

This presentation premiered at WaterSmart Innovations

watersmartinnovations.com





Cash For Kitchens (C4K)

Water Education & Outreach
Program for Restaurants and
Commercial Kitchens

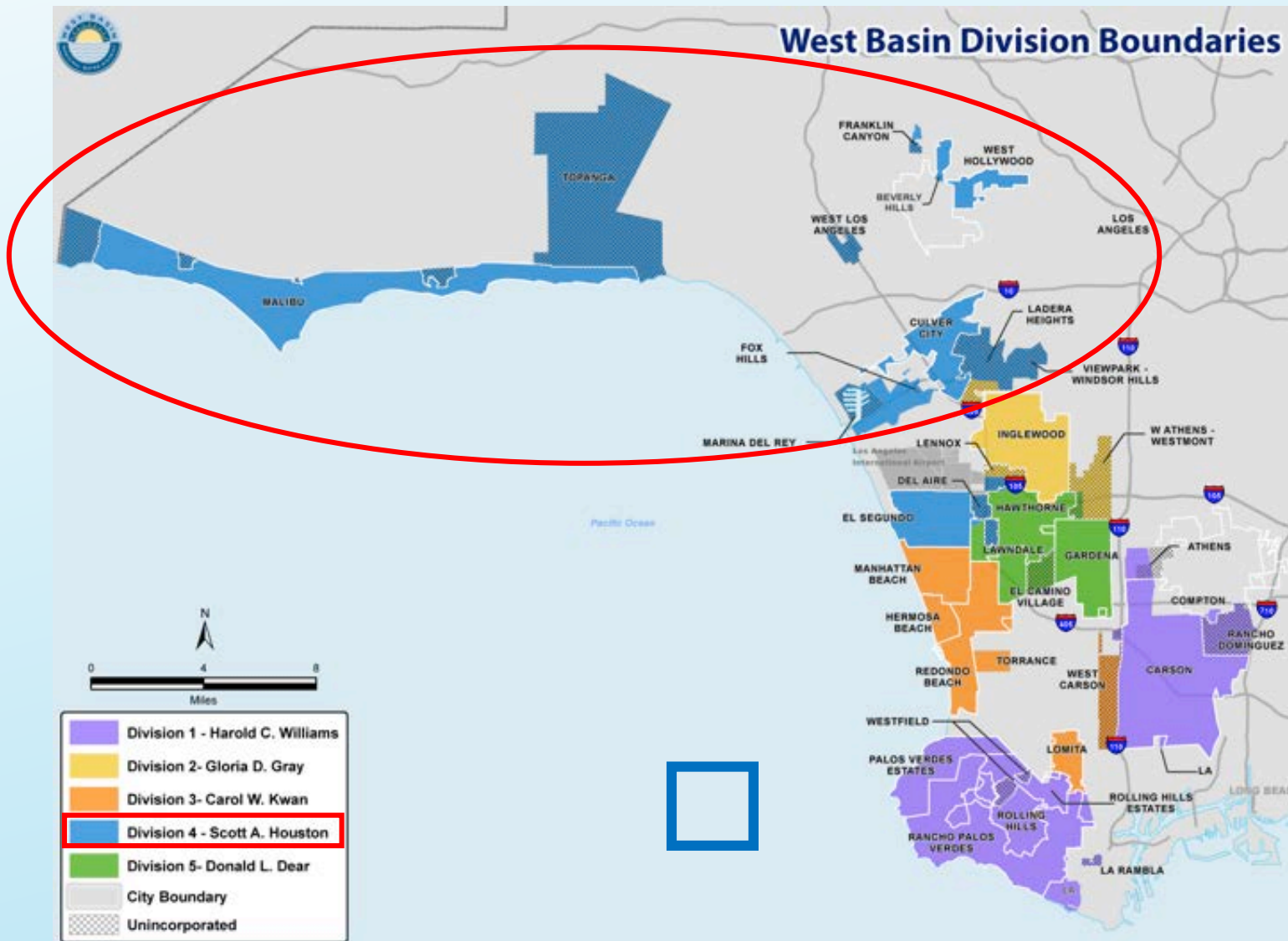
Nola Hastings, Hastings & Co.
Jeremiah Shea, West Basin MWD

