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18. Mr. Gelson Baptista Serva, Executive Coordinator, PSAM/SEA

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19. Mr. Rudolph S. Chow, Director, Department of Public Works, City of Baltimore
20. Mr. Joseph P. Gill, Secretary, Department of Natural Resources, State of Maryland
21. Mr. Anwer Hasan, Senior VP & Director of Water Resources, Louis Berger Water Services Inc.
22. Mr. Thomas G. Lewis, President, Louis Berger Water Services Inc.
23. Ms. Cam Hill-Macon, Senior Advisor, Office of International and Tribal Affairs, U.S. EPA
24. Mr. Dave Nemazie, Associate VP for External Affairs, UMCES
25. Dr. Robert M. Summers, Secretary, Department of the Environment, State of Maryland
26. Ms. Halle Van der Gaag, Executive Director, Blue Water Baltimore

**Workshop Rio de Janeiro – Technical Cooperation Maryland (USA) 28-30 July 2014
Structuring Governance Model for Environmental Recovery of Guanabara Bay**

(Unofficial Translation)

Purpose: The Government of the State of Rio de Janeiro in December 2013 signed a partnership with the Government of the State of Maryland (USA) to exchange experiences aimed at environmental restoration and socioeconomic revitalization of Guanabara Bay, in light of the successful experience of Maryland with the Chesapeake Bay.

Among the successes of the Chesapeake Bay program is its system of governance -- based on participatory processes of the various bay stakeholders and related institutions, including various state and local entities, non-governmental organizations, businesses and their representative bodies, universities and other representative institutions.

For the establishment of this management model-- which includes the allocation of responsibilities, the definition of a strategic plan with specific goals and full transparency of actions and results -- the State Government of Rio de Janeiro won the support of the Inter-American Development Bank (IDB) to strengthen cooperation.

The PSAM-Sanitation Program for Municipalities Surrounding Guanabara Bay, linked to the Secretary of State for the Environment of Rio de Janeiro (SEA / RJ) was responsible for coordinating the discussions and the proposition of a new Governance Model for the Guanabara Bay, with the various institutions representing the Rio de Janeiro.

In this context, the Executive Office of the PSAM, will hold between 28 and 30 July, in the Meeting Room of the Commercial Association of Rio de Janeiro - Rua da Candelaria, No. 9/12 First Floor, an International Workshop with specific sectoral meetings with representatives of government entities, the business community, non-governmental organizations, and academia in Rio de Janeiro and Maryland-- seeking to present proposals for work, encourage debate and the exchange of experiences with guests from Maryland and receive suggestions from all for the creation and implementation of a Governance structure of Guanabara Bay.

Monday, July 28

9-10 AM **Official Opening Meeting Attendance:**

- **Mr. Luiz Fernando “Pezão”,** Governor of the State of Rio de Janeiro
- **Mr. Carlos Portinho,** Secretary of Environment of the State of Rio de Janeiro
- **Ms. Isaura Fraga,** Chairman of the State Environmental Institute
- **Mr. Wagner Farm Victor,** President of CEDAE
- **Mr. Gelson Baptista Serva,** Executive Coordinator of UEPSAM
- **Mr. Antenor Barros Leal,** President of ACRJ
- **Mr. Haroldo Mattos de Lemos,** Chairman of the Business Council of MA and Sustainability ACRJ
- **Mr. Jaime Teixeira Azulay,** Director General of the Watershed Committee of the Guanabara Bay
- **Mr. John Creamer,** Consul of the United States of America in Rio de Janeiro
- **Ms. Cam Hill-Macon,** United States Environmental Protection Agency

- **Mr. Robert Summers**, Secretary of the Department of Environment, State of Maryland
- **Mr. Joe Gill**, Secretary of the Department of Natural Resources, State of Maryland
- **Mr. Fernando Bretas**, Representative of the Inter-American Development Bank

10 AM - noon **Meeting 1:**

Meeting to exchange information between the U.S. delegation and representatives of the State Government of Rio de Janeiro and invited representatives of the Universities of RJ

- Overview of the Water Quality of Guanabara Bay
- Challenges of Managing the Collection and Treatment of Wastewater
- Challenges of Solid Waste Management
- Challenges to the Planning and Development of Environmental Actions
(120 minutes – 3-4 presenters)

2:30-5:30 PM **Meeting 2:**

Meetings with NGOs & Academia

I. Governance Structure of the Chesapeake Bay Program

- Role of Federal Government
- Role of State Government
- Role of Local Government
- Engagement of NGOs and the Private Sector
(Total 30 minutes presentation; 10 minutes discussion)

II. Scenario for the New Governance Structure of Guanabara Bay

- Structure, Function, and Regional Coverage
- Vision and Strategic Plan
- Stakeholder Involvement
- Decision-Making Process and Authority to Carry Out Decisions
- Communication Plans
(Total 20 minutes presentation; 20 minutes discussion)

III. Overview and Planning IDB Technical Cooperation with Stakeholders

- Goals
 - Description of Projects, including:
 - Geographic Scope
 - Schedule
 - Prioritization of Actions
- (30 minutes)

IV. Panel Discussion: Stakeholder Engagement

- How the governance structure of Guanabara Bay can be strengthened
 - Key points

(30 minutes)

Tuesday, July 29

9:30 AM- **Meeting 1:**

12:30 PM

Meetings with Representatives of the Private Sector

Same agenda as Meetings with NGOs

2:30-5:30 PM **Meeting 2:**

Meetings with Representatives of the Public Sector

Same agenda as Meetings with NGOs

Wednesday, July 30

AM

Meeting between the U.S. delegation and representatives of the State Government of Rio de Janeiro

- Consolidation of Meeting Results
- Define Schedule and Actions related to Technical Cooperation
- Participation of Foreign Consultants

Thursday, July 31

Note: For this day, a program of field visits to sites of Rio de Janeiro related to the topic of Guanabara Bay should be developed.

Key Contacts in Rio

In-Country Contact:

Mr. Gelson Serva
Coordinator, Guanabara Bay Clean Up Project

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Environmental Technical Consultant, PSAM

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Rio State Environment Secretariat
Av. Venezuela, 110 - 5º andar -- Praça Mauá
20081-312 Rio de Janeiro, RJ
BRAZIL

Hotel:

JW Marriott Rio de Janeiro
Avenida Atlantica, 2600 – Copacabana
Rio de Janeiro, RJ 22041-001
Brazil
Tel: 55-21-2545-6500
Fax: 55-21-2545-6555

U.S. Consulate:

Avenida Presidente Wilson, 147 - Centro
Rio de Janeiro, RJ
Phone: (0XX 21) 3823-2000
8 a.m. to 5 p.m. - Monday through Friday
(except on [U.S. and major Brazilian Holidays](#))

For emergencies outside office hours or during weekends and holidays, the U.S. Marine on duty can be reached by calling the Consulate General (3823-2000). If he cannot resolve your problem, he will ask the Duty Officer to contact you.

Traveler Information on Brazil

(Excerpted from Travel.State.Gov)

Safety and Security

Demonstrations: Demonstrations and political/labor strikes are common in urban areas and may cause temporary disruption to public and private transportation. While the protests have not been directed at U.S. citizens, there have been incidents of vandalism which have affected U.S. government facilities. In some cases, Brazilian police have used tear gas, riot control, and mounted units to disperse protestors. If you become aware of a protest in your vicinity, you should avoid the area; remain indoors and close doors and windows. U.S. citizens in Brazil are urged to monitor local news reports and to plan their activities accordingly.

