



IAO STREAM, MAUI, HAWAII FLOOD RISK MANAGEMENT PROJECT

Budget & Finance Committee Meeting
September 4, 2018



US Army Corps of Engineers
BUILDING STRONG®



RECEIVED AT BF MEETING ON 9-4-18
(BF-163) Submitted by Dept. of Public Works and US A.C.E.

Topics

- Project History
- Work to Date
- Project Status
- Cost Share
- Next Steps

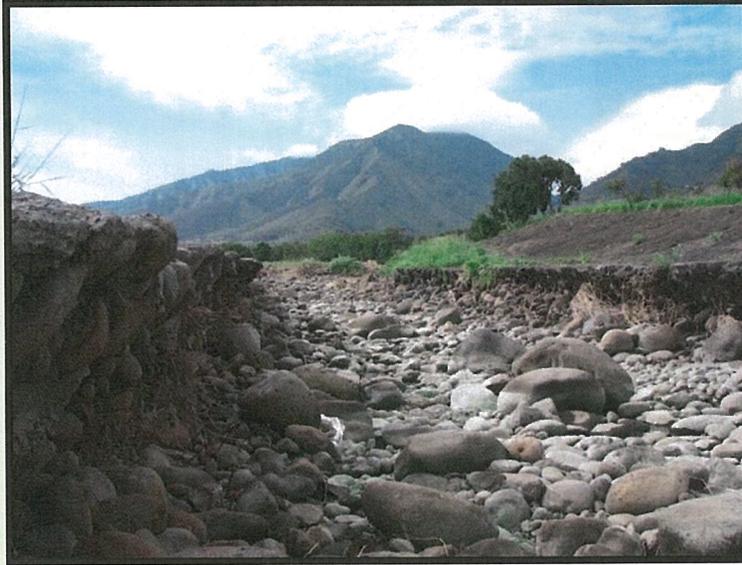


Project History

- Authorized under Flood Control Act of 1968
- Constructed in 1981 by Corps



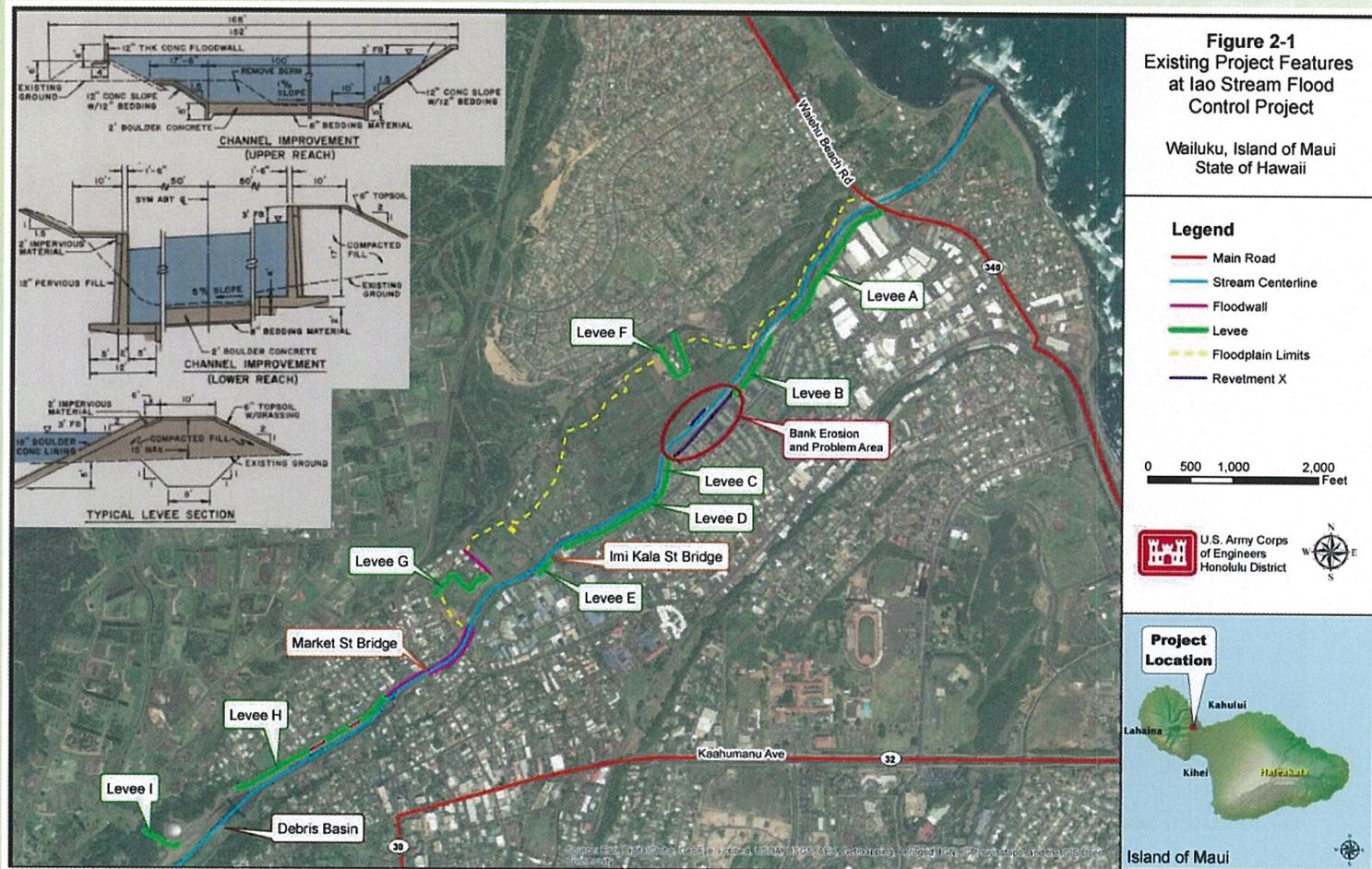
Project History



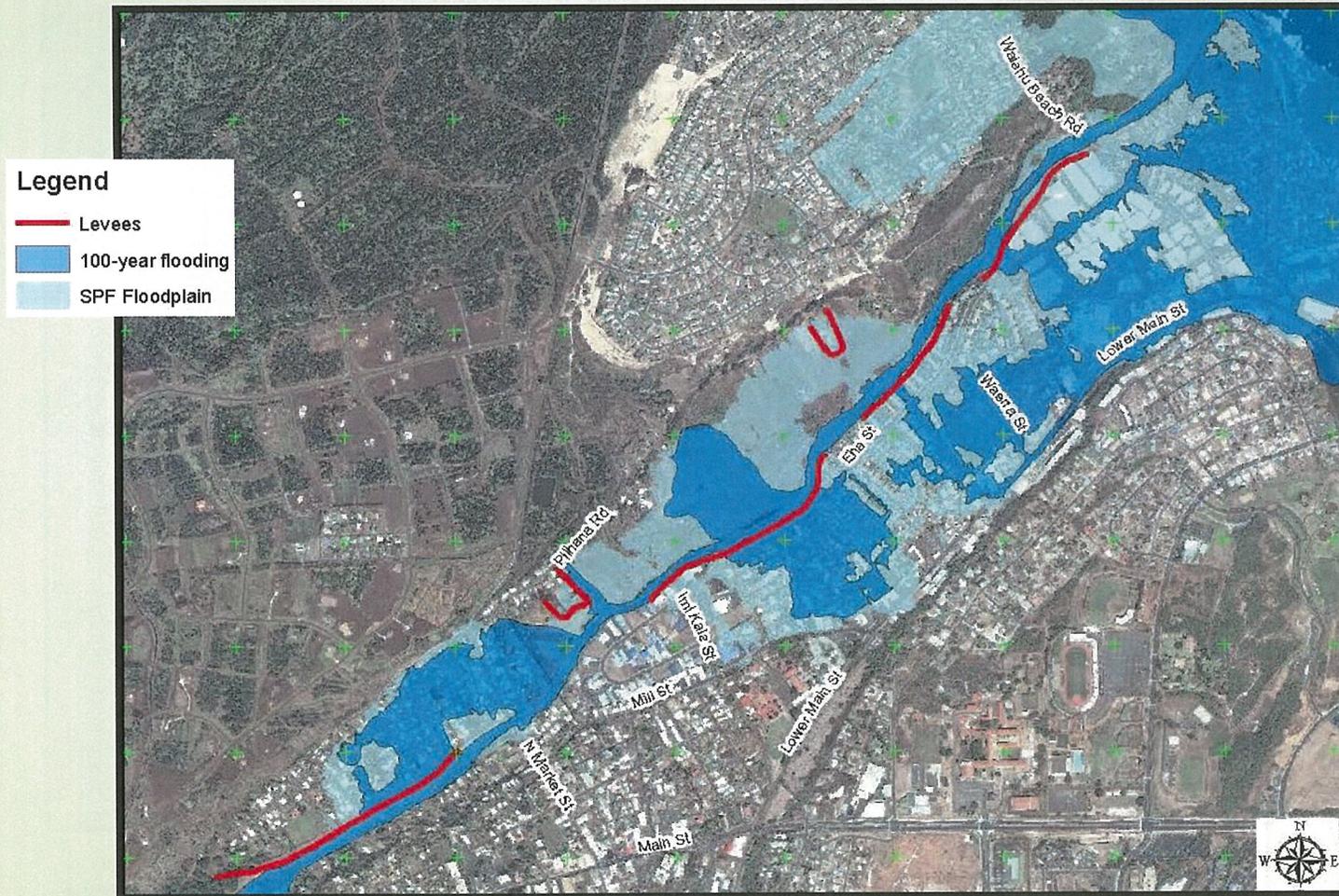
- Erosion began shortly after completion
- Repaired in 1983 (\$2.5M) & 2018 (\$3M)
- County owns and operates the project