West Basin Municipal Water District



- Public wholesale water agency
- Member agency of the Metropolitan Water District of Southern California
- Provides imported drinking water to nearly 1 million people in 17 cities
- Produces 5 types of “designer” recycled water for municipal, commercial, and industrial customers

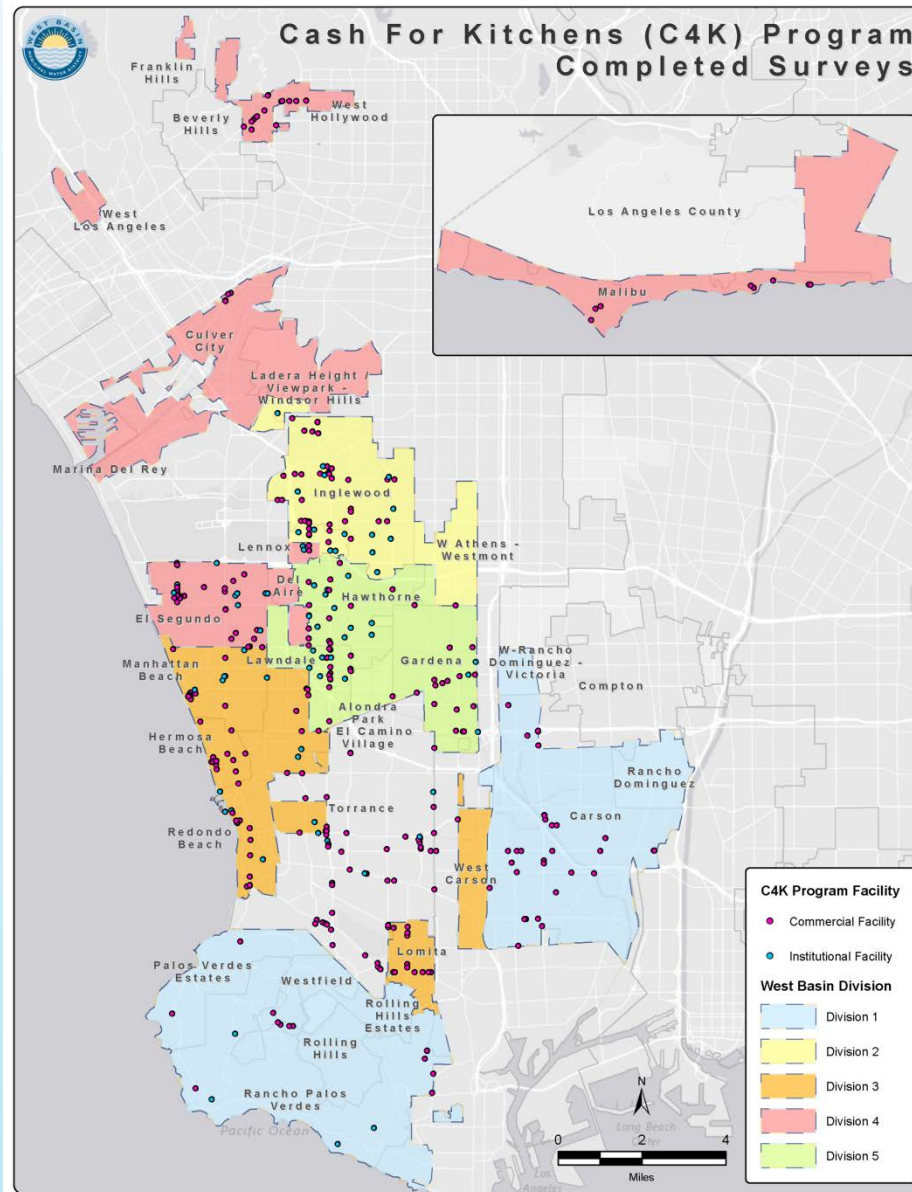
West Basin's Service Area



Cash For Kitchens (C4K) Overview

- C4K began in 2008 to address water efficiency in restaurants and commercial kitchens
- Since its inception, C4K has accomplished:
 - ✓ Over 350 commercial kitchen / restaurant visits
 - ✓ Over 70 institutional kitchen audits
 - ✓ Faucet aerators distributed → 900+
 - ✓ Flow restrictors distributed → 400+
 - ✓ Pre-rinse spray valves distributed → 200+

