (fulltime). Should have at least a B.S. or equivalent experience and training in personnel management and supervision, and familiar with growing plants in greenhouses or open fields, pesticide applications, grinding mill operations, safety protocols and financial statements.

- I (one) secretary for recording Board and daily business daily transactions, keep track of hourly wages for workers, interns and student aids (fulltime). Prefer someone with some College training who understands
- 1 (one) comptroller/accountant/treasurer in one position for recording financial transactions and issuing checks to pay personnel (halftime). Prefer someone with a degree in business and/or accounting and at least 5 years experience. Should be familiar with corporate nonprofit tax preparations, balance sheets, and standard accounting procedures.
- I (one) communications Director for website maintenance, email donations, advertising and promotion of the company (halftime). Prefer someone with degree in automation and computer systems and experience setting up and maintaining websites including PayPal.
- 1 (one) nursery manager who will oversee oil seed germination, transplanting, fertilization, pest treatments and ordering of shade house and growing supplies (fulltime). At least 10 years of experience required including management, supervision and training of one or more personnel and pesticide training in safely handling pesticides and fungicides.
- 2 (two) or more aids, students or interns for labor in shade house and mill, some college experience and botanical or agricultural courses preferred.

NOTE: At this point we are only requesting funding halftime for the general manager, ³/₄ time for the nursery manager and half-time for the student interns. In Year 2 Managers will become full time positions and by Year 5 we anticipate employing up to 20 people as the nursery grows and as trees are shifted to the field; we will be offering student interns jobs as they graduate.

B. Organization Chart: The applicant shall illustrate the position of each staff and line of responsibility/supervision.



C. Compensation

The applicant shall provide the annual salaries paid by the applicant to the three highest paid officers, directors, or employees of the organization by position.

Currently there are no salaried positions. This funding will help create such positions. Common Stock shares in the Cooperative are issued annually to the Manager, Secretary, Communications Director, and Comptroller as well as the Board of Director membership for their service in lieu of payment with hopes the company will grow in value through time. Currently 5% of 1 million shares are committed in this manner and the rest are available for investors for Phase 3 expansion.

VI. Other

A. Litigation: The applicant shall disclose any pending litigation to which they are a party, including the disclosure of any outstanding judgement.

There is no litigation or outstanding judgements against HOSPRO or its Board members.

B. Licensure or Accreditation: The applicant shall specify any special qualifications, including but not limited to licensure or accreditation that the applicant possesses relevant to this request.

There are no special qualifications, licensures or accreditations relevant to this request.

C. Private Educational Institutions: The applicant shall specify whether the grant will be used to support or benefit a sectarian or non-sectarian private educational institution

NOT APPLICABLE

D. Future Sustainability Plan

The applicant shall provide a plan for sustaining after fiscal year 2017-18 the activity funded by the grant if the grant of this application is

- (1) Received by the applicant for fiscal year 2017-18, but
- (2) Not received by the applicant thereafter.

HOSPRO is making a one-time request for bridge funding and currently has 80 acres (8,000 trees) in production, the fruit of which are Going to waste or being fed to hogs on the Big Island.

Table 1. Income versus cost picture of the first 5 years of HOSPRO production. Income from composting of dry material waste (stems and kernel shells)) and animal feed from wet crushed meal are not included. Note: The original base cost of operations is used in developing budgets for first year of this request.

	Gallons Fuel Produced ^a Income	Seedlingsno. trees Income		Less Base Costs	+Profit Carryover	- Misc Costs ^b	Profit
Year 1	30,000 \$ 90,000	25,000 \$450,000	\$540,000	\$259,340	Ne के के पत पत के का को उठ	\$ 61,934	\$ 218,726°
Year 2	30,000 \$ 90,000	24,000 \$432,000	\$522,000	\$259,340	\$ 218,726	\$163,934 ^d	\$ 317,452
Year 3	30,000 \$ 90,000	25,000 \$450,000	\$540,000	\$259,340	\$ 317,452	\$352,455 ^e	\$ 245,657
Year 4	103,200 \$309,600	24,000 \$432,000	\$741,600	\$259,340	\$ 727,917 ^f	\$572,455	\$ 155,462 ⁸
Year 5	199,200 \$597,600	73,000 \$1,314,000	\$1,911,60	00 \$259,340	D \$1,807,744	\$372,455	\$1,432,289 ^h

At \$3/gallon of raw vegetable oil as offered by Pacific Biodiesel; production lowered by 80% to adjust for differences in maturity and male vs female producers.

