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 Hawaiʻi's water resources. As a part of the WRPP update process, the Commission is hosting seven "Hawaiʻi 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 first workshop, held on Oʻahu on March 3, 2015.**

ATTENDANCE

Community Participants:	40 participants signed in
Water Commissioners:	Denise Antolini, Michael Buck
Commission Staff:	Roy Hardy, Lenore Ohye, Jeremy Kimura, Neal Fujii, Bob Chenet
Townscape (Consultant):	Bruce Tsuchida, 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. Over-watering by State facilities
2. Concern over future water supplies
3. Impacts to the aquifers
4. Instream flow standards (IFS)
5. Restoring taro loʻi
6. Climate change
7. Revisions to the sustainable yields
8. The need to address both water quality and quantity together[1]
9. How water is allocated
10. Water conservation
11. How stream outflows affect the nearshore reef
12. Conservation
13. Management policies

[1] Administration of the State's water quality control program is the jurisdiction of the State Department of Health (DOH), as provided by law. The Commission collaborates with DOH on water quality issues, particularly as they impact water supplies, and will share these notes with them.

ONE WATER ISSUE (CONTINUED)

14. Integrate water quality and quantity
15. Fulfilling State Water Code mandates
16. Water governance Hawaiian ecological management
17. Water for agriculture
18. Keauhou aquifer concerns
19. Innovation around water resources
20. Learn more about water issues
21. Providing for the water needs of Department of Hawaiian Home Lands (DHHL) and traditional and customary (T&C) practices
22. Oʻahu sustainable yields
23. Conservation and reuse
24. Climate change and decreasing rainfall
25. Agricultural water use
26. Agriculture and the Water Use and Development Plans
27. Balance between protection and use of water
28. Water conservation
29. Stream restoration in Waiʻanae
30. Ground water quality in the Red Hill area
31. Central Oahu ground water pollution, e.g., TCP in water
32. Water availability

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, Hawaiʻi's ground and surface water resources, the Hawaiʻi 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. All of the topics are recorded below and are consolidated by topic, rather than by what group they came from.

	COMMENT/ISSUE	RESPONSE
Agricultural Water Needs		
1	Agriculture operates on a thin margin and cannot afford to pay high water rates. Some agricultural users are using domestic/municipal water, which is much more expensive than gravity-fed surface water systems.	Agricultural water users can apply to the Honolulu Board of Water Supply for an agricultural meter to get a lower water rate. Other alternatives include developing one's own water source (e.g., well or stream diversion, although water availability would depend on location and there are costs involved as well), or moving operations to an area serviced by a surface water irrigation system.
2	Agricultural water quality needs to be protected for food safety.	Water utilized by agricultural producers for the final washing of crops intended for human consumption needs to be of drinking water quality.
3	Increase kalo production	If you would like information on existing diversions that may support new lo'i, please contact the CWRM at 587-0234. If new stream diversions are needed to support increased kalo production, please also call the number provided for more information on permit requirements.
4	Differentiate between water for food vs. non-food crops	CWRM does not have water use categories that are fine enough to differentiate between various types of agriculture. However, crops may be indicated through the water use permit process if the stream diversion or well is within a water management area.
5	Agricultural water use has the secondary benefit of recharging the aquifer, e.g. Central Maui or previously in 'Ewa, O'ahu.	Return irrigation may indeed serve to artificially recharge aquifers. CWRM must determine, on a case-by-case basis, whether over-irrigation for the purposes of aquifer recharge is more beneficial than leaving water in the water source of origin.
Alternative Water Sources		
6	Take a careful look at alternative water sources.	CWRM supports the use of alternative sources and encourages the use of alternative sources wherever practicable through CWRM's long-range planning and regulatory functions. Section 7 of the updated WRPP will have a discussion on alternative water sources and challenges to expanding their use.
7	Stormwater reuse and catchment	Stormwater is a valuable and underutilized resource. Section 7 of the updated WRPP will have discussion about efforts by CWRM to study and implement large-scale stormwater reclamation and reuse in Hawaii.