C4K Surveys Completed Through 2016



The C4K Process

Audit scheduled with management

Auditor completes audit checklist, prints report immediately, and reviews w/ manager

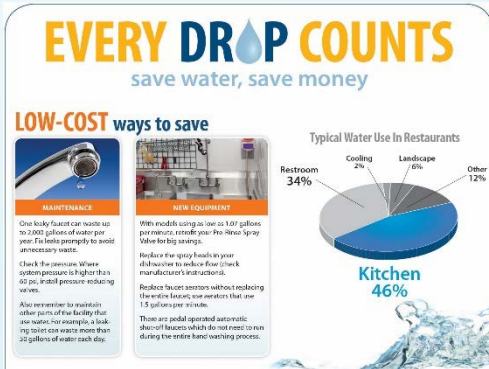
Auditor delivers devices and education materials; encourages staff to take quiz

Management installs free devices, shares educational materials with staff and customers

Follow up call / visit to ensure devices installed and any leaks are fixed

West Basin presents Certificate of Completion to the restaurant

C4K Program Goals



INCREASE WATER AWARENESS

- Poster & Quiz
- Window Clings
- Children's Activity Placemats
- Training Sessions



PROVIDE LOW-FLOW DEVICES

- Faucet Aerators
- Flow Restrictors
- Pre-Rinse Spray Valves
- Water & Energy Rebates



ENCOURAGE BEHAVIORAL CHANGES

- Visual Prompts in the Kitchen
- Open Dialogue w/ Employees
- Certificate of Completion
- Public Recognition

Water Efficiency: Survey

- Audits usually scheduled for mornings
- Auditor meets with manager on duty, and begins taking inventory of water devices; checks for leaks
- Auditor measures all sink & faucet flow rates with timer & flow bag
- Staff is interviewed to find out the typical use of each station / sink



Water Efficiency: Rebates & Free Devices



Faucet Aerators
(0.5 gpm and 1.5 gpm)



Flow Restrictors
(0.5 gpm)



Pre-Rinse Spray Valves
(1.1 gpm – 1.25 gpm)

Available Rebates (MWD)



Connectionless Food
Steamer

Air-Cooled Ice Machine



Energy Efficiency: Rebates

SoCalGas Rebates

Pressureless Steamer

Combination Oven



California Investor-Owned Utilities
PARTNERING FOR ENERGY EFFICIENCY

REBATES

California Energy Wise

2015 Rebate Qualified

AVAILABLE IN GAS OR ELECTRIC:	Gas	Electric
• Commercial Combination Ovens	\$1000/m	\$1000/m
• Commercial Convection Ovens	\$1000/m	\$1000/m
• Commercial Electric Griddles	\$1000/m	\$1000/m
• Commercial Food Warmers	\$1000/m	\$1000/m
• Commercial Hot Holding Cabinets	\$1000/m	\$1000/m
• Commercial Dishwashers	\$1000/m	\$1000/m
• Commercial Griddles	\$1000/m	\$1000/m

AVAILABLE IN GAS ONLY:

- Commercial Hot Holding Cabinets
- Commercial Convection Ovens

AVAILABLE IN ELECTRIC ONLY:

- Electric Food Warmers
- Electric Hot Holding Cabinets
- Electric Convection Ovens
- Electric Dishwashers
- Electric Griddles

HOW TO APPLY FOR FOODSERVICE EQUIPMENT REBATES:

1. Visit our local energy partner for rebate information and to determine qualification.
2. Visit website for list of qualified equipment.
3. Purchase qualifying equipment, and submit completed rebate application.

