JOSIAH K. NISHITA County Clerk





MARGARET C. CLARK Deputy County Clerk

2019 SEP -9 AM DEFECE OF THE COUNTY CLERK COUNTY OF MAUI 200 SOUTH HIGH STREET COUNTY COUNCIL WAILUKU, MAUI, HAWAII 96793 www.mauicounty.gov/county/clerk

September 9, 2019

Honorable Alice L. Lee, Chair Water and Infrastructure Committee Council of the County of Maui Wailuku, Hawaii 96793

Dear Chair Lee:

Respectfully transmitted are copies of the following communications that were referred to your Committee by the Council of the County of Maui at its meeting of September 6, 2019:

## COUNTY COMMUNICATIONS:

No. 19-373	-	Rowena M. Dagdag-Andaya, Director of Public Works
No. 19-374	-	Rowena M. Dagdag-Andaya, Director of
No. 19-375	-	Public Works Jeffrey T. Pearson, Director of Water Supply
		Alice L. Lee, Councilmember

Respectfully,

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JOSIAH K. NISHITA County Clerk

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Enclosures

cc: Director of Council Services



RECEIVED 2019 ANG 27 AT 10 DI OFFICE OF THE MAYO

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DEPARTMENT OF WATER SUPPLY COUNTY OF MAUI 200 SOUTH HIGH STREET WAILUKU, MAUI, HAWAI'I 96793 www.mauiwater.org

August 26, 2019



Honorable Michael P. Victorino Mayor, County of Maui 200 South High Street Wailuku Hawaii 96793

MICHAEL P. VICTORINO Mayor JEFFREY T. PEARSON, P.E. Director HELENE KAU Deputy Director

For Transmittal to:

Honorable Kelly T. King Council Chair Maui County Council 200 South High Street Wailuku, Hawaii 96793

APPROVED FOR TRANSMITTAL

Dear Chair King:

SUBJECT: A BILL FOR AN ORDINANCE AUTHORIZING THE MAYOR OF THE COUNTY OF MAUI TO ENTER INTO AN INTERGOVERNMENTAL AGREEMENT WITH THE U. S. GEOLOGICAL SURVEY, PACIFIC ISLANDS WATER SCIENCE CENTER, UNITED STATES DEPARTMENT OF THE INTERIOR

The Department of Water Supply has been working with the U.S. Geological Survey, Pacific Islands Water Science Center, United States Department of the Interior (USGS) since the 1980's. We would like to continue this cooperative water-resource monitoring program from October 1, 2019 to September 30, 2020. The data collected at selected rainfall, streamflow and groundwater monitoring stations are being used to evaluate the status and trends of surface water and groundwater resources in the Islands of Maui and Molokai. Data collected are stored in the USGS National Water Information System database and are publicly available on the internet website.

COUNTY COMMUNICATION NO. 19-375

In compliance with Section 2.20.020 of the Maui County Code, which requires an ordinance to authorize the Mayor to enter into any intergovernmental agreement which places a financial obligation upon the County or any department or agency, we respectfully request approval of the above referenced and furthermore attached proposed legislation.

Sincerely,

JEFFREY T. PEARSON, P.E. Director

Cc: Helene Kau, Deputy Director Eva Blumenstein, Planning Program Manager

"By Water All Things Find Life"

## ORDINANCE NO.

## BILL NO. \_\_\_\_\_ (2019)

## A BILL FOR AN ORDINANCE AUTHORIZING THE MAYOR OF THE COUNTY OF MAUI TO ENTER INTO AN INTERGOVERNMENTAL AGREEMENT WITH U.S. GEOLOGICAL SURVEY, PACIFIC ISLANDS WATER SCIENCE CENTER, UNITED STATES DEPARTMENT OF THE INTERIOR (COOPERATIVE WATER-RESOURCE MONITORING PROGRAM)

## BE IT ORDAINED BY THE PEOPLE OF THE COUNTY OF MAUI:

SECTION 1. <u>Purpose</u>. The U.S. Geological Survey, Pacific Islands Water Science Center, United States Department of the Interior ("USGS") desires to enter into a Joint Funding Agreement for Water Resource Investigations ("Joint Funding Agreement" or "Agreement") with the County of Maui Department of Water Supply ("MDWS") to continue its cooperative water-resource monitoring program, during the period of October 1, 2019 to September 30, 2020. The total cost of the Agreement is \$130,690 of which \$91,440 would be contributed by the MDWS and \$39,250 would be contributed by the USGS.

