

UTILITIES ADVISORY COMMITTEE MEETING

Wednesday, October 14, 2015 at 5:30 p.m. Los Osos Community Services District Office 2122 9th Street, Suite 102, Los Osos, CA

COMMITTEE MEMBERS
Louis Tornatzky, Chairperson
Jon-Erik Storm, Vice Chairperson
Noah Evans, Member
Jan Harper, Member
Lee Harry, Member

Leonard Moothart, Member Ron Munds, Member STAFF
Kathy Kivley, General Manager
Margaret Falkner, Utility Compliance Technician III
Ann Kudart, Administrative/Accounting Assistant III

AGENDA

- 1. Opening 5:30 p.m.
 - A. Call to Order
 - B. Flag Salute
 - C. Roll Call
- 2. Approval of UAC Meeting Minutes of July 8, 2015

Presented By: Administrative/Accounting Technician Kudart

3. Review of Board Item Regarding Authorization to Surplus Utility Vehicle

Presented By: Utility Compliance Technician Falkner

- 4. Utilities Department Updates
 - a. Update of Water Conservation Measures
 - b. Update of Title 2, Section 2.06 Water Conservation and Water Shortage Contingency
 - c. Update of 8th Street Upper Aquifer Well Progress
 - d. Update of 16th Street Water Tanks Maintenance
- 5. Discussion of Grey Water Recycling and Potential Nexus Collaboration

Presented By: Chairperson Tornatzky

6. Recommendations to Board Regarding Items for Discussion in Calendar Year 2016

Presented By: Chairperson Tornatzky and Vice Chairperson Storm

- 7. Public Comments on Items NOT on this Agenda: At this time, the public may comment on items not on this agenda. Each commenter is limited to 3 minutes and shall address the Chairperson.
- 8. Schedule UAC Meeting UAC meetings are held quarterly and unless otherwise noted the next meeting will be held Wednesday, January 13, 2016.
- 9. Closing Comments by UAC Committee Members
- 10. Adjournment

ITEM 2

APPROVE UAC MINUTES OF JULY 8, 2015

Los Osos Community Services District DRAFT Minutes of the Utilities Advisory Committee Meeting July 8, 2015 at 5:30 p.m. at the District Office

AGENDA ITEM	DISCUSSION	FOLLOW-UP
1. Call to Order, Flag Salute and Roll Call	Chairperson Tornatzky called the meeting to order at 5:30 p.m. and Vice Chairperson Storm led the flag salute. Roll Call: Noah Evans, Committee Member – Absent Jan Harper, Committee Member – Present Lee Harry, Committee Member – Present Ron Munds, Committee Member – Present Leonard Moothart, Alternate Member – Arrived at 5:40 p.m. Jon-Erik Storm, Vice Chairperson – Present Louis Tornatzky, Chairperson – Present Staff: Kathy Kivley, General Manager Margaret Falkner, Utility Compliance Technician III Rob Miller, District Engineer Ann Kudart, Administrative/Accounting Assistant III Chairperson Tornatzky announced that Committee Member Floyd had resigned, that Alternate Member Moothart would complete Mr. Floyd's term, and that the Alternate Member position is now vacant.	FOLLOW-UP TO A CONTROL OF THE PROPERTY OF THE
2. Approval of UAC Meeting Minutes of April 22, 2015	Committee Member Harry moved to approve the minutes. The motion was seconded by Committee Member Harper. Public Comment: Richard Margetson spoke. The motion carried with the following roll call vote: Ayes: Harry, Harper, Munds Nays: None Abstain: None Absent: Evans, Moothart	Action: File approved minutes.
4e. Seawater Intrusion	Chairperson Tornatzky moved these items to be heard at this point in the meeting. District Engineer Miller reported on the Cleath-Harris Geologists technical memorandum based on the April 2015 water quality sampling at key wells which shows that seawater intrusion continues to advance in the lower aquifer. The report recommended not recalculating the rate of seawater intrusion at every sampling. The next monitoring will be performed in October 2015. Public Comment: Richard Margetson spoke. District Engineer Miller reported that the District approved the nitrate removal project and adopted the Mitigated Negative Declaration for the 8th Street Upper aquifer well, that the MND is through the 30-day challenge period and that he is preparing the application for a Coastal Development permit to drill the well for blending with hopes that a nitrate removal system will not be needed. Public Comment: Linde Owen spoke.	

