



**MANILA WATER**  
CARE IN EVERY DROP

# Aptos

The official magazine of Manila Water Company  
Volume 18 | Number 139 | October-December 2014

**CLEAN  
AND SAFE  
DRINKING  
WATER:  
THE GIFT OF  
LIFE FOR EVERY  
FAMILY**

Drink tap water  
and stay healthy  
this holiday season!

MANILA WATER  
REMAINS FIRM IN ITS  
COMMITMENT TO  
BRING YOU  
POTABLE WATER

**24/7**

## MESSAGE FROM THE PRESIDENT

To our valued Kasanggas,

Over the last 17 years, your valued partnership has been instrumental in ensuring that Manila Water consistently delivers world-class water and used water services. Your tireless contribution and support for our various programs have made a positive impact in the communities that we serve throughout the East Zone and even beyond.

In gratitude, we express our sincerest thanks for giving us the opportunity to serve you. We value the trust and confidence you have placed in our company and we look forward to providing you with reliable and sustainable service for many years to come.

As we tackle health and safety in this issue of Agos, we remain fully committed in fulfilling our mandate to bring you and your family clean and potable water straight from the tap. Rest assured that we will continue to ensure your family's well-being through the provision of quality water and used water services by constantly adhering to the most stringent and highest standards of operations.

On behalf of Manila Water, we extend to you, your families and your communities our best wishes for a meaningful Christmas and a blessed New Year!



**GERARDO C. ABLAZA, JR.**

President and CEO  
Manila Water



## ABOUT THE COVER



COVER PHOTO shows two little brothers sharing a glass of water, a testament of Manila Water's continuing commitment to provide the highest quality of water. This is the gift of life that Manila Water offers to families—clean, safe and potable water—to stay healthy this holiday season and throughout the year.

Photo taken by Reau Gutierrez. Special thanks to Enzo Ruan Gutierrez, Inigo Rhys Gutierrez and Maryanne Valmocina Gutierrez.

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*Manila Water makes sure that only quality and safe drinking water reaches your homes*

Complete, Complied, Certified  
*Securing public health and safety through world-class quality testing and monitoring*

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*Potable drinking water made available to more people in the East Zone of Metro Manila and beyond*

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## Tap It!

*Keep yourself properly hydrated to make the most out of the holidays*

# DRINK MANILA WATER!

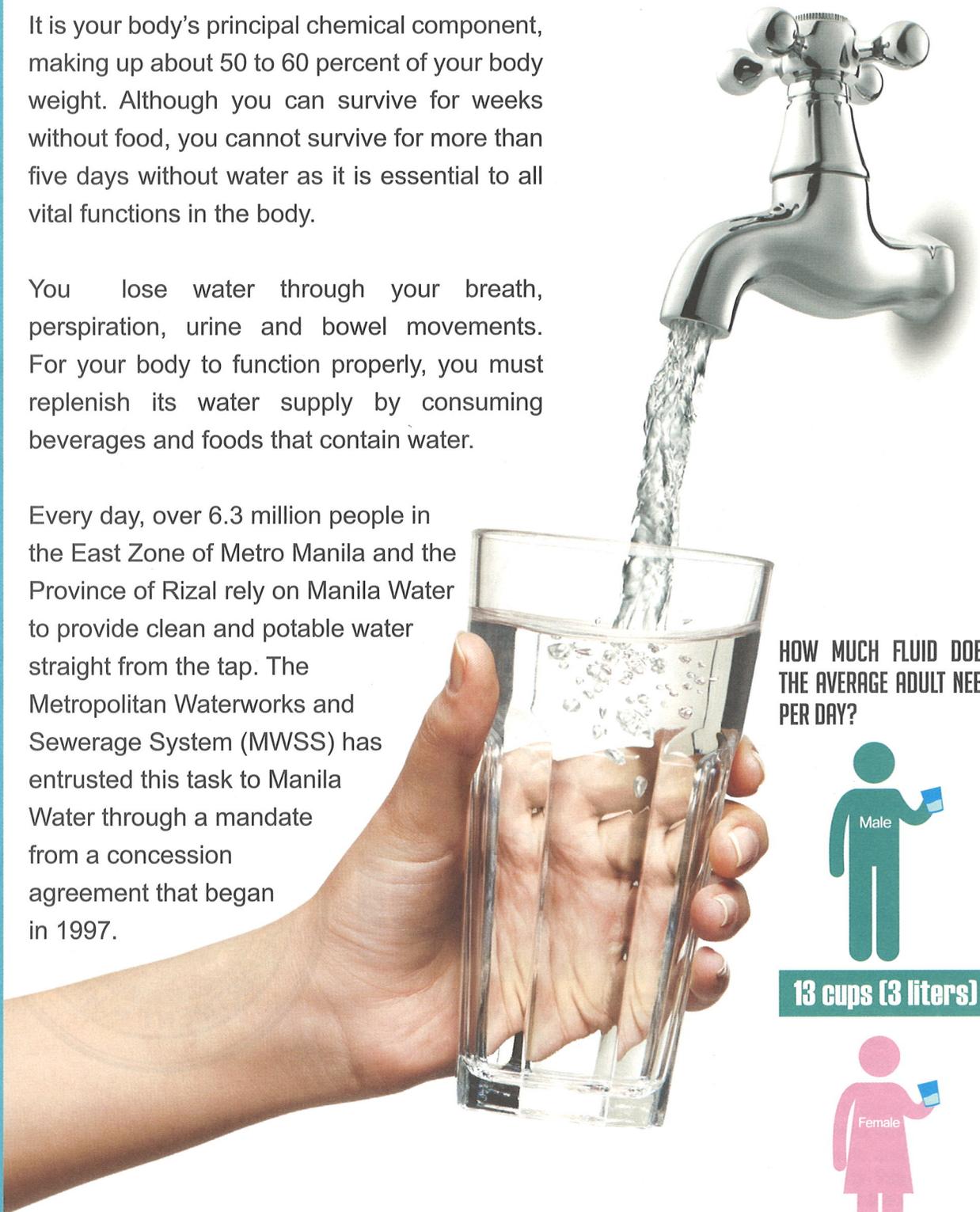
Be assured that Manila Water brings you only the best and highest quality of safe and clean water.

