Ala Wai Watershed Flood Risk Management Project
Questions and Answers

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What is the current status of the Ala Wai Watershed Flood Risk Management project?
The U.S. Army Corps of Engineers (USACE) has been authorized to move forward to the Design and Construction Phase, meaning the project is economically justified and environmentally compliant and has received authorization from Congress for construction. USACE has been working with the State and City and County of Honolulu to identify the appropriate non-Federal partner to move the project into the Design and Construction Phase. The State of Hawaii, City and County of Honolulu, and USACE Honolulu District will continue further community involvement after the Project Sponsor has been identified and agreements have been reached for partnership. The intent is assisting the City and County of Honolulu and State of Hawaii in implementing this project to protect the people, infrastructure, and economy within the Ala Wai Watershed.

What is an Engineering Documentation Report?
The purpose of the Engineering Documentation Report (EDR) for the Ala Wai Watershed Flood Risk Management project is to document technical analysis completed following Congressional authorization of the project for construction, identify system modifications and the technical basis for those recommendations, and provide the engineering and data foundation for a future Validation Study.

What is the significance of the EDR?
Using the EDR as a foundation, the project team will begin the evaluation of the new plan's costs, economic benefits, and environmental impacts through a supplemental National Environmental Policy Act (NEPA) and Hawaii Environmental Policy Act process (HEPA) process.

Is the EDR a decision document?
The Ala Wai EDR is not a decision document, it is a technical document to capture changes in engineering data and outline recommended modifications to system features. The EDR determined that there is still a justified flood risk management project in the Ala Wai Canal project area, as well as a technical recommendation to achieve flood risk reduction as authorized by Congress.

Where can I view the Engineering Documentation Report (EDR) and map of the new system design?
The EDR and a map showing the current proposed project design changes and new feature recommendations are available on the Ala Wai project webpage*:* https://go.usa.gov/xfARb.

How can I submit questions or feedback about the project/report?
Questions and feedback can be emailed to: AlaWaiFloodProject@usace.army.mil.

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People are encouraged to communicate with their locally elected leaders, City & County of Honolulu, and the State of Hawaii. The Honolulu District is in constant communication with our partners on this project and are happy to assist in answering questions. Once an agreement is in place between USACE and the non-Federal partner, formal channels will be established for the public to communicate questions or concerns.

What is the estimated cost of the project (Aug. 2020)?
Under previous designs, the project was expected to cost $345 million, with the state agreeing to pay $121 million and federal dollars covering the rest. The new plan estimated cost is approx. $376 million and includes a $48 million contingency.

In general terms, what is the difference between the previous system plan and the new one?
The new plan incorporates significantly less impacts on the natural streams and residential properties within the watershed and focuses on evacuating the water without detaining it in the upper reaches of the watershed valleys. Updated modeling shows that the detention basins wouldn't be as effective as it originally thought, largely due to the steepness of the terrain. "Going from a system of detention to a system of conveyance."

What is the function of a Validation Study, and who is it conducted by?
A Validation Study is a comprehensive document utilized to validate whether project modifications remain within the original authorization provided by Congress or if additional authorization will be necessary. The validation study will include an Engineering Documentation Report (EDR) that summarizes technical changes, a Supplemental NEPA document for environmental impact analysis, an updated cost estimate, and an in-depth economic update, to ensure the scope, level of risk reduction, and cost remain justified without additional Congressional Authorization. The validation study is led by the USACE Honolulu District and compiled by team members consisting of USACE subject matter experts in Hawaii and across the nation.

What systems of checks and balances exist in the Validation Study process?
The Validation Study requires a series of reviews, beginning with the District Quality Review, reviews by the USACE Centers of Expertise (Cost, Risk, Environmental, Economics), an Agency Technical Review (ATR) by USACE representatives not associated with the project, and by the USACE Office of Water Project Review (USACE Policy Experts advising our senior leaders). The non-federal partner and their designates are also involved with each step of the process.

How long does the Validation Study process take and when will it begin?
The Validation Study begins when the project team receives approval to proceed from Headquarters, USACE. The validation study is estimated to take approximately seven months.

Who decides what the "appropriate level of supplemental environmental analysis" is?
The environmental coordinator will first conduct a preliminary environmental analysis through informal discussions and consultations with federal and state resource agencies. Resource

agency review and consultation throughout the process helps determine the appropriate level of analysis.

Will the Supplemental EIS be required after the Validation Study?
The Validation Study will require a completed Supplemental NEPA document to determine whether environmental impacts from the project modifications are within the Chief of Engineers' discretionary authority or if it requires new Congressional authorization. The validation study and Supplemental NEPA analysis will be done concurrently.

