



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
**COMMISSION ON WATER RESOURCE MANAGEMENT**  
P.O. BOX 621  
HONOLULU, HAWAII 96809

STAFF SUBMITTAL

for the meeting of the  
COMMISSION ON WATER RESOURCE MANAGEMENT

September 20, 2006  
Honolulu, Hawaii

Cooperative Agreement with U.S. Geological Survey for  
Statewide Hydrologic Data Collection and  
Water Resource Investigations for Fiscal Year (FY) 2007

Each year the Commission on Water Resource Management (CWRM) enters into a cooperative agreement with the U.S. Geological Survey (USGS) for the inventory and investigation of Hawaii's water resources.

Background:

The cooperative agreement between the USGS and the State officially began in 1909 when the USGS entered into an agreement with the Territory of Hawaii. At first only 12 streams were gaged continuously. By 1914 there were 87 continuous-record stations. The program continued to grow, and by 1966 there were 197 gages operating under the agreement. Over the years, gages were discontinued for a variety of reasons. The primary reasons have been economic and/or a gage has fulfilled its data collection requirements. Over 140 of the 376 perennial streams in Hawaii have been gaged since the inception of the cooperative program. Similarly, the existing ground-water data collection began in 1972 to gather baseline data throughout the State. The program began with 170 wells where new knowledge of ground-water conditions was needed. Beginning in 1998, CWRM streamlined the cooperative agreement by transferring the crest-stage stream-gaging program to public agencies where these data are more applicable. In addition, we eliminated duplication of ground-water data collection in wells, and encouraged governmental and private water system purveyors to provide water level data to CWRM as required by law. The Natural Area Reserve System (NARS) program funded stream-gages and rain-gages on lands under their jurisdiction in FY 2005 and FY 2006. Exhibit 2 provides a summary of changes to the program since 1995.

Present Agreement:

The FY 07 agreement is significantly different from the FY 06 cooperative agreement. The USGS operational costs have increased by 31%. The cost for a streamgage in FY 2006 was \$12,600. In FY 2007 the cost for a similar gage will be \$16,500. As noted earlier in FY 2005 and 2006 the NARS program supported 15 gages through a separate cooperative agreement. However, the NARS program will no longer be able to pay for some of the stream and raingages. These gages are essential to the CWRM program and since the NARS program is unable to fund these gages, CWRM staff has had to pursue alternative sources of funding.

To help make up for the increasing costs and loss of the NARS funding, CWRM staff applied for a grant from the Division of Forestry and Wildlife (DOFAW) Watershed Management Grant Program. CWRM was awarded a grant for \$132,000 for stream and raingage monitoring with the USGS. This grant will fund 16 rain and streamgages in FY 2007 (Exhibit 3).

Under the cooperative agreement with USGS, the CWRM Survey Branch collects basic hydrologic data and conducts area resource investigations. The gages funded through the FY 06 and FY 07 cooperative program are summarized in the table below. Even though additional funding was secured, the program now supports 32 fewer gages. A detailed listing showing unit cost per gage and the number of data collection sites is included as Exhibit 1.

Gaging Type	FY 2006		FY 2007
	CWRM	NARS	CWRM
Continuous recording stream/ditch gage stations	25	13	33
Ground water levels	56	0	31
Monitoring and discharge measurements at Pearl Harbor and Molokai Springs	26	0	25
Rain gage stations	21	2	22
Data analysis	yes		no
Total stations/measurements	143		111

The Commission's share of the cooperative program will not exceed \$284,307 and is available under the Department's LNR 404 Water Resources Program. In addition to the DOFAW grant of \$132,000, Kamehameha Schools has agreed to reimburse the State's cost-share of \$7,127 for the Punaluu Ditch Gage. Additionally, the Waiahole Trust Fund will be used to cost-share \$42,713 to pay for the Waiahole area gages. Exhibit 2 also shows the cost changes to the cooperative program over the past thirteen years.

Staff continues to confer with the USGS on a regular basis to review and evaluate our comprehensive statewide ground and surface-water monitoring program. We continue to look for duplication of efforts, usefulness of information, and the need for monitoring information in a particular geographical area.

RECOMMENDATION:

Staff recommends that the Commission authorize the Chairperson to enter into a cooperative agreement between the Commission and the U.S. Geological Survey to undertake the specified monitoring activities. The terms of this agreement will be subject to the approval of the Chairperson and the Department's Deputy Attorney General. Contract execution will be done in accordance with Chapter 103D, HRS, and Chapter 3-122, Hawaii Administrative Rules.

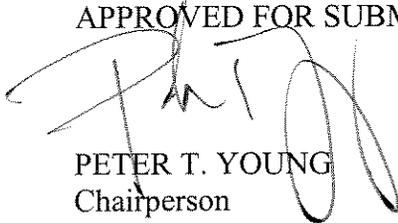
Respectfully submitted,



DEAN A. NAKANO  
Acting Deputy Director

- Exhibits 1 Cooperative Agreement for Federal FY 2007
- 2 Summary of Changes to the Cooperative Program 1995 to 2007
- 3 Gages to be funded by the Watershed Management Grant Program

APPROVED FOR SUBMITTAL:



PETER T. YOUNG  
Chairperson