^b Assumes a 10% miscellaneous cost charge + \$3,000/month mortgage cost continuing through time.

^c Any profit will be used for next year operations and capital improvements and is carried over.

By Year 3 salary adjustments for General Manager and Nursery Manager are on full time, and student aides have doubled in number so cost goes up accordingly.

By year 3 we add a 2-ton truck with hydraulic lift bed for handling gravel, cinders, additional fruit hauling, and hauling trees to Coop farms.

Includes cost of doubling shade house space and purchase of an additional truck.

By Year 5 Field crews for planting and overseeing tree crops are in place. We expect 20 people to be employed by HOSPRO by Year 5.

By end of Year 5, HOSPRO begins looking at expansion beyond existing 2,200 acres estimated to be in production by this time by seeking purchase or lease of agricultural land.

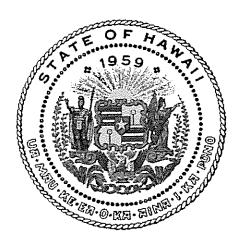
Once the mill is in place, we anticipate production to produce at least \$1,500/acre until the oil mill is set up, or about \$90,000-\$120,000/year depending on the number of male trees versus female trees, the latter being the fruit producers. We are assuming the lower figure for production purposes and to be conservative in our approach. Since the trees are still two years from maturity, and production will likely ramp up to \$1,700/acre thereafter, we think \$90,000/annum is our best conservative estimate. After 2017, sales of oil palm should reach = \$882,000 less cost of \$\$490,000 for raising the trees = \$392,000. Thus by year 2 we anticipate a \$90,000 income and by year 3 a \$90,000 +\$392,000 or \$482,000 income. Beyond that, production will continue to ramp up as more trees for sale come on line and seedlings mature to produce oil. This robust picture is a conservative estimate but clearly indicates the oil palm production will be a profitable venture in the future. Future expansion will continue and will be based on profits from this venture. We need help with the first year to help us realize our vision of a biofuel secure Hawaii. Table 1 outlines the income vs cost details of production which clearly demonstrates how the income picture will not only be sustainable but will grow beyond the first and only year of this request.

E. Certificate of Good Standing (If the Applicant is an Organization): The applicant shall submit one (1) copy of a certificate of good standing from the Director of Commerce and Consumer Affairs that is dated no earlier than December 1, 2016.

SEE ATTACHED.

F. References

- 1. DBEDT 2017 Hawaii Energy Facts and Figures, Hawaii Energy Office, 44 pages.
- 2. Steiner, W.W.M. 2012. Final Report: Proof of Concept for Growing Oil Palm in Hawaii. Final Report to HECO: 9 Figs, 4 Tables, 24 pp.



Department of Commerce and Consumer Affairs

CERTIFICATE OF GOOD STANDING

I, the undersigned Director of Commerce and Consumer Affairs of the State of Hawaii, do hereby certify that

HAWAII OIL SEED PRODUCERS (HOSPRO) FDN

was incorporated under the laws of Hawaii on 06/13/2014; that it is an existing nonprofit corporation; and that, as far as the records of this Department reveal, has complied with all of the provisions of the Hawaii Nonprofit Corporations Act, regulating domestic nonprofit corporations.

COMMERCE AND COLUMN ERCE AND C

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of the Department of Commerce and Consumer Affairs, at Honolulu, Hawaii.