## WATER IS A BASIC HUMAN NEED.

It is your body's principal chemical component, making up about 50 to 60 percent of your body weight. Although you can survive for weeks without food, you cannot survive for more than five days without water as it is essential to all vital functions in the body.

You lose water through your breath, perspiration, urine and bowel movements. For your body to function properly, you must replenish its water supply by consuming beverages and foods that contain water.

Every day, over 6.3 million people in the East Zone of Metro Manila and the Province of Rizal rely on Manila Water to provide clean and potable water straight from the tap. The Metropolitan Waterworks and Sewerage System (MWSS) has entrusted this task to Manila Water through a mandate from a concession agreement that began in 1997.



HOW MUCH FLUID DOES THE AVERAGE ADULT NEED PER DAY?



13 cups (3 liters)



9 cups (2.2 liters)

# FROM RAW TO CLEAN WHERE DOES YOUR GLASS OF WATER COME FROM?

The process of delivering potable water from source to each home goes through several stages. Manila Water takes on a holistic approach to ensure the quality and safety of water that you and your family drink.

Raw water from Angat Dam undergoes several treatment processes before it passes the standards for potable water. Manila Water operates three water treatment facilities—Balara Filter 1, Balara Filter 2 and East La Mesa. The Balara Plants treat

**1,300 MILLION LITERS PER DAY (MLD)  
OF DRINKING WATER, EQUIVALENT TO  
6.5 BILLION GLASSES OF WATER EACH DAY.  
EAST LA MESA CAN TREAT AN ADDITIONAL 150MLD.**

At the treatment facilities, Manila Water applies international best practices to ensure the potability of water entering the distribution system.



SINCE 1997,  
**5,000**  
KILOMETERS  
OF NEW PIPELINES  
HAVE BEEN LAID  
WITHIN THE EAST  
ZONE, ALL DESIGNED  
TO BRING POTABLE  
WATER STRAIGHT  
TO CUSTOMERS.

Manila Water remains vigilant about the quality of water running through its network. All possible avenues of contamination of water supply in its distribution system have been addressed by curbing illegal network tapping, replacing old lines and repairing leaks. The company's flagship sustainability program Tubig Para Sa Barangay (Water For the Community), in particular, has enabled low-income and marginalized communities to have access to affordable and potable water.

## GEODINO V. CARPIO

Group Director, Operations, Manila Water

*"Proactive monitoring, profiling and testing at source, more than at distribution, is key. That is why our Laboratory Services Department regularly monitors raw water at La Mesa and the intakes. Treatment processes can be adjusted based on the characteristics of the raw water they find."*

*When a tsunami hit Fukushima in 2011, there were threats of radioactive cloud drifting across the Pacific skies. Our lab quickly tested our water source for radioactivity.*

*This vigilance and analysis at the top of the treatment chain ensures that we treat water properly, which makes it possible that everything downstream is good, down to the tap."*



## KNOW YOUR H2O

What's in your water? Here are some of the most common parameters tested in water, which are examined against the standards of the Philippine National Standards for Drinking Water, DENR Administrative Order No. 34 and 35, and the Standard Methods for the Examination of Water and Used Water.

- TOTAL COLIFORM
- HETEROTROPHIC PLATE COUNT
- TURBIDITY
- IRON
- FECAL COLIFORM
- PH
- RESIDUAL CHLORINE
- MANGANESE

## CUSTOMER TIPS

- ✓ To ensure the cleanliness and safety of water from your taps, check your home's plumbing system and make sure it's leak-free, made of good quality pipe material (not galvanized iron) and free from illegal tapping which may cause contamination.
- ✓ Regularly clean your taps by scrubbing the spout and exposed parts. For water tanks, check the user manual or with your supplier for proper cleaning instructions.
- ✓ Regularly clean your storage containers—that includes your water pitchers and bottles, too!