Alternative Water Sources		
8	Infrastructure is expensive so we need to take that into account. Are there ways to decentralize infrastructure? Ex: It doesn't make sense to pipe wastewater to one central treatment plant then pipe recycled water back out to users. Can we use scalping plants to create recycled water regionally?	The 2015 Hawaii legislature passed HB1394, signed into law as Act 229, which requires Hawaii Department of Transportation to conduct a water scalping feasibility study. We are hopeful that the study will provide information that can help Hawaii move forward with this technology in appropriate locations and for appropriate uses to supplement our natural supplies.
9	Water scalping: the timing for implementing this is urgent because both the Sand Island and Honouliuli Wastewater Treatment Plants are expanding.[1]	See above response. Intercepting, treating, and reusing wastewater at higher elevations may defer the need for additional expansion of the treatment plants. Treatment plant upgrades are implemented by the County. The Commission provides studies and guidance on opportunities for alternative water sources and venues for collaboration but does not implement wastewater infrastructure projects.
10	We need to find opportunities to use alternative water sources.	See response to Comment 6.
11	The Department of Health needs to provide guidance for the use of alternative water and these requirements need to be incorporated into the planning.	The Department of Health (DOH) is currently updating its Reuse Guidelines. The guidelines will identify acceptable uses for different levels of recycled water and monitoring and other requirements that may be needed depending on the location of the reuse project.
12	Storage is key for storm water reuse – we need to identify where storage can occur	We agree storage is important and will become increasingly important due to the likely impacts of climate change on rainfall intensities and frequencies. Section 7 of the updated WRPP will have a discussion on the importance of storage.
13	Storm water reuse could be used for agriculture	Stormwater and other alternative sources should be used for non-potable needs, such as agricultural irrigation, provided there are no unacceptable risks to human health or the environment. CWRM requires an analysis of alternatives as part of the water use permitting process. CWRM also encourages the counties to engage in integrated resource planning by exploring stormwater and other alternative non-potable sources in their Water Use and Development Plans.

Alternative Water Sources		
14	Need to implement a strategy for storm water reuse	CWRM conducted a study in 2008 to investigate and identify opportunities for large scale stormwater reclamation and reuse in Hawaii. A copy of the report is available at http://dlnr.hawaii.gov/cwrm/planning/alternative/, along with other recent CWRM studies on alternative resources. The report identified and prioritized 21 opportunities statewide. The report concluded among other things that the implementation of total maximum daily loads will require higher levels of treatment that will potentially offset the treatment required for other uses, particularly irrigation. Funding is an issue and the development of stormwater utilities should be explored. The 2015 Legislature passed legislation which authorizes the counties to establish and charge user fees for stormwater management systems or infrastructure. The bill was signed into law as Act 042.
15	Restore existing and old loʻi and fishponds, create new loʻi	Lo'i and fishpond restoration require adequate fresh water supplies. CWRM must consider potential impacts on these activities in their decision-making.
16	Mat placed by military in Kawainui Marsh prohibits recharge of the storm water captured in the marsh.	Management of the Kawainui Marsh is under the jurisdiction of the Department of Land and Natural Resources' (DLNR) Division of Forestry and Wildlife (DOFAW), which is in the process of updating its master plan for the marsh. To review and comment on the draft master plan, please visit DOFAW's webpage at http://dlnr.hawaii.gov/dofaw/featured/kawainui-hamakua-marsh-master-plan-draft/.
17	Reservoirs need to be listed as part of the solution.	See response to Comment 12.