Dated: January 14, 2017

Cathur. Cowal: Colh

Director of Commerce and Consumer Affairs



BUDGET REQUEST BY SOURCE OF FUNDS

Period: July 1, 2017 to June 30, 2018

William W.M. Steiner, HOSPRO

	UDGET ATEGORIES	Total State Funds Requested (a)	Total Federal Funds Requested (b)	Total County Funds Requested (c)	Total Private/Other Funds Requested (d)
A.	PERSONNEL COST				
	1. Salaries	85,000	0	0	0
	2. Payroll Taxes & Assessments	8,500	0	0	0
	3. Fringe Benefits	17,000	0	0	0
	TOTAL PERSONNEL COST	110,500	0	0	0
В.	OTHER CURRENT EXPENSES	0			
	Airfare, Inter-Island	500	0	0	0
	2. Insurance	8,400	0	0	0
	Lease/Rental of Equipment	0	0	0	0
	Lease/Rental of Space	0	0	0	0
	5. Staff Training	0	0	0	0
	6. Supplies	91,840	0	0	0
	7. Telecommunication	0		2,500	0
	8. Utilities	. 0	0	12,500	0
	9. oil palm seeds	49,000	0	0	0
	10. shipping of seeds from Costa Rica	8,100	0	0	0
	11				
	12				
	13				
	14				
	15				
	16				
	17				
	18				
	19				
	20				
	TOTAL OTHER CURRENT EXPENSES	157,840		15,000	
C.	EQUIPMENT PURCHASES				
D.	MOTOR VEHICLE PURCHASES				
E.	CAPITAL				
TC	OTAL (A+B+C+D+E)	268,340		15,000	



a way of the contract of the c		Budget Prepared By:	***************************************
SOURCES OF FUNDING			
(a) Total State Funds Requested	268,340	William W. Steiner 808-294-0750	
(b) Total Federal Funds Requested	0	Name (Please type or print)	Phone
(c) Total County Funds Requested	15,000	William W. Steiner	***************************************
(d) Total Private/Other Funds Requested	0	Si	
TOTAL BUDGET	283,340	Name and Title (Please type or print) William W.M. Steiner, General Manager HOSPRO	

BUDGET JUSTIFICATION - PERSONNEL SALARIES AND WAGES

Period: July 1, 2017 to June 30, 2018

WILLIAM W.M. STEINER, HOSPRO

POSITION TITLE	FULL TIME EQUIVALENT	ANNUAL SALARY A	% OF TIME ALLOCATED TO GRANT REQUEST B	TOTAL STATE FUNDS REQUESTED (A x B)
				\$ -
General Manager (1/2 time)	0.5	\$40,000.00	50%% OF TIME	\$20,000
Palm Technician	0.75	\$40,668.00	75%% OF TIME	\$35,000
Student Intern 1	0.49	\$15,000.00	49%% OF TIME	\$15,000
Student Intern 1	0.49	\$15,000.00	49%% OF TIME	\$15,000
				\$ -
Benefits for above at 20%				\$ -
General Manager	0		50% OF TIME	\$ -
Palm Technician	7000		75%% OF TIME	\$7,000
Student Aid 1	5000		49%% OF TIME	\$5,000
	5000		49%% OF TIME	\$5,000
				\$ -
Payroll Taxes	8500			\$8,500
				\$ -
TOTAL:				110,500.00

JUSTIFICATION/COMMENTS:

General Manager is retired and draws Social Security, he had no need of benefits and

needs only half time salary. Palm tech will assume full time duties in Year 2. Student aides draw UHH equivalent 40% salaries and benefits.

BUDGET JUSTIFICATION - EQUIPMENT AND MOTOR VEHICLES

Period: July 1, 2017 to June 30, 2018

William W.M. Steiner, HOSPRO

DESCRIPTION EQUIPMENT	NO. OF	COST PER
EQUIPMENT AND VEHICLES ARE REQUESTED IN THE		
ACCOMPANYING CAPITAL REQUEST.		
TOTAL:		
JUSTIFICATION/COMMENTS:		
	Total Science Company of the Company	
DESCRIPTION	NO. OF	COST PER
OF MOTOR VEHICLE	VEHICLES	VEHICLE
TOTAL:		
JUSTIFICATION/COMMENTS:		



