ECEIVE

commentletters

From:

Hal T. Nelson, Ph.D. <hal.nelson@res-intel.com>

Sent:

Thursday, January 12, 2017 11:58 AM

To:

commentletters

Subject:

FW: NOTICE OF PUBLIC WORKSHOP - URBAN WATER CONSERVATION -- comment

letter attached

Attachments:

Residential Water Intelligence Revenue Optimizer May 2016.pdf

Follow Up Flag:

Follow up

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Dear Ms Townsend,

Urban water efficiency policies and programs need to begin to utilize the advanced analytics available to other sectors. These analytics can increase water agency revenues through advanced leak detection and reduce customer bill impacts through mass-scale water budgeting and micro-targeted marketing of conservation measures.

Residential Energy and Water Intelligence is a software firm dedicated to improving urban water efficiency. We use GIS remote sensing and advanced statistics to create water budgets for each residence at the county and agency service territory scale.

We are currently working on a behavioral pilot with two energy utilities and three water agencies in Southern California to reduce resource use by 10% or more. We have benchmarked the energy consumption of over 2,400 apartment complexes with ~70,000 units in a competition for them to improve the resource efficiency.

This project is easily replicable in other jurisdictions in the state, and can the analytics can identify indoor and outdoor water wasters to adopt water conservation measures whose levelized cost is lower than the avoided cost of wholesale water.

California's water sector cannot afford to neglect these advanced analytics any longer. Thank you for the opportunity to comment on these proceedings. Best regards,

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From: lyris@swrcb18.waterboards.ca.gov [mailto:lyris@swrcb18.waterboards.ca.gov]

Sent: Friday, January 06, 2017 11:18 AM

To: Hal T. Nelson Ph.D.

Subject: NOTICE OF PUBLIC WORKSHOP - URBAN WATER CONSERVATION

CONFIDENTIAL DRAFT



Residential Energy & Water Intelligence Revenue Optimizer Levels of Service



	Data Only	Integrated Data + Map + Outreach
Annual Price per Account*	TBD	TBD
Integration of Customer Information Database with Real Estate Data	/	~
Water Budget Estimates at the Customer Account Level	✓	✓
Residential and Non-Residential Customers	/	•
Non-Revenue Water Assessment	. 🗸	✓
Meter-Made [©] Periodic Test Optimization Tool	/	✓
Demand-Side Leak Detection Algorithm	✓	√
Remote Sensing of Real Estate Attributes	+	
Predictive Modeling for Program Participation		
Geo-Targeted Distribution System Upgrade Deferral Analysis	+	•
Integration with Existing GIS Platform	×	+
Customer Relations Management System	*	.
Budget-Based Rate Analysis	×	+
3-D Water Use Maps	*	+

^{*} Depending on the number of meters, a modest fixed-cost charge might be required.

➡ Indicates an option under this level of service