Alternative Water Sources		
18	Modify concrete channels to capture rain water.	See response to Comment 14. This novel concept was explored on Oahu, and opportunities for using existing stormwater channels in Millilani, Waipahu, and Waikele were explored in the 2008 study.
19	Doors next to the canals could be installed to capture high storm flows.	See responses to Comments 14 and 18.
20	Allow farming next to the canals to utilize the water in the canals.	CWRM does not regulate the water in drainage canals. Please contact the City Department of Facility Maintenance at 768-3343.
21	Utilize resource	Water resources are held in trust for the use and enjoyment of the citizens of Hawaii.
Climate Change		
22	Impacts to water resources	Climate change is expected to impact water resource availability generally. Much still needs to be understood about specific impacts. The updated WRPP will have a discussion on impacts to Hawaii's water resources from climate change and strategies to address and mitigate potential impacts.
23	Pauoa Valley: climate change is decreasing water availability for kalo.	Please contact CWRM at 587-0264 to provide more information on this matter.
24	What is the accuracy of sustainable yield estimates in light of climate change?	The sustainable yield calculations are for the most part based on current conditions. The global climate change models needs to be downscaled in order for CWRM to understand the impacts for specific areas and water resources. For now, CWRM is applying a precautionary principle in its calculations of sustainable yields by selecting the most conservative recharge estimates, unless there is sufficient monitoring data, hydrologic studies, or numerical models that suggest otherwise. Section 3 of the updated WRPP will have more discussion on the process CWRM utilizes to determine sustainable yields.

Collaborative/Integrated Long Range Water Management Planning		
25	Develop a framework for bringing all players to the table when managing water resources.	While there are numerous avenues and opportunities for stakeholder input and involvement in water resource management, the development and updating of the Hawaii Water Plan, in particular the County Water Use and Development Plan (WUDP) component of the Hawaii Water Plan, presents a great opportunity for community dialogue. The goal of the County WUDPs is to set forth the allocation of water to land use – how much water is needed to support current land use plans and policies and what are the strategies to meet these needs? It is recognized that substantial and credible stakeholder and public involvement is critical to the success of the WUDP, and all counties are required to incorporate a public participation process. Honolulu Board of Water Supply (BWS) is currently updating its WUDP, which is comprised of eight separate watershed management plans. The boundaries for these watershed management plans follow the same as those of the eight regional Development Plans / Sustainable Community Plans areas. Please contact BWS at 748-5900 to find out how you can participate in this important planning process. To find out more about other available opportunities to engage in water resource management, please call us at 587-0216. Additionally, the updated WRPP will include strategies to improve community engagement and outreach to further water resource protection and management.
26	How do we bring the community and private sector into the conversation? What are the needs of each? Consider round table discussions.	See above response.

Collaborative/Integrated Long Range Water Management Planning		
27	Develop decentralized regional plans to better identify the water needs, sources, and opportunities for a particular area.	See response to Comment 25.
28	Develop metrics for a triple bottom line: environment, economy, community	See response to Comment 25. The County WUDPs utilize an integrated resource planning (IRP) process. Elements of IRP encompass least-cost analyses of resource management options, as well as a participatory decision-making process. Development of water resource alternatives consider communities and environments that may be affected, other institutions concerned with water resource development and protection, and the potential for competing policy goals.
29	Include all parties, including relevant public agencies. Educate them on the importance of water and the need to plan/manage this way.	See response to Comment 25.
30	The lead still needs to come from the government with regard to the framework for planning and the constraints to work within, i.e., permits and regulations.	CWRM continues to work with stakeholders across all water use sectors to provide guidance for long-range water planning and education and outreach on its permits and regulations.
31	Integrated water management: combine compartmentalized departmental responsibilities.	See responses to Comments 25 and 28. In addition to the WRPP and County WUDPs, other components of the Hawaii Water Plan include a Water Quality Plan, prepared by the DOH; a State Water Projects Plan, prepared by the DLNR's Engineering Division; and an Agricultural Water Use and Development Plan, prepared by Department of Agriculture (DOA). The Water Code recognizes that CWRM must rely on other agencies for valuable input to long-range water planning. The Hawaii Water Plan seeks to integrate the plans and policies of other entities that play a role in sustainable water management. Please visit our website to learn more about the Hawaii Water Plan and integrated resource planning http://dlnr.hawaii.gov/cwrm/planning/hiwaterplan/.