SoCalGas | Pacific Gas and Electric | Edison Energy | Edison Energy

California Utilities Partnering For Energy Efficiency
Qualified equipment at rebates.com

SAVE ENERGY. SAVE MONEY. SAVE THE ENVIRONMENT.

Commercial Electric Griddle



Edison Rebates

Electric Convection Oven



Water Efficiency: Customized Report



CASH FOR KITCHENS



Water Efficiency: Customized Report

Water-Use Efficiency Recommendations Ago Restaurant West Hollywood, CA

Initial Assessment Date: 10/21/15
Assessment team: Adolfo Lazcano

Thank you for your participation in the Cash for Kitchens program! West Basin has provided your facility with the following items:

Devices:

- 5 pairs – 1 gpm Flow Restrictors
- 0 units – 0.5 gpm Faucet Aerators
- 1 unit – 1.1 gpm Pre-Rinse Spray Valve

Educational Materials:

- Placemats and crayons for kids
- Window cling
- Device rebate information
- Poster and Training Manual



The Water-Energy Nexus

Joint Audits with Energy Utilities

- Single, streamlined visit for busy restaurants
- Helps to emphasize the link between water & energy use in kitchens
- SoCalGas technician discovers a broken thermostat during a joint visit



Education & Behavior: Poster

EVERY DROP COUNTS

save water, save money

LOW-COST ways to save



MAINTENANCE

Check leaky faucets can waste up to 2,000 gallons of water per year. Fix leaks promptly to avoid unnecessary waste.

Check the pressure. Where system pressure is higher than 60 psi, install pressure-reducing valves.

Also remember to maintain other parts of the facility that use water. For example, a leaking toilet can waste more than 50 gallons of water each day.



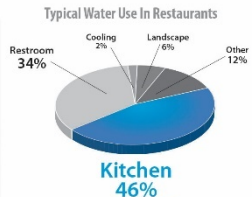
NEW EQUIPMENT

With models using as low as 1.07 gallons per minute, retrofit your Pre-Rinse Spray Valve for big savings.

Replace the spray heads in your dishwasher to reduce flow (check manufacturer's instructions).

Replace faucet aerators without replacing the entire faucet; use aerators that use 1.5 gallons per minute.

There are several approved automatic shut-off faucets which do not need to run during the entire hand washing process.



CADA GOTA CUENTA

ahorrar agua, ahorrar dinero

Aquí están algunas maneras para ahorrar de BAJO COSTO



MANUTENIMIENTO

Una llave de agua que gotea puede gastar hasta 2,000 galones de agua por año. No espere a arreglar goteras para evitar el desperdicio innecesario de agua.

Revise la presión del agua. Cuando la presión del sistema sea superior a 60 psi, instale válvulas reductoras de presión.

Recuerde también ocuparse del mantenimiento de las otras partes de las instalaciones que utilicen agua. Por ejemplo, un inodoro con fugas puede gastar más de 50 galones de agua cada día.



NUEVO EQUIPO

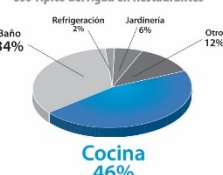
Con modelos que solo usan entre 1.28 y 1.6 galones de agua por minuto, modernice los rociadores de cocina para grandes ahorros.

Reemplace las cabezas del rociador de su lavaplatos para reducir el flujo. (Revise las instrucciones del fabricante).

Reemplace los restrictores de agua de las llaves de agua sin reemplazar la llave de agua por completo. Use restrictores de agua que usen 1.5 galones por minuto.

Hay lavamanos operados con pedales que detienen el flujo del agua automáticamente cuando no se necesitan y no llenan que comer durante todo el proceso de lavarse las manos.