# COMPLETE, COMPLIED, CERTIFIED

*Securing public health and safety through world-class quality testing and monitoring*



To make sure that the water delivered to customers satisfies regulatory standards on quality, strict control standards are adopted at all times.

## WORLD-CLASS LABORATORY SERVICES

Manila Water's Laboratory Services boasts of equipment that puts it at par with established laboratories around the world that analyze water and used water samples.

Water quality is stringently monitored in this world-class laboratory that is recognized by the Department of Environment and National Resources (DENR) and accredited by the Department of Health (DOH).



ISO/IEC 17025:2005  
ISO 9001:2008  
ISO 14001:2008  
OHSAS 18000

The company's resolute dedication to ensuring water quality was affirmed when the laboratory was awarded with an ISO accreditation by the Geneva-based International Organization of Standards. The ISO/IEC 17025:2005 accreditation was conferred to Manila Water in 2006 which cited the laboratory's competence for testing and calibration. In addition, the lab has been certified with and against ISO 9001 (quality management), ISO 14001 (environmental management) and OHSAS 18000 (occupational health and safety).

### **BERNALIZA B. ESPINA**

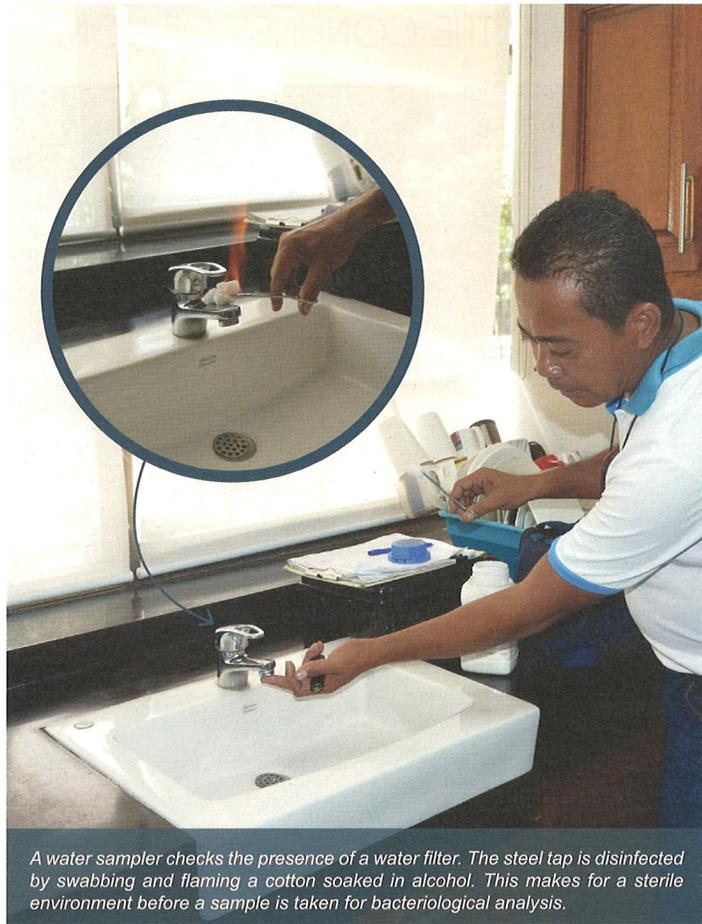
*Laboratory Services Department Head, Manila Water*

*"As the main sentinel of water quality, Manila Water's Laboratory Services continuously promotes holistic management of water quality through programs and practices that ensure effective monitoring and protection of water throughout the system—from water sources to the customer taps and to effluent discharges. Through this, the drinking water that we supply to our customers and the treated used water that we return to the river systems are safe and fully compliant with regulatory standards. Our laboratory continues to strengthen its capabilities to address the changing needs and demands of our internal and external customers, and address emerging risks to public health and the environment."*



# WATER SAMPLING AND ANALYSIS

On a daily basis, the lab processes water samples collected from strategically located sampling points all over the East Zone. Around 845 water samples (as of October 2014) directly from the faucets within the distribution network are tested per month against more than 50 physical, chemical and bacteriological parameters. Water samples are also collected from the raw water source, treatment facilities and reservoirs.



Mobile refrigerated vans preserve and guarantee the integrity of the samples during transfer—from the sampling point location up to the laboratory where it is tested. These vans were designed to maintain the temperature of the samples between 2 and 4 degrees Celsius. This ensures that the samples are of suitable quality to meet the requirements for the test parameters against which they will be analyzed in the laboratory.

**MANILA WATER  
HAS 6  
REFRIGERATED  
VANS**



A lab personnel performs a jar test procedure in the Lab, a method which intends to mimic or simulate the conditions in a full-scale water treatment plant. The results it produces help to determine optimum dosages of treatment chemicals.

## WHAT IS WATER FORENSICS?

Water Forensics is a supporting arm of the laboratory that does continuous improvement on water quality assurance and drives changes in water quality policies. It performs investigations on water quality issues and recommends or facilitates implementation of corrective and preventive actions on these issues based on comprehensive analysis, taking into consideration internal, external, current and emerging risks. It develops programs and processes for the study and understanding of water quality issues from raw water to treated water, distribution and effluent discharges.