The purpose of the water-resource monitoring program is to collect data needed to evaluate the status and trends of surface-water and groundwater resources in the County of Maui. Since the 1980s, water-resource data have been collected at selected rainfall, streamflow, and groundwater monitoring stations. The Joint Funding Agreement is attached hereto and incorporated herein as Exhibit "1".

Section 2.20.020, Maui County Code, provides that, unless authorized by ordinance, the Mayor shall not enter into any intergovernmental agreement or any amendment thereto which places a financial obligation upon the County or any department or agency thereof. SECTION 2. <u>Authorization</u>. The Council of the County of Maui hereby authorizes the Mayor or his authorized representative to execute the Agreement, all other necessary documents relating to the Agreement, and any amendments thereto.

SECTION 3. <u>Effective date</u>. This ordinance shall take effect upon its approval.

APPROVED AS TO FORM AND LEGALITY:

JENNEER M.P.E. OANA Deputy Corporation Counsel County of Maui 2019-1354 JFA w USGS for Cooperative Water Resource Monitoring Program (2019-08-14)



# United States Department of the Interior

U.S. GEOLOGICAL SURVEY Pacific Islands Water Science Center 1845 Wasp Boulevard, Building 176 Honolulu, Hawaii 96818

Phone: (808) 690-9600/Fax: (808) 690-9599

July 5, 2019

Mr. Jeffrey T. Pearson, Director Department of Water Supply County of Maui 200 South High Street Wailuku, Hawaii 96793-2155

Attention: Eva Blumenstein, Robert DeRobles

Dear Mr. Pearson:

Subject: Joint Funding Agreement to continue our cooperative water-resource monitoring program during the period October 1, 2019 to September 30, 2020

Enclosed is a Joint Funding Agreement (JFA) between the County of Maui Department of Water Supply (MDWS) and the U.S. Geological Survey (USGS) to continue our cooperative water-resource monitoring program during the period October 1, 2019 to September 30, 2020. The total cost of the agreement is \$130,690 of which \$91,440 will be contributed by the MDWS and \$39,250 will be contributed by the USGS.

The purpose of the water-resource monitoring program is to collect data needed to evaluate the status and trends of surface-water and groundwater resources in the County of Maui. Since the 1980's, water-resource data have been collected at selected rainfall, streamflow, and groundwater monitoring stations as part of this cooperative program between the MDWS and USGS. Data are collected by the USGS in accordance with well-documented techniques and quality-assurance procedures. Data are stored in the USGS National Water Information System database and are publicly available on the internet website (http://hi.water.usgs.gov). The number and type of monitoring stations is periodically adjusted to meet current priorities and available funds.

The number and type of monitoring stations is periodically adjusted to meet current priorities and available funds. A complete list of monitoring stations and associated costs for the period October 1, 2019 to September 30, 2020 (Federal Fiscal Year 2020) is attached to the JFA. As requested, two new monitoring stations on Kanaha Stream and diversion were added to the program to monitor compliance with interim instream flow standards recently established by the Commission on Water Resource Management. Because of additional sample collection and processing requirements, we have increased costs associated with the collection of discrete samples for chloride analysis from the Waiehu Deep Monitor Well. The chloride results for samples collected at discrete depths are important for tracking long-term changes in chloride concentration at selected depths within the water column and for comparison with quarterly salinity profiles collected by the CWRM.

## EXHIBIT <u>"1"</u>

Mr. Jeffrey T. Pearson, Director

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If you are in agreement with this program, please sign and return a copy of the enclosed JFA as soon as possible.

The legal authority for the USGS to enter into this agreement is 43 USC 36C, 43 USC 50, and 43 USC 50b. Work performed with funds from the agreement will be conducted on a fixed price basis. Your agency will be billed using form DI-1040, according to the terms of the agreement.

The results of the work under this agreement will be available to the USGS for publication and use in connection with related work. In addition, the USGS may provide unpublished USGS data or information to your office for review during the course of this jointly planned activity and partnership. Guidance concerning the U.S. Geological Survey's non-disclosure policy will be provided with any review material and is further explained in USGS Circular 1367, Fundamental Science Practices, available at http://pubs.usgs.gov/circ/1367/pdf/C1367.pdf.

If you have any questions, or would like more information about this program, please feel free to contact Brian Loving of my staff at (808) 690-9603 or by e-mail at bloving@usgs.gov.

Thank you for your continued interest in working with the USGS to provide water-resource information for the County of Maui.

