# DISTRIBUTION

ADDC QUARTERLY INTERNAL NEWSLETTER ISSUE NO.



# WATER. SHARE IT & SAVE IT!

# **HIGHLIGHTS**

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- P.7 History of Water Industry in Abu Dhabi





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Dear reader

Welcome to the 6th edition of our quarterly newsletter "Distribution". This edition coincides with the new organizational and administrative amendments that have been recently introduced by Abu Dhabi Water and Electricity Authority (ADWEA), under the leadership of H.E. Dr. Ahmed Mubarak Al Mazrouei, ADWEA Chairman, to ADDC.

The changes, the foremost of which is the new Organizational Chart, were aimed at injecting new blood into ADDC and improving its performance building on the great achievements of previous administrations. They also came within the context of keeping the company abreast of the unprecedented economic and real estate boom witnessed by the emirate under the wise leadership of the President, His Highness Sheikh Khalifah bin Zayed Al Nahyan and General Sheikh Mohamed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi, Deputy Supreme Commander of the UAE Armed Forces and Chairman of the Abu Dhabi Executive Council.

Let me first reassure our customers that we shall continue improving the company's infrastructure, particularly in the areas of introducing up-to-date IT applications and methods of water and electricity bills payment.

Based on this, and in association with the Emirates Identity Authority (EDIA), we have recently started accepting ID cards as the identification document for processing household transactions. Therefore, we request our valued customers to obtain this important document, which is of great help in processing transactions with us, and reducing queue time at our customer care centers by 50 per cent.

Finally, we invite you to continue reading our newsletter in the future with the hope that it will serve as a means of interaction.

Eng. Abulaziz Abdulrahman Al Hemaidi ADDC Managing Director

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# **World Water Day**

# The United Nations General Assembly adopted a resolution designating the 22 March of each year as the World Water Day

The World Water Day is an initiative that grew urban water management. out of the 1992 Rio de Janeiro United Nations Conference on Environment and Development (UNCED), to conform with the recommendations of the UNCED contained in chapter 18 (Fresh Water Resources) of Agenda 21.

The United Nations General Assembly adopted a resolution designating the 22 March of each year as the World Water Day, starting from 1993.

The event is organized by the UN Water Group, which also decides each year a specific the national context. This year's global event theme. This year the theme is "Water for Cities", stretches from Argentina to Japan and from in response to the urban challenges and calls New Zealand to Sweden and includes a variety upon governments, communities, organizations of sports, fun, edutainment programs and and individuals to address the problems around photo contests.

The objective of World Water Day 2011 is to focus international attention on the impact on urban water systems of rapid urban population growth, industrialization and uncertainties caused by climate change, conflicts and natural disasters.

> Day to implementing the recommendations and set up concrete activities appropriate to

### **Facts and figures**

- Four million people die each year from water-related diseases.
- Two billion people lack proper sanitation because of poverty.
- The entire Arab countries are below the water-poverty line.



# The late Sheikh Zayed's statement on environmental protection

"We have to pay a great deal of attention to the protection of the environment. Our ancestors lived in harmony with their surrounding environment and instinctively realized the importance of protecting it and the sustainable use of natural resources for the betterment of posterity. Therefore, it is a collective responsibility of all those who now live on this blessed land to preserve the environment and wildlife, not for us only, but also for our children and grandchildren."

The late His Highness Sheikh Zayed bin Sultan Al Nahyan speech in the 1st UAE National Environment Protection Day, 1998.





**INTERVIEW** 



Mohammed Sultan Al Maamari

**Education certificate:** 

Master's degree in Water Science

Job title:

Water O&M Director

Joining date: 2000

#### In brief

Your role model character:

The late Sheikh Zayed

A book you have read:

Friends in High Places

**About ADDC employees:** 

I appreciate their dedication and perseverance

Word for them:

Smile is the best gift

# Al Maamari: Daily per capita water consumption in Abu Dhabi is 28 imperial gallons

# Abu Dhabi annual water leakage is 16%

High water consumption in the Emirate of Abu Dhabi causes to rationalize water consumption, "It is important to say here that estimated to be 72 imperial gallons in the US, 52 imperial gallons in much higher". Singapore and much less than that in the European countries. The Abu Dhabi Distribution Company (ADDC) is putting in force many In the same context, the directorate has replaced 85 per cent of the the natural resources as wtell as causing high economic loss.