Uso Típico del Agua en Restaurantes



Aquí están algunos consejos operacionales para AHORRAR AGUA Y DINERO que NO CUESTAN NADA



COMPROMISO CON EL CLIENTE

"Siga agua únicamente bajo solicitud"

Considere la posibilidad de preparar a los clientes, "¿quiere el postre ahora?" En lugar de traer agua de inmediato a la mesa.

Por cada vaso de agua sin tocar, no sólo el agua en el vaso se le que desperdicia sino que el vaso también se desperdicia.



PREPARACIÓN DE ALIMENTOS

No deje correr el agua para hacer hielo o los refrigerados.

Use el refrigerador, en lugar de dejar correr el agua, para descongelar alimentos. Despiene un lugar en el refrigerador durante la noche para la descongelación de alimentos.

Investiguel el uso de formas para sarmos que sean adecuados para usar con alimentos. Así el sarten podrá ser usado varias veces durante el día antes de ser lavado.



MANTENIMIENTO DE EQUIPO

Ajuste las máquinas de hielo para disminuir la cantidad si usted nota que el hielo está siendo desperdiciado.

Ajuste el flujo de el remoedor de platos, si es posible de acuerdo con los estándares del departamento de salud.

Lave sólo cargas completas en el lavaplatos. El gasto de agua y energía es el mismo si se lava una carga completa o media. Cuando se lava una carga completa los recursos de su cocina serán usados de manera más eficiente.

Apague los lavaplatos cuando no lo este usando.



LIMPIEZA

Antes de lavar los platos, raspe en seco y remoje los platos y utensilios en un recipiente de agua en vez de dejar el agua correr.

Cuando sea posible, utilice métodos de limpieza en seco y después limpie con toallitas húmedas o un trapo para limpiar las superficies. No inunde el piso con agua para limpiarlo; use un trapo y una cubeta.

Utilice escobas en lugar de agua para barrer los estacionamientos o las zonas pavimentadas. Cuando sea necesario utilizar agua, use una escoba de agua o un aparato similar para limpiar de manera eficiente.

珍惜每一滴水

怎样在餐馆节约用水

成本低廉的节水方式



维护

一个滴水的水龙头每年浪费的水量高达 2,000 加仑。尽快修理滴水的龙头，避免不必要的浪费。

检查水压。当系统水压高于 60 磅/平方英寸时，请安装减压阀。

此外，别忘了维护其他的用水设备。例如：一个漏水的马桶每天浪费的水量超过 50 加仑。



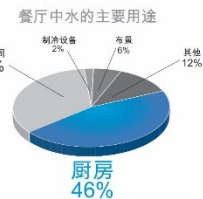
新设备

对于用水最低至每分钟 1.07 加仑的设备，更换密封的预冲洗喷嘴，可以大大节约用水。

更换洗碗机的喷头，以降低水流量（查看生产商说明）。

更换水龙头起泡器，将不必要的热水龙头；使用水流每分钟 1.5 加仑的起泡器。

此外，还可使用脚踏式自动关闭水龙头，它在整个洗手过程中无需用水。



无成本运营方式小贴士节约水资源和资金



让顾客参与节水

"只在顾客需要时才提供用水"

可以考虑向顾客询问：“您想喝点儿什么？”而不是直接给顾客倒水到餐桌上。

对于每一杯要倒未触的水，不仅杯中的水被浪费了，还浪费了用来清洗杯子的水。



食品制备

请勿向流水槽中融化冰块。

用冰箱解冻食品，而不是用流动水。在冰箱中专门腾出一小块地方存放解冻后的冷冻食品。

了解食品专用除冰器的用途；这种装置可在无需清洗使用几次之后再次清洗。



设备维护

如果注意到冰块浪费的现象，则应修理冰机，以减少制冰的数量。

根据卫生标准，调整注入水池的水量。

只在装满餐盘时，才启动洗碗机。高效率和半满的洗碗机的水费和热能消耗。以满载的方式运行可以最高效地利用您的设备。



清洁 - 拖地

洗碗前，先用干布擦拭碗碟等器具，并丢弃在水槽中，而不是用流动水冲。只有当碗碟脏到必须刷洗时才进行刷洗。

尽量多使用干拖法。之后再使用湿拖法。不要再使用冲水的方式或清洗地板；使用湿拖法。

清洁户外的停车场和卫生区域时，使用扫帚而不是用水。必需用水时，请使用高压式喷雾器设备，实现高效的清洁效果。

NO-COST operational tips to SAVE WATER & MONEY



CUSTOMER ENGAGEMENT

"Serve Water Only Upon Request"

Consider asking customers, "What would you like to drink?" rather than bringing water immediately to the table.