Collaborative/Integrated Long Range Water Management Planning		
32	We need to seek innovation in advancing the energy-agriculture-water-tourism nexus. Bring all players to the table and seek innovative solutions with technology.	See responses to Comments 25, 28, and 31.
33	Integrated water resource management is needed.	See responses to Comments 28 and 31.
34	Community groups need to understand the responsibilities of government agencies and project funding and how to do community water plans. Need to catalogue government agency responsibilities in watersheds.	Section 9 of the updated WRPP will have some discussion on agencies responsible for watershed protection and management.
35	Communities should take ownership of water management plans and moku management responsibilities.	See response to Comment 25.
36	Engage in long-range planning	See responses to Comments 25 and 31.
37	Create a "bank statement" for watershed management. For each watershed, how much water is there, how much is being used?	Within DLNR, the Division of Forestry and Wildlife is the lead agency for watershed protection and management. CWRM manages surface and ground waters through the establishment of hydrologic units. Water availability and use within these management units are inventoried and tracked. Water availability and use will be discussed in the updated WRPP in Sections 3 and 6, respectively.
38	What are other models for water management?	Water management must consider the governing statutes and case law. Hawaii's water law is unique in that it does not follow the riparian doctrine of the Eastern states, nor the prior appropriation doctrine, which is prevalent in the West. Water management in Hawaii is largely dictated by the provisions State Water Code.

Data Collection, Monitoring, and Analysis		
39	There is a lack of monitoring: surface water quality, ground water seeps, wells, etc.	We agree that more monitoring and data collection is needed. The updated WRPP will describe CWRM's monitoring program, that of other agencies, and include strategies to increase water resource monitoring in the State of Hawaii.
40	Support regulation	CWRM's main regulatory functions include permitting of wells and stream diversions and water use permitting in water management areas to ensure that uses are reasonable and beneficial and do not compromise water resource sustainability.
41	Data management and dissemination	CWRM continues to work on means to disseminate the data we collect. Ground water and surface water data collected by CWRM at selected sites can be found on the CWRM website at: http://dlnr.hawaii.gov/cwrm/. The website also provides links to data collected by other agencies, such as the U.S. Geological Survey (USGS) and University of Hawaii (UH).
42	Monitoring and assessments are needed to properly evaluate the status of the resource, identify trends and potential problems, and develop management strategies.	See response to Comment 39. Section 4 of the updated WRPP will have some discussion on current hydrologic data trends. For information and/or analysis of specific areas, please contact the CWRM Survey Branch at 587-0225.
43	The quality of the data is also important	We agree. Depending on the data source, quality assurance and control (QA/QC) may vary. For example, USGS has the highest standards for QA/QC. CWRM has developed its own standards and protocols for the data we collect. Section 4 of the updated WRPP will have more information about the CWRM data collection programs and those of other entities.
44	More monitoring wells are needed to be able to track ground water resources	See response to Comment 42.

Data Collection, Monitoring, and Analysis		
45	How is the US Geological Survey (USGS) involved in water management?	In addition to publishing studies on Hawaii's water resources, the USGS partners with CWRM and other agencies to cooperatively monitor streamflow, rainfall, and ground water resources throughout the State. More information about their programs can be found online here: http://hi.water.usgs.gov/. The USGS is an independent fact-finding agency that collects, monitors, and analyzes natural resource data. The USGS has no regulatory or management mandate and plays no role in CWRM management, policy or decision making.
46	Does monitoring have to be done by USGS? Are there cheaper options? Is this an opportunity for students, the university, and community to get involved?	The USGS collects data to a very high standard that allows for water managers to make defensible decisions based on that data. UH collects data and publishes studies that are used and valued by CWRM. Examples of data collection by the larger community include the CoCoRaHS volunteer raingage program (http://www.cocorahs.org/) and monthly reporting of water use by owners/operators of wells and stream diversions. CWRM will explore opportunities for increased community involvement to increase the collection of hydrologic data.
47	Find opportunities for citizen scientists and students to contribute data. This will provide the added benefit of getting the public involved in water issues and train the next generation of scientists and managers.	See above response.
48	Are there opportunities for academic partnerships?	CWRM engages in numerous partnerships with the University of Hawaii for research projects that aid in CWRM's mission and goals. Recent examples include the updating of the Rainfall Atlas of Hawaii and the first comprehensive analysis of evapotranspiration for the State of Hawaii.
49	Water use reporting is important and needs to continue	We agree that water use reporting provides valuable information that is needed to effectively management water resources. CWRM is currently conducting outreach and education for well and stream diversion owners/operators to increase compliance. The updated WRPP will have more information about the water use reporting program.