### YES, METRO WATER IS SAFE TO DRINK!

Water quality has always maintained 100% compliance based on the physical, chemical and bacteriological standards of the Philippine National Standards for Drinking Water (PNSDW). Manila Water is also a member of the Drinking Water Quality Monitoring Committees of Metro Manila and Rizal headed by the Department of Health.

On a monthly basis, Manila Water reports its water quality testing results to the Drinking Water Quality Committees of Metro Manila and Rizal, which in turn, publish the results in major broadsheets in the area. This way, customers are assured that they are getting the best quality drinking water from their taps.

The Laboratory also has a track record of excellent and satisfactory ratings in almost all local and international proficiency tests it has participated in. These attest to the effectiveness of the Laboratory's system and competency of its people and processes.

# CLEAN WATER FOR ALL

PROVIDING ACCESS TO POTABLE WATER BEYOND THE CONFINES OF HOME

Manila Water's 'Lingap' program (Water and Sanitation Program for Public Service Institutions) is meant to complement 'Tubig Para Sa Barangay'.

It brings the benefits of potable water to a broader community by installing drinking fountains and wash areas, repairing after-the-meter pipelines, and providing sanitation facilities in public schools, hospitals, orphanages, markets, city jails and even churches.

By extending its reach, 'Lingap' provides a more widespread 24/7 access to clean water. To date, more than 300 institutions and over 1.5 million people have benefited since its inception.

## LINGAP ESKWELA

(Water and Sanitation Program for Public Schools)

In cooperation with the Department of Education, the Department of Health and various local government units, Manila Water's Lingap Eskwela ensures that public school children will have an environment conducive to learning by setting up and improving the basic water infrastructure facilities through regular access to safe and potable water supply and adequate sanitation.



## LINGAP OSPITAL

(Water and Sanitation Program for Hospitals)

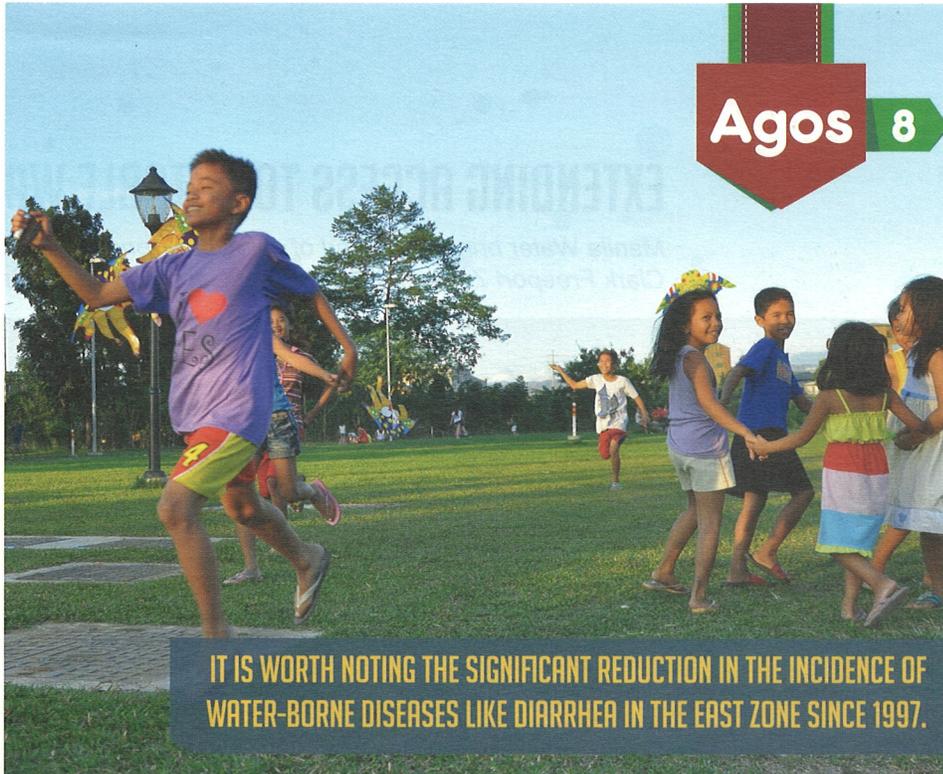
Together with the Department of Health, Lingap Ospital seeks to provide public hospitals with a steady supply of safe and potable water. The program encourages hospitals and health facilities to promote proper sanitation and hygiene. Lingap Ospital also aims to replace worn-out pipes, clean cisterns, install hydrants when applicable and provide testing faucets for regular sampling and water quality monitoring.



**EVANGELINE M. CLEMENTE**

*Division Head,  
Operations Technical Services  
Manila Water*

*Highly aware of our part in protecting public health, we keep a close watch on water quality and perform appropriate interventions as water flows from sources to treatment plants to the distribution network and finally, to the customers' taps. Our laboratory and major plants are certified to ISO's quality and environmental management systems, as well as occupational health and safety standards. In addition, our analysts are certified to local and international standards. So I say, drink up, the water is good!*



**LINGAP AMPUNAN** (Water and Sanitation Program for Orphanages)

An offshoot of Lingap Eskwela, the Lingap Ampunan program provides drinking water fountains, restores old pipes and cisterns, and installs wash areas and sanitation facilities in orphanages, day care centers and special homes in the East Zone.