For every glass of untouched water, not only is the water in the glass wasted, but the water needed to wash the glass is also wasted.



FOOD PREPARATION

Do not use running water to melt ice in sinks.

Use refrigeration rather than running water to thaw foods. Designate a place in the refrigerator for over-night thawing of frozen foods.

Investigate the use of food-grade pan liners; the pan can then be used several times between washings on the same day.



EQUIPMENT MAINTENANCE

Adjust ice machines to dispense less ice if it is noticed that ice is being wasted.

Adjust the flow to dispenser wells, if possible according to health department standards.

Wash only full loads in the dishwashers. Your water and heating expenses are the same for a full or half load. Running a full load will use your kitchen's resources most efficiently.

Turn dishwashers off when dishes are not being processed.



DISHWASHING & CLEANING

Before washing dishes, dry-scrub and pre-soak dishes and utensils in a basin of water rather than under running water. Run only fully loaded dish racks through the machine.

When possible, use dry surface cleaning methods, followed by damp mopping or wiping. Do not continue to do flood-type cleaning of floors; use a mop and a bucket.

Use brooms rather than water for sweeping outside parking lots or paved areas. When necessary to use water, use a waterroom or similar device to clean efficiently.



visit www.westbasin.org for more information and to download the Cash For Kitchens Training Manual

Cash for Kitchens



Visite www.westbasin.org para más información y para bajar el Manual de Entrenamiento Dinero Para Cocinas

Cash for Kitchens



敬請訪問 www.westbasin.org, 了解更多信息, 并下載《廚房省錢妙招培訓手冊》

Cash for Kitchens

English

Spanish

Chinese

Education & Behavior: Poster & Follow-up



California State University,
Dominguez Hills



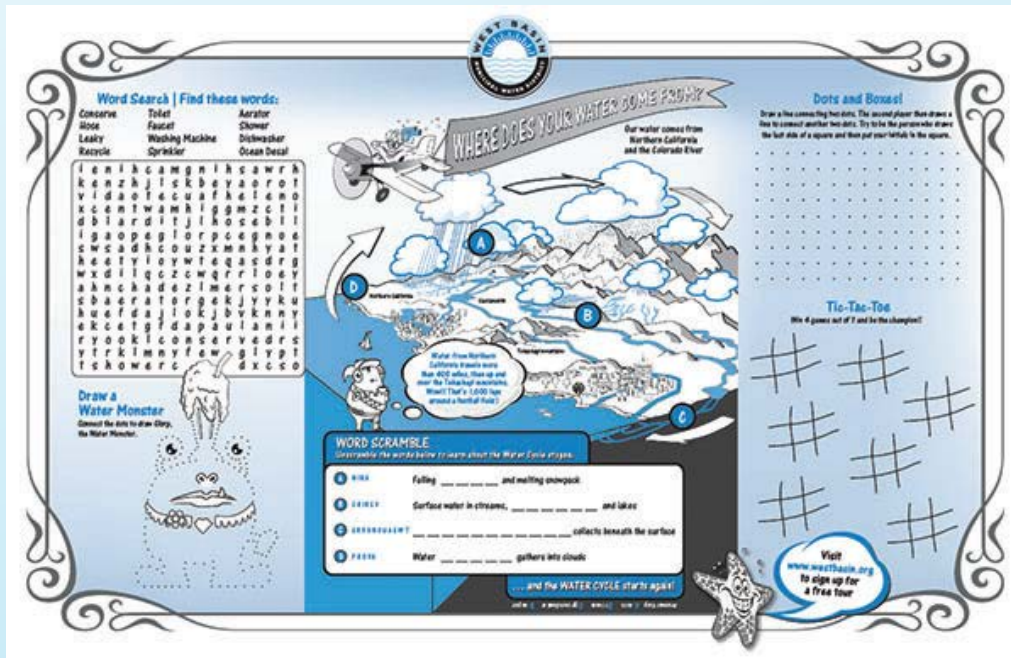
Duke's Restaurant, Malibu

Program manager called all 45 restaurants (+ 10 follow-up visits)

