DAVID Y. IGE GOVERNOR OF HAWAII





STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF AQUATIC RESOURCES 1151 PUNCHBOWL STREET, ROOM 330 HONOLULU, HAWAII 96813

Date: <u>January 3, 2020</u> DAR #<u>6059</u> SUZANNE D. CASE CHARRERSON BOARD OF LAND AND NATURAL RESOURCES COMMISSION ON WATER RESOURCE MANAGEMENT

> ROBERT K. MASUDA FIRST DEPUTY

M, KALEO MANUEL DEPUTY DIRECTOR-WATER

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HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

MEMORAN	JDUM	트웨어 마음 선생님은 아내지는 얼마를 했다고 다
TO:	Brian J. Neilson DAR Administrator	
FROM:	Skippy Hau	, Aquatic Biologist
SUBJECT:		cation for a Stream Diversion Works Permit for Diversions, Honopou, Hanehoi (Puolua). Pi'ina'au
Request Sub	omitted by: M. Kaleo Manuel,	Deputy Director
y	Selected East Maui Strea	m Diversions
Location of	Project:	
Brief Descri	iption of Project:	나는 아니라 얼마를 보면 하는데 이렇게 되었다.
portion of e into the dito themselves off-stream structures	each structure which cause ch is being abandoned; the s, will continuer to function to users and are not being about to allow them to continue to vater from their respective station made by the Commission.	andonment of 15 stream diverson works. Only the s water to be diverted from the corresponding stream larger structures including the irrigation ditches o carry water diverted from other East Maui stream to andoned. Maintenance work on the existing operate as part of the EMI ditch system without treams has been or is being conducted under a on on Water Resource Management (CWRM), dated
Comments: ☐ No Comm		ied
Thank you f there be any changes.	for providing DAR the opportu changes to the project plan, D	unity to review and comment on the proposed project. Should DAR requests the opportunity to review and comment on those
Comments	Approved: Brian J. Neilson DAR Administrato	Date: 1/3/2020

Comments

- 1. We fully support restoring natural stream flow to all streams. We support filling grate openings with concrete/grout and/or stream rocks; or by bolting a steel plate over the grate opening; removal of sluice gates; removal of diversion dam (K-30b); and removal of pipes (K-31a, K-19a, K-20a, etc.).
- 2. More information and description with dimensions are needed for the proposed concrete stream overpasses. There is no assessment on the amount of flow above the ditch under various storm conditions. During flooding conditions, it appears most of the water be allowed to flow into the ditch.
- 3. For example, K-30a proposes to remove the pipe. Will the concrete catchment basin be removed similar to K-30b or broken to allow water to flow naturally?
- 4. The simple removal of sluice gates is a "great first step" in restoring flow, however, the walls and dams that have been constructed to direct water to intakes and diversions must also be removed or "modified." These areas that constrict flow prevents animals from migrating upstream. The presence of some animals which we've identified helps to validate that few animals can migrate upstream. The multiple diversions prevents healthy populations to successfully migrate to upper elevations.
- 5. Stream "tributaries" also have diversions and could contribute to the overall flow in a particular stream. As much as possible, these diversion should also be modified and/or removed.
- 6. Will future maintenance for the EMI System require review of sealed diversions? How long will concrete/grout last and will these locations be surveyed for leaks? Who will be responsible for sealing any leaking into the ditches in the future? Will all of the structures be identified, mapped with GPS coordinates and monitored for compliance?