THE CITY OF SAN DIEGO

M E M O R A N D U M

DATE: September 20, 2013

TO: Honorable David Alvarez, Chair
Natural Resources & Culture Committee

FROM: Ann Sasaki, Interim Director of Public Utilities

SUBJECT: Public Utilities Department responses to the Water Policy Implementation Task Force Final Report

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Since the inception of the Water Policy Implementation Task Force, professional staff from the Public Utilities Department attended nearly every Task Force and Working Group meeting. The Department was pleased to assist the Task Force with expertise on water issues, including historical perspective and context, political realities of water supply, and high-level financial analysis and impact. Staff also provided presentations on current initiatives as well as a variety of other policy areas.

As the Department is responsible for providing water supply and operations to 1.3 million customers as well as business and industry, we appreciate the opportunity to provide the City Council's Natural Resources & Culture Committee with responses to each of the Water Policy Implementation Task Force's recommendations. Generally speaking the Department agreed with the majority of the recommendations, but some recommendations we cannot support. They have some potential implications that may not be in the best interest of the financial health of the Department, provide adequate consideration of our customers' water rates, or may not be able to implement.

Below are the Department's responses to the Water Policy Implementation Task Force goals and recommendations.

Water Policy Implementation Task Force Goals

Goal #1, Reduction in Total Imported Water

Based on anticipated delivery of approximately 200,000 acre feet of imported water from the County Water Authority in 2015, reduce the volume of purchases of water originating outside the County 12% by 2025 and 35% by 2035.

Department Response:
Partially Agree. To achieve the 12% by 2025, would require full implementation of Phase 1 potable reuse at North City[1] (16,800 acre feet per year (AFY), groundwater (4,400 AFY) and other local supply projects currently under consideration and enhanced water conservation (47,150 AFY).
Estimated cost: Potable Reuse, Phase I - $369 million; Groundwater $38.1 million. Local Supply Projects including conservation –Cost unknown

To achieve the 35% by 2035, will require completion of non-potable infill projects, groundwater (4,400 AFY) and full implementation of potable reuse as identified in the Recycled Water Study.
Estimated cost: Groundwater: $227 million; Conservation: TBD; Potable Reuse: $2 billion[2]

Goal #2, Increase in Total Recycled Water
Increase production of recycled water to 10% of total treated water delivered within the City by 2025 and 35% of total by 2035. Adjust these goals upward if potable reuse is increased at a greater rate than currently anticipated.

Department Response:
Partially Agree. The goal is achievable assuming funding and full implementation of three phases of potable reuse totaling 89,600 AFY and continued connection of non-potable recycled water infill customers[1].
Estimated cost: $2 billion[1] for three Phases of potable reuse.

Goal #3, Recycling Storm Water
Establish a program for treatment and recycling of storm water, based on a collaborative study between the Public Utilities Department and the Transportation & Storm Water Department, with a goal of commencing implementation of such a program by 2020.

Department Response:
Disagree. Recommend the goal be revised to "conduct a feasibility study" for the treatment of *additional* storm water through a collaboration between Public Utilities and Transportation & Storm Water Department.

Goal #4, Mitigating Environmental Consequences
Consider the tradeoffs between expanding multiple benefits and potential environmental consequences in water management.

Department Response:
No response

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[1] *Recycled Water Study, July 2012*

[2] *Additional staff costs not included in any of the cost estimates.*

Goal #5, Reduction in Use
The Task Force acknowledges the substantial progress the residents and businesses of San Diego have made in meeting the state mandated goal of reducing per capita water consumption by 20 percent by 2020. With implementation of the recommendations made by the Task Force, including the proposed Potable Reuse Project, the Task Force believes that it is possible to expand this goal and achieve a 35 percent reduction in calculated per capita water usage by the year 2035.

Department Response:
Partially agree. The Department is focused on achieving the 20% reduction by 2020 as required by State law. This proposed goal is: a) inconsistent with State (DWR) water planning methodology and urban water management planning; b) in order to achieve this reduction it assumes, by 2035, extensive groundwater development of 16,400 AF per year, water conservation of 61,300 AF per year, and potable reuse of 89,600 per year [3] [By comparison, in CY 2012 water conservation savings was 35,000 AFY and groundwater was 500 AFY]; c) recycled water must be counted in per capita calculation to remain consistent with State water planning; d) inconsistent water conservation messaging with agencies in the region and will likely create confusion for our customers. *Estimated cost: Groundwater: $227 million; Conservation: TBD; Potable Reuse: $2 billion*[4]