BUDGET JUSTIFICATION - CAPITAL PROJECT DETAILS

Period: July 1, 2017 to June 30, 2018

Applicant: __William W. M. Steiner, HOSPRO

FUNDING AMOUNT REQUESTED								
TOTAL PROJECT COST		ALL SOURCES OF FUNDS RECEIVED IN PRIOR YEARS		STATE FUNDS REQUESTED	OTHER SOURCES OF FUNDS REQUESTED		EQUIRED IN NG YEARS	
		FY: 2015-2016	FY: 2016-2017	FY:2017-2018	FY:2017-2018	FY:2018-2019	FY:2019-2020	
PLANS		0	0	0	0	0	0	
LAND ACQUISITION		0	0	150000	0	0	0	
DESIGN		0	0	0	0	0	0	
CONSTRUCTION	irrigation and shade	0	0	54000	0	0	0	
EQUIPMENT	oil mill (2015-16), tra	39000	10000	108000	0	0	0	
	TOTAL:			312,000		self paying	self paying	

лизтігісатіом/сомменть Oil Mill purchased with USDA funding. Construction consists of repairs to irrigation system, shade house roofing screen

Tractor is necessary for moving supplies, unloading trucks, etc; soil sanitizer will kill harmful soil fungi, incubators are for germination of seeds

LAND ACQUISITION

See section IV B for description.

11 acres to provide a base of operations and place to mill oil palm seeds and germinate and grow new palm trees to expand the industry to thousands of acres of old sugar cane land.

GOVERNMENT CONTRACTS AND / OR GRANTS

Ap	William W. M. Steiner, HOSPRO	Contracts Total: -			
****	CONTRACT DESCRIPTION	EFFECTIVE DATES	AGENCY	GOVERNMENT ENTITY (U.S. / State / Haw / Hon / Kau / Mau)	CONTRACT VALUE
1	There currently are no government contracts	***************************************	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	**************************************	የአደ ቀመደግ ያመፅ ት መያፅ የተሻ የሚያ ታሳሳ የያያጠናስ። የሚያ ቁጥርህ ውስ ድህ ለ ያ <i>ዘሠ ዕድ የ</i> መታፈ
2	or grants, a USDA Rural Development grant	AAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	a din mandrati ha time contra da proper con ancia de la porce servicio de habe de contra de de mentre della di Alandin	The state of the second	ત્રા ત્રોકામાનું કે ત્રાં માત્ર વર્ષ તે કંતાકામોત્ર તાત્રોગોર્ટ કો ત્રોગોતામાં તત્રા ત્રોકા કે ત્રોગાતિમાં કંત
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DECLARATION STATEMENT OF APPLICANTS FOR GRANTS PURSUANT TO CHAPTER 42F, HAWAI'I REVISED STATUTES

The undersigned authorized representative of the applicant certifies the following:

- 1) The applicant meets and will comply with all of the following standards for the award of grants pursuant to Section 42F-103, Hawai'i Revised Statutes:
 - a) 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 is awarded;
 - b) Complies 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;
 - c) Agrees not to use state funds for entertainment or lobbying activities; and
 - d) Allows the state agency to which funds for the grant 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 ensuring the proper expenditure of the grant.
- 2) If the applicant is an organization, the applicant meets the following requirements pursuant to Section 42F-103, Hawai'i Revised Statutes:
 - a) Is incorporated under the laws of the State; and
 - b) Has bylaws or policies that describe the manner in which the activities or services for which a grant is awarded shall be conducted or provided.
- 3) If the applicant is a non-profit organization, it meets the following requirements pursuant to Section 42F-103, Hawai'i Revised Statutes:
 - a) Is determined and designated to be a non-profit organization by the Internal Revenue Service; and
 - b) Has a governing board whose members have no material conflict of interest and serve without compensation.

Pursuant to Section 42F-103, Hawai'i Revised Statutes, for grants used for the acquisition of land, when the organization discontinues the activities or services on the land acquired for which the grant was awarded and disposes of the land in fee simple or by lease, the organization shall negotiate with the expending agency for a lump sum or installment repayment to the State of the amount of the grant used for the acquisition of the land.

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

William W.M. Steiner, Hawaii Oil Seed Producers LLC



William W.M. Steiner (Typed Name)

General Manager, HOSPRO (Title)