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PRIMARY URBAN CENTER WATERSHED MANAGEMENT PLAN (PUC WMP) Notes from Community Meeting No. 3 (B)

Meeting Location: Ala Wai Elementary School Cafeteria

Date: October 25, 2018 **Time:** 7:00 to 8:30 p.m.

Meeting Purpose:

The purpose of the meeting was to share water-related issues and concerns and water supply options for meeting future water demands for the Primary Urban Center. Key projects, strategies, and programs to address the water-related issues and concerns were also presented. Eighteen individuals attended the meeting.

Summary of Meeting:

Townscape, Inc. presented a slideshow that provided an overview of the following:

- Introduction and Project Overview
- Water-related Issues and Concerns from stakeholder outreach
- Projects, Strategies, and Programs to address water-related issues and concerns
- Priority Watersheds and Catalyst Projects
- Next Steps

Materials from the meeting, including the slideshow, project fact sheet, comment form, and meeting notes, are available on the BWS website at:

https://www.boardofwatersupply.com/water-resources/watershed-management-plan/primary-urban-center-plan.

After the slideshow, the following questions were posed to the meeting participants:

- Are there other water-related issues and concerns for the PUC that we missed?
- How aggressively should we implement water conservation strategies now to prepare for a possible "worst case" future scenario?

Meeting participants were also invited to ask questions and share any concerns about water resources in the Primary Urban Center. Barry Usagawa from the Honolulu Board of Water Supply (BWS) led the discussion. A summary of the various questions, comments, and discussions is provided below. BWS responses are in *Italics*.

- What would the Ala Wai Golf Course Water Recycling Facility look like? Would it be a large building?
 - The Ala Wai Golf Course Water Recycling Facility would treat wastewater that would be used to irrigate the Ala Wai Golf Course. The golf course is currently using potable water for irrigation. The facility would be a one-story building within the Ala Wai Golf Course, possibly near Date Street. It would screened by some of the ironwood trees that are located over there. Consultants are currently conducting a feasibility study and Environmental Assessment. The implementation of this project is still to be determined.
- How does fishpond restoration help watershed health?
 - The PUC WMP is taking an ahupua'a approach to watershed management. In addition to ground water, the plan is looking at surface and nearshore water. Fishpond restoration promotes traditional and customary practices which is one of the objectives of the watershed management plans. Fishpond restoration encourages community stewardship and education.
 - Another meeting participant added that fishponds assist with sediment and nutrient retention which improves water quality of surrounding areas and encourages the growth of algae that feeds fish in the fishpond.
- Regarding the Nu'uanu Managed Aquifer Recharge project, if you pump in 1 million gallons per day (MGD), do you get 1 MGD back out?
 - Possibly. The percentage of water supply recovery will be determined by ground water monitoring.
- Is the aquifer level dropping?
 - It is currently stable. It used to be higher and historically has decreased, but we
 are trying to maintain it now. However, climate change may impact aquifer
 recharge as less rainfall is anticipated in some areas. The BWS has implemented
 a number of conservation programs to reduce ground water use that should keep
 water levels stable.
- Since the PUC population is so large (440,000), how do the aquifer systems for the PUC compare to the aquifer systems for other areas such as the Windward side that has a relatively smaller population?
 - The geology of the aquifers on the leeward (PUC) side of the Koʻolau Range is different from the windward side. The aquifers underlying the PUC provide almost all the water necessary for the population of the PUC; the BWS only transfers a small quantity of water into the PUC from Central Oahu each year. The water for the windward side is generally provided by windward aquifers.
- Are cemeteries using recycled water for irrigation?
 - The cemeteries in the PUC are not using recycled water. However, schools, roadway landscaping, and golf courses in other parts of the island (such as in 'Ewa) are using recycled water for irrigation.
- Should people be worried if their houses are lower than street level?

- Flooding will most likely occur if a house is lower than street level, especially with sea level rise. In a 6 feet sea level rise scenario, there will be severe flooding issues. We will need to look at raising properties and streets if we do not retreat.
- Sea level rise is not only a flooding issue, but there are also water quality implications. As ground water rises, sewage from cesspools will also rise; therefore, microbiological contamination from wastewater (i.e. cesspools) may become an issue.
- Why is the sewer bill on O'ahu so high relative to other islands?
 - The sewer bill includes a fixed fee, therefore, a person cannot try to reduce their sewage bill by flushing the toilet less often or by using other methods.
 - Infrastructure for wastewater is more expensive than for potable water.
- We received notice about a pipeline replacement project for the BWS. When will it start?
 How will it impact traffic?
 - Pipeline replacement projects will require contractors to provide a traffic mitigation plan to minimize impacts to residents.
 - BWS will notify affected residents in writing before the project starts.
- The Ala Wai Golf Course Water Recycling Facility is a great idea, but will it smell? Will it contaminate surrounding water bodies?
 - The water recycling facility will have odor control and noise abatement. It will not contaminate water bodies because the recycled water will be UV disinfected to I kill bacteria and other pathogens. Recycled water is used for irrigation in other areas of Oʻahu.
- Stream channel maintenance is very important. I am concerned about the conditions of the stream channels, especially all the streams that flow into the Ala Wai Canal.
 - The PUC WMP includes projects and strategies related to this issue. The Ala Wai Watershed Collaboration has been exploring ways to create a watershed district and implement a stormwater fee for properties within the Ala Wai watershed. The stormwater fee would be based on percentage of impervious surfaces for each property and could then be used for services such as maintaining stream channels.