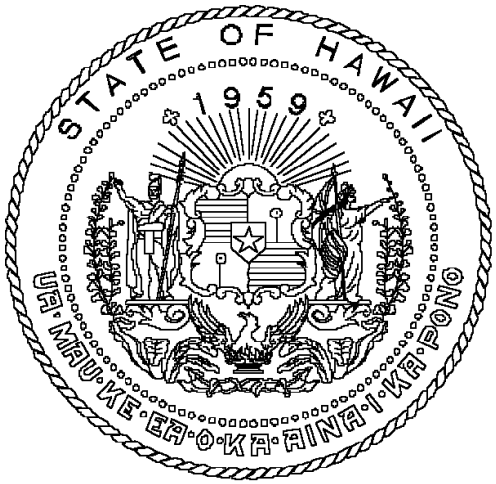
Report to the Twenty-Fourth Legislature
2007 Regular Session

STATUS OF THE STATEWIDE FIELD INVESTIGATIONS OF STREAMS TO ESTABLISH INSTREAM FLOW STANDARDS



Prepared by the

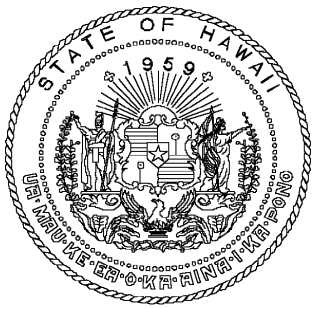
Department of Land and Natural Resources
Commission on Water Resource Management
State of Hawaii

In response to

Section 19.1 of Act 160,
Session Laws of Hawaii 2006

Honolulu, Hawaii

November 2006



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INTRODUCTION

The following report has been prepared in compliance with Section 19.1 of Act 160, Session Laws of Hawaii (SLH) 2006, that calls for the Commission on Water Resource Management (Commission) of the Department of Land and Natural Resources (Department) to submit to the Legislature no later than twenty days prior to the 2007 Regular Session, a status on statewide field investigations of streams to establish instream flow standards (IFS).

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BACKGROUND

Act 160, SLH 2006, appropriated to the Commission, the sum of $650,000 for the purpose of conducting statewide field investigations to verify and inventory surface-water uses and stream diversions, and update existing surface water information. This is one of the key requisite steps toward the establishing of IFS statewide. Under the State Water Code, Chapter 174C, Hawaii Revised Statutes (HRS), IFS is defined as "a quantity or flow of water or depth of water which is required to be present at a specific location in a stream system at certain specified times of the year to protect fishery, wildlife, recreational, aesthetic, scenic, and other beneficial instream uses."

The State Water Code mandates that the Commission shall establish and administer a statewide instream use protection program to protect, enhance, and reestablish, where practicable, beneficial instream uses of water. To meet this responsibility, the Commission has the particularly difficult duty of setting IFS for over 376 perennial streams in Hawaii, a complex task reaffirmed by the Hawaii Supreme Court's (Supreme Court) Waiahole Ditch Contested Case Hearing Decision which stated, *"instream flow standards serve as the primary mechanism by which the Commission is to discharge its duty to protect and promote the entire range of public trust purposes dependent upon instream flows."*

The Commission, as a first step, established interim IFS at "status quo" levels, i.e., that amount of water flowing in each stream on the effective date of the administrative rules for each interim IFS. However, the Supreme Court held that such "status quo" interim IFS were not adequate for protecting instream uses and required the Commission to take immediate steps to identify best available information and develop measurable IFS for streams statewide.

The Commission's Stream Protection and Management (SPAM) Branch continues to address a multitude of instream and noninstream issues, in addition to recent petitions to amend the interim IFS for 27 streams in East Maui; Waihee River, Waiehu, Iao, and Waikapu Streams in Central Maui, and Honokohau and Honolua Streams in West Maui. In July 2005, the Commission was presented with the SPAM Program Implementation Plan, part of which identified six strategic actions to develop the necessary informational resources and processes in support of establishment of an IFS methodology, as follows:

(1) Establish statewide surface-water hydrologic units for protection and management purposes;

(2) Improve the processing of permit applications and management of permit information through the revision and enhancement of application forms;

(3) Improve the compilation, management and utilization of surface water-related information through the development of integrated information databases;

(4) Enhance the management of surface water-related information spatially through the development of Geographical Information System (GIS) databases:

(5) Develop a standardized interim IFS methodology (In progress); and

(6) Conduct statewide field investigations to verify and inventory surface-water uses and stream diversions, and update existing surface water information.

Action item (1) has been completed. The Commission's SPAM Branch is currently working on Action items (2-5) with current staffing and funding, and this report reflects the Commission's effort to implement Action item (6) as a direct result of the Legislature's funding appropriation.

STATUS OF THE STATEWIDE FIELD INVESTIGATION PROJECT

The proposed Statewide Field Investigations Project (Project) will require engaging the services of a consulting firm to develop a methodology and conduct a prioritized and phased field investigation of all surface-water diversions statewide. The statement of objectives for the Project are as follows:

(1) Research to determine declared surface water uses, diversions, owners, locations, and current condition of the facilities;

(2) Develop a data sheet to record information during field investigations and methods to enter the information into a database;

(3) Contact diversion owners and schedule the appointments necessary to conduct the field investigations;

(4) Develop a standardized field methodology;

(5) Mobilize and traverse stream reaches to diversion locations;

(6) Determine the Global Positioning System (GPS) derived location of each diversion in terms of latitude and longitude coordinates and tax map key (TMK) number plotted on United States Geological Survey (USGS) quadrangle and tax maps;

(7) Document the surface-water diversions through field inspection, photographs, and system/structure descriptions;

(8) Provide a written descriptive summary identifying the withdrawal capacity of the surface-water diversion, the time, manner, and quantity of the taking, the user of the water from the source, and the nature of water use; and

(9) Identify and describe the size and/or capacity of any infrastructure, such as pipes or ditches used to transport the water from the source to the area of use, and any other information that may be useful to the development of IFS.

Based upon an estimate of 1,242 registered stream diversions statewide at an estimated cost of approximately $500 per stream diversion, the total cost would be approximately $650,000 to complete the Project. The lack of verified surface-water diversion and water use information has inhibited the Commission's ability to adequately develop IFS. The information gathered in the course of this Project will allow the Commission to more effectively administer a statewide instream use protection program.

A "Request to Enter Into a Contract for Professional Services" was submitted to and approved by both the Commission and the Governor. In accordance with §103D-304, HRS, and based upon a preliminary Statement of Objectives for the Project, the Commission initiated the consultant selection process in coordination with the Department's Engineering Division. Qualified consultants were identified from the Engineering Division's "Professional Services for CIP and Operating Budget Projects During Fiscal Year 2006-2007" list under the discipline of "Land Surveying".

A Consultant Selection Committee was convened to review and select the top three qualified consultants to implement this Project. The list of consultants were submitted to and approved by the Department's Chairperson, and the top-ranked consultant has been notified. The Commission is currently in the contract negotiation phase and the consultant will be preparing a proposed scope of work outlining specific project details for planning and execution. The Project is expected to commence by December 2006 and should be completed within 24 to 30 months. The project schedule for completion will be subject to weather conditions and site accessibility.