Data Collection, Monitoring, and Analysis		
50	Increased funding is needed for research, e.g., estimating sustainable yields, economics, social impacts, hydrology, etc.	The updated WRPP will include recommendations for increasing resources to achieve CWRM goals and objectives.
51	More research and data collection is needed	See responses to Comments 39 and 42.
52	Could water taxes/fees be a source of funding?	CWRM has the authority to collect permit fees to defray the administrative costs of the permitting program. Additional sources of funding are being explored.
53	Determine the economic value of water resources so people can better evaluate impacts when making decisions.	The University of Hawaii's UHERO has done research into the economic value of water and ecosystem services in Hawaii. Please contact UHERO at 808-956-2325.
54	Include the value of the ecosystem services that watersheds provide and the benefits to tourism. This ties back to the energy-agriculture-water-tourism dynamic.	See response to Comment 53.
55	Determining the value of the resource will influence political will	See response to Comment 53.
Ground Water Protection		
56	Wellhead protection	The DOH Safe Drinking Water Branch administers the State's wellhead protection program. For more information, please contact them at 586-4258.
57	Maui County has proposed a wellhead protection ordinance.	Maui County is aggressively pursuing wellhead protection, and the draft ordinance would supplement voluntary best management practices to address potential contaminating activities. To our knowledge, the ordinance has not yet been adopted.
58	O'ahu Sustainable Yields	Sustainable yields statewide are being reviewed as part of the WRPP update. Section 3 of the updated WRPP will have more information about the process for determining sustainable yields.
59	Need to carefully evaluate sustainable yields and consider impacts to residents.	See above response.

Ground Water Protection		
60	Water demand has been decreasing across the island due to conservation efforts.	Oahu's experience with water conservation, spearheaded by the Honolulu Board of Water Supply (BWS) has been exemplary. While population has steadily increased, water use has flattened out. CWRM commends the actions by the BWS to preserve our precious ground water supplies. Section 7 of the updated WRPP will have more information about BWS' water conservation program and those of the other municipalities. This section will also describe CWRM's water conservation program and implementation actions to promote water conservation and efficiency statewide.
61	Concern with development negatively impacting ground water flow in the karst.	While the karst systems on Oahu do not contribute to the ground water drinking water supplies, brackish water contained therein is used for irrigation and other non-potable uses. Karst formations underlie much of downtown Honolulu and the Ewa region. Pumping pressures in the Ewa region have been significantly lessened due to the use of recycled water from the Honouliuli Wastewater Reclamation Facility.
62	Ground water flow is important to coastal resources.	CWRM recognizes that spring discharge at the coast and submarine discharges support ecosystems and coastal resources. Only a portion of total recharge, in many areas less than 50%, may be sustainably developed and CWRM enforces this limit. In addition, available sustainable yield, and water allocated but not pumped, also support coastal resources.
63	If pillars from development pierce the karst, what are the long term consequences? Will there be sinkholes?	Much development has occurred in areas underlain by karst formations. Karst underlies much of urban Honolulu, Ewa, and Kapolei. We are not aware of past developments resulting in sinkholes.
64	How does removing water from the karst impact the ecosystem found there?	We defer to DLNR's Division of Aquatic Resources (DAR), which has expertise in aquatic species and habitats. Please contact DAR at 587-0100 for more information.
65	Target management by prioritizing aquifers.	CWRM prioritizes management and monitoring in designated water management areas and aquifers that may be threatened by proposed increases in water development.