Was the main reason the upper mauka area portions of the project were eliminated from the project because they were objectionable to those with environmental concerns?
There were multiple reasons for the change in the recommended project. The engineering data and modeling identified that changes to the system needed to be made. USACE and our partners met with the community on several occasions to discuss options and opportunities that included moving the basins, eliminating the basins, making the basins bigger or any combination. Ultimately, after reviewing new data and meeting with the community we identified our recommendation to fundamentally change the project from a detention alternative with multiple basins to a conveyance system of features that evacuates the water to reduce risk on the community.

Can some of the same things that could be achieved by engineering and construction be done by minimizing or somehow otherwise maintaining the debris going into the streams and canals both in the mauka sections of the affected areas and the lower areas?
This project is only a piece of the puzzle to reduce risk in the Ala Wai Watershed; the flood control project is meant to address massive storms that are low probability but very high consequence. Other projects like reforestation, rain gardens, bio-swales all would be all great additional pieces, and likely serve great benefit against smaller rain events, however, they would not have the same success against a low probability high consequence type of storm.

Are you concerned at all that some of the cost-effectiveness points may be lost on the citizenry who will have to pay for this long-term in taxes for maintenance, etc. to protect Waikiki when it obviously is empty right now due to the lack of tourists?
This project goes beyond only protecting Waikiki, this project is meant to reduce risk in the Metropolitan areas of Moiliili and McCully, as well as the University of Hawaii at Manoa, all of which are of vital importance to the community beyond tourism.

How many private properties are due to be affected by the new system design proposal? Will some people lose their homes?
The new system recommendation requires no homes to be purchased or condemned for the project. Impacts to private property is still being determined because of the unique situation with property ownership in Hawaii. Homeowners in Hawaii may actually own the portions of streams, so any change in the streams - and the amount of water - requires some sort of flowage easement to ensure the water can evacuate.

With the release of the EDR, has anything been added to the project added?
The Woodlawn Bypass feature at the Manoa Marketplace is new, to divert water from impacting the University of Hawaii at Manoa. Other revisions in the new system include eliminating six catch basins in the upper portions of Manoa, Palolo and Makiki valleys meant to detain floodwater and debris and one in-stream debris catchment structure in Manoa. The EDR also recommends the addition of a Makiki Stream bypass culvert to reduce risk of backwater flooding from the Ala Wai Canal, as well as reducing flood risk in the lower watershed of the Makiki community. Finally, the EDR recommends modifications to authorized features at Kanewai, Hausten Ditch, Ala Wai Golf Course, and Ala Wai Canal flood barriers with pump stations.

Why do you keep moving the Ala Wai project forward despite the opposition?
Receiving community feedback on projects, whether it be critical or supportive is an essential part of our process. Our goal is to listen to concerned community members and work together towards solutions where possible. Most people we talk to during engagements recognize the need for flood protection. Their concern is ensuring that it is done right, and that they have an opportunity to participate. The project as a whole has come a long ways over the past year, from updating technical data to receiving community feedback. Moving forward with all of this, plus continued collaboration can deliver a project that protects the community, the infrastructure, while serving as a model for how future projects on Oahu should be delivered.

Are you going to look at more ecosystem restoration opportunities?
The short answer is yes, but what needs to be clarified is that the term “Ecosystem Restoration” has many meanings to different groups. While the project was not able to justify ecosystem restoration as defined by the
Federal Government, many of the environmental operating principals required by federal mandate align with much of the same ecosystem restoration principles requested by the community. Therefore, the project team is looking at ecosystem restoration opportunities as defined by the community. Moving forward this includes using soft natural features and native materials in lieu of concrete, as much as possible. It also means investigating features that have less impact on the natural flow of water within the streams. Where impacts are identified, action is taken to mitigate impacts, providing opportunities for the habitat to thrive. We will continue to share these types of opportunities with the community as we balance an engineering solution with the ecosystem, both urban and natural.

Why is there such a rush to sign the Ala Wai project partnership agreement?
The 2018 Emergency Supplemental program selected projects for funding based on imminent risk to public safety and property. This funding allowed for an accelerated process which enables implementation of these risk mitigation features much more quickly than the standard process. As the Corps of Engineers can't operate unilaterally in Civil Works, a nonfederal Partner is needed to move forward into the next stage of the project. The City and County of Honolulu has agreed to be our partner, but an official agreement hasn’t been solidified to date. An agreement is in the best interest of both the federal and non-federal party, because it outlines the obligations and expectations for both parties, which will better ensure the project objectives are met.

