## ПЕРЕПИСКА С МИНИСТЕРСТВОМ ЭНЕРГЕТИКИ И ВОДНЫХ РЕСУРСОВ

09.2012.

От кого: **Alexander Kogan** <alexkgn@inbox.ru>

Кому: pniot@energy.gov.il 8 сентября 2012, 07:26

Ladies and Gentlemen!

Recently, significant progress in reducing water shortage in the country, which is certainly an achievement of your Ministry.

However, the problem is not yet fully charged and requires further efforts.

In this regard, it is important to use a resource-saving, which, in my opinion, we can achieve tangible results.

I would like to offer you suggestions in this direction, perhaps, something of interest to you.

Wishing you continued success!

## Alexander Kogan, MrTechSc.

#### **WATER SCARCITY - SURVIVAL TACTICS.**

Published in the "Herald of Scientists House, Haifa", Vol. XII, Haifa, 2007.

The author apologizes in case of errors or incorrect figures of speech - the translation is a machine translator.

The reason for writing this was an article published in The News: "Water is not enough" (01.18.07), "Water in the Desert" (01.03.07, Annex Treasurer) and the "threat of drought" (04.19.07).

Authors of all publications warn: status of water reserves in the country - on the eve of disaster.

Authors are responsible also for two age-old question:

- Who is to blame?

Global climate change in dry side, and we are mindless spenders of water and its egregious polluters.

- What to do?

Urgent: a) multiply the scale desalination of sea water, and b) to refuse to crop, requiring large amounts of water for irrigation; c) the act is not only culturally in communication, in transport, in public places, in nature, the Internet, etc., etc., but also in the treatment of water - the culture is lacking!

However, this way of education through the revelation of the foolish they first notice, and then the ordeal, is known for millennia and is described in detail in all religions, but brought up (in percentage) for a radical change in the situation all too insignificant. Their voice is still a voice crying in the wilderness - is about water.

Let's try to get along with their ordinary powers, relying on common sense and remembering the eternal motto of salvation, but now is not drowning, and wither.

From consideration of the above points can be seen that the first two in the section "What to do?" Require huge investments and affect the structural changes in the economy and the economy. The same applies to the problem of organizing over ripened total rainwater harvesting. It is a matter of strategy and they should be left to deal with strategists. Implementation of the third paragraph in the short term, given the fact, with what has become ¬ nods occasionally in communication, often in public transport, as a rule - in public places outdoors (parks, gardens, beaches!), The Internet (forumy!) causes very deep skepticism. Mix it all here - and the mentality and psychology, and the notorious stubbornness.

Little comforting and what is bad not only for us, even in such a fabulously rich water country like Russia - 2.5 million rivers (!), more than 3 million lakes (!), water reserves are estimated at 26,000 cubic kilometers (an account with us goes into cubic meters!) - the population of many cities

get water on the schedule, and another has to catch the source of life in the night (after **rian.ru**, Internet).

In the same **rian.ru** says: "Russian standard allows the use of drinking water with hardness values mlg.ekv. 7 per liter. This is a terrible figure for the body. The normal number - no more than 0.2 mlg.ekv. per liter. But it is not heartless services, and the economy."

Thus, the uncontested survival tactic for us is a major water savings. Immediately, starting now. Overcoming established habits (for many: "I'm doing so all my life!"; for the rich: "What's the matter? I pay! Conversation is over!"), skepticism, and mentality.

Is it possible? I think so, yes.

At first I want to quote the world famous healer Louise Hay (her books have been translated into dozens of languages and millions of copies left) associated with the period of drought in California. Yes, even in the States it happens. This secured a woman living in his house with a large garden (it runs all year round itself - not out of stinginess, and glad to care for their pets), in his book, "Life! The one and only!", provides a list of ways to keep water out of 17 points, which it should be in her life. To save space, will give, in my opinion, the most important (not quoting, but the meaning): "Do not let the loss of a drop of water, collecting it for reuse, herbs and vegetables in the wash basin, using water for watering plants, go to use non-toxic cleaning agents, harmless to water plants, and if you do not have a garden, water the trees near the house, give up washing dishes in the machine, saving not only water, but also electricity, learn new hand-washing dishes and use two basins, one for washing, the other for rinsing - water from the last collect for consumption, adjust the water in the tank toilet; use water sparingly in the shower - turn off the water when use soap, do not stand under the waterfall then long, include only fully loaded washing machine; involve children in the game, arrange family contest, who will save more water".

This is fine, much to use, but generally only suitable for very responsible - ourselves, society and Nature - people. Possible, and there are enthusiastic followers, but the weather, they will not. I think that in this case you have to go on the proven forced and incentive way.