1981 Project



Areas of Reduced Risks by 1981 Project



Current Project



- Reduce loss of life and property damages
- Address deficiencies
- Reduce flood risks



Work To Date

Deficiencies identified	1995-1997
Publication of Draft EA	March 2009
Public Informational Meeting	April 2009
Development of "Alternative F" with lessened environmental impacts	2015



Work To Date

Publication of new Draft EA & Public Informational Meeting	June/July 2015
Flooding event	September 2016
Corps Headquarters requested reevaluation of alternatives	May 2017
Publication of Final EA	July 2017
Completion of repair project addressing flood damages	January 2018
Approval of federal funds to conduct reevaluation	June 2018



Alternatives Criteria

- Reduce loss of life and property damages
- Correct design deficiency
- Cost effective
- Increase environmental functionality
 - Groundwater recharge
 - Sediment conveyance
 - Aquatic organism passage



Alternatives Considered

A – No Action

B – Removal of Flood Control Improvements

C – Roller Compacted Concrete and
Grouted Boulder Channel

D – Stilling and Sedimentation Basins

E – Roller Compacted Concrete Channel
with Grade Control Structures

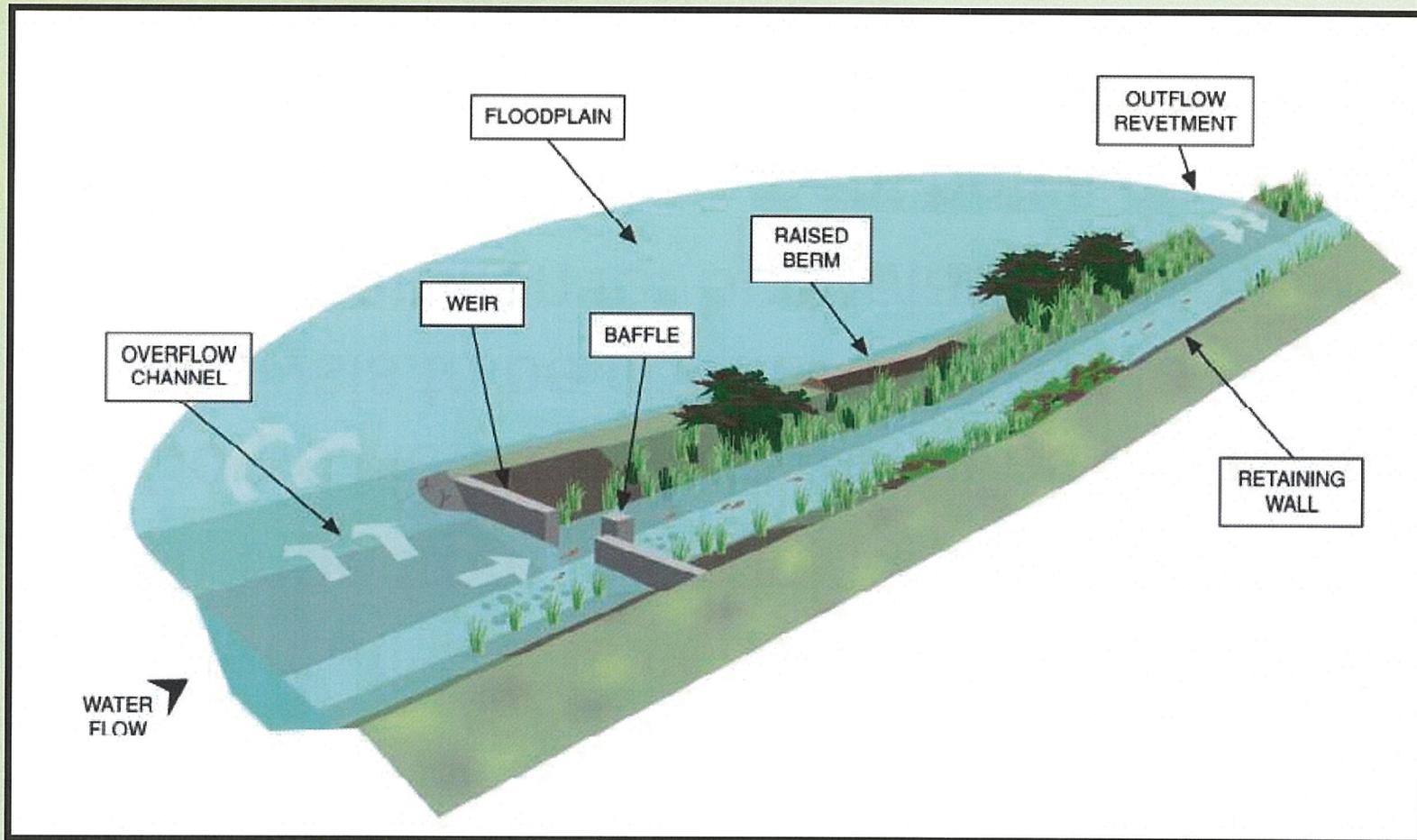
F – Floodplain Reconnection



Alternative F Floodplain Reconnection



Alternative F



Current Status

- Alternative F is considered a substantial change from the original 1981 project
- Corps Headquarters requires additional analysis to be conducted prior to consideration for budgetary approval
- Cooperation agreement between County and Corps needs to be executed prior to entering into next phase



General Reevaluation Report (GRR)

- Reevaluate the original design and address flood risks of Wailuku River
