



The Commission on Water Resource Management (Commission) is currently updating the State Water Resource Protection Plan (WRPP), a long-range plan that provides guidance and direction for protecting and managing Hawai‘i’s water resources. As a part of the WRPP update process, the Commission is hosting seven “Hawai‘i Water Workshops” throughout the state to hear about water management issues and ideas in those communities. This will inform the Commission’s thinking as it formulates the WRPP Update. **These notes are for the second workshop, held on Lāna‘i on March 11, 2015.**

ATTENDANCE

Community Participants: 21 participants signed in
Commission Staff: Roy Hardy, Lenore Ohye, Jeremy Kimura, Neal Fujii
Townscape (Consultant): Sherri Hiraoka

“ONE BIG WATER ISSUE”

Participants were asked to share their one big water issue to give the group an idea of where interests lay. Those issues included:

1. Is there enough water?
2. Department of Hawaiian Home Lands (DHHL) access to water.
3. Sustainability in the face of climate change.
4. Water and land in the ahupua‘a
5. Watersheds
6. Making sure that we have enough water for development and the next generation.
7. Water on Lāna‘i.
8. There is not enough water for development.
9. WE need updated studies and current information.
10. Sustainability.
11. We need scientific evidence on the human trends that have caused drying on Lāna‘i for the past 200 years. We need solutions to replenish water reserves.



ONE WATER ISSUE (CONTINUED)

12. Concerned about wasting water - why is water being used for swimming pools that are not being used because the owners are not always here?
13. Concerned about aquifer protection – the Company (Pūlama Lāna‘i) is not doing desalination.
14. How does the WRPP ensure drought mitigation?
15. Ungulates and invasive species on Lāna‘i Hale and lack of communication on critical habitat.
16. Preservation of Lāna‘i Hale and watershed.
17. Education on water resources.
18. How long will our water resources last?
19. Degradation of the watershed – runoff, water quality.
20. Change to a culture of water conservation.
21. Watersheds

PRESENTATION

Roy Hardy welcomed participants to the meeting and thanked everyone for attending and Sherri Hiraoka discussed the importance of water and gave a brief introduction to water management in Hawai‘i. Jeremy Kimura then provided an overview of the Commission on Water Resource Management, Hawai‘i’s ground and surface water resources, the Hawai‘i Water Plan, known water resource issues, and water resource management strategies.

BREAKOUT GROUPS

Participants broke out into four small groups to discuss water resource issues. Groups identified several issues and focused on a few issues to discuss more in depth, along with potential actions to address the issues. All of the topics are recorded below and are consolidated by topic, rather than by what group they came from.

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COMMENT/ISSUE		RESPONSE
Alternative Water Sources		
1	Capture runoff	Stormwater is a valuable and underutilized resource in Hawaii. Section 7 of the updated WRPP will have more discussion opportunities and barriers for large-scale stormwater reclamation and reuse in Hawaii.
Data Collection, Monitoring, and Analysis		
2	How much of rain goes to recharge?	The amount of rainfall that contributes to ground water recharge can differ due to factors such as land cover and plant water usage. The best estimates of recharge come from the USGS and their periodic updates of recharge estimates. Section 3 of the updated WRPP will have more discussion about how ground water recharge is assessed.
3	Lāna‘i is small and in the rain shadow of Maui. There is a potential change in rainfall patterns due to climate change. Sea level rise may also impact ground water. We need to understand the impacts of climate change on Lāna‘i water resources.	The updated WRPP will have a discussion of potential impacts to our water resources from climate change and possible actions that CWRM can take to mitigate these impacts.
4	Who is monitoring water on Lanai? Is there a conflict of interests? The Company hires consultants. There is still a conflict. The State or some independent entity needs to monitor water resources.	All well owners are required to report their water use to CWRM on a monthly basis. From time to time, CWRM staff may do field inspections of wells and meter readings. The CWRM ground water monitoring program exists to assess the health of our aquifers to evaluate current management and regulatory programs. Section 4 of the updated WRPP will have more information about CWRM hydrologic monitoring programs.
5	How does the public know if water managers are qualified?	The Department of Health’s Safe Drinking Water Branch must certify operators of public water systems. For more information, please visit their website at: http://health.hawaii.gov/sdwb/operatorcert/