Hawaiian Water Management		
66	Restore traditional land uses: fish ponds, loʻi, organic farming practices to make more water and grow supply.	In general, CWRM discourages agricultural over-irrigation, although there may be a benefit in recharging aquifers. CWRM would review, on a case-by-case basis, whether such artificial aquifer recharge is more beneficial than leaving the water in its natural state.
67	Use water wisely.	Thank you for your comment. See also response to Comment 60.
68	Control development and reduce impervious surfaces to increase ground water recharge.	CWRM also supports low impact development techniques and encourages best management practices to reduce runoff and increase recharge.
69	Ecosystem management and ungulate control.	Watershed management is critical to enhancing and augmenting water resource quality and quantity. The DLNR's Division of Forestry and Wildlife is the primary agency that oversees ecosystem management and ungulate control. For more information, please contact them at 587-0166. CWRM's supporting role in watershed management will be discussed in Section 9 of the updated WRPP.
70	Holistic ahupuaʻa management – we need help from community groups.	The updated WRPP will include strategies to improve community engagement and outreach to further water resource protection and management.
Implementation of Management Strategies		
71	Identify costs and implement the plans.	Similar to the 2008 WRPP, which identified priority water resource management projects and estimated costs, the updated WRPP will include an implementation plan with cost estimates. Many of the projects identified in the 2008 WRPP have been implemented or are in the process of being implemented.
72	Utilize community members in resource management	See response to Comment 70.
73	Are there opportunities for the agriculture industry to contribute to water infrastructure development, maintenance, and monitoring?	The Hawaii Department of Agriculture coordinates with agricultural industry trade groups to target State and private funding towards agricultural sectors that need support. Agricultural water users indirectly support infrastructure development and maintenance through the collection of water use fees. All owners/operators of agricultural diversion works are required to monitor and report monthly water use.

Implementation of Management Strategies		
74	There is a lack of government funding for hydrological research and hydrologic data collection.	We agree hydrological research and data collection is underfunded. To maximize efforts, CWRM looks for opportunities for partnerships and cost-sharing. Examples of such partnerships include our cooperative agreement with the U.S. Geological Survey and with the U.S. Army Corps of Engineers and University of Hawaii for research studies.
75	Consider the politics of water: watershed benefits vs. development.	The source of most of our water supply is the upper forested conservation areas. Proper management of these critical watersheds will help to enhance and augment water resource quality and quantity. These areas are protected and development is regulated through the DLNR's Office of Conservation and Coastal Lands. The DLNR's Division of Forestry and Wildlife is the primary agency that oversees ecosystem management and ungulate control. For more information, please contact them at 587-0166.
76	How do we level the playing field so the resource has as much political power as big business?	Pursuant to the State Constitution, State Water Code, and case law, public rights and public trust uses have priority over private, commercial use of water, which bear a higher level of scrutiny. CWRM must determine, on a case-by-case basis, whether proposed development of water resources outweighs impacts to public trust resources.
Kawainui Marsh		
77	Kawainui marsh needs to receive adequate water.	Management of the Kawainui Marsh is under the jurisdiction of DLNR's Division of Forestry and Wildlife (DOFAW), which is in the process of updating its master plan for the marsh. To review and comment on the draft master plan, please visit DOFAW's webpage at http://dlnr.hawaii.gov/dofaw/featured/kawainui-hamakua-marsh-master-plan-draft/
78	Need studies and management	See above response.