Sincerely,

55, A

Stephen S. Anthony Center Director

Enclosure/Attachment

Form 9-1366 (May 2018)

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## U.S. Department of the Interior U.S. Geological Survey Joint Funding Agreement FOR Water Resource Investigations

Customer #: 6000001187 Agreement #: 20ZHJFA00000011 Project #: ZH00GSN TIN #: 99-6000618

#### Fixed Cost Agreement YES[X]NO[]

THIS AGREEMENT is entered into as of the October 1, 2019, by the U.S. GEOLOGICAL SURVEY, Pacific Islands Water Science Center, UNITED STATES DEPARTMENT OF THE INTERIOR, party of the first part, and the COUNTY OF MAUI DEPARTMENT OF WATER SUPPLY party of the second part.

1. The parties hereto agree that subject to the availability of appropriations and in accordance with their respective authorities there shall be maintained in cooperation a water-resource monitoring program according to the list of stations provided in Attachment 1, herein called the program. The USGS legal authority is 43 USC 36C; 43 USC 50, and 43 USC 50b.

2. The following amounts shall be contributed to cover all of the cost of the necessary field and analytical work directly related to this program. 2(b) include In-Kind-Services in the amount of \$0.00

- (a) \$39,250 by the party of the first part during the period October 1, 2019 to September 30, 2020
- (b) \$91,440 by the party of the second part during the period October 1, 2019 to September 30, 2020
- (c) Contributions are provided by the party of the first part through other USGS regional or national programs, in the amount of: \$0

Description of the USGS regional/national program:

- (d) Additional or reduced amounts by each party during the above period or succeeding periods as may be determined by mutual agreement and set forth in an exchange of letters between the parties.
- (e) The performance period may be changed by mutual agreement and set forth in an exchange of letters between the parties.

3. The costs of this program may be paid by either party in conformity with the laws and regulations respectively governing each party.

4. The field and analytical work pertaining to this program shall be under the direction of or subject to periodic review by an authorized representative of the party of the first part.

5. The areas to be included in the program shall be determined by mutual agreement between the parties hereto or their authorized representatives. The methods employed in the field and office shall be those adopted by the party of the first part to insure the required standards of accuracy subject to modification by mutual agreement.

6. During the course of this program, all field and analytical work of either party pertaining to this program shall be open to the inspection of the other party, and if the work is not being carried on in a mutually satisfactory manner, either party may terminate this agreement upon 60 days written notice to the other party.

7. The original records resulting from this program will be deposited in the office of origin of those records. Upon request, copies of the original records will be provided to the office of the other party.

8. The maps, records or reports resulting from this program shall be made available to the public as promptly as possible. The maps, records or reports normally will be published by the party of the first part. However, the party of the second part reserves the right to publish the results of this program, and if already published by the party of the first part shall, upon request, be furnished by the party of the first part, at cost, impressions suitable for purposes of reproduction similar to that for which the original copy was prepared. The maps, records or reports published by either party shall contain a statement of the cooperative relations between the parties. The Parties acknowledge that scientific information and data developed as a result of the Scope of Work (SOW) are subject to applicable USGS review, approval, and release requirements, which are available on the USGS Fundamental Science Practices website (https://www.usgs.gov/about/organization/science-support/science-quality-and-integrity/fundamental-science-practices).

## Form 9-1366 (May 2018)

Name:

Address:

Telephone:

Fax:

Email:

## U.S. Department of the Interior U.S. Geological Survey Joint Funding Agreement FOR

## Customer #: 6000001187 Agreement #: 20ZHJFA00000011 Project #: ZH00GSN TIN #: 99-6000618

#### Water Resource Investigations

9. Billing for this agreement will be rendered guarterly. Invoices not paid within 60 days from the billing date will bear Interest, Penalties, and Administrative cost at the annual rate pursuant the Debt Collection Act of 1982, (codified at 31 U.S.C. § 3717) established by the U.S. Treasury.