- Report will analyze various alternatives and identify recommended action
- Decision document to be reviewed and used for budgetary approval



General Reevaluation Report (GRR)

- Report to include:
 - Engineering, Cost Evaluation, Economic Justification, Real Estate, Environmental Impacts and Sustainability, O&M
- Provide opportunity for public review and comment and future Council Committee discussions



Cost Share

- The GRR is estimated to cost \$1.2 M
- County and Corps to cost share (50:50) the GRR
- Cooperation agreement to be executed to accept County funds (\$600K)
- Federal funding has been approved (\$600K)



FY 2018 Budget Amendment

The Department of Public Works requests a \$600,000 budget amendment for CBS-1053 to support the General Reevaluation Report.



CBS-1053

To date, the County has not contributed funds to the federal project.

Encumbrances for CBS 1053 relate to land acquisition.

C4087: ACM Consultants

Land appraisals (\$1,700 of \$27,500 spent to date)

C4079: Controlpoint Surveying

Topo and boundary maps (\$124,563.36 of \$246,600 spent to date)



Schedule (Next Steps)

Execute Feasibility Cost Share Agreement (50:50)	October 2018
Prepare General Reevaluation Report	November 2018 - September 2020
Execute Design Agreement (65:35)	March 2021
Prepare Design	April 2021-2022
Execute Project Partnership Agreement (65:35)	July 2022
Award Construction Contract	September 2022
Construction	October 2022 – September 2024



MAHALO!



David Goode, Director, DPW, Maui County (david.goode@co.maui.hi.us)
Krisit Ono, Civil Engineer V, DPW, Maui County (kristi.ono@co.maui.hi.us)
Nani Shimabuku, Project Manager, Corps of Engineers
(lorayne.p.Shimabuku@usace.army.mil)