State Water Code		
79	Water Policy: Accommodate growth and resource impacts	The Hawaii Water Plan is the vehicle for examining impacts to water resources from current and future land uses. The County Water Use and Development Plans integrate water and land use planning to ensure holistic water management planning at the County level.
80	Balancing water needs: protection with reasonable beneficial use	The primary mission of CWRM and the intent of the State water Code is to balance protection of our water resources with the reasonable and beneficial use of those resources.
81	The Precautionary Principle needs to be balanced between protection and use	We agree. That is the difficult job of the Commission members to find the right balance.
82	There are many needs and uses of water that are valuable	We agree.
83	Consumptive and non-consumptive uses need to be considered	Most water uses have a consumptive and non-consumptive component. To be conservative, CWRM looks at the total amount of water being withdrawn from the resource, not just the consumptive portion, and disallows water waste.
84	Protect Department of Hawaiian Home Lands (DHHL) water reservations for all homestead uses	DHHL have high priority water rights under the State Constitution and Water Code, and DHHL water reservations are a protected trust use. CWRM recognizes and protects these rights through our long-range planning and regulatory programs. Section 2 of the updated WRPP will have more discussion about DHHL water rights.
85	"Watershed rights." New Zealand concept of the watershed having rights. The concept of NZ watershed rights is that a watershed has rights similar to how a person has individual rights	The DLNR's Division of Forestry and Wildlife implements the State's watershed management and protection programs. Please contact them at 586-0166 to share your ideas for increased watershed protections.
86	Identify what the Commission needs to do its job	Similar to the 2008 WRPP, which identified priority water resource management projects and estimated costs, the updated WRPP will include an implementation plan with cost estimates. Additional resources needed to carry out priority measures will be identified to provide a basis for future requests.

State Water Code		
87	Address the Commission's lack of resources to fulfill its Constitutional mandates	The updated WRPP will include a strategic action plan that will identify additional resources needed to carry out the duties of the CWRM.
88	The Commission needs to be able to anticipate problems and address issues early. Good data is needed to do this.	Data collection and long-range planning are key to proactive protection of our water resources. Section 4 of the updated WRPP will have more discussion about the CWRM's data collection programs and those of other entities.
89	Emerging issues associated with climate change need to be addressed	The updated WRPP will have a discussion on climate change, potential impacts to our water resources, and strategies for addressing and mitigating impacts.
90	Water rights have become increasingly important	CWRM's responsibilities to protect water rights have been clarified through recent case law and have provided CWRM with additional guidance. Section 2 of the updated WRPP will have a discussion on water rights and CWRM's legal mandates to protect those rights.
91	The public needs to be educated on the Commission's mission to generate support	The updated WRPP will include strategies to improve community education and outreach to further water resource protection and management.
Stream Protection		
92	Dry Streams	Please contact the CWRM Stream Protection and Management Branch at 587-0234 if you would like to file a complaint or initiate an investigation regarding a specific stream or surface water issue.
93	Restoration of streams	See above response.
94	Instream Flow Standards (IFS) – out-of-watershed transfers should not occur.	As part of its establishment of measurable interim instream flow standards, CWRM must determine, on a case-by-case basis, whether the benefits of out-of-watershed transport outweigh the impacts on public trust resources and uses.
95	O'ahu stream flows and impacts to fisheries, particularly in Wai'anae	The instream flow standard assessment (IFS) process considers flows required to support aquatic habitats. CWRM works closely with DLNR's Division of Aquatic Resources who advises us in the area of aquatic species and habitat impacts. Section 3 of the updated WRPP will have a discussion on the IFS process.

Stream Protection		
96	Stream flows should be restored in the Waiʻanae District.	See response to Comment 92.
97	There are parallels between community health and stream health	We agree that the health of our environment has a strong influence on our quality of life.
Water Pricing		
98	Conservation via payment: higher water rates will promote conservation	Tiered pricing has been shown to increase water conservation generally. Tiered pricing is one of many measures that have been identified to promote water conservation. At this time, all counties have instituted tiered pricing.
99	The cost of water is too low.	Current water rates may not reflect the true cost of water.
100	Separate the sewer and water bills. Not everyone understands that the water bill also includes the sewer bill and that sewer bill is much higher. Separation will help people realize that water rates are not that high.	We are aware that there is confusion about water versus sewer bills. We defer to the County to clarify this so that residents may be better informed.
101	Earmarking any fees for water management will lead to better acceptance	CWRM is authorized to collect fees to defray the administrative costs of its permitting system. These fees are deposited into CWRM's account to support water management.
Water Quality and Quantity		
102	Integrate water quality and quantity	The Hawaii Water Plan process provides a vehicle for DOH and CWRM to coordinate water management through the preparation of the WRPP and the Water Quality Plan. In addition, CWRM and DOH meet on a regular basis to coordinate on regulatory issues, data collection and monitoring, long-range planning, and resource assessments.
103	The administrative structure for managing water resources needs to be changed to eliminate the separation between water quality and quantity as they go hand in hand.	See above response.
104	This seems to be an artificial division	See response to Comment 102.