Protests anywhere in the world have the potential to become violent. Even demonstrations or events intended to be peaceful can turn confrontational and possibly escalate into violence. U.S. citizens traveling or residing in Brazil are advised to take common-sense precautions, avoid large gatherings or other events where crowds have congregated to demonstrate or protest, and comply with the instructions of local authorities. Check the website of the Embassy or consulate nearest you for current information on demonstrations.

Criminal Activities: Individuals with ties to criminal entities and traffickers operate along all the Brazilian borders. These organizations are involved in the trafficking of illicit goods and drugs. U.S. citizens crossing into bordering countries should consult the Country Specific Information on the relevant nation.

Colombian terrorist groups have been known to operate in the border areas of neighboring countries. Although there have been reports of isolated small-scale armed incursions from Colombia into Brazil in the past, we know of no specific threat directed against U.S. citizens across the border in Brazil at this time.

Colombian groups have kidnapped residents and tourists along the Colombian border. If you are traveling or residing in this area we urge you to exercise caution when visiting remote parts of the Amazon basin, and respect local laws and customs. You should ensure that your outfitter/guide is familiar with the Amazon region.

Restricted Areas for U.S. Government Employees: U.S. government employees are restricted from traveling to any of the unpacified communities, or “favelas,” in Recife, Rio de Janeiro, and Sao Paulo for unofficial business. There are also restrictions on unofficial travel to and in the majority of favelas that have been pacified. This restriction does not include commonly used transit routes that pass near or through favelas.

In addition, U.S. government employees are not permitted to visit any area within 150 km of the borders with Venezuela, Colombia, Peru, Bolivia, Guyana, Suriname, French Guiana, or Paraguay. Travel is also restricted between the hours of 6:00 p.m. and 6:00 a.m. in ALL satellite cities around Brasilia, including Ceilandia, Santa Maria, Sao Sebastiao, Taguatinga and Paranoa.

To stay connected:

- Enroll in the [Smart Traveler Enrollment Program](#) so we can keep you up to date with important safety and security announcements.

- Follow the Bureau of Consular Affairs on [Twitter](#) and [Facebook](#).
- Bookmark the [Bureau of Consular Affairs website](#), which contains the current [Travel Warnings and Travel Alerts](#), as well as the [Worldwide Caution](#).
- Follow the U.S. Embassy in Brazil on [Twitter](#), and visit the Embassy's [website](#).
- In the event of an emergency, contact us at 1-888-407-4747 toll-free within the United States and Canada, or via a regular toll line, 1-202-501-4444, from other countries.
- Take some time before traveling to consider your personal security and checking for useful tips for [traveling safely abroad](#).

CRIME: Brazilian police and media report that the crime rate remains high in most urban centers, including the cities of Rio de Janeiro and Sao Paulo, and is also growing in rural areas within those states. Brazil's murder rate is more than four times higher than that of the United States, and rates for other crimes are similarly high.

Street crime remains a problem for visitors and local residents alike. Foreign tourists, including U.S. citizens, are often targets, especially in Sao Paulo, Rio de Janeiro, Salvador, and Recife. Although the risk is greater during the evening and at night, street crime also occurs during the day, and safer areas of cities are not immune. Incidents of theft on city buses are frequent. You should keep a copy of your passport with you while in public and keep your passport in a hotel safe or other secure place. You should also carry proof of your health insurance with you.

The incidence of crime against tourists is greater in areas surrounding beaches, hotels, discotheques, bars, nightclubs, and other tourist destinations. It is especially prevalent prior to and during Carnival (Brazilian Mardi Gras), but also occurs throughout the year. Several Brazilian cities have established specialized tourist police units to patrol areas frequented by tourists.

Use caution when traveling through rural areas and satellite cities due to reported incidents of roadside robberies that randomly target passing vehicles. Robberies and "quicknappings" outside of banks and ATMs occur regularly. In a "quicknapping," criminals abduct victims for a short time in order to receive a quick payoff from the family, business, or the victim's ATM card. Some victims have been beaten and/or raped. You should also take precautions to avoid being carjacked, especially in Sao Paulo, Rio de Janeiro, Recife, and other cities.

In airports, hotel lobbies, bus stations, and other public places, pick pocketing and the theft of hand-carried luggage and laptop computers is common. You should "dress down" when in public and avoid carrying valuables or wearing jewelry or expensive watches. "Good Samaritan" scams are common. If a tourist looks lost or seems to be having trouble communicating, a seemingly innocent bystander offering help may actually be a participant in a scam. Take care at and around banks and ATMs that accept U.S. credit or debit cards. Travelers using personal ATM or credit cards sometimes receive billing statements with unauthorized charges after returning from a visit to Brazil, or discover that their cards were cloned or duplicated without their knowledge. If you use such payment methods, carefully monitor your bank records for the duration of your visit.

Although the ability of Brazilian police to help recover stolen property is limited, we strongly advise you to obtain a "boletim de ocorrencia" (police report) at a "delegacia" (police station) if any of your

possessions are lost or stolen. This will facilitate your exit from Brazil and assist with insurance claims. Be aware, however, that the police in tourist areas are on the lookout for false reports of theft for purposes of insurance fraud.

Do not buy counterfeit and pirated goods, even if they are widely available. These goods are illegal in the United States, and if you purchase them you may also be breaking local law.

If you are a woman traveling abroad, please review our travel tips for [Women Travelers](#).

Rio de Janeiro: The city continues to experience high incidences of crime. Tourists are particularly vulnerable to street thefts and robberies in the evening and at night especially in areas adjacent to major tourist attractions. There have been attacks, including shootings, along trails leading to the famous Corcovado Mountain and in other parts of the Tijuca Forest. If robbed, do not attempt to resist or fight back, but rather relinquish your personal belongings. At all times, pay close attention to your surroundings and the behavior of those nearby. There have been reports of thieves and rapists slipping incapacitating drugs into drinks at bars, hotel rooms, and street parties. While crime occurs throughout the year, it is more frequent during Carnival and the weeks prior.

When choosing lodging, carefully consider location, security, and the availability of a safe to store valuables. Do not answer your hotel room door until you positively confirm who is on the other side. Look out the peephole or call the front desk to confirm the visitor. There have been several recent incidents where mass holdups of guests have occurred at hotels and hostels in the city.

Rio de Janeiro's favelas are a subject of curiosity for many U.S. travelers. A favela pacification program, instituted in 2008, installed police stations in some favelas, primarily in the Zona Sul area. However, most favelas exist outside the control of city officials and police. Travelers are urged to exercise caution when entering any "pacified" favelas and should not go into favelas that are not "pacified" by the state government. Even in some "pacified" favelas, the ability of police to provide assistance, especially at night, may be limited. Several local companies offer "favela jeep tours" targeted at foreign tourists. Be aware that neither the tour company nor the city police can guarantee your safety when entering favelas.