Water Policy Implementation Task Force Recommendations

CONSERVATION
Recommendation C1, Permanent Voluntary Drought Standard
Modify Emergency Water Regulations as required to update and clarify text in the document, to make the current Level 1 Drought Alert a permanent voluntary standard. Examples of modifications may include, but are not limited to:

1. Modifying and renaming the Level 1 Drought Alert to a permanent voluntary standard.
2. Modifying the other stages of Drought Alert as required to clarify standards.
3. Clarifying standards for non-potable water use during Drought Alerts.
4. Include an alternative compliance application process for all drought alert levels for large water users such as parks, cemeteries, and golf courses.

Department Response:
1 and 2 – Disagree. The entire San Diego region worked cooperatively on defining the drought restrictions for consistency and to avoid confusion. For the City to deviate from this plan and promote new standards would be confusing, and would send a negative message to businesses expanding or relocating to the city that this is a lack of a reliable water supply.
3 – Agree. Already stated in the Muni Code but staff will look into clarifying it.
4 – Agree. Already in process of developing.

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[3] *Data from the 2012 Long-Range Water Resources Plan*
Water Purification Demonstration Project Report, April 2013

[4] *Additional staff costs not included in any of the cost estimates.*

Recommendation C2, Water Conservation Code Modification
To strengthen the Code and to encourage more water-conserving (e.g., WaterSmart) landscapes in new construction, modify the Water Conservation Code requirement for new landscape construction as follows:

1. Reduce the Evapotranspiration Factor from 0.7 to 0.6.
2. Modify the Plant Factors from "ranges" to specific numbers as follows:
    a. Very Low Water Use Plantings 0.1
    b. Low Water Use Plantings 0.3
    c. Moderate Water Use Plantings 0.5
    d. High Water Use Plantings 0.8.

Special Use Landscape Areas including parks, edible gardens, and special botanical areas should retain 1.0 ET adjustment factor.

Department Response:
Neutral. Development Services Department oversees the Landscape Ordinance.

Recommendation C3, Water Budget Based Billing
Implement a water budget based billing program for commercial landscape meters. This includes the utilization of Geographic Information Systems (GIS) to quantify irrigated areas and modifying billing systems to charge commercial customers based on a water budget for the size of their irrigated landscape area.

Department Response:
Partially Agree. While feasible, the Department will assess the cost for implementation, administration and appropriate customer outreach.

Recommendation C4, Water Conservation Ethic
Implement a permanent and ongoing water conservation and outreach program. City leaders, elected officials and others should take on the responsibility of helping to create a city-wide water conservation ethic. The City should substantially increase funding for public outreach and education on water conservation, beginning with the next municipal budget cycle, in order to promote conservation on an ongoing basis and not only during drought periods. This is a key factor in creating a citywide water conservation ethic.

Provide the City Council Natural Resources and Culture Committee (NR&C) with quarterly updates on conservation efforts and outcomes, much like the status reports regarding water recycling efforts and the Water Purification Demonstration Project.

Examine the education and outreach tactics used in countries such as Australia to achieve their massive reduction in water use.

Coordinate regional water consumer education campaigns using the latest research from social psychology that shows what messaging is most effective in influencing thoughtful water use behavior. Water agencies can also work with the private sector to develop public-private partnerships that can help reduce consumer demand.

Department Response:
Partially Agree. The Department intends to continue conservation programs, messaging and community presence. In a memorandum to Councilmember David Alvarez dated September 6, 2013, the department recommended an annual budget increase of$250,000 for outreach, exclusive of the current outreach contract.

Examining tactics by other agencies may require additional staffing to complete or may require the hiring of a consultant.

Current City efforts include outreach via social media and private-public partnerships like the Conservation Action Committee (CAC) and California Landscape Contractors Association (CLCA). It does not include water bills that show customer consumption compared to similar customers (social conformance.) The City's AMI effort includes developing a web portal that will have this feature. Regional campaigns are the responsibility of a regional agency such as the San Diego County Water Authority (CWA). The City can and will provide input in the regional process, but city ratepayer funds can only be used for programs that benefit the city's ratepayers.

Recommendation C5, Sustainable Development Incentives
Implement the Sustainable Development Incentive Program outlined in the most recent update of Council Policy 600-27. In addition, implement a voluntary (up to 100%) water offset program utilizing significant development incentives.

Department Response:
Neutral. Development Services Department is the lead for this recommendation.