AGENDA ITEM	DISCUSSION	FOLLOW-UP
3. Review Markups to District Water Conservation and Shortage Contingency Section 2.06	Utilities Compliance Technician Falkner reported on the changes made by the Board to Chapter 2.06 of Title 2 of the District Code and that she incorporated those changes into the spreadsheet. Committee Member Harry recommended changing "may" to "shall" under the prohibitions. General Manager Kivley reported that the Board wants voluntary compliance at this time and "shall" indicates enforcement. Committee Member Moothart recommended referencing adopted emergency rates. Public Comment: Linde Owen, Al Barrow, Richard Margetson spoke. Committee Member Munds reported that the State standard for low flush toilets is 1.28 gallons per flush, not 1.6 gallons. The Committee agreed with the recommended changes,	FOLLOW-UP STATE OF THE PROPERTY OF THE PROPER
4. Utilities Department Updates a. Utilities Department Report of May 2015 b. June 20, 2015 Tribune Article – Los Osos Water	recommended moving forward, and that the rates be tied in in order to go into effect as quickly as possible when necessary. Utilities Compliance Technician Falkner reported on the May 2015 Utilities Department Report submitted to the Board at their July meeting reporting on decrease in water production, consumption and revenues; her attendance at the Water Forum, discussed new utility billing payment portal; the Consumer Confidence Report; and; rainfall measures. Public Comment: Richard Margetson, Al Barrow spoke. Utilities Compliance Tech Falkner reported on The Tribune's June 22, 2015 article concerning the District's consumption reduction by	
d. 2014 Water Quality Report 5. Public Comments on	its water customers. Public Comment: Richard Margetson, Linde Owen, Al Barrow spoke. Utilities Compliance Tech Falkner discussed the Consumer Confidence Report for calendar year 2014 that was mailed to District water customers in June. Linde Owen commented on funding for water audits not public	
Items NOT on this Agenda 6. Schedule UAC Meeting	relations; funding for a public water tank; and the cell tower proposal. Richard Margetson commented on Golden State's recent presentation and the issuance of will serve letters. The next UAC meeting will be held on October 14, 2015 unless	
7. Closing Comments by UAC Committee Members 8. Adjournment	otherwise noted. Committee Member Harry commented on the seriousness of the drought situation. The meeting adjourned at 6:54 p.m.	

ITEM 3

REVIEW OF BOARD ITEM REGARDING AUTHORIZATION TO SURPLUS UTILITY VEHICLE



October 5, 2015

TO:

LOCSD Board of Directors

FROM:

Margaret Falkner, Utility Compliance Technician III

SUBJECT:

Agenda Item ### - 11/5/2015 Board Meeting

Adopt a Resolution Declaring Utility Vehicle Surplus to District

Needs and Approve Sale of Vehicle

Vice President Marshall E. Ochvlski

R. Michael Wright

President

<u>DESCRIPTION</u>

Directors

Louis G. Tornatzky

Charles L. Cesena Jon-Erik G. Storm ready to be added to the vehicle surplus.

General Manager

STAFF RECOMMENDATION

Kathy A. Kivley

This item will be approved along with the Consent Calendar unless it is pulled by a Director for separate consideration. If so, Staff recommends that the Board adopt the following motion:

The Utility Vehicle, 2001 Ford F-150 (Unit F), has served its purpose and is now

District Accountant Michael L. Doyel

Motion: I move that the Board adopt Resolution 2015-27 declaring 2001 Ford F-150 Utility Vehicle surplus to District needs and approving the sale of the vehicle.