Be vigilant while on the roads, especially at night. There have been shootings and carjackings on the Linha Vermelha that links the airport to the Southern Zone of the city. In Rio de Janeiro, motorists should be especially vigilant at stoplights and when stuck in traffic. Carjackings and holdups can occur at intersections, especially at night. Incidents of crime on public transportation are frequent, and at times have involved violent crimes. When traveling by yellow taxi, tourists are recommended only to use taxis openly displaying company information and phone numbers as well as red license plates. Tourists are also advised not to use public vans.

Visitors should also remain alert to the possibility of manhole cover explosions. There have been multiple manhole cover explosions in Rio de Janeiro in the past few years, with a higher incidence in the Centro and Copacabana neighborhoods.

Report all incidents to Rio's tourist police (DEAT) at (21) 2332-2924. The tourist police have been very responsive to victims.

VICTIMS OF CRIME: If you or someone you know becomes the victim of a crime abroad, you should contact the local police and the nearest U.S. embassy or consulate. We can:

- Replace a stolen passport.
- Help you find appropriate medical care if you are the victim of violent crimes such as assault or rape.
- Put you in contact with the appropriate police authorities, and if you want us to, contact family members or friends.
- Help you understand the local criminal justice process and direct you to local attorneys, although it is important to remember that local authorities are responsible for investigating and prosecuting the crime.

The local equivalent to the “911” emergency line in Brazil is divided between three services: 190 - Policia (Police), 192- Ambulancia (Ambulance), and 193- Bombeiros (Fire Department).

Please see our [information for victims of crime](#), including possible victim compensation programs in the United States.

Local Laws and Special Circumstances

CRIMINAL PENALTIES: While you are traveling in Brazil, you are subject to its laws. Foreign laws and legal systems can be vastly different from our own. Penalties for breaking the law can be more severe than in the United States for similar offenses. Persons violating Brazilian laws, even unknowingly, may be expelled, arrested, or imprisoned. Penalties for possession, use, or trafficking of illegal drugs in Brazil are especially severe, and convicted offenders can expect long jail sentences and heavy fines. The Brazilian judicial process can be slow and cumbersome.

There are also some things that might be legal in Brazil, but illegal in the United States. For instance, you can be [prosecuted under U.S. law](#) if you buy pirated goods in Brazil. In addition, engaging in sexual conduct with children or using or disseminating child pornography in a foreign country is a crime, prosecutable in the United States. In November 2008, Brazil passed a series of laws designed to strengthen protection of children against sexual exploitation. Brazilian police in tourist areas such as Rio de Janeiro are on the lookout for foreigners inappropriately touching or photographing minors. If you break local laws in Brazil, your U.S. passport will not help you avoid arrest or prosecution.

According to the Vienna Convention on Consular Relations, and customary international law, if you are arrested in Brazil, you have the option to request that the authorities alert the nearest U.S. Embassy or Consulate. We recommend that you carry the contact information for the nearest U.S. Embassy or Consulate with you when traveling.

SPECIAL CIRCUMSTANCES

Water Hazards: Brazil’s beaches can pose a threat to the safety of travelers. Many beaches have very strong and dangerous riptides, including those in Rio de Janeiro and Fortaleza. Always observe posted flags and signs warning of strong swells and currents, and never swim while under the influence of

alcohol. Even if the water looks safe, there may be strong riptides. Ocean currents and waves are unpredictable, even in popular beaches frequented by tourists.

Travelers are advised to adhere to local authorities' guidance and refrain from swimming alone in areas marked with red warning signs or at beaches where there are no municipal lifeguards or first responder services. There is a possibility of shark attacks in the waters of many of the beaches in northeastern Brazil, including those in Recife, Natal, and Maceio. Heed signs posted on any beach you visit.

Brazil is an endemic area for schistosomiasis, a water-borne parasite, and travelers should avoid wading, swimming, or other contact with fresh water in streams, lakes, and ponds.

Electricity Blackouts: Power failures in large urban centers frequently occur in areas with high concentrations of hotels and residences in cities throughout the country. During these blackouts, local authorities quickly increase police presence to maintain public security. In addition, most tourist hotels are equipped with generators, minimizing the impact of a blackout on visitors. Nonetheless, you should use caution in the event of a blackout during your visit to Brazil. Residents should keep flashlights and sufficient supplies of food and potable water in their residences to prepare for extended blackouts.

Natural Disasters: Flooding and mudslides occur throughout the country, and can be fatal. Monitor news and weather reports and adhere to municipal advisories before traveling to areas prone to flooding or landslides. Many of Brazil's larger cities have frequent heavy rainstorms that have caused flash flooding and crippled traffic for hours.

Customs Restrictions: Brazilian customs authorities may enforce strict regulations concerning temporary importation into, or export from, Brazil of items such as firearms, antiquities, mineral samples, tropical plants, medications, and business equipment. In the Amazon region, there is special scrutiny of the export of biological material which could have genetic value. People propagating or exporting biological material without proper permits run the risk of being accused of "biopiracy," a serious offense in Brazil. Contact the Brazilian Embassy in Washington, D.C. or one of Brazil's consulates in the United States for specific information regarding customs requirements. Please also refer to our [information on customs regulations](#).

Health

A high level of medical care comparable to that in industrialized countries is available in São Paulo, Rio de Janeiro, and Salvador, although sophisticated cases are best referred to São Paulo. Adequate private medical care is available in other major cities but is not up to the standards of industrialized countries. Medical care is substandard outside major cities. Prescription and over-the-counter medicines are widely available and, in most cases, comparable to the U.S., though brand names are more difficult to find.

Emergency services are responsive. For emergency services in Brasília and São Paulo, dial 190 for police, 192 for ambulance, and 193 for fire. The São Paulo Tourist Police (Delegacia de Protecao ao Turista) numbers are 11-3120-4447 and 3151-4167. The Rio de Janeiro tourist police numbers are 21-2332-2924, 21-2332-2511, and 21-2332-5112. Travelers may also call a private ambulance company. Callers must stay on the line to provide the location as there is no automatic tracking of phone calls.

Lists of doctors and hospitals commonly used by expatriates is available on the [medical information section of the Embassy's website](#).

Brazil is a large country and of endemic infectious diseases vary by geographical regions and season (remember that Brazil's summer is the U.S. winter and vice-versa.). Consult the CDC [Yellow Book](#) in regards to specific precautions (including which vaccines are recommended —particularly yellow fever) to protect yourself.

Vaccinations: Brazil requires no specific vaccinations for entry into the country. All travelers should consult with their personal physician or a [travel health clinic](#) 4-8 weeks before departure, as some vaccines and malaria prophylaxis must be given a few weeks before arriving in Brazil. You can find detailed information on vaccinations and other health precautions on the [CDC website](#). For information about outbreaks of infectious diseases abroad, consult the [World Health Organization \(WHO\) website](#), which contains additional health information for travelers, including [detailed country-specific health information](#).

MEDICAL INSURANCE: You should not assume that your medical insurance will go with you when you travel. Medicare, for instance, does not cover any foreign medical care except in very limited circumstances along the border of the United States. We strongly urge you to consult with your medical insurance company PRIOR to traveling abroad to determine whether the policy applies overseas and whether it covers emergency expenses such as a medical evacuation. It is very important to find out BEFORE you leave whether your medical insurance will cover you overseas. You need to ask your insurance company two questions:

1. Does my policy apply when I'm out of the United States?
2. Will it cover emergencies like a trip to a foreign hospital or a medical evacuation?