Water Quality and Quantity		
105	Planning should cover both potable and non-potable water	While CWRM jurisdiction over the waters of the State, CWRM engages in studies and planning for alternative water resources as a means to protect and conserve our natural supplies. Section 7 of the updated WRPP will have more discussion about alternative water programs supported by CWRM. Please also visit our website to view or download recent studies conducted by the CWRM on alternative water sources: http://dlnr.hawaii.gov/cwrm/planning/alternative/.
106	Water plans for quality and quantity should be integrated	See response to comment 102.
Water Scarcity		
107	Address the scarcity of water	CWRM establishes hydrologic units, assesses water availability for each unit, and tracks water use. Alternative water sources and resource augmentation and enhancement will be discussed in the updated WRPP.
108	Conservation	Section 7 of the updated WRPP will have a discussion on the CWRM water conservation program.
109	Wastewater reuse, stormwater	Section 7 of the updated WRPP will have a discussion on alternative water programs and how CWRM is supporting expanded alternative water use.
110	Direct potable reuse of recycled water	While there are some areas in the United States that have moved to direct potable reuse, there are no current plans for direct potable use in Hawaii.
111	Quantity/quality issues: safety, protect water resources from land uses (see New York Plan).	The DOH Safe Drinking Water Branch administers the Source Water Assessment Protection Program to prevent potentially contaminating land use activities from occurring in areas that influence drinking water sources. Please visit their website at http://health.hawaii.gov/sdwb/swap/ to find out more information.
112	Eliminate wasting and overuse of water	See response to comment 108.
113	Define the role of the Commission in water demand management, i.e., water use efficiency to reduce demands	To protect and preserve Hawaii's water resources, CWRM supports water conservation efforts across all water use sectors. Section 7 of the updated WRPP will have more information about the CWRM water conservation program and the efforts to support improved water use efficiency. In designated water management areas, CWRM requires a showing of water efficiency as a condition to obtain a water use permit.

Watershed Management		
114	Invasive species: vines, pigs; too many invasive species in watersheds.	The DLNR Division of Forestry and Wildlife is the lead State agency responsible for the protection and management of the mauka watershed areas. For more information about their programs, please contact them at 587-0166.
115	Watershed management is needed to protect water resources	We agree watershed management is important to enhancing water quality and quantitiy. Section 9 of the update WRPP will have a discussion on how CWRM intends to support DLNR's Division of Forestry and Wildlife, which is State's lead watershed protection agency.
116	More people need to understand ecosystem services and the need to protect ecosystems because of their inherent value.	Watersheds and other natural landscapes provide services that are in many cases taken for granted. Agencies responsible for natural resource management are well aware of the value of our watersheds. DLNR's watershed initiative has done a great job in outreach and educating the general public about the value of watershed protection measures.
117	"Watershed rights." New Zealand concept of the watershed having rights. The concept of watershed rights is that a watershed has rights similar to how a person has individual rights – apparently which can be protected by the courts	Although the watersheds in Hawaii do not have "rights" per se, DoFAW is required by HRS § 183-1.5(4) to "*devise ways and means of protecting, extending, increasing, and utilizing the forests and forest reserves, more particularly for protecting and developing the springs, streams, and sources of water supply to increase and make that water supply available for use*". For more information on the DoFAW watershed program, please contact them at 586-0166.

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 Lānaʻi, Maui, Molokaʻi, Kauaʻi, Hawaiʻi 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