For its implementation can be recommended following urgent measures:

- 1. Develop minimally required application rate of water in the home (in person, depending on the number of members of the family) and on all kinds of production (per unit of output). After this set differentiated prices per cubic meter of water used for consumption in the normal range, lower in cost, progressively increasing with overspending.
  - 2. Prohibit operation of any production without water recycling.
- 3. Conduct a continuous review of all cranes, adjusting them to be easily opened, with the installation of the limiter at half the maximum rate (over the expected savings of 25-40%), and the same for all flushing cisterns especially in public setting the floats to minimum required level (the digits on saving the same).
- 4. Develop, with the launch and totally replace the old valves type: "take all you want!", to the new: "take as needed!" when you open the stream flowing minimal section, enough to wash hands, face, to get more you have to press the button (move the lever), with increased flow rate for some time (say 30 seconds), then gradually descends to the lowest, and so on, and, the higher the flow, the less time it exists prior to reduction (even 25-40, and even more%). But without sensors, fotocells, and other innovations that raise the price of the crane to hundreds of shekels.
- 5. Eliminate the use of tap water for auxiliary needs draining the water in the toilet, washing, cleaning floors, etc.

In view of volume of work, it is divided into two stages.

- A. Partial disposal of used water. Next to the washing machine is mounted on an elevated tank to pump washing machine pumps the spent rinse water (same here, if any, receives water from the dishwasher), which is arranged layout to a tank toilet and tap for household needs.
- B. Ultimate disposal of used water. Streams of water used divided: from the toilet into the sewer, from all the other places in the house-automatic water treatment plants for non-potable water (precipitation of solids and coagulation products, disinfection). Necessary, of course, to develop, to start production and installation of such facilities, as well as to alter the system drainage pipes. The treated water is pumped into storage tanks on each stairwell, there is arranged layout of the flats the toilet cistern, taps for washing machine and dishwasher, and in the bottom of the shower, to the tap for household needs. All such valves shall be provided with bright words "no drinking water!" and the appropriate protection of their young children.
- 6. Develop and release flow water heaters, alternative "Atmore" these devices are too extravagant for water and electricity.

- 7. For solar water heaters to consider and implement a system of hot water directly to the tap, without the prior forced now draining into the sewer pipes in the cooled water (I drain into a bucket), for example, the new layout of pipes (in the walls is not penetrate) with thorough insulation.
- 8. Develop and begin production of hand tools for washing machines, supplies water to the brush in the form of a mist, and then wash the hoses banned. Elaborate on this principle, appropriate equipment for the brushes on the car is washed and prohibit the use without them.
- 9. Start in all kinds of media large, active, ongoing awareness-raising campaign on the situation with drinking water. The campaign should be aimed at all ages, but especially bright and attractive, it has to be for the younger generation: the goal rooting habits lean to all, and especially to the water. Each issue should indicate the measures taken by the government to save water, and the measures that are available to everyone in that direction now: "hasahim hamaim ahshav!".
- 10. Announce various competitions for the best deals to save water, not forgetting the promotion of all involved.

Yes, it will need the service manual for house plants. Yes, the cost of water will increase. But the rise in the cost - this is backbone for our civilization. Some people prefer not to pay more, and sit without water? As it know, our initial advantage over all living things - the freedom of choice. It is also in this case: it is possible to move to a place where there is free water from a well or stream.

Implementation of these measures only, I believe, will help to reduce water consumption by at least 30 - 40%. The game is seems worth the candle - about us today and not enough.

Afford, as an illustration, refer to personal experience. In 1,5 rooms apartment with a shower room and toilet, no dishwasher (hand washing without basins, dishes by rubbing detergent water off) and no washing machine (shall delivered, but the fines wash house), the monthly water consumption does not exceed 1.5 cubic meters (I assure you, I wash myself under the faucet and shower, wet cleaning and spend my floors regularly). The car, however, not wash (two-wheeled horse rubbed) and not water the lawn (only permanently withered flower). Is that a lot or no? It is 50 liters of water a day. Imagine five buckets of water every has 10 liters. Of them used for drinking and cooking 2.5-3 liters per day. All others - 4 full and almost 5th poured - there and here, such here is receipts and consumption. Can you imagine?

I have no doubt that the common sense of all of us, citizens, and knowledge of professionals in the water will not only significantly expand and adjust this list, but realize it, of course, the attention of the State, in the short term. If implemented listed a couple of years - the period for emergency work, but because we did not crash, but on the verge of a disaster! - it is possible to gain time to address strategic issues, without which we will again end up in the same dry well: after new water itself does not appear out of nowhere, and we run out of reserves of economy. Next will be only extraordinary measures: closing plants using water but except vital, hard limits on the distribution of water, etc.

Of course, the question: "Where can we take so much money on this?" - I hear.

I will not answer slyly: "From the night table."