In many places, doctors and hospitals still expect payment in cash at the time of service. Your regular U.S. health insurance may not cover doctors' and hospital visits in other countries. If your policy does not go with you when you travel, it's a very good idea to take out another policy for your trip. For more information, please see our [medical insurance overseas page](#).

Travel & Transportation

Local Driving Customs: Drivers often use flashes or wave a hand out of the window to signal other drivers to slow down. In addition, pedestrian "zebra" crossings are strictly observed in some places (especially in Brasilia) and ignored most everywhere else.

U.S.-BRAZIL RELATIONS

U.S. Department of State Fact Sheet

The United States and Brazil have traditionally enjoyed cooperative, active relations encompassing a broad political and economic agenda. The United States was the first country to recognize Brazil's independence from Portugal in 1822, and as the two largest democracies and economies in the Western Hemisphere, the United States and Brazil are currently consolidating a foundation for a new partnership for the 21st century with a focus on global issues that affect both countries. Ten bilateral agreements signed during President Obama's visit to Brazil in March 2011 and five more signed during President Rousseff's visit to the United States in April 2012 testify to an intensification of bilateral engagement in a broad range of areas of mutual interest. Since 2011, a series of high-level dialogues have been created or upgraded, including four Presidential Dialogues: the Global Partnership Dialogue, Economic and Financial Dialogue, Strategic Energy Dialogue, and Defense Cooperation Dialogue. Formal intergovernmental dialogues engage multiple U.S. and Brazilian agencies on issues including bilateral and multilateral issues, economics, trade, finance, agriculture, energy, aviation, technology, innovation, the environment, education, culture, defense, and nonproliferation. These dialogues are the primary vehicles for policy coordination and for defining partnership priorities.

Bilateral relations are complemented by people-to-people initiatives and trilateral and multilateral cooperation. The United States and Brazil's long history of exchange in education is one example; the binational Fulbright Commission was established in 1957, and thousands of scholars have traveled between the two countries. Education cooperation continues to thrive as President Obama's "**100,000 Strong in the Americas**" goal and Brazilian President Rousseff's "**Science without Borders**" initiative create opportunities for new academic and research partnerships. EducationUSA centers around helping Brazil advise students on study in the United States and host events to assist U.S. higher education institutions recruit Brazilian students. The United States is also working closely with Brazilian counterparts to expand opportunities for English language learning and professional development for Brazilian teachers. These exchanges strengthen U.S. and Brazilian institutional partnerships, develop a workforce prepared for 21st century opportunities, and contribute to long-term economic growth for both countries.

The United States and Brazil also share a commitment to combat discrimination based on race, gender, ethnicity, or lesbian, gay, bisexual, and transgender (LGBT) status; to advance gender equality; to fight exploitative child and forced labor; and to promote human rights. The U.S.-Brazil Joint Action Plan to Eliminate Racial and Ethnic Discrimination and Promote Equality, the first bilateral instrument that targets racism, and the U.S.-Brazil Memorandum of Understanding on the Advancement of Women provide platforms for cooperation to combat racial discrimination and women's empowerment broadly, and to share best practices in tackling discrimination in STEM education, law enforcement, labor, health, gender-based violence, economic empowerment, and many other areas. Multilateral cooperation and collaboration at the United Nations and Organization of American States has also proven effective in the promotion of LGBT human rights.

The United States and Brazil also partner on trilateral cooperation in third countries, particularly in support of biofuels and agricultural development, food security, health, and women's rights. Successful programs include joint technical cooperation and training in support of trilateral development programs in Mozambique in agricultural research and technology and food security, with plans to extend this cooperation to additional countries in Africa, Central America, and the Caribbean. Multilaterally, the

power of U.S.-Brazil collaboration is evidenced by the success of the Open Government Partnership, a multi-country initiative to foster transparency launched and co-chaired in its inaugural year by the United States and Brazil.

U.S. Assistance to Brazil

The United States, through the U.S. Agency for International Development (USAID), and Brazil are committed to forging a strong partnership that promotes development in other countries, principally in Africa and the Western Hemisphere. Innovative trilateral collaboration will prioritize transnational challenges that are of mutual interest, including food security, health, the environment, agriculture, and economic development. USAID is concluding its bilateral support to prevent and control tuberculosis, support HIV/AIDS prevention, promote clean energy technologies in Brazil, and mitigate climate change. Ongoing programs continue to preserve natural ecosystems, and foster sustainable forest management. Through public-private partnerships, USAID is helping develop basic workplace skills and expand access to English language training for disadvantaged youth, and foster corporate social responsibility goals and projects conducted by U.S. companies operating in Brazil..

Bilateral Economic Relations

In 2007, the United States and Brazil launched the Economic Partnership Dialogue, a multi-agency technical consultative mechanism that addresses bilateral, trilateral, and hemispheric initiatives. The two countries also signed an agreement in 2011 to enhance cooperation on trade and investment. The agreement aims to expand the direct trade and investment relationship by providing a framework to deepen cooperation on innovation, trade facilitation, and technical barriers to trade. The Economic Partnership Dialogue promotes economic cooperation across a range of issues.

In 2011, the United States accounted for 10% of Brazil's exports and 15% of Brazil's imports. The flow of investment between the United States and Brazil is increasingly important, as the United States is one of Brazil's top foreign investor. Brazil has been designated a priority market under both the President's National Export Initiative (NEI) and for FY 2012 via SelectUSA to promote exports and two-way investment. As the world's largest biofuels producers, the two countries have worked together to help make sustainable biofuels a global commodity.

In March 2011 the U.S. Ambassador and Brazilian Foreign Minister signed the U.S.-Brazil Air Transport Agreement that, once in force, will establish an Open Skies air transportation relationship between our two countries. In April 2012 the Secretary and the Brazilian Foreign Minister signed the bilateral Aviation Partnership Memorandum of Understanding (MOU), which will provide a coordinated venue for both countries to address aviation sector priorities, including technical cooperation on aviation infrastructure, air transportation, and air traffic management technologies. The U.S. Trade and Development Agency (USTDA) also held an Airports Modernization Technologies Reverse Trade Mission for Brazilian officials in June 2012. This was the inaugural activity of the U.S. Brazil Aviation Partnership.

Some 150,000 U.S. citizens visit Brazil annually. In 2011, more than 1.5 million Brazilians visited the United States, spending more than \$6.8 billion, extending the arrivals expansion streak to eight years and setting a second consecutive record. Travel and tourism exports now account for 34% of all U.S. services exports to Brazil. In 2012, the U.S. government embarked on a national strategy to make the United States the world's top travel and tourism destination, to generate jobs and revitalize the U.S.

economy. Goals include increasing visitor visa processing capacity at U.S. missions in Brazil and China by 40% in 2012.

Brazil's Membership in International Organizations

Brazil and the United States belong to a number of the same international organizations, including the United Nations, Organization of American States, Inter-American Development Bank, G-20, International Monetary Fund, World Bank, and World Trade Organization. Brazil has also traditionally been a leader in the inter-American community, and is a member of the sub-regional Mercosur and UNASUR groups.

Bilateral Representation

The U.S. Ambassador to Brazil is Liliana Ayalde; other principal embassy and consulate officials are listed in the Department's Key Officers List.