**PATUBIG SA CITY JAIL**

(Water and Sanitation Program for Jails and Penitentiaries)

This program for jails and penitentiaries was conceived to address the water and sanitation needs of detainees and jail personnel in the East Zone. The company strongly feels that support and service must be extended to this segment of the community. The project is being undertaken in cooperation with the Bureau of Jail Management and Penology which hopes to upgrade the plight of detention facilities that are often cramped and congested.

**PATUBIG SA PALENGKE**

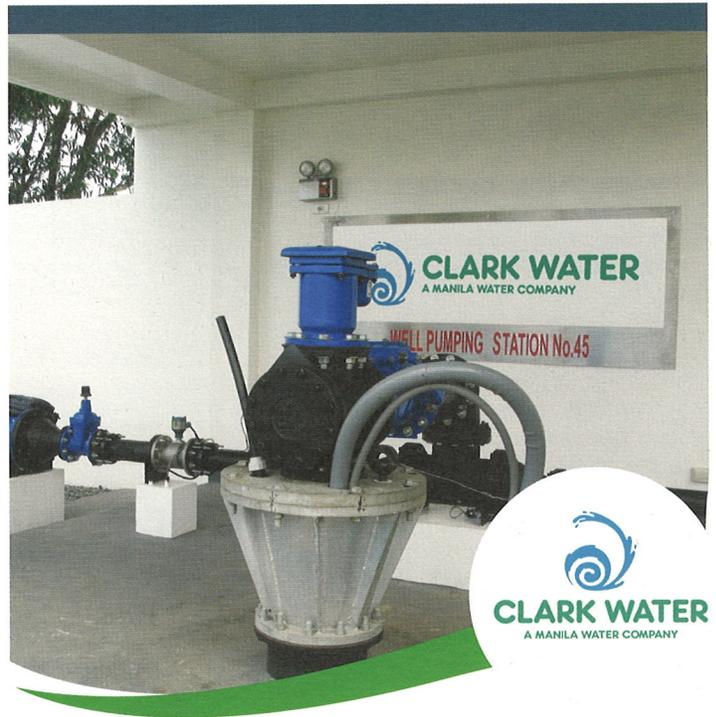
(Water and Sanitation Program for Markets)

Public markets have always been a popular destination point where people from all walks of life regularly converge. This brings to the fore the importance of water in maintaining the cleanliness and sanitation of these places. Patubig sa Palengke hopes to provide marketplaces with sufficient water supply at adequate water pressure.



# EXTENDING ACCESS TO POTABLE WATER BEYOND THE EAST ZONE OF

Manila Water brings its brand of service beyond borders. Its operating subsidiaries in Boracay Island, Clark Freeport Zone, the Province of Cebu and Laguna provide clean and potable water to its customers.



Laguna Water's DOH-accredited laboratory spearheads the drive to maintain water quality that complies with the Philippine National Standards for Drinking Water.

Clark Water continues to implement improvements in water infrastructure to ensure safe drinking water for their customers.

INITIATIVES:

- Monitoring of 204 sampling points in Biñan, Santa Rosa and Cabuyao.
- Treatment of groundwater with chlorine so that pathogens, which may have found their way into the water network, are neutralized.