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Data Collection, Monitoring, and Analysis		
6	<p>Is water data analyzed for trends? CWRM should regularly analyze data for water use, pumpage, etc.</p>	<p>Section 4 of the WRPP will describe the CWRM’s monitoring programs and include an analysis of data and trends in selected aquifer system areas. Section 5 will contain a discussion and analysis of water use trends since the last update of the WRPP in 2008.</p>
7	<p>Potential actions for data availability and dissemination for Lāna‘i: Put data on the internet, especially for Lāna‘i. Resurrect the monthly bulletin on-line. Provide access to understandable information on water resources and use. Need information on water quality and quantity. Develop a State monitoring network for Lāna‘i. We need more monitoring wells and better monitoring of existing wells. Obtain adequate funds for monitoring. Those that most affect the resource should pay more. Revenues go to the general fund, and not for specific issues. US Geological Survey (USGS) cooperative agreement for Lāna‘i. Train the Lāna‘i Water Advisory Committee (LWAC) and the community to do monitoring. Enforce reporting requirements. Levy fines to generate revenue for state monitoring and data dissemination.</p>	<p>CWRM continues to work on disseminating data to the public in an efficient, easy to understand format. Lanai is the only island that has 100% compliance in water use reporting for production wells. A graph of the reported ground water pumpage for Lanai is displayed on the CWRM website at: http://dlnr.hawaii.gov/cwrn/groundwater/reportedpumpage/. Water use data for specific wells are available upon request. CWRM is currently conducting outreach and education prior to implementing enforcement of water use reporting. Following outreach effort, CWRM intends to utilize the Department of Land and Natural Resources’ Civil Resource Violation System to enforce the reporting requirement. The monthly CWRM water resource bulletin can be found online here: http://dlnr.hawaii.gov/cwrn/newsevents/bulletin/. The updated WRPP will have more information and discussion about the CWRM hydrologic monitoring programs, as well as strategies for engaging the island communities to improve water resource management.</p>

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Governance and Community-Based Water Management		
8	Home rule is important.	The County Water Use and Development Plan process allows for integration of land use and water use policies to occur at the County level. This allows communities to directly provide their input to a process that will guide the long-range management of their local water resource.
9	Develop a community water committee.	The updated WRPP will include a discussion and strategies for engaging the island communities to improve water resource management.
10	Lanai has a private water system, but CWRM has little to no regulatory presence on-island.	While CWRM does not have on-island staff, CWRM does regulate the construction/modification of wells and the installation of pumps statewide through a permitting process.
11	LWAC is the eyes and ears for regulatory compliance. The State needs to support their role.	CWRM appreciates the assistance and participation of the LWAC in the development and implementation of the Lanai Water Use and Development Plan.
12	Why isn't CWRM participating in the recent water use and quantity issues?	We are unsure what recent issues are being referred to, please contact CWRM at 1-800-464-4000 (extension 70214) to provide more information.
13	When will CWRM annual meetings continue? Issues include desalination and water supply.	CWRM attended annual meetings with the LWAC during the development of the Lanai Water Use and Development Plan. The plan was completed and adopted by the CWRM in 2012. If there are issues requiring CWRM intervention or assistance, please contact us at 1-800-464-4000 (extension 70214) to provide more information.
14	Fate and power of the LWAC.	See responses to Comments 11 and 13.
15	The County wants to control water and water decisions but they have no water system on Lāna‘i and should not control water. CWRM should be the overseeing agency and needs to be more involved.	The County Water Use and Development Plan process allows the community to participate in the allocation of water resources to current land use entitlements. CWRM reviews and formally approves both the project scope and final draft of the WUDP. When the final draft of the WUDP is being considered for adoption by CWRM, a public hearing is required to be held on the island affected. CWRM maintains regulatory oversight over the development and use of the island's water resources.
16	County land use needs to be in compliance with the Water Use and Development Plan allocation tables and acknowledge that compliance in the decisions.	The County land use plans and polices inform the County Water Use and Development Plan. Conversely, any subsequent decisions on land use plans and/or polices should be informed by the updated WUDP.

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17	There are rumors of a statewide entity akin to the LWAC, with a representative from each island. Is this true? If so, it should not include water system owners.	You may be referring to the Aha Moku Committee, which was established by the Legislature in 2012. Committee members are selected from a list of nominations submitted by the aha moku councils of each island. The committee may advise the Chair of the Board of Land and Natural Resources on indigenous resource management practices and to foster understanding and use of native Hawaiian resource knowledge, practices, and expertise, among other things.
Ground Water Protection		
18	Concerned about the feasibility of development given the amount of water we have in our aquifers.	The County Water Use and Development Plan process is meant to tie land use entitlements to water infrastructure with a 20-year planning horizon. Any source development strategies established in the WUDP may not violate the sustainable yield limits established by CWRM.
19	Replenish the ground water aquifers.	Watershed management is critical to support the recharge and augmentation of ground water aquifers. CWRM’s role in watershed management will be discussed in Section 9 of the updated WRPP. Other resource augmentation measures will be discussed in Section 7.
20	Need to revise sustainable yield.	Section 3 of the updated WRPP will have a discussion about current hydrologic data and proposed new sustainable yield values for some areas of the State.
State Water Code		
21	We need to reverse our policies and put replenishment over use.	The State Water Code’s Declaration of Policy (§174C-2 HRS) states, among other things, that maximum reasonable-beneficial use of the waters of the State shall be obtained, while making adequate provision for public interest objectives, such as maintenance of proper ecological balance and protection of traditional and customary Hawaiian rights. CWRM’s role as trustee is to balance protection of the resource and public trust uses with reasonable-beneficial uses.