Brazil maintains an embassy in the United States at 3006 Massachusetts Avenue NW, Washington, DC 20008 (tel. 202-238-2700).

BRAZIL: PRACTICALITIES AND ETIQUETTE

Social Norms

- A common greeting among female friends or members of the opposite sex in Brasilia and Rio de Janeiro is to embrace and kiss on alternating cheeks or touch cheeks and “kiss the air” (it can be two or three kisses depending on the region).
- Men shake hands when greeting one another while maintaining steady eye contact and sometimes pat each other on the back (similar to a half-hug).
- When women wish to shake the hand of a man, they extend their hands first.
- Common verbal greetings include Olá. Tudo bem [*OH-lah. TOO-DOO BEHM*]?, which means “Hello. Is everything fine?” and Como vai [*COM-OH VAH-IH*]?, which means “How are you?”

Business Norms

- Do not appear impatient if you are kept waiting. Brazilians see time as something outside their control and the demands of relationships takes precedence over adhering to a strict schedule.
- Meetings are generally rather informal.
- Expect to be interrupted while you are speaking or making a presentation.
- Confrontation is fine, as long as it is done in a respectful and productive manner.

General Etiquette

- Brazilians like to make small talk before entering a formal conversation.
- It is not considered good manners to show the soles of one’s shoes, but it is not considered an insult. For ladies, crossing their legs at the knee or the ankle are acceptable.
- The “O.K.” sign is considered to be inappropriate, but a “thumbs up” is an appropriate alternative.
- Women should never place their purse on the floor, but instead should place it on the chair, hook or table provided for this purpose.

Dining











- Brazilians use the continental dining style, with the knife in the right hand and the fork in the left.
- In Rio de Janeiro, a favorite food is *feijoada* (black beans with beef, pork, sausage, and sometimes a pig's ears, feet, and tail).
- *Picanha com fritas* (meat with egg and french fries) is popular in many areas.
- Common drinks include fruit juices and shakes, soft drinks (*guarana*, the Brazilian soft drink), coffee, beer, *caipirinha* (the Brazilian mixed drink) and an herbal tea called *mate* [*MAH-tee*], which is enjoyed in southern states.
- When finger food is served, Brazilians use toothpicks or a napkin to pick up the food. It is not polite to let your fingers come into direct contact with food.

- The standard tip for waiters/waitresses in restaurants is 10% and often is included in the bill.

Clothing

- For official dinners or lunches, business formal attire is recommended. “Business formal” in Brazil, especially for evening or night events, means dark suits for men and dark evening suits or dark dresses—ranging from cocktail to more formal gowns - for women.
- If it is a lunch, the attire could be more casual, which means a suit for men—light or dark colors are acceptable—and anything ranging from a suit or dark dress for women to lighter and more casual suits and blazers or dresses for women—something within the business casual to dressy for women.
- American women should avoid wearing flat shoes when meeting with high ranking government and business officials.
- Generally, heavy clothing should be avoided as the weather is warm in Brazil even when it is raining.

Weather Forecast for Rio de Janeiro, Brazil (Last Updated Jul 25 10:18 a.m. EST):

| | | | High / Low (°F) | Precip. % |
|-----------------|---|-------------------|--------------------|--------------|
| Today Jul 25 |  | Rain | 70°/65° | 80 % |
| Sat Jul 26 |  | Rain | 67°/65° | 100 % |
| Sun Jul 27 |  | Rain | 68°/66° | 80 % |
| Mon Jul 28 |  | Rain | 69°/66° | 80 % |
| Tue Jul 29 |  | Scattered Showers | 70°/63° | 40 % |
| Wed Jul 30 |  | Partly Cloudy | 70°/61° | 10 % |
| Thu Jul 31 |  | Sunny | 73°/62° | 0 % |
| Fri Aug 01 |  | Sunny | 76°/62° | 0 % |
| Sat Aug 02 |  | Sunny | 78°/64° | 0 % |
| Sun Aug 03 |  | Sunny | 80°/66° | 0 % |

Guanabara Bay

From Wikipedia, the free encyclopedia (http://en.wikipedia.org/wiki/Guanabara_Bay)

Coordinates:  [22.790426°S 43.15567°W](#)

Satellite image of Guanabara Bay



Guanabara Bay (**Portuguese:** *Baía da Guanabara*, IPA: [ɡwanaˈbaɾɐ]) is an oceanic [bay](#) located in [Southeast Brazil](#) in the state of [Rio de Janeiro](#). On its western [shore](#) lies the city of [Rio de Janeiro](#), and on its eastern shore the cities of [Niterói](#) and [São Gonçalo](#). Four other municipalities surround the bay's shores. Guanabara Bay is the second largest bay in area in Brazil (after the [All Saints' Bay](#)), at 412 square kilometres (159 sq mi), with a perimeter of 143 kilometres (89 mi).

Guanabara Bay is 31 kilometres (19 mi) long and 28 kilometres (17 mi) wide at its maximum. Its 1.5 kilometres (0.93 mi) wide mouth is flanked at the eastern tip by the Pico do Papagaio (Parrot's Peak) and the western tip by [Pão de Açúcar](#) (Sugar Loaf).

The name Guanabara comes from the [Tupi language](#), *goanã-pará*, from *gwa* "bay", plus *nã* "similar to" and *ba'ra* "sea". Traditionally, it is also translated as "the bosom of sea."

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- [1 History](#)
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- [4 References](#)
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History



View of [Rio de Janeiro](#) from Guanabara Bay (early 20th century picture).

Guanabara Bay was first encountered by Europeans on January 1, 1502, when one of the Portuguese explorers [Gaspar de Lemos](#) and [Gonçalo Coelho](#)^[1] arrived on its shores. According to some historians,^[2] the name given by the exploration team to the bay was originally *Ria de Janeiro* "January Sound", then a confusion took place between the word *ria*, which at the time was used to designate a [bay](#) or a [sound](#), and *rio* "river". Anyway, the name of the bay was soon fixed as *Rio de Janeiro*. Later, the city was named after the bay. [Natives](#) of the [Tamoio](#) and [Tupiniquim](#) tribes inhabited the shores of the bay.

After the initial arrival of the Portuguese, no significant European settlements were established until French colonist and soldiers, under the [Huguenot](#) Admiral [Nicolas Durand de Villegaignon](#) invaded the region in 1555 to establish the [France Antarctique](#). They stayed briefly on Lajes Island, then moved to Serigipe Island, near the shore, where they built [Fort Coligny](#). After they were expelled by Portuguese military expeditions in 1563, the colonial government built fortifications in several points of Guanabara Bay, rendering it almost impregnable against a naval attack from the sea. They were the Santa Cruz, São João, Lajes and Villegaignon forts, forming a fearsome crossfire rectangle of

big [naval guns](#). Other islands were adapted by the [Navy](#) to host naval storehouses, [hospitals](#), [drydocks](#), [oil reservoirs](#) and the [National Naval Academy](#).

