FEATURE ADDRESS TO THE ANNUAL GENERAL MEETING OF THE CARIBBEAN BASIN WATER MANAGEMENT PROGRAMME BY CLETUS I. SPRINGER DIRECTOR, DEPARTMENT OF SUSTAINABLE DEVELOPMENT OF THE OAS BVI, OCTOBER 3 2008

I cannot begin to tell you how pleased I am and how honored I feel to have been invited to address you on the occasion of your 12th Annual General Meeting as an Incorporated entity.

I bring your warm greetings and best wishes for a successful meeting from the leadership of the Organization of American States; in particular from our Secretary-General and Assistant Secretary General, Excellencies Jose Miquel Insulza and Albert Ramdin respectively.

I have been tracking the work of your organization for nearly 2 decades from various perspectives, first as a Permanent Secretary in the Ministry of Public Utilities in Saint Lucia; then as Program Coordinator of the Caribbean Environmental Health Institute (CEHI), which served as the home of your predecessor organization; and more recently as a consultant.

In this latter role, I had the honor of co-authoring a paper that explored the feasibility of a merger between the CBWMP and the CWWA. I mention this most recent association with some trepidation, as the fact that you have not merged with the CWWA suggests that our recommendations were not accepted.

Be that as it may, I believe your organization is deserving of high commendation for the sterling work that it continues to do under very challenging circumstances, to build the capacity of its member utilities for effective water resources management.

And I believe that part of the reason for your durability and effectiveness is sound decision making by your Board, as is reflected in the recent appointment of Victor Poyotte as Executive Director. I have known Victor for nearly 25 years, and I know that in him, you have a highly knowledgeable and committed individual who will give everything to the cause of your organization.

Responding to Global Crises

Your meeting is taking place during what is arguably the most challenging period in the last 50 years of world history. Several of the global crises that are now receiving the fierce attention of politicians, businesspersons and civil society around the world pose strong implications and complications for utilities generally and water and wastewater utilities in particular.

The Emerging Global Financial Crisis

I am sure that all of you are following closely the crisis that has gripped global financial markets over the past 10 days or so and which has precipitated the fall of banking and investment giants like Meryl Lynch, Washington Mutual, Lehman Brothers, AIG, Bear Stearns and housing giants like Fannie Mae and Freddie Mac, among others.

Of course, the underlying worry in this crisis is uncertainty regarding its depth, breadth, duration and its responsiveness to fiscal reform measures. In other words it's not known how bad the problem really is, how far it will spread, how long it will last and how well it will respond to policy reforms. And this uncertainty has led to a lack of conference in the financial system and in the role of the market as the conciliator of demand and supply.

The real and immediate concern for utilities generally, and in particular water and wastewater utilities is the impact of the crisis on the availability of credit to finance expansion and improvement works. Even at the best of times, utility companies have a really hard time getting credit for their programs. But there should also be real concern about the effect of the crisis on economic growth prospects for the Caribbean region in the short, medium and long term.

It should be noted that the credit crisis is part of a broader economic crisis especially in the US and Europe where recession appears to be taking hold.

So, against this background it would seem prudent for Caribbean governments and utility managers to begin to plan for survival in a "worse case scenario" that might include plant closures, especially of US-owned firms that rely heavily on external credit; the suspension of construction of hotels; job losses, especially in the region's foundation tourism industry and in the construction sector; and disruptions in revenue flows from consumers who have fallen on hard times.

The Challenge Posed by Volatility in Energy Prices

The second major global issue that is of concern to water utilities is the volatility in fuel prices. This is a multifaceted threat that can spell ruin if it is not properly assessed and if adequate and timely mitigation and adaptation measures are not implemented.

In its simplest and more direct form, fuel price volatility can complicate business planning and force utilities to pay more to keep pumps running, undertake routine and emergency maintenance and even keep the lights on in offices. The real problem is when energy price increases merge with economic recession and diminished access to credit. Such a toxic mix will present the "mother of all conundrums" for Governments and businesses alike and could complicate even the most routine task of buying a pump from an overseas supplier.

The Challenge Posed by Global Climate Change

The third major global issue of concern to water utilities is global climate change.

When the debate on climate change began in the wings of the Rio Conference, nearly 20 years ago, climate change was regarded as a phenomenon that posed a threat to the livelihoods of *future* generations. But the clear evidence is that climate change is very much a present day reality.

The evidence suggests that warmer temperatures are already altering average stream and river flows and discharge volumes, by changing average rates of precipitation, as well as evaporation from surface bodies, and transpiration from plants within freshwater basins.

One of the central findings of virtually all climate assessments including the 2007 Report of the Intergovernmental Panel on Climate Change (the IPCC), is that climate impacts are transmitted and mediated primarily through water. In addition to projected increases in average sea level, climate scenarios forecast an increase in the frequency and severity of hurricanes, and tropical storms. We are already experiencing all of these impacts and so you will all be familiar with the problems posed for water production from surface water, groundwater and from hydroelectric sources.

Changes in stream flows would have important and direct impacts on human health because of reduced flushing of sewerage and untreated waste, thereby increasing the risk of water-borne diseases.