Fire Chief Robert Lewin

DISCUSSION

Battalion Chief Phill Veneris The crew listed the sampling vehicle as needed for replacement in early 2015. They are requesting authorization to sell this vehicle. In order to do so this vehicle needs to be declared as surplus to District needs. The Utility Vehicle, 2001 Ford F-150 (Unit F) is ready to be added to vehicle surplus. This was the sampling vehicle for the Utilities Department for many years.

In January 2015 at the Utilities Advisory Committee, staff presented the Mid-Year Budget and requested this vehicle be replaced. The committee recommended the Board accept the staff changes to the Mid-year budget.

At the February 5, 2015 Board meeting, the mid-year adjustments were approved so this vehicle could be replaced.

Mailing Address: P.O. Box 6064

Los Osos, CA 93412

Offices:

2122 9th Street, Suite 102 Los Osos, CA 93402

Phone: 805/528-9370 FAX: 805/528-9377

www.losososcsd.org

FINANCIAL IMPACT

This vehicle will be offered for sale. The financial impact will be an increase in revenue. Please note that proceeds from this vehicle will be recorded in the Water Fund 500, general ledger account 4935, Non-Capital Sales. At year-end, proceeds from the sale of this vehicle will be transferred into the vehicle replacement reserve, general ledger account 9504, Water Fund 500 as stated in our Reserves Policy.

D	ate	e: November 5, 2015
A	ge	nda Item:
()	Approved
()	Denied
()	Continued to

RESOLUTION NO. 2015-27

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE LOS OSOS COMMUNITY SERVICES DISTRICT DECLARING UTILITY VEHICLE SURPLUS TO DISTRICT NEEDS

WHEREAS, certain vehicle described as 2001 Ford F-150 XL is surplus to District needs; and

The equipment described as 2001 Ford F-150 XL is surplus to District needs.

1.

General Manager and Secretary to the Board

WHEREAS, the Board desires to dispose of surplus vehicle in as efficient and cost effective manner as possible

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE LOS OSOS COMMUNITY SERVICES DISTRICT DOES HEREBY RESOLVE, DECLARE, AND DETERMINE THAT:

2. The Board of Director	s directs start to dispose of the surplus vehicle by sale.
Upon motion of Director and on the following roll call vote, to w	rit:
ABOLIT:	
The foregoing resolution is hereby pas Services District this 5 th day of Novem	ssed, approved and adopted by the Board of Directors of the Los Osos Community liber, 2015.
	R. Michael Wright President, Board of Directors Los Osos Community Services District
ATTEST:	APPROVED AS TO FORM:
Kathy A. Kivley	Michael W. Seitz

District Legal Counsel

ITEM 4b

UTILITIES DEPARTMENT UPDATE

b. Update of Title 2, Section 2.06
Water Conservation and
Water Shortage Regulations

<u>Chapter 2.06</u> Water Conservation and Emergency Water Shortage Regulations (Adopted 1/4/01)

2.06.01 Water Conservation Stages

A. Refer to Water Shortage Contingency Plan in Appendix D (adopted September 4, 2014, modified by the Board of Directors by resolution based on climate and water quality triggers)

2.06.02: Water Conservation Stage Implementation

A. Refer to Water Shortage Contingency Plan in Appendix D (adopted September 4, 2014, modified by the Board of Directors by resolution based on climate and water quality triggers)



<u>ITEM 5</u>

DISCUSSION OF GREY WATER RECYCLING



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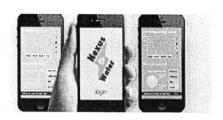
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The Home Water & Energy Recycler

The Nexus eWater App



Through the Nexus eWater smartphone application, users of the NEXtreater and NEXheater have easy access to their Nexus product usage information and much, much more.

>>read more...



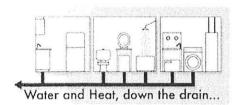
Los Angeles Times



THE SACRAMENTO BEE Treehuager

Union-Tribune.