The Water O&M Directorate pumps around 420 imperial gallons the end of 2013". of healthy potable water, as per the World Health Organization (WHO) standards, daily in the company's 7000 kilometers network In realization of the directives of Abu Dhabi Executive Council, the well as cooling purposes.

44 per cent in the UK, but taking in mind that we largely depend sewer water within the coming two years. on desalinated water we find that the cost of the loss is very high maps we present to them so we make every effort to keep an leakage points as well as staff number," he added. eve on their activities". The official added that the directorate also does network maintenance, cleaning and replacement of low density

The directorate, which consists of the Central Laboratory, Planning polyethylene pipelines with high density ones.

Asbestos pipes (AC) to minimize outflow incidents".

The directorate also organizes campaigns to encourage people

serious environmental problem that needs to be addressed. The per the percentage of water leakage, 16 per cent, is calculated only capita daily consumption of water in the emirate is estimated to according to the outflow incidents that occur in the network areas be 82 imperial gallons, one of the highest rates in the word as it is before the outflow meters, otherwise this figure could have grown

measures to tackle this problem because it places great pressure on old outflow meters with more accurate electro-magnetic ones. Al Maamari added; "The old meters are still in use in some farms and forestry projects and we will be replacing 100 per cent of them by

for around 250,000 customers to be used for drinking irrigation as directorate has reduced water supplies to farms and forestation projects by 50 million imperial gallons per day beginning of mid 2010. Al Maamari added; "We knew that 50 per cent of the 140 million Mohammed Sultan Al Maamari, Water O&M Director, said; "We imperial gallons consumed daily is leaked and all our calls for them to estimate our per annum of water leakage to be 16 per cent and we rectify their poor water distribution networks went unheeded, so by are doing our best to cut this figure to the minimum". Al Maamari cutting their water supplies we forced them to adopt less wasteful added; "Although this is a medium record compared to the other irrigation techniques and to shift to water-efficient crops and organic countries, 2 per cent in Netherlands, 4.5 per cent in Singapore and farming". Plans are also in the pipeline to provide them with treated

in both environmental and economic terms". As for the reasons "The directorate's future plans include the establishment of the behind this high outflow, Al Maamari added; "It occurs mainly due Water Network Remote-Control Centre which would be using to accidents caused by contractors' and developers', around 40 sensors for seepage detection and water pressure measurement accidents per year, non-adherence to the network drawings and and remote-controlled valves that would reduce time for reaching

and Maintenance and Standards and Quality sections, contributes for the firefighting and crisis prevention efforts in collaboration with The replacement also includes metal pipes that have been in service the Civil Defense Department and other governmental concerned for 30 years as well as Glass-fiber Reinforced Plastic (GRP) and departments. "We also take part in the company's social, sports and cultural activities." he concluded.



# **History of water industry in Abu Dhabi** The first desalination plant was established in 1961

# The plant used to sell a gallon of water for 2 annas, 1/8 of an Indian rupee

report about the history of water industry development in British Treasury slashed it to only £8,200 and the total amount the Emirate of Abu Dhabi since the formation of the Trucial to only £64,989. States Council in 1952. Before this date people in Abu Dhabi, as well as other emirates, used to draw drinking water from The first desalination plant in Abu Dhabi was supplied to three sources, namely shallow hand dug wells; the traditional the Dubai-based firm of "Al Mulla and Owais" by Richardson falaj system and rainfall harvesting methods. Water obtained and Westgraph Ltd, of West Hartlepool, an indication of the from these three sources caused serious health hazards to the great role the private sector played in the development of consumers at that time because of high salinity and pollution. the modern water industry in the Emirate of Abu Dhabi. This