Description



View of [Rio de Janeiro](#) from Guanabara Bay

There are more than 130 islands dotting the bay, including:

- [Lajes](#)
- [Governador](#) – site of Rio de Janeiro's [Galeão - Antônio Carlos Jobim International Airport](#)
- [Galeão](#)
- [Paqueta](#)
- [Cobras](#)
- [Flores](#)
- [Fiscal](#)
- [Ilha da Boa Viagem](#)
- [Villegaignon](#)
- [Fundão](#)

The bay is crossed by the mighty [Rio-Niterói Bridge](#) (13.29 kilometres (8.26 mi) long and with a central span 72 metres (236 ft) high) and there is heavy boat and ship traffic, including regular [ferryboat](#) lines. The Port of Rio de Janeiro, as well as the city's two airports, [Galeão - Antônio Carlos Jobim International Airport](#) (on Governador Island) and [Santos Dumont Airport](#) (on a [landfill](#) next to downtown Rio), are located on its shores. The [Federal University of Rio de Janeiro](#) main campus is located on the artificial Fundão Island. A maze of smaller bridges seamlessly interconnect the two largest islands, Fundão and Governador, to the mainland. In Guanabara Bay lies an Environmental Protection Area (APA), which is located mostly in the municipality of Guapimirim and given the name of (APA) Guapimirim.

Environment



Sunrise over Guanabara Bay from central [Rio de Janeiro](#)—the cities of [Niterói](#) and [São Gonçalo](#) are opposite on the Bay's eastern shore

Guanabara Bay's once rich and diversified [ecosystem](#) has suffered extensive damage in recent decades, particularly along its [mangrove](#) areas. The bay has been heavily impacted by [urbanization](#), [deforestation](#), and [pollution](#) of its waters with [sewage](#), [garbage](#), and [oil spills](#). There have been three major [oil spills in Guanabara Bay](#). The most recent was in 2000 when a leaking underwater pipeline released 1,300,000 litres (340,000 USgal) of oil into the bay, destroying large swaths of the [mangrove](#) ecosystem. Recovery measures are currently being attempted, but more than a decade after the incident, the mangrove areas have not returned to life.

One of the worlds largest [landfills](#) is located at [Jardim Gramacho](#) adjacent to **Guanabara Bay**. It was closed in 2012 after 34 years of operation. The landfill attracted attention from environmentalists and it supported 1700 people scavenging for recyclable materials.^[3]

As part of the preparations for the [2016 Rio's Olympics Games](#), the government was supposed to improve the conditions, but progress has been slow^[4] and there is fear that most of the improvements will be short-term which will be abandoned after the [Olympics](#) when the little political will there is for cleaning up the bay disappears.^[5] In June 2014 Dutch windsurfer and former Olympic and world champion^[6] Dorian van Rijsselberghe expressed a proposal for government and industry in The Netherlands to collaborate in cleaning up the bay, together with the Plastic Soup Foundation.^{[7][8]}

References

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Further reading

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Greater Rio de Janeiro

From Wikipedia, the free encyclopedia (http://en.wikipedia.org/wiki/Greater_Rio_de_Janeiro)

Satellite image of the metropolitan area, with the capital from the center below, Baixada Fluminense on the north-west and Niterói and São Gonçalo east of the Guanabara Bay

The **Greater Rio de Janeiro** (*Grande Rio*, officially *Região Metropolitana do Rio de Janeiro*, in **Portuguese**) is a largemetropolitan area located in **Rio de Janeiro state** in **Brazil**, the second largest in Brazil and third largest in South America. It consists of 16 municipalities, including the capital, Rio de Janeiro.

The metropolitan area of Rio de Janeiro is known as a historical, cultural and economic centre of Brazil, with a total population of 12.6 million inhabitants. The region was first officially defined on July 1, 1974 after the fusion of the **Guanabara State** with Rio de Janeiro State. Several municipalities show a high level ofconurbation, with Rio de Janeiro-Duque de Caxias and Niterói-São Gonçalo being the most clear examples.



The [water supply](#) plans of the region are coordinated, and transportation in the area is heavily interconnected with urban intermunicipal buses to all municipalities in the area, trains over the capital and some [Baixada Fluminense](#) municipalities, ferry boats to some of the [Guanabara Bay](#) municipalities and major inter-city [freeways](#) such as [Ponte Rio-Niterói](#), [Linha Vermelha](#), [Rodovia Presidente Dutra](#) and [Rodovia Niterói-Manilha](#). Most transportation methods are integrated with the capital inner transportation system of buses, trains, subways, freeways and [expressways](#).

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- 4 [Notes and references](#)

Cities by Population (2008)

+ 1,000,000

- [Rio de Janeiro City](#): 6,323,037
- [São Gonçalo](#): 1,013,290

400,000 - 999,999

- [Duque de Caxias](#): 855,997
- [Nova Iguaçu](#): 797,290
- [Niterói](#): 487,397
- [Belford Roxo](#): 469,998
- [São João de Meriti](#): 460,402

100,000 - 399,999

- [Magé](#): 228,150
- [Itaboraí](#): 218,090
- [Mesquita](#): 168,409
- [Nilópolis](#): 157,788
- [Queimados](#): 138,082
- [Japeri](#): 100,308

-100,000

- [Seropédica](#): 78,183
- [Guapimirim](#): 51,487
- [Paquetá Island](#) (NOTE: The *Paquetá Island*, or *Ilha de Paquetá* in Portuguese, is not a municipality like the others, but an island in [Guanabara Bay](#), part of the metropolitan area): 4,500

Statistics

- **Population**: 12,603,939 (2011 est.)^[1]
 - **Most populous city**: [Rio de Janeiro City](#): 6,323,037 (2010 est.)
- **Nominal GDP**: [R\\$](#)232 billion / [US\\$](#)145 billion (2008 est.)^[2]
 - **Largest GDP City**: Rio de Janeiro City: [R\\$](#)154 billion / [US\\$](#)96,2 billion (2008 est.)^[2]
- **Nominal GDP per capita**: [R\\$](#)18.230,39 / [US\\$](#) 11.393,75 (2008 est.)
- **HDI**: 0,816 (2008 est.)

- Highest HDI City: [Niterói](#): 0,886 (2008 est.)

Municipalities

The 16 municipalities of the area are:

| Administrative division | Area (km ²) ^[3] | Population 2000 Census ^[3] | Population (2010 Census) ^[3] | Population density 2010 (/km ²) |
|------------------------------------|--|---------------------------------------|---|---|
| Belford Roxo | 79 | 434,474 | 469,261 | 5940 |
| Duque de Caxias | 464.5 | 775,456 | 855,046 | 1840 |
| Guapimirim | 361 | 37,952 | 51,487 | 143 |
| Itaboraí | 424.2 | 187,479 | 218,090 | 514 |
| Japeri | 82.9 | 83,278 | 95,391 | 1151 |
| Magé | 386.6 | 205,830 | 228,150 | 590 |
| Mesquita | 34.8 | 0 | 168,403 | 4839 |
| Nilópolis | 19.4 | 153,712 | 157,483 | 8118 |
| Niterói | 129.3 | 459,451 | 487,327 | 3769 |
| Nova Iguaçu | 523.8 | 920,599 | 797,212 | 1518 |
| Queimados | 77 | 121,993 | 137,938 | 1791 |
| Rio de Janeiro | 1260 | 5,857,904 | 6,323,037 | 5018 |
| São Gonçalo | 249.1 | 891,119 | 1013,901 | 4014 |
| São João de Meriti | 34.8 | 449,476 | 459,356 | 13200 |
| Seropédica | 284 | 65,260 | 78,183 | 275 |
| Tanguá | 147 | 26,057 | 30,731 | 209 |
| Metropolitan Rio Janeiro | 4,557.4 | 10,670,040 | 12,603,936 | 2535 |