Recommendation C6, Water Conservation Products
In coordination with the San Diego County Water Authority, investigate implementing an outreach and education program that concentrates on home improvement stores and nurseries in the region. Evaluate programs for labeling water conserving products, especially in the landscape industry, such as labeling drought tolerant trees, shrubs and groundcovers.

Department Response:
Disagree. CWA currently has no labeling plans. The Environmental Protection Agency's (EPA) Watersense is starting to label irrigation products. Based on the Metropolitan Water District of Southern California's (MWD) experience in plant labeling, it was labor intensive, and nurseries did not want to incur additional costs to label individual plant pots.

Recommendation C7, Cash for Grass Program
Expand "Cash for Grass" programs to effect real change in the landscape, with a goal of converting 1,000 residential and 200 commercial sites per year to water conserving landscapes.

Department Response:
Disagree. The City has not reached this participation level in over two years of operation with current staffing. It will also require millions of dollars in funding rebates, plus additional staff.
Estimated cost: Close to $5 million per year in rebate funds alone, not including additional staff costs.

Recommendation C8, Conservation Equipment Rebates
Investigate expanding rebate programs for indoor or outdoor water-conserving fixtures and equipment that would be cost effective and successful.

Department Response:
Partially Agree. MWD is bringing back toilet rebates. There are o the SoCal Water Smart program.

Recommendation C9, Retrofit at Resale
Modify Municipal Code Section 147.04 to require retrofit at resale of all plumbing fixtures to water conserving fixtures, including replacing toilets that utilize greater than 1.6 gallons per flush.

Department Response:
Agree. The Department is currently scheduled to present a change in code to the Natural Resources & Culture Committee.

Recommendation C10, Water Use Monitoring
Pursue new technology that provides real-time feedback tracking of indoor and outdoor water consumption for both residential and commercial property owners. Study technologies, and engage in a pilot study if appropriate (at the cost of the vendor), to demonstrate the success of products and methodologies, with the intent of promoting more widespread implementation of this technology.

Department Response:
Partially Agree. The Department will evaluate the feasibility of such technology.

Recommendation C11, Tree Benefits
Promote, support and educate the public regarding the importance of preserving and utilizing low and moderate water use trees, shrubs and groundcover species to maximize environmental and social benefits such as: shade, walkability, stormwater management, erosion control, reduction of urban heat island effects, oxygen production, carbon storage and other public benefits.

Department Response:
Neutral

WATER RECYCLING and REUSE

Recommendation WR1, Stormwater Infiltration

Direct the Transportation and Stormwater Department and the Public Utilities Department to investigate opportunities for strategic infiltration of stormwater in areas where stormwater could replenish existing groundwater basins. This provides multiple benefits:

1. Infiltration may be the most cost-effective manner to address more stringent bacteria total maximum daily loads.
2. Stormwater infiltration could increase the yield of existing groundwater basins and reduce salinity.
3. Stormwater infiltration would benefit the environment by reducing run-off.

Department Response:
Defer to Transportation and Stormwater Department for response.

Recommendation WR2, Groundwater Basins

Direct the Public Utilities Department to increase the focus on characterizing groundwater basins such as the San Pasqual Basin, San Diego Formation and San Diego River System that could be potential local water supplies.

Department Response:
Agree. The Department has been actively working (drilling monitoring wells, performing characterization studies and pilot work) in the identified basins since 2005.

Recommendation WR3, Pilot Study Funding

Direct the Transportation and Stormwater Department and the Public Utilities Department to cooperate in investigating potential grant funding for a feasibility and pilot study, such as a multi-beneficial joint project that can be included in the Integrated Regional Water Management Plan for possible Department of Water Resources funding.

Department Response:
Defer to Transportation and Stormwater Department for response.

Recommendation WR4, LID Demonstration Project

Explore opportunities to develop a low impact development (LID) "Demonstration Project" in an area with high public traffic and access, such as Balboa Park, that would reduce run-off and also serve to educate the public. Alternatively, consider pursuing a "green streets" project, like the one in Los Angeles which produces multiple benefits and serves as a demonstration site as well.

Department Response:
Defer to Transportation and Stormwater, Development Services and Park & Recreation Departments for response.

Recommendation WR5, Stormwater Management
Direct the Transportation and Stormwater Department to investigate new programs that achieve the following goals:

1. Funding city-wide stormwater management programs to meet existing and new Regional Water Quality Control Board requirements through the use of a new fee-based program that can be directly correlated to Equivalent Stormwater Units assigned to each individual property.
2. Providing incentives, such as a fee reduction, to property owners of new and existing development to maximize the use of low impact development methodologies such as pervious pavement, grass rooftops, rain gardens and trees to minimize stormwater run-off.