The council's first budget included an allocation of 150 3.5 dhm per gallon, produced the first gallons of desalinated thousand Indian rupees to a Water Resources Survey in drinking water in Abu Dhabi. Unfortunately, the plant had many the Trucial States; however the British Ministry of Overseas teething troubles and did not begin to function reliably until Development (MOD) refrained from providing funds for this about September of the same year with a daily output of only purpose without giving justification for that. Mr. Crawford, of 11,000 gallons. The plant used to sell a gallon of water for 2 the British Middle East Office (BMEO), visited the region in annas, equal to 1/8 Indian rupees, which was a very high price December 1953 and advised that funds should be allocated compared to the per capita income at that time. for the development of water resources in Al Ain city and the coastal cities. In 1954 the council earmarked £20,000 (Twenty Then a contract was awarded to Aloma Company, of Kuwait, thousand sterling pounds) for digging wells in the Trucial States: for the construction of a desalination plant with a total capacity three of them in Abu Dhabi emirate, one on Abu Dhabi Island of 25 thousand gallons per day, with the total cost of £22,000 and two on the Abu Dhabi-Al Ain highway. Subsequently, (Twenty two thousand sterling pounds) which was supplied by Colonel Merrylees, an expert in underground water, refrained from digging in Abu Dhabi Island because wells need heavy witnessed so many difficulties such as insufficient length of

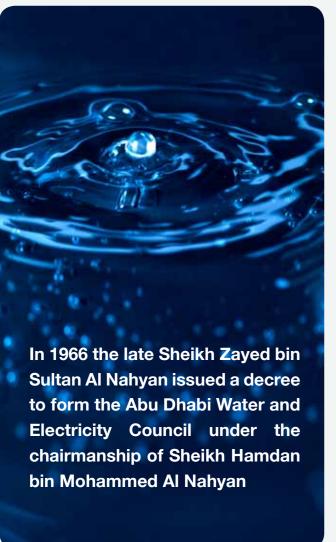
for the year 1957/58 included £15,613, out of £92,699, for generally above 100 Fahrenheit during summer in Abu Dhabi.

In recognition of the World Water Day, we present this short surveying and preservation of water resources. However, the

plant, with 14,000 gallons of water capacity per day for about

the British company Bennis Thermoflash. However, the plant pipe for the intake of salt water to the storage tank. Another problem was that the manufacturers designed the plant to The Political Resident's proposal for the Development Program work in sea temperatures below 80 Fahrenheit, whereas it was





The company failed to address these problems and the plant Which means that by the end of the first quarter of 1962 matter that delivered a severe blow to the water desalination working to their full capacity. industry in Abu Dhabi. The British Political Agent expressed companies ability to invest in the region, particularly with the emergence of tough competition posed by the American

The same company has supplied and commissioned two desalination plants in Tiraif area and Abu Dhabi Island for the Abu Dhabi Petroleum Company Ltd. (ADCO).

In June 22, 1962, Colonel Merrylees came back to Abu Dhabi and claimed that he spotted underground water in two sites team and driller and so he was able to commence digging the Abu Dhabi Water and Electricity Authority (ADWEA). first well, somewhere to the west of Albuteen neighborhood, on 26 August 1962. Unfortunately, Merrylees failed to get Refs: water at 139 feet depth and had to stop because this was the maximum depth to which the driller was designed. The second well provided saline water not fit for human consumption.

It was mentioned in the 1962 Economic Report of the Emirate of Abu Dhabi that the USA company Agua Chem International Ltd had been awarded a contract for the supply and commissioning of one more desalination plant with the total cost of £60,000 (Sixty thousands sterling pound) with a 25 thousand gallons per day capacity. Work on this project was scheduled to take place in mid 1963 but this didn't happen because the authorities did not allocate a land plot for it.

remained idle at its location on the Abu Dhabi Corniche, a Abu Dhabi had seven desalination plants but only three were

his concerned that such mistakes might jeopardize the British Then plans were formulated to supply Abu Dhabi with fresh water from Al Buraimi oasis at a total cost of BRII,770,000, but the project was not implemented because of the high cost and unfavourable feasibility studies.

In 1966 the late Sheikh Zayed bin Sultan Al Nahyan issued a decree to form the Abu Dhabi Water and Electricity Council under the chairmanship of Sheikh Hamdan bin Mohammed Al Nahyan and membership comprised of a large number of the emirate's businessmen. In 1970 the Water Department Abu Dhabi (WDAD) and Electricity Department Abu on Abu Dhabi Island but he couldn't dig wells because of lack Dhabi (EDAD) merged to create the Water and Electricity of a driller. Then the ADCO provided him with a technical Department (WED) that existed till the formation in 1999 of

- البدواوي، دسيف محمد بن عبود، مجلس حكام الإمارات المتصالحة ١٩٥٢-١٩٧١ .
- محمد مرسى عبدالله، تاريخ الإمارات العربية المتحدة: مختارات من أهم الوثائق . 2
- الفهيم، محمد عبدالجليل، من المحل للغنى، قصة أبوظبي . 3
- 4. Abu Dhabi Economic Report of 1962, for the guarter ended
- 5. Saif Nasser Harhara, interview.



