



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 19, 2007
Honolulu, Hawaii

Cooperative Agreement with U.S. Geological Survey for
Statewide Hydrologic Data Collection and
Water Resource Investigations for Fiscal Year (FY) 2008

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 (see Exhibit 1). 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 (37%) of the 376 perennial streams in Hawaii have been gaged since the inception of the cooperative program. The steady decline of streams monitored since 1966 has diminished the ability of water resource managers to understand and properly manage the State's surface waters.

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 (e.g. flooding issues). 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 the CWRM as required by law. The Division of Forestry and Wildlife's (DOFAW) Watershed Management Grant Program (WMGP) funded the operation of 16 gaging stations on Watershed Partnership Lands in FY 2007 (Exhibit 4). Exhibit 3 provides a summary of changes to the program since 1995.

Approved by Commission on
Water Resource Management
at the meeting held on
SEP 19 2007

Item C1

Present Agreement:

The FY 2008 agreement is slightly different from the FY 2007 cooperative agreement. The USGS operational costs have increased by approximately 9%. The cost for a streamgage in FY 2007 was \$16,500. In FY 2008 the cost for a similar gage will be \$18,000. In FY 2007 CWRM staff applied for and was awarded \$132,000 from the Watershed Management Grant Program. This grant funded the operation of 16 rain and streamgages on Watershed Partnership Lands in FY 2007. However, for FY 2008 the WMGP released \$118,175 to CWRM allowing for only 12 gages to be funded (Exhibit 4). CWRM staff will utilize general funds to continue the operation of the gages not funded by the WMGP.

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 07 and FY 08 cooperative program are summarized in the table below. A detailed listing showing unit cost per gage and the number of data collection sites is included as Exhibit 2.

Gaging Type	FY 2007	FY 2008
Continuous recording streamgage stations	33	32
Ground water levels	31	34
Monitoring and discharge measurements at Pearl Harbor and Molokai Springs	25	25
Rain gage stations	22	21
Data analysis	No	No
Total stations/measurements	111	112

The Commission's share of the cooperative program will not exceed \$367,385 in general funds and is available under the Department's LNR 404 Water Resources Program. In addition to the DOFAW grant of \$118,175, the Waiahole Trust Fund will be used to cost-share \$41,040 to pay for the Waiahole area gages. Exhibit 3 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,



KEN C. KAWAHARA
Deputy Director

- Exhibits 1 Number of Continuous-Record Gages Operated since 1909
- 2 Cooperative Agreement for Federal FY 2008
- 3 Summary of Changes to the Cooperative Program 1995 to 2008
- 4 Gages to be funded by the Watershed Management Grant Program

APPROVED FOR SUBMITTAL:



LAURA H. THIELEN
Chairperson