My answer is clear: "But where can we take so much water to all this?."

I wish all of us a life without limits and without drought on the water!

PS. News.

## "Israel squander the water."

The newspaper "Vesti" application "Treasurer", 30.08.2012.

"Last month the whole water consumed by 13.8% more than in July 2011. Growth of water consumption in households increased by 14.3%."

## Tue, 11 Sep 2012 14:20:05 +0400 or Alexander Kogan <alexkgn@inbox.ru>:

----- Пересылаемое сообщение ------

От кого: "Ovadia Livnat" < livnato10@water.gov.il>

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Дата: Tue, 11 Sep 2012 11:45:28 +0300

Тема: פניית אלכסנדר קוגן - ללשכת הש

אלכסנדר שלום רב,

בהתייחס לאמור במכתבך ברשות המים מרכזים מאמצים רבים בנושאים הקשורים להגברת החיסכון ושימוש יעיל במים.

כמו כן, אנו מוצאים לנכון להביא לידיעתך כי מסי רב של מהלכים נעשו בעבר וכיום בתחום החקיקה, אכיפת בזבוז מים והתקנת תקנות ופעולות הסברה, חינוך והעלאת המודעות הציבורית בנושא חיסכון במים. ובין היתר מבצע לאומי להפצה והתקנה והרכבה של חסכמים בכ 65 % מבתי האב בישראל.

חלק מהמידע מופיע באתר רשות המים, כמו כן מידע נוסף בנושאים שונים.

ושוב ברצוננו להודיע על האכפתיות והמודעות לבעיית המים בארץ.

בברכה,

לבנת עובדיה

ראש ענף פניות הציבור

הרשות הממשלתית למים ולביוב

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Сегодня, 12:45

#### Александр Шалом,

Я хотел бы с удовлетворением отметить высокий уровень осведомленности вы обнаружите проблемы нехватки воды, а также ваши усилия в поиске решений и способов вы хотите иметь дело с ним.

Ссылка на Ваше письмо от Water Authority заявил усилий центров по вопросам, касающимся увеличить сбережения и эффективного использования воды.

Мы также считаем необходимым, чтобы вы знали, что большое число ходов в прошлом и в настоящее время в законодательство, правоприменение и установка сточных вод правила и информационная деятельность, образование и повышение осведомленности общественности о сохранению водных ресурсов. И среди других национальных кампаний для распространения и установки водосберегающих устройств и сборку около 65% домашних хозяйств.

Некоторые сведения, перечисленные на Water Authority, а также информацию по различным предметам.

Еще раз мы хотели бы объявить помощи и повышения осведомленности о проблеме воды в стране.

## Уважаемый Овадия Ливнат!

Благодарю Вас за высокую оценку моей публикации!

Я с интересом знакомлюсь с обширной и разнообразной деятельностью возглавляемого Вами центра и уверен, что проблема дефицита воды, а также дефицита внимания населения к этому вопросу будут успешно преодолены.

Разрешите пожелать Вашему центру новых успехов в новом году, а Вам и всем вашим сотрудникам - здоровья и счастья!

Администратор сайта Дома Учёных города Хайфа, <a href="http://dom-uchenyh-0620092.narod.ru/">http://dom-uchenyh-0620092.narod.ru/</a>, Александр Коган.

#### Dear Ovadia Livnat!

Thank you for hight appreciating my publication!

I was interested to meet a vast and diverse activity center, headed by you and I am sure that the problem of water scarcity, as well as attention deficit population to this matter will be successfully overcome.

Allow me to wish you every success in the center of the new year, and you and all your staff - health and happiness!

Site administrator House of Scientists in Haifa, <a href="http://dom-uchenyh-0620092.narod.ru/">http://dom-uchenyh-0620092.narod.ru/</a>, Alexander Kogan.

RE: פניית אלכסנדר קוגן - ללשכת הש

От кого: "ovadia Livnat" < livnato10@water.gov.il>

Komy: "Alexander Kogan" <alexkgn@inbox.ru>

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12 сентября 2012, 11:40

אלכסנדר שלום רב.

במידה ובנוסף לתשובה שלי תרצה לשוחח או להיפגש עם גורם מקצועי ברשות המים.

ממליצה לך לפנות לאגף קידום חסכון במים – אל ורד המזכירה ולבקש לשוחח עם מנהל האגף מר יעקב לב.

203-6369682/685 בטלפון:

שנה טובה וחג שמח,

# Уважаемый Александр, здравствуйте!

Если, дополнительно к моему ответу, вы захотите поговорить или встретиться со специалистом по водному хозяйству, рекомендую вам обратиться в отделение по водосбережению – к секретарше Веред и попросить о беседе с руководителем отделения господином Яковом Лев, по тел. 03-6369682/685.

Счастливого Нового года!