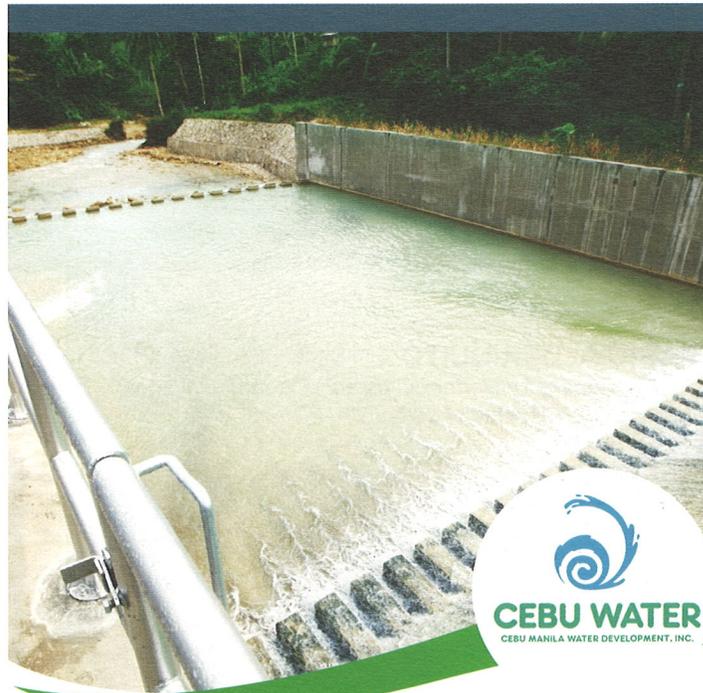
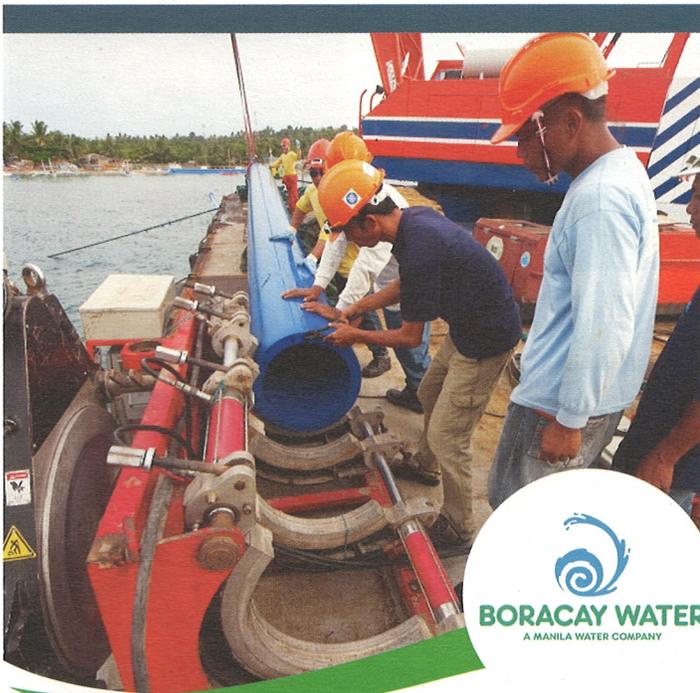
- Use of a modern filtration system called DMI-65 which blocks entry of iron and manganese, elements which cause yellowish discoloration when groundwater is mixed with chlorine during treatment process.

INITIATIVES:

- Regular cleaning of water reservoirs and flushing of the distribution network.



- Replacement of old pipes and conduct of periodic maintenance to remove sediments that have accumulated over time.
- Water testing in Clark Water's DOH-accredited laboratory through regular sampling and analysis from the water source, treatment plants and distribution system.



It is always Happy Hour in the island as Boracay Water gives both locals and tourists safe and potable drinking water straight from the tap, 24/7!

Cebu Water partnered with the Provincial Government of Cebu to provide a sustainable water supply to the people of Cebu City, Mandaue City, Lapu-Lapu City, Cardova, Consolacion, Liloan and Compostela.

INITIATIVES:

- Daily strict monitoring of 18 regular sampling points comprised of network, facilities, and the source, Nabaoy River, on a quarterly basis.
- Installation of drinking water stations in major tourist areas including D'Talipapa and D'Mall in Station 2, and Cagban Jetty Port.
- Efforts on water system loss reduction to mitigate risks of water contamination.



INITIATIVES:

- Implementation of the Bulk Water Supply Project—the first surface water supply project of the province.
- Help address the gap between water demand and supply in the province.
- Construction of the diversion weir intake structure, raw water pipelines, 35 million liters per day water treatment plant, pumping stations, treated water pipelines and a reservoir with a capacity of 9 million liters per day.



**DR. EDUARDO C. JANAIRO**

Regional Director, Center for Health and Development,  
Department of Health (DOH-NCR)

*"I really hope that more communities learn that the best water is what comes out of their faucets handled by Manila Water. It was so amazing seeing Manila Water professionals and experts doing a single advocacy or concern which is water. That water is actually our life and Manila Water is much concerned with that. And being concerned gives more progress, more development. I am looking forward to a more aggressive partnership with Manila Water's Laboratory and more opportunity to work on the cleanliness, safety and clarity of our water."*

**MARIO A. DERIQUITO**

Undersecretary for Partnerships and External Linkages,  
Department of Education (DepEd)

*"Stakeholders play a major role in educating the young blood of the country. I'm a fan of Manila Water's social responsibility programs. Potable drinking water and hand washing areas in public schools have direct effects to the health, and consequently, attendance of students in classes."*



What our  
**PARTNERS AND STAFF**

**DR. GERARDO V. BAYUGO**

Undersecretary of Health Designate,  
Department of Health (DOH)

*"Manila Water has proven itself as a reliable partner in ensuring the public's health and safety. The Department of Health (DOH) has seen marked improvements in the health sector, thanks to Manila Water's initiatives especially for poor communities. I believe Manila Water*

*is true to its commitment to community development. DOH has seen diarrhea cases in low income areas go down because Manila Water provided them with clean water. Manila Water has also shown us full support in national water safety events and, more importantly, in times of disasters when clean water is needed by all."*

**DR. RUBEN S. SIAPNO**

OIC Director III, Office of the Assistant Regional Director,  
Department of Health (DOH)

*"Marami nang mga kababayan natin ang umiinom ng tap water, ngunit marami pa rin sa community ang hindi nakakaalam sa kalidad ng ating tubig. It's high time that we tell the public that tap water is safe to drink. Manila Water, as an active member of the Metro Manila Drinking Water Quality Monitoring Committee (MMDWQMC), is our partner in achieving this."*