Is USACE working with the Honolulu City Council Permitted Interaction Group (PIG) and Oceanit?
Yes. In December 2019, upon request of Honolulu Mayor Kirk Caldwell and the Honolulu City Council, we added Oceanit and the PIG to the project team. We have been communicating regularly to share information, provide updates, and evaluate alternative options. With Honolulu City Council unanimous adoption of Resolution 20-230 that recommended the City expedite the environmental review and implementation of the USACE EDR Recommended Plan along with a non-federal project to further reduce flood risk, the PIG was dissolved. The non-federal project is a separate undertaking than the USACE plan; the USACE plan is not dependent on the non-federal plan.

What are the deadlines to use the federal and state funding that have been allocated for the project? Could these deadlines be extended?
The appropriation received from Congress is an emergency appropriation to invest in projects located in areas prone to flooding that were determined to be economically justified and environmentally compliant. There is no expiration of funds provided under PL 115-123, for the Long Term Disaster Recovery Investment Program. It is at the discretion of the Congress and Assistant Secretary of Army for Civil Works to reallocate funding from those projects if projects do not proceed.

What extra protections would be put in place to address concerns of schools and neighborhoods with children near the proposed structures?
Many of the public lands selected for the project features were identified due to their existing flood risk. For example, areas adjacent to the Ala Wai Canal currently flood annually as the flood waters rise and leave the canal. The construction of the project features will take flooded areas and control the water through use of the project to hold flood waters back and protect private property. All designs have been reviewed at several levels both within the USACE and outside organizations for safety, residual risk, compliance, and operability. Final designs will undergo a similar level of review. Mitigation, warnings, signage and education have been funded as part of this project to help increase the awareness of these structures and how to mitigate risks associated with them.

Why is this project needed and what's at stake if we don't get it done soon?
With increased frequency of storms in the Pacific, the geographic nature of the watershed, the increased development of the watershed, and the unique micro-climates within the watershed, there are significant flood risks to the people in the community, damage to the infrastructure, and risks to the people who work in and visit Waikiki. This project seeks to implement an integrated system of project features that operates together to reduce those risks. Hurricane Lane (2018) was a near miss, however, with the increasing number of storms and intensity of those storms, this project is necessary to protect the community, the infrastructure, and the economy from the risks of those future storms. The intent of the project team is to work as quickly as possible to ensure that protection is in place before a major storm arrives.

There has been concerns about the 4-foot wall concrete flood mitigation wall around the Ala Wai Canal. Is this part of the project still up for debate?
The U.S. Army Corps of Engineers, the State of Hawaii and the City and County are working together on the layout, design and level of protection. The design was approved for a flood wall because of space constraints, and the need to protect the surrounding areas from riverine flood drainage and sea level rise in the Ala Wai Canal. Design decisions for the flood wall recommendations in the EDR will be made in cooperation with our non-federal partner.

Is the Ala Wai project taking into account the effects of climate change?
Frequent extreme and nuisance events, amplified by increasing urbanization and impacts from climate change, result in severe costly impacts wherever they occur. Investment in resilience makes a difference. It is the policy of USACE to integrate climate change preparedness and resilience planning and actions in all activities for the purpose of enhancing the resilience of our built and natural water-resource infrastructure and the effectiveness of our military support mission, and to reduce the potential vulnerabilities of that infrastructure and those missions to the effects of climate change and variability. USACE shall continue undertaking its climate change preparedness and resilience planning, in consultation with internal and external experts and with our districts, divisions, and Centers, and shall implement the results of that planning using the best available – and actionable – climate science and climate change information. USACE is on the forefront of federal construction agencies in integrating climate change (including sea level change) into project planning and climate change adaptation into project design, construction and repair. Honolulu District works closely with State and local partners to provide a better understanding of (and ways to reduce) erosion, within our missions and authorities.

How will this project impact the homes on Koali road?
In reference to how a potential multipurpose basin at Kanewai Field will impact your neighborhood (specifically Koali Road), basin will be designed to divert water above a certain level into the field that will have a levee constructed of an earthen berm with armored rock beneath the grass. The field will have an approximately 7' tall sloped earthen berm around the perimeter. The water will be diverted through an armored spillway where the Manoa Stream makes the curve by the baseball diamond. Water will gather in the field and be able to flow out via an outlet in the berm that will control outflows back into Manoa stream down by the end of Koali Road at the corner of the field. When there is no storm event the field can be used for recreational purposes. Visually, the field will look similar to an amphitheater looking down onto the baseball fields. The levee will be sized to detain a 100-year storm event as to provide protection for Hokulani School and the surrounding neighborhood without inducing risk.