Department Response:
Defer to Transportation and Stormwater Department for response.

Recommendation WR6, Non-Potable Reuse Expansion
Encourage "cost-effective" expansion of non-potable reuse by in-fill within the backbone of the existing system only. ("Cost effective" meaning the City can recover the cost of service.)

Department Response:
Agree

Recommendation WR7, Recycled Water Rates
Since existing recycled water rates were set at a discounted rate in 2001 and no provision was made for increasing them, and no adjustment to the discounted rate has been made since 2001, revisit the rate structure for users of non-potable recycled water and adjust the rate to recover the cost of service or at least index rates to keep up with increases in other water rates.

Department Response:
Agree. The Department is in the process of reviewing recycled water rates.

Recommendation WR8, Recycled Water Study
Move forward with recommended next steps in the 2012 Recycled Water Study.

Department Response:
Agree. The Department presented a 90-day update to the Natural Resources and Culture Committee on July 31, 2013.

Recommendation WR9, Water Purification Project
Discuss with the County Water Authority its participation in Phase 2 and Phase 3 of the Water Purification Project as part of a potential future regional water supply, as the advanced treated water from the Water Purification Project will be stored in San Vicente Reservoir, which can serve the region.

Department Response:
Agree. We recommend all CWA participating agencies be included in the discussions.

Recommendation WR10, Potable Reuse Regulations
Support legislation to streamline the regulatory process for indirect and direct potable reuse.

Department Response:
Agree.

Recommendation WR11:
Become an active participant in the Coalition for Direct Potable Reuse.

Department Response:
Agree. The City Council directed the Department to join the Direct Potable Reuse Initiative led by the WateReuse Association. The Department joined this initiative in FY13.

Recommendation WR12, Reuse Technology Test Site
Offer the Water Purification Demonstration Plant as a site for testing technologies and methodologies to demonstrate the ability to provide real-time monitoring and implement fail-safe process methodology for treating wastewater to potable water quality.

Department Response:
Agree. The Department will focus on cost-recoverable relationships.

Recommendation WR13, No Permit for Basic Systems
Maintain the current "no permit" policy for Closed Clothes Washer Systems.

Department Response:
Defer to Development Services Department for response.

Recommendation WR14, Expansion of "No-Permit" Standard
Expand the "no permit" requirement to systems used for landscape irrigation that discharge less than 250 gallons a day and consist primarily of systems taking discharge water from washing machines and wash basins and do not include a potable water connection or the use of a pump, or affect other plumbing, electrical, mechanical or building components. Emphasize the use of Best Management Practices to prevent runoff.

Department Response:
Council approval has already occurred.

Recommendation WR15, Permitting
Streamline the permitting process for "simple" and "complex systems" that take discharge water from other elements in a residence such as bathtubs and showers that would require more extensive in-house plumbing, electrical or mechanical modifications or use of a pump.

Department Response:
Council approval has already occurred.

Recommendation WR16, Simple Systems Information
Direct the Public Utilities Department, in consultation with the Development Services Department, to develop and include information on simple graywater systems in their public outreach materials and social media outreach, including emphasis on use of Best Management Practices to prevent runoff.

Department Response:
Agree. In coordination with Development Services, the Department has developed an outreach plan.

Recommendation WR17, Complex Systems Oversight
Continue oversight of "complex systems" in the purview of the Development Services Department in order to ensure that Plumbing and Building Code requirements are met.

Department Response:
Defer to Development Services Department for response.

RATE STRUCTURE
Recommendation RS1, Tiered Rate Structure
To encourage conservation, retain a tiered rate structure, but with greater cost difference between tiers. For example, some water suppliers that use a three-tiered rate structure charge thirty percent (30%) more for Tier 2 than for Tier 1, and forty percent (40%) more for Tier 3 than for Tier 2.

Department Response:
Partially Agree. The Department has recommended, and Council has authorized notification to our customers, a four-tier rate structure that is conservation driven and consistent with cost of service principals.

Recommendation RS2, Cost of Service Study
Use the Cost of Service Study being performed for the City by Black and Veatch, to determine how much the City should charge for each tier of water service. (Note: Black and Veatch cautions, however, that the difference between tiers should not be unduly punitive, such as tiers that are 10 or 15 times higher than the base rate.)