The system is also expected to reduce queue time by 50%

# **ADDC** accepts **ID** Cards as identification document

The Abu Dhabi Distribution Company (ADDC), place to enable officials at its Customer Care in association with the Emirates Identity Authority Centers to scan ID Card to validate the applicant's (EDIA), announced on Sunday December 19, identity, which makes the whole process hassle-2010, the adoption of ID Cards for all transactions free and time saving for both sides. The system is by households. The new system comes in line also expected to reduce gueue time by 50 per with the UAE Government Decree No. 201/1 for cent and will be put in place in all the company's the year 2007 that reads; "All government and Customer Care Centers in Abu Dhabi city and semi-government departments (local and federal the Eastern and Western regions. alike) should endorse the ID Card as identification document in processing all transactions".

The company announced that starting from period they have to present their ID Cards to be January 2011, it would not process any transaction added to the company's database. After expiry to open a new household customer water and of the grace period their transactions will not electricity account without presenting an ID be processed. Card. This makes the ADDC one of the pioneer government departments in taking such important The company has earlier this year introduced new step which is in line with the UAE government water and power bills payment methods through strategy of making use of the most up-to-date ADDC's website (www.addc.ae), the Abu Dhabi IT technologies.

administrative arrangements have been put in Emirates Post offices.

A grace period has been provided by the company for its old customers. During this

Government Portal (www.abudhabi.ae), over the telephone (by calling toll free 8002332), ATMs of The company also said that all technical and selected authorized banks and through any of the



# **ADDC** wins the Five-star Health and **Safety Audit Award**

# The Five-star Audit is an internationally recognized audit system, used by leading organizations worldwide

The Abu Dhabi Distribution Company (ADDC) prestigious award in Abu Dhabi emirate, scored recognition of the high quality of the occupational top management. health and safety measures applied by its Health, Safety, Environment and Quality (HSEQ) Winning such an international accolade reflects Department.

organizations worldwide to benchmark list of the five top governments worldwide. their safety management system against best market today.

has been awarded the Five-star Health and 94.4 % per cent points in the award results, Safety Audit award of the British Safety Council. thanks to the support of Abu Dhabi Water The company won this prestigious accolade in and Electricity Authority (ADWEA) and ADDC

the ADDC efforts to put into practice the directives of General Sheikh Mohamed bin Zayed The Five-star Audit is an internationally Al Nahyan, Crown Prince of Abu Dhabi, which recognized audit system, used by leading aim to place the Abu Dhabi Government on the

practices and is globally recognized as one Eng. Ahmed Saeed Al Mureikhi, ADDC Chairman, of the most comprehensive, independent said; "This accomplishment reinforces ADDC audit measurement systems available on the position as a leading utility provider worldwide and I do call upon all our staff to work together to maintain such a level and to achieve our ultimate The company, which is the first to win this goal of "ADDC: Free of work-related accidents".





# Al-Nuaimi: Shuweihat S3 financial forecast due by the end of April

The Abu Dhabi Water and Electricity Authority (ADWEA) announced that the completion of the financial forecasts of the Shuweihat S3 power project is due to take place by the end of April 2011, which is in line with the set timetable. Abdulla Saif Al-Nuaimi, ADWEA Chief Executive Officer, said that the implementation stage of the AED 5billion project would be commenced in the second guarter of this year.

After tough competition from a large number of international players, the Sumitomo Corp/Korea Electric Power Corp consortium has been selected for the development and construction of the greenfield power generation plant with an intended capacity of about 1,600 megawatts.

"The plant, located near Jebel Dhana area about 260 kilometers west of Abu Dhabi, will commence production by the year 2014" Al-Nuaimi added.

In spite of the tough construction and operating conditions set by ADWEA, the project is offering best prices: at 56 per cent operating capacity, only 12 fils for one kilowatt; at 67 per cent operating capacity only 10 fils for one kilowatt. These prices match the requirements of the ADWEA's (IWEP) program from its onset in 1998, the official added.