**RAMON R. JIMENEZ, JR.**  
Secretary, Department of Tourism (DOT)

*"Boracay Water's submarine pipeline launched a new standard for people to appreciate—water that is potable straight from the tap. Boracay, next to the Philippines, is the best brand we have. The island is growing faster and our responsibility is to make the world know that and let the rest of the world taste the cleanest potable water in the country that is found in Boracay."*

# STAKEHOLDERS Say



**ARMANDO PRESBITERO**  
Barangay Desk Officer, Brgy. Malaban,  
Biñan, Laguna

*"I used to be vulnerable to water-borne diseases because of the poor water quality in our place. As an official of our Barangay, it has been my dream to have access to affordable and clean water supply. Our prayers were answered through the water supply project of Laguna Water. Things have changed for the better ever since because we now have individual piped water service connections. Our water is now clean, clear, and has a strong pressure, 24 hours every day."*

**ERNESTO S. GOROSPE**  
Vice President for Business Development,  
Clark Development Corporation

*"By pro-actively providing quality and adequate water to serve the industrial, residential, tourism, corporate and commercial sectors in the Freeport Zone, Clark Water has surely contributed to our area as an investment destination of choice. Clark Water has also extended its service areas to the local communities immediately adjacent to Clark, thus helping improve of the*



*quality of life of the local community which did not have prior access to clean and potable water. For all these reasons, CDC considers Clark Water a very important partner in the development of the Freeport Zone and its adjacent areas."*



**JONY SALME**  
President, Boracay Foundation, Inc.;  
Owner, Jony's Resort

*"The additional water pipeline assures us of good water pressure and a more comfortable life in the island. Our tourists are happy because they now use and drink clean water. We are also proud to say that we have a reliable water concessionaire in the island of Boracay."*

For many, the holiday season is their excuse to let go and give in to indulgences because, hey, 'tis the season to be jolly after all. But it is during these days when a person's lifestyle is at its unhealthiest, causing many to suffer from unexpected issues with their bodies—issues that could have been easily avoided had they imbibed enough water throughout the merrymaking.

So what does drinking more water really do for your body, especially during the holidays?

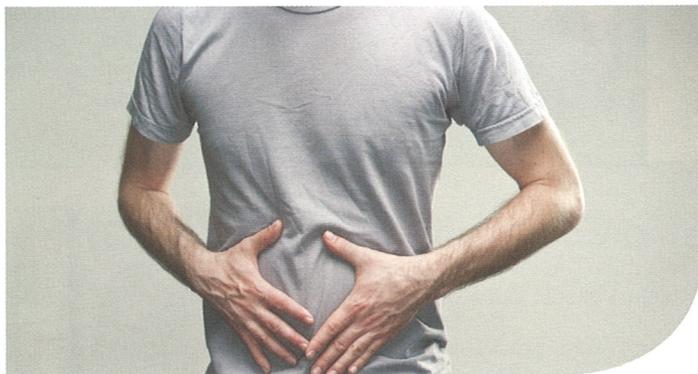
**IT HELPS CURB DEHYDRATION SPELLS.**

When you're stressed, your heart beats faster causing your body to lose water more quickly. This, in turn, can lead to dehydration. Prevent this by drinking eight or more glasses of water every day, especially when you start experiencing thirst, because this is the most important and blatant sign that you haven't been getting enough water into your system.



**IT AIDS IN DIGESTION.**

Digestion starts with saliva, the basis of which is water. Digestion relies on enzymes that are found in saliva to help break down food and liquid and to dissolve minerals and other nutrients. Water is also necessary to help you digest soluble fiber. With the help of water, this fiber dissolves easily and benefits your bowel health.



**IT HELPS FIGHT COLDS AND OTHER COMMON SICKNESS.**

Drinking lots of fluids during a cold spell is said to break up congestion, keeping you hydrated and your throat moist.



# TAP IT!

Give yourself the gift of health this *Christmas!*



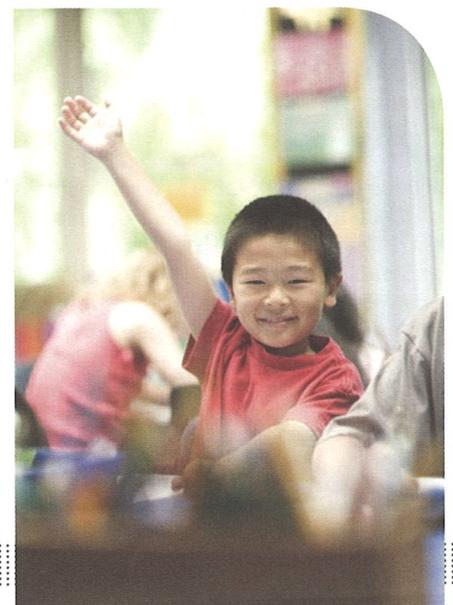
**IT BOOSTS YOUR METABOLISM.**

A study published in the Journal of Clinical Endocrinology and Metabolism found that drinking about 17 liters of water increases metabolic rate by 30 percent. The boost occurred within **10 minutes** but reached a maximum **30 to 40 minutes** after drinking.