Department Response:
Agree.

Recommendation RS3, Water-Based Budget for Irrigation
Continue with studies of a water-based budget for the City's approximately 4,400 irrigation-only accounts. Depending on the results of those studies, include this concept when the City next moves forward with a Proposition 218 notice seeking to increase rates.

Department Response:
Partially Agree. While feasible, the Department will assess the cost for implementation, administration and appropriate customer outreach.

INNOVATION & TECHNOLOGY

Recommendation IT1, Water Loss Reduction

Improve the quality of the data used to establish water loss performance indicators, such as:

1. Evaluating accuracy in the determination of the number of service connections and length of water mains.
2. Evaluating the potential for errors associated with determination of water input volumes.
3. Introducing a program to address unauthorized consumption.
4. Introducing a methodology to determine the magnitude for meter under-registration.
5. Maintaining separate statistics for leaks and for water used in fire suppression.
6. Benchmarking real versus apparent losses.
7. Calibrating the City's current model.
8. Evaluating pressure reduction through rezoning.

Department Response:

Partially Agree. The Department is currently in compliance with BMP 1.2-Water Loss Control. The Department performs and submits an annual Standard Water Audit and Water Balance using the AWWA Water Loss software. BMP 1.2 has specific requirements to develop, validate, document and track various record-keeping and data components (such as leak repair times and volumes, real and apparent losses/etc). Over the next five-year period, agencies will be tasked with demonstrating progress in water loss control performance as measured by AWWA software real loss performance indicators. The BMP 1.2 process will address these recommendations.

Recommendation IT2, Water Pressure Assessment

Conduct the City's own assessment of potential pressure reduction throughout each pressure zone, if the City has not already done so, by such means as:

1. Desktop assessment of existing topographic and water supply conditions, including customer base requirements.
2. Evaluation and validation of network performance through hydraulic modeling.
3. Identification and investigation of potential rezoning opportunities to reduce energy requirements.

Department Response:

Partially Agree. The Department currently performs pressure zone assessments in the following manners:

1. Current Department Water Master Planning efforts assess zones via hydraulic studies to identify zones that can be merged, re-zoned or created for optimal pressure. The Department's Water Modeling Section prepares model calibrated studies that identify demands, low pressure areas, and high pressure areas to assist in operations and planning efforts. In addition, the Department's 10% Design Section, during development of detailed planning studies, identifies areas that need to be rezoned.
2. The Department can further build upon these efforts by preparing individual zone by zone studies that will evaluate and balance pressure reduction rezoning with water quality, demand and pressure requirements (customer and fire flows), infrastructure requirements and O&M costs/savings.

Recommendation IT3, Assisting New Technologies
Investigate the possibility of using the Water Purification Project demonstration site or providing services, as appropriate, for local water treatment technology manufacturers and/or Blue Tech industries that need (or desire) to do field testing of new products.

Department Response:
Agree. The Department will focus on cost recoverable relationships.

Recommendation IT4, Optimization Study
Include in any planned optimization study not only pumped storage but also development of solar energy at City-owned sites and the use of in-line hydroelectric (micro turbines) in place of pressure reducing valves at appropriate locations in the distribution system, to reduce imported energy consumption by the City and create overall long term energy savings.

Department Response:
Agree.

Recommendation IT5, Dynamic Optimization Programs
As part of the City's Energy Optimization Study, evaluate the costs and benefits of dynamic optimization programs that provide water utilities an opportunity to use behind the meter dynamic real-time SMART Grid technology to increase efficiency and flexibility to better manage their own energy use. Considering the complexity of the City's treatment and distribution system, at the minimum, the dynamic optimization programs evaluated should be able to handle several hundred pumps, control-valves, and demand zones and save energy costs, in at least five main ways, by:

1. Time-of-use load shifting where the pumping operations are moved from daytime (high energy tariff) to night-time (low energy tariff);
2. Peak charges avoidance where the software will naturally choose to avoid running pumps during high periods when peak charges occur;
3. Selecting lowest cost sources of water where the software queries the lowest cost of production of water and adjusts the water source based on the information;
4. Achievement of shortest path through the trunk distribution network by constantly reading and working to the lowest head loss;
5. Pump efficiency improvement because the software holds the actual pump operating curve which is calibrated from flow and pressure measurements read from telemetry, and from the monthly energy bill. The software selects the combination of pump settings which delivers the overall lowest operating cost and highest possible efficiency.