SAFETY

**FIRST** 

# The HSEQ Department

The Health, Safety, Environment and Quality (HSEQ) Department of ADDC was established in 2007. Its aims were the establishment and implementing safety, occupational health and environment protection procedures to create and maintain the safest work place for employees, contractors as well as the public. Eng. Hani Hosni, Head of HSEQ Department said; "Through conducting internal and external audit procedures, under the supervision of Abu Dhabi Water and Electricity Authority (ADWEA), the Regulation and Supervision Bureau (RSB) and the International Organization for Standardization (ISO), the department ensures that all the company's departments and sections strictly adhere to those standards".

The department also reviews and evaluates tender documents to ensure that they comply with the company's HSEQ standards and conducts site visits to gauge their implementation. Hosni said; "We have provided 8000 training hours to our employees during the last year, 2010, on occupational safety, prevention of work-related accidents and environment

protection". Stressing that, "no employee would be allowed to work in the water and electricity networks sites before attending such training".

He added that the department also "Publishes electronic and paper leaflets to educate the company's and contractors' employees on issues of occupational health, safety and environment

"Participation in educational programs and public speeches in schools and public and private institutions, in association with Abu Dhabi Education Council and the Red Crescent, is also a part of the department activities". Hosni said.

The department has recently organized the "Best Practices in Safety Forum 2010" with the participation of a number of local, regional and international institutions and won the Five-star Health and Safety Audit award of the British Safety Council.

# **Enhancement in occupational safety and** environment protection

ADDC has registered zero environmental accidents in its worksites during the two years 2009/2010. The Lost Time Injuries (LTI) rate was 0.34% during the year 2010, with only 3 accidents registered. This is a very good indicator of safety in the context of the international standard for utility providers and not far above the company's target for the same year, 0.25%.

The company has achieved a great performance in this area since 2007 when the LTI rate was 0.23%. In 2008 its performance was 0.41% and 2009 saw the best-registered rate of 0.17%. These achievements place the company among the best 5% utility providers worldwide for occupational safety. The ADCC aspiration is to have accident-free worksites.





or even solar energy. Here of water every 2 or 3 months. tips on how to reduce power emptied once every month.

#### **NOT IN USE**

functioning properly and water temperature

#### INSULATION

- Make sure that the insulation is wrapped around

#### CLEANING

#### consumption and to avoid **CAUSES OF HEATER ACCIDENTS**

- Lack of water in the reservoir.
- the pressure associated with high temperatures.
- Weakness and deterioration of the tank itself.

#### PREVENTATIVE MEASURES

- Installation should be carried by qualified technical





# Michael Faraday

1791 - 1867

"a strong sense of the unity of God and nature pervaded Faraday's life and work"

English chemist and physicist was born in Newington Butts, London.

His inventions of electromagnetic rotary devices formed the foundation of electric motor technology, and it was largely due to his efforts that electricity became viable for use in technology.

Faraday's breakthrough came when he wrapped two insulated coils of wire around an iron ring, and found that, upon passing a current through one coil, a momentary current was induced in the other coil, which is known as mutual induction. In subsequent experiments he found that if he moved a magnet through a loop of wire, an electric current flowed in the wire. The current also flowed if the loop was moved over a stationary magnet. His demonstrations established that a changing magnetic field produces an electric field. Faraday later used the principle to construct the electric dynamo, the ancestor of modern power generators. He used "static", batteries, and "animal electricity" to produce the phenomena of electrostatic attraction, electrolysis, magnetism, etc.

Science historians refer to him as the best experimentalist in the history of science.



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### **Appreciation**

Congratulations to our colleague Saif Al Kabi, PR Section, for receiving an appreciation certificate in recognition of his contribution towards making the "Legend" project of Zayed University a success.



Network Management Division staff would like to congratulate their colleague Ms. Mona Al-Khumairi in getting her Bachelor Degree at the Higher Colleges of Technology (ADWC). May all her future ambitions be successful.



# **Dhyab becomes Aikido trainer**

Dhyab Al Aseery, Power Network Section, has been awarded Aikido Instructor license from the International Aikido Federation, the first UAE national to get such accolade. Dhyab started practicing Aikido in late 2003 and got a black belt 2 Dan in 2010.

Aikido is a Japanese martial art that trains its practitioners to defend themselves without injuring their attackers.