**IT BOOSTS BRAINPOWER.**

The human brain needs a lot of oxygen to function at optimum levels, so drinking plenty of water ensures that it's getting all it needs. In fact, drinking enough water every day can improve one's levels of cognitive performance by as much as 30 percent.

THE BRAIN IS MADE UP OF ABOUT **75% WATER**



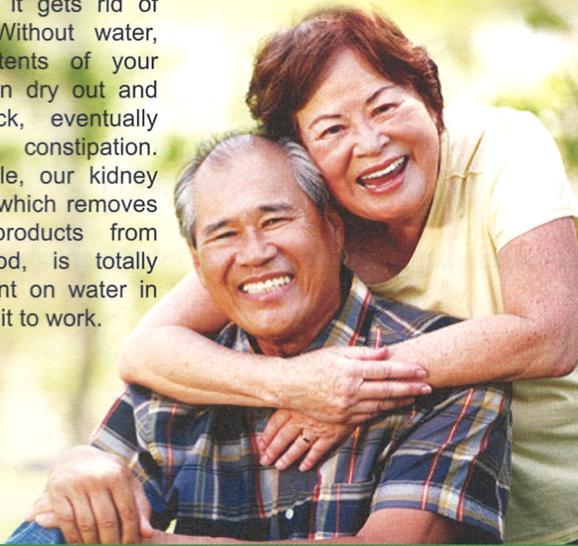


**IT HELPS YOU DEAL WITH HANGOVERS BETTER.**

Alcohol dehydrates your body of fluids, so the more water you drink in between sips of your favorite alcoholic beverage, the more fluids you replace and the better you will feel. Seal the deal by downing a tall glass of water (or several) before falling asleep and as soon as you wake up.

**IT FLUSHES TOXINS FROM THE BODY.**

Water transports nutrients to where they are needed in the body as it gets rid of toxins. Without water, the contents of your colon can dry out and get stuck, eventually causing constipation. Meanwhile, our kidney system, which removes waste products from the blood, is totally dependent on water in order for it to work.



**IT HELPS PREVENT WEIGHT GAIN.**

While water does not possess fat-burning properties, it can definitely help with weight loss efforts. First off, staying hydrated helps you avoid overeating, especially since many confuse thirst for hunger. If you're craving for a snack and want to make sure your pangs are caused by hunger, and not lack of hydration, drink a glass of water. Then see if you're still hungry 30 minutes later.



**IT FIGHTS FATIGUE.**

Inadequate water intake causes a drop in blood volume, which makes the heart work harder to push oxygen and nutrients through the bloodstream to the brain, skin and muscles. All these, in turn, result to fatigue.



One study of athletes found that after limiting fluids for

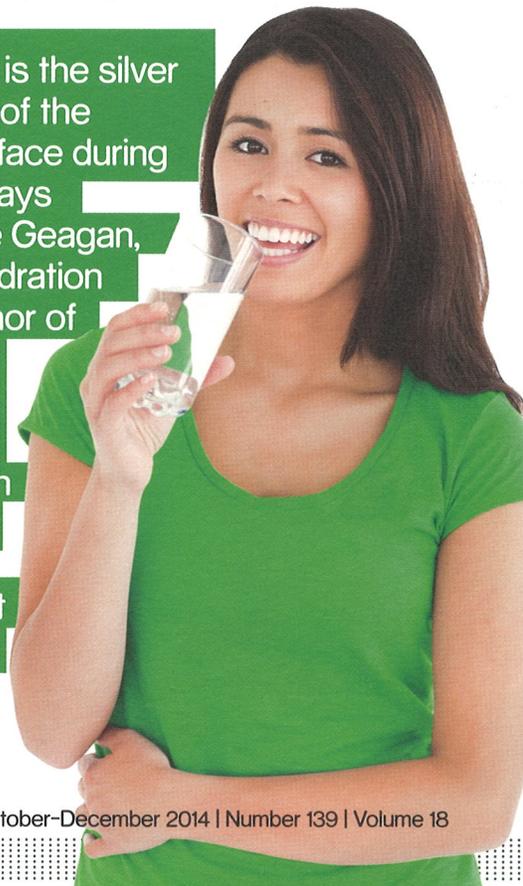
**15 hours, 92%**

felt tired, had lapses in memory and had difficulty concentrating.

**IT GIVES YOU BETTER COMPLEXION.**

When the skin is dehydrated, the pores are firmer and tighter. Dehydrated pores do not flex, making skin prone to bumps, future acne or blackheads. Hydrated skin has more flexible pores, which are then able to stretch and release naturally secreted oils, keeping skin well-moisturized and pores tighter.

“Drinking water is the silver bullet for many of the challenges we face during the holidays,” says nutritionist Kate Geagan, a CamelBak hydration expert and author of *Go Green Get Lean*. A drop in water levels in your body, even as little as 2%, can have a dramatic impact on your overall well-being.



*Here's to a refreshing  
Holiday Season  
flowing with good cheer!*

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[@ManilaWaterPH](https://twitter.com/ManilaWaterPH)

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