Department Response:
Agree. In preparation for real time electricity pricing, which is not expected to be implemented by the California Public Utilities Commission until the 2016 or 2019 three-year rate case cycles, the Department has almost all of our major accounts on the Critical Peak SDG&E rate option. This allows SDG&E to give us a day-ahead notice 19 times a year. The rates will go from approximately 15 cents per KWH to $1.09 for the hours from 11:00 AM to 6:00PM. In return we receive lower year-round rates. While this program

has generally saved the department money, it has encouraged the operation staff to determine what operations or equipment can be turned down or delayed for financial reasons.

All of the Department's Water Treatment Plants and laboratories have completed energy audits. They have performed preliminary analysis of over 100 suggestions for energy conservation and demand side management. Many suggestions have been implemented, others are in progress and others need additional study. HVAC re-commissioning studies that have been successful on the wastewater South Bay Water Reclamation Plant are scheduled to begin at the Miramar Water Treatment Plant this fall.

Pre-packaged hardware and software water distribution system energy management systems were investigated as an add on modification to the Water Branch's Supervisory Control and Data Acquisition (SCADA) System. As a result the Department is working with its SCADA system software supplier to design a custom energy use simulation system. Eventually this system is expected to be able to provide control of the system for energy conservation, energy demand savings, pumping optimization based on pump curves and current performance and water source savings.

The Department has a Condition Assessment Section that is using a free SDG&E provided pump testing service to evaluate the condition of water pumps, to recommend possible improvements and to identify possible SDG&E incentives to make those improvements.

Recommendation IT6, Energy and Water Supply
Take the "embedded energy" of any water supply into account in any future City water supply decisions. Since water and energy are intrinsically linked, both limited resources must be managed efficiently.

Department Response:
Agree.

Recommendation IT7, On-Site Treatment Guidelines
Using an open stakeholder process including representatives of the Public Utilities, Parks and Recreation, and Development Services departments, the City Attorney's office, private developers and others, develop a set of guidelines for on-site or decentralized wastewater treatment and reuse (including proposals for sewer mining operations) which detail the issues and criteria (including the financial viability of a proposed project) that proposals must meet or address in order for the City to participate in or cooperate with such projects.

Department Response:
Partially Agree. The Department will conduct an assessment of on-site wastewater treatment and reuse which will address the issues and criteria.

Recommendation IT8, Value of Wastewater and Reclaimed Water
Consider the value of both wastewater (when providing water for potential sewer mining operations) and reclaimed water (when projects provide water to city owned properties) and

increased costs or avoided costs that the City would incur or realize, and how the proposed project could impact the City's plans for potable reuse when setting a charge for wastewater supply and/or purchase price of recycled product water provided by the project. Establish standby fees and reserved capacity charges for such projects, so that developers can take such fees into account in determining whether a proposed project makes economic sense.

Consider any avoided costs, such as reducing the City's need to expand, repair or replace its sewer collection system, providing system redundancy for disaster preparedness, or other factors that can be clearly demonstrated by the developer and credit a portion of such benefits back to projects through a reduction in or credit to the standby fees, or reserved capacity charges identified above.

Cooperate with private developers, non-profit groups, or others to help facilitate development of viable on-site waste water treatment projects that meet the criteria developed through the processes detailed above. Such cooperation could include demonstration projects paid at developer/advocate expense to further identify issues, equipment, methods of operation (including sludge disposal) or procedures that could be incorporated into larger scale operations.

Department Response:
Partially Agree - Determining the cost allocation framework was one of the follow-on tasks described in the Department's 90-day Update to NR&C on July 31, 2013. Alternatives will be evaluated with stakeholder input to determine an appropriate framework. Public Utilities will conduct an assessment of on-site wastewater treatment and reuse which will address the issues and criteria.

Recommendation IT10, AMI Funding
Pursue grant funding to offset some of the costs for an entire system Advanced Metering Infrastructure retrofit.

Department Response:
Agree.

Recommendation IT11, Water Meter Retrofitting
Retrofit all of the remaining 265,000 water meters with AMI technology within 10 years.

Department Response:
Partially Agree. The Department will continue to assess the economic feasibility of converting the entire system to AMI technology.

Recommendation IT12, Retrofit Cost-Sharing
Consider cost sharing with single family customers who would like to retrofit their water meters with AMI technology on a more expeditious basis.

Department Response:
Partially Agree. The Department will assess the feasibly of partnering with individual homeowners who may convert to AMI.