## **Role Model Employee**

We congratulate our colleague Mohammed Newaf Al Haran, Coordinator at ADDC Call Centre, for being selected as the Role Model Employee of the Electricity O&M Division for November 2010.



#### Well done

Our colleague, Fadhel Khouri, trekked around the seven Emirates starting at Abu Dhabi and cycling back. He dedicated his journey to the President H.H. Sheikh Khalifah bin Zayed Al Nahyan, Well done Khouri.

# Comparison between getting married and excessive use of water and electricity

By Sadiq A. Salam

In dealing with water and electricity bills, in treat water as a very cheap commodity because raising questions about these "accomplishments", end of the day, when the bridegroom receives more than food". the bills for the wedding feast, onion sacks and honeymoon hotels he will lower one eyebrow. I retorted to him that this contagious disease headline; "100 per cent increase in water and which he thought about getting married.

This is simply because water and electricity bills been warned of destruction. expose the weakness of a person's pocket and destroy the family budget.

general people tend to be like men in dealing of its availability and we start to squander it reporters used to ask questions like "Are you with marriage. Is there any man who is not in abundance as if it is never going to dry up, going to raise water and electricity rates?" and interested in getting married? Actually all men However, water is the most valuable thing for us "When are you going to do that?" Then we are obsessed with the mere notion. But at the when it is scarce and then we cherish it even realized that reporters are more interested in

and raise the other one, and curse the day on of obsessive water consumption has spread to power rates." But the following headline is written electricity consumption. So we see some people with INVISIBLE ink; "100% increase in newspaper who illuminate their houses with enough light that circulation". And all our statements go unheeded Similarly, who does not enjoy the sound of water it rivals the lighting at the Maracana Stadium in that it is not a part of ADDC's mandate to make splashing in the bathroom? Who does not enjoy Brazil and leave their AC running all day and night tariff decisions regarding water and power prices. the sound of an air conditioner unit while it during both summer and winter until it produces consumes power to manufacture cold air that temperatures that would leave an Inuit shivering. Accordingly, we advise all our valued customers

press conferences to publicize the company's reduce your consumption! One day a friend of mine told me that; "We achievements or new projects. But instead of

scare-mongering stories that turn the reader's face into "rubble" as they read the morning

makes ones' cheeks chilly as well as bedrooms? In the case of a power outage, they would be that the size of your water and power bills are However, when he receives the utility bill he will sweltering from head to toe and become very set according to your consumption rate, and it is lower one eyebrow and raise the other etc... anxious as if they had received a bad omen or in your hand only, not ADDC's, to decide that. So don't be panicked when you receive your utility bill as if you have seen a bogey or have been In ADDC's Media Office, we regularly organize attacked by air-borne force. Just cut back and



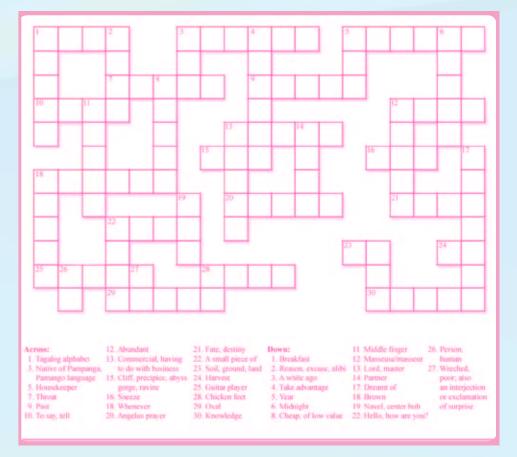
# The prince and the Bedouin

One day a Bedouin came to feast organized by prince Al Mugairah bin Abdallah Al-Thagafi and started hungrily eating from a roasted gazelle, tearing it apart.

So the prince asked him, "you eat it as if his mother butted you and you are taking your revenge on him."

The Bedouin reacted; "why show him so much pity? Did his mother breastfeed you?"

# Crossword



# Relevant Sayings

"Don't let what you cannot do interfere with what you can do."

John Wooden.

Famous American basketball champion and coach

So, do your best to preserve water.



# Did you know?

The UAE has one of the highest per capita water consumption statistics in the world. Every individual in the UAE consumes from 280 to 320 liters of water per day, compared to only from 140 to 150 liters per day in Europe. Twice as much!