- Were devices installed? Why / Why Not?
- Is the poster up?
- Were leaks fixed?

Education & Behavior: Placemats & Quiz

Tablet Raffle: Incentive to Participate in C4K Poster Quiz



Children's Placemats: Fun & Water Education!
(Crayons Included)

The poster features a blue background with a water splash at the top. The West Basin Municipal Water District logo is in the top right corner. The main text reads "Enter to Win a Tablet!". Below this, a section titled "Here's how:" lists five steps:

- 1 Study the Cash for Kitchens "Every Drop Counts" poster
- 2 Take the quiz (answer 6 out of 7 questions correctly)
- 3 Provide all required information
- 4 Fold, seal and mail in by **Jan. 11, 2016**
- 5 Be entered to win

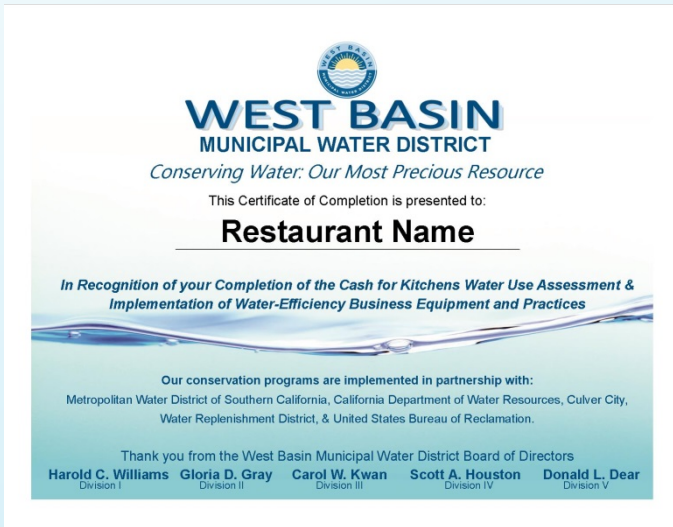
An image of a tablet is shown to the left of the list. An arrow points from the list to a smaller image of the "EVERY DROP COUNTS" poster at the bottom. The poster includes sections for "LOW-COST ways to save" and "NO-COST operational tips to SAVE WATER & MONEY". At the bottom of the poster, it says "Visit www.westbasin.org to sign up for a Free Tour!". The "Cash for Kitchens" logo is at the bottom left of the poster.

Follow Up: Training Sessions

- Training Sessions: Scheduled to coincide with staff meetings
- Trainings became opportunities to speak openly with staff about the reality of water use in kitchens & restaurants
- Managers, owners, and staff attend the training, and provide feedback on C4K program elements



Follow Up: Public Recognition



- A Certificate of Completion is given to restaurants that participate in C4K and implement changes
- Restaurants are invited to City Council meetings to receive public recognition for their conservation efforts



C4K: Lessons Learned

- Restaurants are very busy!
 - Scheduling issues
 - Maximize each visit
 - Management / staff communication

- Water conservation vs. “optimal” workflow:
 - Faucet / Sink Use
 - Defrosting Meats



C4K: Lessons Learned

- Flow restrictors vs. faucet aerators

- Be flexible; tweak program when necessary
 - Quizzes
 - Training Sessions



WWW.WESTBASIN.ORG

CONNECT WITH US:



Nola Hastings, Hastings & Co.
Hastings.Nola@gmail.com

Jeremiah Shea, West Basin MWD
JeremiahS@westbasin.org