Notes and references

1. http://www.ibge.gov.br/home/estatistica/populacao/censo2010/populacao_por_municipio.shtm
2. http://www.ibge.gov.br/home/estatistica/economia/pibmunicipios/2004_2008/
3. http://www.ibge.gov.br/home/estatistica/populacao/censo2010/tabelas_pdf/total_populacao_rio_de_janeiro.pdf IBGE Census 2010

<http://www.iadb.org/en/news/news-releases/2011-11-23/sanitation-program-in-brazils-baia-de-guanabara,9713.html>

IDB approves \$452 million for sanitation program in Brazil's Baía de Guanabara

News Releases
Nov 23, 2011

Resources will help Rio de Janeiro state to advance on a program to expand sewage collection to 80 percent of the state's population by 2018

The Inter-American Development Bank (IDB) approved a \$452 million loan to improve sewage collection at Baía de Guanabara, one of [Brazil's](#) best known tourism landmarks.

The resources will allow Rio de Janeiro state's government to advance in the implementation of the [Sanitation Program for the Municipalities of Baía de Guanabara](#) (PSAM), a region that is home to over 10 million people. The program is part of the Sanitation Pact, a plan approved in April aimed at expanding sewage collection to 80 percent of the state's population by 2018.

"The goal is to improve sewage collection and treatment levels, lowering the organic domestic waste that reaches water channels. As a result, the program will help improve the Baía de Guanabara's water quality," explains Yvon Mellinger, the IDB project team leader.

An estimated 359,000 households are expected to gain access to [sewage collection](#), directly benefitting 1.68 million people.

The project involves not only the installation of sewerage collectors and treatment systems, but also investments to improve public services offered by different state bodies as well as the promotion of sustainable sanitation policies in the municipalities. Rio de Janeiro state has committed before the International Olympic Committee (IOC) to invest in the environmental recovery of Baía de Guanabara when its capital, Rio de Janeiro, was chosen to host the 2016 Olympic Games.

The loan is for a 25-year term, with five-year grace and disbursement periods, and a variable interest rate based on LIBOR. Financing for program will be complemented by \$188 million from the state government, bringing the total investment to \$640 million.

Excerpt from IDB Loan Proposal for Guanabara Bay

I. DESCRIPTION AND RESULTS MONITORING

A. Background, problem addressed, and rationale

1.1 The state of Rio de Janeiro covers an area of 43,696 km², has 16 million inhabitants,¹ and produces 11.5% of the country's GDP.² The city of Rio de Janeiro and its surrounding municípios account for 70% of the state's population and generate an even larger proportion of its economic activity. Tourism accounts for a

large component of this,³ and is expected to rise in relation to the 2014 Soccer World Cup and the 2016 Olympic Games. The city and several of the state's municípios are located around Guanabara Bay, which is a geographic landmark of great natural and environmental beauty and wealth.

1.2 Guanabara Bay receives the effluents generated by roughly 11 million inhabitants, with an estimated 452 tons of organic material (biochemical oxygen demand—BOD₅) being discharged into the bay every day. This happens because there are zones in the Metropolitan Region of Rio de Janeiro (particularly the Baixada Fluminense area) that either have no wastewater collection system, or else have systems that are not connected to treatment plants. The environmental recovery of Guanabara Bay, a commitment made to the International Olympic Committee as a condition for holding the 2016 Olympic Games, requires the organic load discharged to be reduced by collecting and properly treating the wastewater generated in the surrounding municípios.

1.3 Through Decree 42.930 of 18 April 2011, the Rio de Janeiro state government created the Sanitation Covenant (“Pacto pelo Saneamento,” hereinafter “the Covenant”). This aims to expand basic sanitation services in the state (sewerage services for 80% of the state population by 2018, compared to the current 30% according to the Covenant), thereby reducing the negative impact of the lack of these services on public health, the environment, and economic activity. The Covenant defines responsibilities for the various State entities in the sector.

1.4 The Covenant formalizes the active participation of the State of Rio de Janeiro in several programs aimed at expanding the coverage of basic sanitation services in the state and the environmental recovery of Guanabara Bay. The State has also been promoting actions to eliminate pollution hotspots in Guanabara Bay, through: (i) a water pollution self-monitoring program (PROCON-Água) targeting industries; (ii) air pollution self-monitoring (PROCON-Aire); (iii) the “Zero Garbage” program (“Programa Lixão Zero”), which involves eliminating all State garbage dumps, including the Gramacho site located about 30 m from the waters of Guanabara Bay, into which 8,000 tons of solid waste are deposited every day; and (iv) the “Cleaner Rio” (“Rio+Limpo”) program which aims to increase the collection and treatment of wastewater in the state.

1.5 As part of this commitment, the State of Rio de Janeiro has requested Bank support to finance the Environmental Sanitation Program (PSAM) for Municípios in the Guanabara Bay Area,⁴ which will be implemented by the State Environment Department (SEA).

1.6 The SEA is the State agency responsible for formulating and coordinating State policy on the protection and conservation of the environment and management of water resources, to promote sustainable development of the state of Rio de Janeiro.

1.7 The State Environment Institute (INEA) is the state environment regulatory,

licensing and inspection body, set up as an autonomous agency attached to the SEA. It also invests in environmental projects with financial support from the State Environmental Conservation and Urban Development Fund (FECAM) and the State Water Fund (FUNDRHI).

1.8 The State Water and Sanitation Company (CEDAE), a semipublic corporation, controlled by the State of Rio de Janeiro and attached to its Works Department (SEOBRAS), operates drinking water and wastewater collection and treatment services in the state, within a framework of municipal autonomy. CEDAE was created by legislative decree in 1975, and operates water services in 62 of the state's 93 municípios.⁶ In the case of sewerage services, CEDAE has agreements with seven municípios, serving 10 million inhabitants.⁷

1.9 The municípios are the sanitation service concession-granting authorities, and represent the political level closest to users. Their inclusion in this Covenant is essential, both in this context and also given the importance of solid waste management actions for the cleanup of Guanabara Bay.

1.10 **Legal framework.** The Basic Sanitation Law (Law 11.445–LSB), which establishes the new institutional context for sanitation in Brazil, is being fully implemented following the recent publication of its regulations.⁸ It provides for the development of municipal sanitation plans as the foundations of the concession contract to be signed between the operators and municípios; and it also provides for the incorporation of regulatory agencies and formalizes aspects of transparency and social oversight of the service. The State of Rio de Janeiro and CEDAE are making progress with the directorates created by the LSB, and the PSAM will help the sector to adapt to the new requirements imposed.

1.11 **Regulation.** The LSB sets out the principles, objectives, and guidelines for regulation of the sector. In June 2005, through State Law 4.556/05, the State of Rio de Janeiro created the Energy and Basic Sanitation Regulatory Agency (AGENERSA), which currently covers all of the state's gas services, but only regulates and inspects water and sanitation concessions in the lakes region.⁹ The Covenant proposes that AGENERSA's field of action be expanded through agreements with the municípios.