### **USGS Technical Point of Contact**

#### **Customer Technical Point of Contact** Name: Eva Blumenstein Brian Loving Assistant Center Director USGS - PIWSC Address: Maui Department of Water Supply 1845 Wasp Boulevard 200 South High Street Honolulu, HI 96818 Wailuku, Hawaii 96793-2155 (808) 690-9603 (808) 463-3102 Telephone: (808) 690-9599 Fax: Email: bloving@usgs.gov eva.blumenstein@co.maui.hi.us

### **USGS Billing Point of Contact**

Name:	Leanne Kitano	Name:	Eva Blumenstein
Address:	Budget Analyst USGS – PIWSC	Address:	Maui Department of Water Supply
Address.	1845 Wasp Boulevard	Address.	200 South High Street
	Honolulu, HI 96818		Wailuku, Hawaii 96793-2155
Telephone:	(808) 690-9562	Telephone:	(808) 463-3102
Fax:	(808) 690-9599	Fax:	
Email:	Irkitano@usgs.gov	Email:	eva.blumenstein@co.maui.hi.us

#### U.S. Geological Survey **United States** Department of Interior

### Signature

55 ) Bv Date: 07/05/2019 Name: Stephen S. Anthony

Title: Center Director

#### County of Maui Department of Water Supply

**Customer Billing Point of Contact** 

#### Signatures

Ву	Date:
Name	-
Title:	
Ву	Date:
Name:	
Title:	
Ву	Date:
Name:	

Title:

## SCOPE OF INVESTIGATIONS

## WATER-RESOURCE MONITORING PROGRAM, COUNTY OF MAUI

The purpose of the water-resource monitoring program is to collect data needed to evaluate the status and trends of surface and groundwater resources in the County of Maui. Since the 1980's, water-resource data have been collected at selected rainfall, streamflow, and ground-water monitoring stations as part of Joint Funding Agreements between the U.S. Geological Survey (USGS) and the County of Maui Department of Water Supply (MDWS). Data are collected by the USGS in accordance with well-documented techniques and quality-assurance procedures. Data are stored in the USGS National Water Information System database and are publicly available on the internet website (http://hi.water.usgs.gov). The number and type of monitoring stations is periodically adjusted to meet current priorities and available funds. The monitoring stations and associated costs for the period October 1, 2019 to September 30, 2020 are as follows:

MONITORING STATIONS	MDWS	USGS	TOTAL
Groundwater Monitoring			
Kanoa Ridge Test Hole, Maui	4,343	2,397	6,740
• Groundwater-level monitoring site in an important drinking-water aquifer			
<ul> <li>Site equipped with continuous water-level recorder and satellite</li> </ul>			
telemetry to provide real-time data			
<ul> <li>Data used to assess ground-water resources in the Waihee Aquifer</li> </ul>			
• Test Hole B, Maui	4,343	2,397	6,740
o Groundwater-level monitoring site in an important drinking-water aquifer			
• Site equipped with continuous water-level recorder and satellite			
telemetry to provide real-time data			
<ul> <li>Data used to assess groundwater resources in the Iao Aquifer</li> </ul>			
Waikapu 2, Maui	3,410	3,330	6,740
o Groundwater-level monitoring site in an important drinking-water aquifer			
<ul> <li>Site equipped with a continuous water-level recorder</li> </ul>			
<ul> <li>Data used to assess ground-water resources in the Iao Aquifer</li> </ul>			
Waiehu Deep Monitor Well, Maui	11,768	2,632	14,400
o Groundwater-level and salinity monitoring site in an important drinking-			
water aquifer			
<ul> <li>Samples collected quarterly from discrete depths for chloride analysis</li> </ul>			
<ul> <li>Continuous water-level monitoring in cooperation with the CWRM</li> </ul>			
<ul> <li>Data used to assess ground-water resources in the Iao Aquifer</li> </ul>			
<ul> <li>Kualapuu Deep Monitor Well, Molokai</li> </ul>	4,343	2,397	6,740
<ul> <li>Groundwater-level and salinity monitoring site in an important drinking- water aquifer</li> </ul>			
• Site equipped with a continuous water-level recorder			
<ul> <li>Salinity profiles collected twice per year in cooperation with the CWRM</li> </ul>			
<ul> <li>Data used to assess ground-water resources in the Kualapuu Aquifer</li> </ul>			