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Waste and Conservation		
22	How much water is wasted in system losses? How can we address this?	Water system audits are an important component of any water conservation program and can assist a utility in identifying and addressing system losses. CWRM recently hosted workshops on the AWWA/IWWA method of conducting water audits for water systems throughout the State. Section 7 of the updated WRPP will have more discussion of water audits and other best management practices for water conservation.
23	Irrigation and swimming pools on the dry side of the island waste water.	CWRM encourages water conservation and efficiency for all types of water use. CWRM regulates sources of water (wells, stream diversions) but does not regulate end-uses of water unless an area has been designated a water management area.
24	There is a disparity in the per household use of water.250 gallons per house per day in Lāna‘i City, 2,300 gallons per house per day brackish irrigation in Manele	See above response.

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Waste and Conservation		
25	<p>Ways to foster a culture of conservation and reduce water demands on Lāna‘i: Establish water conservation rate structure; tiered water rates.</p> <p>Aggressive water conservation programs targeted at high water users.</p> <p>County ordinance requiring xeriscaping, swimming pool covers, etc.</p> <p>Modify Community Association Declarations of Codes, Covenants and Restrictions (DCC&Rs).</p> <p>Water conservation education and outreach.</p> <p>Compliance with existing Memorandum of Agreement between the Land Use Commission, The Company, Office of Hawaiian Affairs, and Lanaians for Sensible Growth restricting use of high-level water.</p>	<p>Section 7 of the updated WRPP will have more information about the CWRM’s water conservation program and strategies to improve water efficiency for all water use sectors. These are proven water conservation policies and practices. The Implementation Matrix for the 2011 Lanai Water Use and Development Plan includes numerous supply- and demand-side measures for water conservation. The latest report implementation report, dated January 8, 2015, documents forward progress in the areas of wastewater reuse, outreach and education, pipe replacement, and leak detection.</p>
Watershed Management		
26	<p>Health of Watershed</p>	<p>According to Pulama Lanai, ongoing watershed management efforts on Lanai include the maintenance of installed fencing, eradication of ungulates within fenced areas, and invasive weed control (e.g., biocontrol for strawberry guava). Pulama Lanai is working on a comprehensive natural resources management plan. Please contact Pulama Lanai for more information on current or planned future management activities.</p>
27	<p>What is being done to protect watersheds on private lands? Concerned about public resources on private lands.</p>	<p>See above response.</p>

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Watershed Management		
28	What's being done to address watershed issues? Invasive plants, e.g., strawberry guava Trees, such as Cook Island Pine, that are important for intercepting fog, are dying and need to be replaced. Feral ungulates, e.g., sheep, are damaging the forest. What controls are there?	See response to Comment 26.
29	There is a lack of information and communication on watershed actions.	Please contact Pulama Lanai for information on watershed actions. If you are unable to receive a response, please contact CWRM at 587-0214.
30	There is a lack of access to the watershed for research and conservation groups, such as Sea Grant.	CWRM is unable to grant access or right of entry to private lands. Due to liability and other issues, only the landowner has the authority to grant access.
31	Company studies on the watershed are taking too long to complete.	See response to Comment 26.

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Watershed Management		
32	<p>Need to invest in a plan to protect watersheds and generate revenue to implement it. Replenish the watershed.</p> <p>Mauka to makai 3-D, include the ocean, fishponds, reservoirs.</p> <p>Develop a reforestation plan</p> <p>Replant native species.</p> <p>Replace thirsty invasives with natives that evolved here.</p> <p>Create a layered understory.</p> <p>Develop a game management plan.</p> <p>Ungulate removal.</p> <p>Use non-native species to generate products revenue to reinvest in the watershed.</p> <p>Reforest previously forested areas.</p> <p>Federal and State funds are available. Requires company buy-in.</p> <p>There is a need for Company cooperation to prioritize watersheds, open them up to partnerships, and provide access.</p> <p>Designate Lāna‘i a ground water management area.</p> <p>Public resources used for private benefit. Recapture private money through fees or annual registration (water use fees and water source registration).</p> <p>Need more State Division of Conservation and Resource Enforcement officers on Lāna‘i. Expand watershed boundaries to better reflect recharge areas. Limit demand for water.</p>	<p>See response to Comment 26. Pulama Lanai is working on a comprehensive natural resources management plan. These suggestions will be made available to them.</p> <p>A petition was filed to designate Lanai as a water management area. The CWRM deferred designating at that time, but may reconsider designation should any of the legal criteria for designation be found to be met.</p>



NEXT STEPS

- Workshop notes
 - Notes from the Water Workshops will be posted to the Water Resource Protection Plan Update website at:
<http://dlnr.hawaii.gov/cwrm/planning/hiwaterplan/wrpp/wrpp2014/>
 - The Commission will share the notes from this workshop with other water agencies that had comments and/or questions relating to their missions and purviews.
- Remaining Workshops: Workshops are being held on Maui, Moloka‘i, Kaua‘i, Hawai‘i Island (Kona and Hilo). Please see the WRPP Update website for dates and locations.
- Schedule: The Public Review Draft WRPP Update is expected in Summer 2015. Public Hearings on the Draft will be held in late 2015, with the Final Plan report expected in Spring 2016.

HANDOUTS

- WRPP Update Fact Sheet
- Hawaii Water Workshop Agenda
- Slideshow Presentation
- Comment Sheet