Field work done by the OAS together with the International Development Research Centre and the Pan American Health Organization (-PAHO) has highlighted a strong correlation between a decrease in water flows and drought and an increased incidence of risks related to malaria and dengue fever.

Given the magnitude of these water-related impacts that I have just described, there is an urgent need for water utility managers to sharpen their understanding of climate change impacts on the critical hydro-geological characteristics of freshwater basins.

I wish to suggest that these three global concerns that I've just briefly described deserve to be included alongside the current training offerings of the CBWMP. They all belong under the rubric of integrated water resources planning – a field that hitherto has not received much attention by water utilities.

Simply put, these current and future challenges demand that water engineers and managers have some knowledge of the social, economic and environmental aspects of water production and distribution.

The Threat of Roll Back

A very real concern for us at the OAS is the threat of "roll back" in the significant advances that have been made in the Caribbean, especially in the area of access to potable water and improved sanitation. The Caribbean has achieved many, if not all of the national targets set during the UN's International Decade for Drinking Water Supply and Sanitation in the 1980s, as well as the Millennium Development Goals (MDGs).

However, the threat of "roll back" is ever-present. Rapid urbanization, improved sanitation and health practices in rural areas, and sustained growth in tourism and in industrialization, have significantly increased the demand on freshwater resources.

Further, deforestation and encroachment on protected areas of watersheds have resulted in significant changes in the water-retention capacity of the soil. The deterioration and malfunctioning of the municipal water supply, poor maintenance and weak attempts at rehabilitation of irrigation, distribution and wastewater treatment systems have created added problems.

Then there is the issue of the state of the legal, policy and institutional framework for water and wastewater management. These areas can no longer be ignored, and in a sense it is good that they have begun to attract the attention of many international

finance institutions like the World Bank which regard them as "conditions for loan effectiveness".

It is encouraging to note that Barbados, Jamaica, Trinidad and Tobago and Saint Lucia have all designed national water policies and are seeking to streamline water laws and institutions. However, it must be said that the efforts being made by these and other countries in the region are still some distance away from the ideal of Integrated Water Resources Management.

On the legal front, the norm across the region is outdated and conflicting legislation and poor enforcement of laws, which retard effective management and dilute the effect of policy reforms. An improved legislative framework is also critical to facilitating private sector investment in utilities.

In nearly all countries, there are multiple institutions and agencies involved in water resources management, but there is no effective institutional mechanism in place to coordinate the inputs of these entities. Jamaica, through its National Environmental and Planning Agency and Trinidad and Tobago, through its Environmental Management Authority are examples of two countries where some degree of coordination takes place, not only within the water sector, but also between the water sector and other areas of the environment and the economy.

Decision Support Systems within the water and wastewater sector are grossly inadequate, as reflected in the paucity of data on water resources generally and on water and climate in particular. Generally, regular water resources assessments are not being undertaken. Where these are done, they do not routinely examine the competing uses of water against the availability of the resource; nor do they assess the risk and vulnerability of business operations to extreme weather events.

I put it to you that without a sound risk assessment and management approach it is virtually impossible for utilities to consistently ensure the safety of the drinking water supply.

While the efforts of the CBWMP Inc have made a marked difference, human resource challenges still afflict water and wastewater utilities. Very few countries have an adequate stock of skills across the broad spectrum of water and wastewater management needs. Even more critical is the absence of any technical cooperation program to move surplus skills around the region.

It would seem to me that more training is needed in the use of emerging technologies in the water and wastewater sector. Nearly 10 years ago I observed wastewater technologies in Canada that could easily be adapted for use in the

Caribbean. But 10 years later these technologies have yet to be used in the region. It is particularly sad that in a solar-rich region like the Caribbean we have not made sufficient progress in the use of solar energy to reduce the recurrent costs of running water installations and systems.

From all that I have said, it is clear that myriad challenges abound. The good news is that these challenges must be addressed. I say this deliberately because I have discerned a worrying tendency in the Caribbean to ignore challenges in the hope that they will go away. We need to confront our problems head-on, confident in the knowledge that we have the creativity and the energy to overcome them.

I have every confidence that CBWMP Inc will address the training and education dimension embedded in the challenges that I have described. I know that money is a critical constraint. But very often, the availability of money to do something depends on how critical that thing is to the survival of an entity. And so, I believe that if your members deem it to be important enough they will make the money available to do it.

The good thing about training is that it is a development imperative. Utilities that do not train their workers will die. It's as simple as that!

I leave you with my very best wishes that your organization will grow from strength to strength and I pledge that the OAS, through its Department of Sustainable Development, which I have the honor to lead, will provide as much support as it can for your programs. We do not now have a water program for the region, as in the past we have tended to work through entities like CEHI with which we crafted the Integrated Watershed and Coastal Area Management Project which is being implemented.

However, we will explore with you opportunities to collaborate on the design and delivery of a suite of training activities in areas such as the design of water safety plans; and risk management in the water sector among other priorities. One of the areas in which our collaboration can start almost immediately is through sharing of the vast volume of literature that we have developed over nearly 40 years of work in the water sector including for example, a Sourcebook of Alternative Technologies for Freshwater Augmentation in Latin America and the Caribbean, which we developed in collaboration with UNEP.

I thank you and wish you every success in your deliberations over the next 2 days. Cletus I. Springer