The Power of Grey Water



Grey water is commonly viewed as a waste product, but at Nexus eWater, we see it as a vast, untapped resource.

Recycling grey water, and its embedded heat, has the potential to alleviate water and energy stress for all major stakeholders: developers, untilities, and homeowners.

How does it work?



Nexus has developed groundbreaking technology and is commercializing the world's first integrated water and heat recycling solution: the eWater Recycler.

Using patent-pending processes, the eWater Recycler offers an affordable, reliable solution to on-site domestic water recycling and wastewater heat recovery.

Download to learn more!

Download "THE RECYCLE-READY CITY White Paper

Home Water Recycling offers unprecedented water savings to homeowners by recycling 2 out of every 3 gallons of water used indoors.

In this White Paper, Nexus eWater shows how California's cities can cost-effectively incorporate Home Water Recycling into city planning

>>read more...

and build drought resilience that protects quality of life and economic growth.

>>read more...

Nexus News

- Nexus eWater featured on NPR-member station KQED-FM
- Nexus eWater and new San Diego development mentioned in The Wall Street Journal
- Nexus eWater featured in recent article by Environment & Energy Publishing!
- KB HOME MAKES WAVES WITH NEW SEA CLIFF COMMUNITY IN SAN DIEGO
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The Technology Behind Grey Water and Home Water Recycling

The Nexus eWater Recycler offers unprecedented home water and energy savings by reducing domestic water usage by 34%, slashing sewage flows by 70%, and producing hot water with 75% less energy than conventional technologies. The eWater Reycler performs two major functions:

- Recycling grey water to a quality which is safe to use on lawns and in toilets.
- Extracting the waste heat in grey water and concentrating it in a hot water tank.

The eWater Recycler has been designed as a combined system, but can be sold separately as either a Water-only or Energy-only recycler. It has a daily capacity up to 200 gallons.

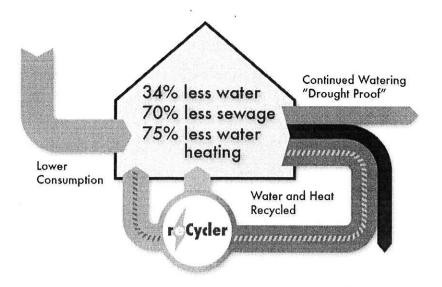
Home Water Recycling

Nexus' advanced home water recycling features a treatment system called the NEXtreater that produces clean water using an innovative 3-stage hybrid process (patent-pending) that combines floatation, filtration and disinfection in an appliance-like package. Unlike chemical or biological alternatives, the eWater Recycler is inexpensive to maintain, produces recycled water which is completely safe, and does not require the homeowner to change their water usage habits. Recycler features:

- Pre-filtration and solids removal
- A novel bubbling process to concentrate and separate contaminants
- Polishing and disinfection to make water 'near potable'

Home Energy Recycling

The Nexus reCycler produces hot water with 75% less grid energy than conventional means using a novel heat pump process (patentpending). This NEXheater is a system to recycle and reuse the energy embedded in the home's waste greywater. The NEXheater utilizes grey water as the heat source, and efficiently concentrates and transfers this heat to clean water stored in a storage tank and ready for use inside the house. This process is efficient enough to provide all the hot water needed by the entire household. Recycling the energy in greywater can be one of the most effective means of reducing the overall energy budget for the home.



Nexus News

- Nexus eWater featured on NPR-member station KQED-FM
- Nexus eWater and new San Diego development mentioned in The Wall Street Journal
- Nexus eWater featured in recent article by Environment & Energy Publishing!
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Home Water Recycling Products Which Also Generate Energy

Nexus eWater product development was inspired with a clear image and a simple goal for capturing and recycling grey water.

The image?

A long, hot shower — and the realization that the shower drain is the heart of the Water/Energy Nexus in every home.

The goal?

To capture and recycle both resources — water and energy — without losing them down the drain.

The home water recycling solution?