Streamflow monitoring station on diversion ditch in West Maui Site equipped with continuous stage recorder and satellite telemetry to provide real-time data Data used to monitor compliance with interim instream flow standards <b>Tonitoring – Real-time continuous-record stations</b> <u>uu Kukui Rain Gage, Maui</u> Long-term rainfall station at the summit of the West Maui Mountain Site equipped with continuous recording rain gage and satellite telemetry to provide real-time data Data used to estimate ground-water recharge and determine existence and severity of drought conditions	8,228	4,542	12,77(
Streamflow monitoring station on diversion ditch in West Maui Site equipped with continuous stage recorder and satellite telemetry to provide real-time data Data used to monitor compliance with interim instream flow standards <b>Ionitoring – Real-time continuous-record stations</b> <u>uu Kukui Rain Gage, Maui</u> Long-term rainfall station at the summit of the West Maui Mountain Site equipped with continuous recording rain gage and satellite telemetry to provide real-time data		4,542	12,77(
Streamflow monitoring station on diversion ditch in West Maui Site equipped with continuous stage recorder and satellite telemetry to provide real-time data Data used to monitor compliance with interim instream flow standards <b>Ionitoring – Real-time continuous-record stations</b> <u>uu Kukui Rain Gage, Maui</u> Long-term rainfall station at the summit of the West Maui Mountain Site equipped with continuous recording rain gage and satellite telemetry		4,542	12,77(
Streamflow monitoring station on diversion ditch in West Maui Site equipped with continuous stage recorder and satellite telemetry to provide real-time data Data used to monitor compliance with interim instream flow standards <b>Ionitoring – Real-time continuous-record stations</b> uu Kukui Rain Gage, Maui		4,542	12,770
Streamflow monitoring station on diversion ditch in West Maui Site equipped with continuous stage recorder and satellite telemetry to provide real-time data Data used to monitor compliance with interim instream flow standards Ionitoring – Real-time continuous-record stations		4,542	12,770
Streamflow monitoring station on diversion ditch in West Maui Site equipped with continuous stage recorder and satellite telemetry to provide real-time data Data used to monitor compliance with interim instream flow standards			
Streamflow monitoring station on diversion ditch in West Maui Site equipped with continuous stage recorder and satellite telemetry to provide real-time data			
Streamflow monitoring station on diversion ditch in West Maui Site equipped with continuous stage recorder and satellite telemetry to			
Streamflow monitoring station on diversion ditch in West Maui			
	,		
	15,500	0	15,70
	15 960	0	15,96
	9.665	5,335	15,00
Streamflow monitoring station in upcountry Maui			
/aikamoi Stream, Maui	14,690	8,110	22,80
groundwater resources			
alawa Stream, Molokai	14,690	8,110	22,800
	human activity Site equipped with continuous stage recorder and satellite telemetry to provide real-time data Data used to assess effects of climate change on surface-water and groundwater resources <u>Vaikamoi Stream, Maui</u> Streamflow monitoring station in upcountry Maui Site equipped with continuous stage recorder and satellite telemetry to provide real-time data Data used to assess inflow to the Kula Reservoir anaha Stream below Pipeline Intake near Lahaina, Maui Streamflow monitoring station in West Maui Site equipped with continuous stage recorder and satellite telemetry to provide real-time data Data used to monitoring station in West Maui Site equipped with continuous stage recorder and satellite telemetry to provide real-time data Data used to monitor compliance with interim instream flow standards Hawaii Department of Transportation contributes funding for this station	alawa Stream, Molokai14,690Long-term streamflow monitoring station in a watershed unaffected by human activity14,690Site equipped with continuous stage recorder and satellite telemetry to provide real-time data Data used to assess effects of climate change on surface-water and groundwater resources14,690Vaikamoi Stream, Maui Site equipped with continuous stage recorder and satellite telemetry to provide real-time data Data used to assess inflow to the Kula Reservoir14,690Streamflow monitoring station in upcountry Maui Site equipped with continuous stage recorder and satellite telemetry to provide real-time data Data used to assess inflow to the Kula Reservoir9.665Streamflow monitoring station in West Maui Site equipped with continuous stage recorder and satellite telemetry to provide real-time data Data used to monitoring station in West Maui Site equipped with continuous stage recorder and satellite telemetry to provide real-time data Data used to monitor compliance with interim instream flow standards9.665	alawa Stream, Molokai14,6908,110Long-term streamflow monitoring station in a watershed unaffected by human activity14,6908,110Site equipped with continuous stage recorder and satellite telemetry to provide real-time data14,6908,110Data used to assess effects of climate change on surface-water and groundwater resources14,6908,110Vaikamoi Stream, Maui14,6908,110Streamflow monitoring station in upcountry Maui Site equipped with continuous stage recorder and satellite telemetry to provide real-time data Data used to assess inflow to the Kula Reservoir14,6908,110Streamflow monitoring station in West Maui Site equipped with continuous stage recorder and satellite telemetry to provide real-time data Data used to monitoring station in West Maui Site equipped with continuous stage recorder and satellite telemetry to provide real-time data Data used to monitor compliance with interim instream flow standards Hawaii Department of Transportation contributes funding for this station tanaha Stream Pipeline Diversion near Lahaina, Maui15,9600

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