The eWater Recycler — The world's first complete athome solution for recycling water and energy for reuse in your home. The eWater Recycler separates out and creates reusable water — NEXwater — for watering lawns and flushing toilets, and reusable heat — NEXheat — that heats fresh hot water for your home.

Why eWater?

Because it is a valuable source of water that is chock full of energy.

The eWater Recycler is a solution for homeowners, builders and architects seeking ultra-low impact on energy and water resources.

It is a modular system that fits together for Combined, Water-only or Energy-only recycling, and sized for both Single Family and Multi-Family residences. The eWater Recycler modules are:

- NEXcollector: An in-ground tank where heat is extracted and water is readied for treatment (learn more...)
- NEXtreater: A home-scale water treatment solution that makes your water crystal clear again







(learn more...)

- NEXheater: An energy recycler and water heater (learn more...)
- NEXservoir: A storage and supply solution for cleaned NEXwater (learn more...)



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Executive Vice President, Co-Founder, Board Member I Craig Richmond



Mr. Richmond is one of the world's foremost business experts on grey-water market commercialization. He cofounded Nexus eWater in 2009 and served as CEO up through May 2014. Craig has direct and unique experience in international grey water technologies market development. Craig has led the efforts to successfully secure Australian government grants for the early stage funding of the Company. Prior to Nexus, he worked as the Director of the International Division, of Canberra, Australia based grey water pioneer, Perpetual Water. While at Perpetual Water, Craig led the team analyzing international market opportunities for the company's products.

Contact Craig

E:

craig@nexusewater.com

P: 1-877-486-9797, ext. 707

Nexus eWater Board of Directors

Board Chairman and Co-Founder I Ralph G. Petroff



Mr. Petroff is a globally known water industry CEO who has started a breakthrough water technology company, ADS Environmental, and grew it from the garage to worldwide market leader, with a successful exit. He also has 8 years of experience in the grey water industry, as a Board Member and Advisor. In 2005, he was selected by the National ICT Australia as an "entrepreneur in residence" in Sydney and supported dozens of companies, six of which received VC funding. Previously, he served as CEO of Time Domain Corporation growing that company to world-wide market leadership and is credited with starting the commercial ultra wideband wireless industry. He is a water technology expert and has testified to the US Congress on several occasions. Ralph is a graduate of Stanford University.

Contact Ralph

E:

ralph@nexusewater.com

P: 1-877-486-9797, ext. 705

Board Member I Thomas Reeves Hitchner



Tom is the retired general partner of QuestMark Partners, a Baltimore-based expansion-stage venture capital firm that he co-founded in 1998. Earlier he was an investment banker with Alex Brown where he began the Private Equity Group, responsible for selecting, analyzing, structuring, marketing and monitoring private equity placements, primarily for young technology firms. He has served on a number of early and expansion-stage company boards. Tom received his undergraduate degree from Harvard University in 1974.

Contact Tom

E:

thitchner@nexusewater.com

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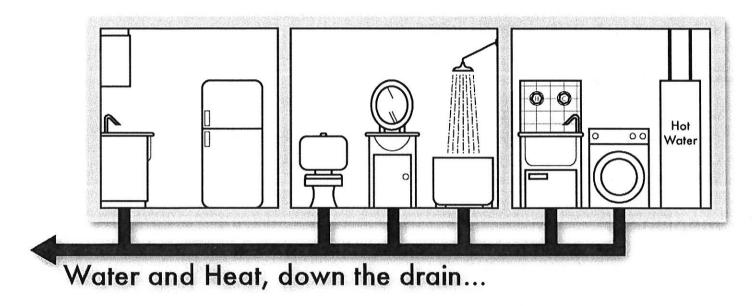
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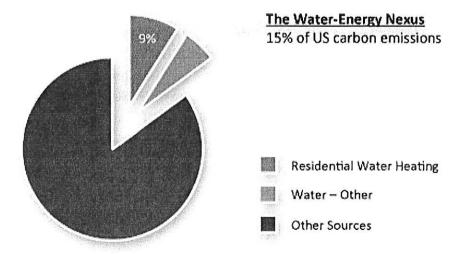


Your house today... where water and heat go down the drain.



Put simply, grey water is wastewater generated by washing people and their clothes. It accounts for nearly half of the water used in a typical home and, while relatively clean, it accounts for about 70% of domestic wastewater. Grey water has the additional benefit of being warm and represents valuable water and heat resources being flushed away.

The Power of Grey Water



There is growing recognition of the interrelationship between water and energy consumption. Currently, it is estimated that heating, treating and transporting water accounts for about 15% of the carbon footprint of the United States. More

surprisingly, residential water heating accounts for 58% of water-related carbon emissions – **9% of total US carbon emissions.** The problem is even worse in water-scarce regions such as California, where 20% of all electricity and gas consumption is linked to a water-related activity. Drought and population growth compound this burden — in the US it is estimated that, by 2013, 36 of the 50 US states will be experiencing severe water shortages – most of them in the evergrowing sunbelt. These problems have real impact on businesses, governments and families.

Unprecedented Water and Energy Savings

By developing the world's first water and heat recycler, Nexus eWater presents an unprecedented value proposition, solving challenging issuse for all water stakeholders: Public Utilities, Property Developers, and Homeowners.

Developers:

 Can achieve immediate payback for the eWater Recycler by building larger developments using less water, while saving money on infrastructure upgrades and tie-in fees

Public Utilities:

- · Will find a simpler and cheaper alternatives to capacity upgrades
- · Can reduce water demand during drought periods, meeting resource reduction targets
- Can reduce sewage flows by 70%
- · Will significantly reduce electricity peak demand

Homeowners:

- Can save thousands of dollars over the life of the product by significantly reducing water and energy use: typically \$100-200/month
- Will enjoy quieter and more reliable hot water than other 'green' heat-pump systems

Nexus News

NEXheater mentioned in ARCHITECT Magazine, the official magazine of the American Institute of Architects
 Nexus eWater featured on NPR-member station KQED-FM
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A residential greywater collection tank optimized for water recycling with the NEXtreater & energy recycling with NEXheater



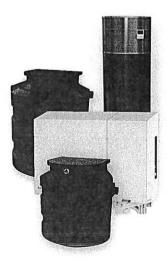
The eWater Collector is an integral component in a dual-plumbed home's system of outflow pipes that carry shower, hand sink and washing machine drain water from the house to the sewer.

It can be installed in-ground just outside the building envelope or even under the garage floor. Or it can be installed above-ground in the basement.

The eWater Collector is the staging area for water and energy resources to be recycled.

Features & Performance:

- In-ground or above-ground installation
- 75 gallon capacity
- Can be used as the surge tank in any dual-plumbed house
- Optimized for energy extraction by the NEXheater
- Optimized for water transfer to the NEXtreater
- HDPE material construction
- Passive overflow
- Dormant, flow-through design until activated by a treatment & reuse system





A home-scale solution to recover crystal clear water from your drain for storage and reuse

Have you ever wondered "Why do we pump pure water from distant mountain ranges just so we can flush our toilets or water our lawns?"

It is an obvious question and we can finally give you the obvious answer — We don't need to do it any longer.

With the NEXtreater, you can clean up water from showers, hand sinks and the clothes washer to reuse it a second time.

ISE.

Certified to NSF/ANSI 350

The NEXtreater is easy to use and maintain, and requires no chemicals, additives, or messy biological culture.

Together with the NEXcollector and the NEXservoir, NEXtreater delivers clean, pressurized water that meets national standards and local codes. Once cleaned, it can be used for lawn watering or flushing the toilets.

Features & Performance:

- 200 gallon daily capacity
- Treats shower, bath, hand sink, and washing machine drain water only
- Water can be reused as permitted by your local Code
- Automatically monitors and records recycling performance
- Remote data connection and monitoring service available
- Certified by NSF to NSF/ANSI Standard 350