1.12 **The Bank's work.** The Bank has supported the State and CEDAE in improving water and sanitation services in the metropolitan region through operation BR-0072—the Basic Sanitation Program for the Guanabara Bay Basin (PDBG)—Phase I (loans 792/OC-BR and 916/SF-BR for US\$350 million). As a complement to the PDBG, a technical cooperation operation was approved (ATN/JC-10237-BR, BR-T1034 Improvement of CEDAE commercial and operational efficiency), to support the institutional and economic improvement of CEDAE and prepare the subsequent phases of the PDBG. The Nova Baixada Program and the Favela Bairro Program¹⁰ also supported the development of water and sanitation infrastructure in the metropolitan region. The State of Rio de Janeiro is also benefiting from a fiscal

management modernization program (PROFAZ/RJ); and two municípios in the Guanabara Bay area (Belfort Roxo and Duque de Caxias) are participating in the PROCIDADES program.¹¹

1.13 The PDBG: The PDBG project completion report was approved in late November 2006, and complemented by an ex post evaluation under Component 1 of the ATN/JC-10237-BR technical cooperation program (see [PDBG Final evaluation](#)–June 2010).

1.14 The PDBG was divided into six components. In Component 1 between 1995 and 2006, CEDAE implemented sanitation facilities which absorbed 70% of the initial US\$793 million budget. The physical outcomes of this component exceeded the output targets envisaged:¹² the coverage of wastewater collection expanded from 35% to 40% of the population, and treatment coverage increased from 15% to 44%. Wastewater treatment capacity rose from 2.4 m³/s to 11.8 m³/s, and the amount of BOD₅ discharged into the bay was reduced by 110 tons/day. Nonetheless, the shortage of collection systems made it impossible to take full advantage of this.¹³ The PDBG supported the implementation of systems for controlling industrial effluents and monitoring beach waters,¹⁴ which have been consolidated in the INEA. Environmental education activities have raised public awareness, generating demand for environmental preservation and investment in sanitation infrastructure.

1.15 The results of the project completion report were interpreted differently¹⁵ by the executing agency and the Bank; probably owing to the long period of implementation of the PDBG, which was approved in 1993 and ended in 2006, compounded by multiple changes of staff in the executing unit. Despite a reduction in the pollution load discharged into Guanabara Bay, the impact in terms of water quality in the bay has been limited. One of the assumptions made was that the future stages would be implemented, but this has not yet happened.

1.16 Lessons learned. The Bank's operations, particularly the PDBG and the Nova Baixada Program, provided important lessons for the design of this operation. The main one was the need to ensure the availability of the counterpart funds, to prevent delays in program execution. In that regard, the counterpart funds will come from FECAM, as confirmed by that organization's board of directors.¹⁶ Other lessons point to the need for: (i) participation by project beneficiaries at all stages; (ii) participation by civil society; (iii) providing for the continuation of the program's actions with subsequent phases, as part of a long-term master plan; (iv) strengthening the sector institutional framework in the State of Rio de Janeiro; and (v) ensuring the continuity of personnel managing the program, to avoid delays in program execution.

1.17 Coordination with other financial institutions. The Japan International Cooperation Agency (JICA), cofinancier of the PDBG,¹⁷ maintains a strong interest in Guanabara Bay, and is considering the possibility of making a grant to help CEDAE strengthen its capacities for operating and maintaining wastewater

treatment plants and sewerage systems. This cooperation would contribute to the sustainability of current and future investments.

1.18 **Strategy of the operation.** Against this backdrop, the operation was structured in three lines of action: (i) completion of the PDBG - Phase I, by increasing the coverage of wastewater collection, making the most of the treatment capacities of wastewater treatment plants financed in Phase I, thereby reducing the amount of organic matter discharged into Guanabara Bay and contributing to its environmental improvement; (ii) support for SEA, CEDAE, INEA and AGENERSA in fulfilling their roles under the LSB; and (iii) helping municípios in the bay area to fulfill their sector responsibilities, by providing them with municipal sanitation plans and improving their capacity to obtain funding. This will enable them to contribute to the program with actions in the urban drainage and solid waste management areas, through actions to improve their governance, financial management, and tax administration.

1.19 The PSAM is included in the update of the Bank's country strategy with Brazil (document GN-2570), in the "Living conditions and efficiency in cities" pillar, with actions to enhance environmental quality in cities, as described in the 2011 Operational Program Report (document GN-2617). The PSAM is expected to contribute to regional targets¹⁸ and includes climate change adaptation and mitigation actions.¹⁹ Zones currently without service, into which wastewater coverage will be expanded, are the poorest zones of the metropolitan region of Rio de Janeiro, so the program will directly benefit the poorest population groups. Moreover, the beneficiary municípios have the highest proportions of Afrodescendant population in the metropolitan region (over 50% of their population).²⁰ The program also includes connection to wastewater collection systems in Rio de Janeiro's favelas.²¹

1.20 The project will contribute two cities to the "100 Cities" target, one utility to the "Efficient Utilities" target, and two subwatersheds to the "Water Defenders" target of the Water and Sanitation Initiative (document GN-2446-3).

B. Objectives and components

1.21 The aim of the operation is to help restore water quality in Guanabara Bay; and its purpose is to increase the level of collection and treatment of wastewater in the bay, thus helping to reduce the organic load discharged into the bay from domestic sources. These objectives will be achieved by implementing three components:

1.22 **Component 1 - Wastewater collection and treatment works and equipment (US\$527 million)** which will finance projects in the Município of Rio de Janeiro, including: (i) the construction of interceptors, collectors, pumping stations and the sewerage system for the Cidade Nova system, corresponding to 33,000 new household connections and serving a population of 160,000; (ii) upgrading of the sewerage system for the existing Tijuca and São Cristóvão collector system,

corresponding to 26,000 new household connections, 93,000 rehabilitated connections, and a total beneficiary population of 270,000. The component will also finance the first phase of the Alcântara sewerage system in the Município of São Gonçalo, which will include interceptors, collectors, pumping stations, wastewater treatment plants, and a sewerage system for a population of 250,000; and the construction of interceptors, collectors, pumping stations and a sewerage system for the Pavuna 1, Pavuna 2, and Sarapui systems in the Baixada Fluminense region, corresponding to over 300,000 new household connections and serving over a million people.

1.23 Component 2 - Operational improvement and institutional development (US\$16 million) which will finance primarily: (i) support for CEDAE to adapt to the LSB parameters, obtain environmental certification, develop a strategy to exploit the wastewater treatment plants' sludge, and action plans in each operational zone for reducing water losses; and (ii) institutional strengthening for AGENERSA to enable it to serve as the benchmark regulator in the state of Rio de Janeiro, as envisaged in the Covenant, and institutional strengthening in INEA to optimize its capacity for project management and monitoring of water quality in Guanabara Bay.

1.24 Component 3 - Sustainability of municipal public sanitation policies (US\$20 million) which will finance: (i) support for preparing municipal sanitation plans in the program's municípios²² as part of LSB implementation, thus providing the municípios with tools to plan and manage their sanitation, urban drainage, and solid waste management actions; and (ii) support for fiscal management modernization in the program's municípios,²³ to improve their capacities for obtaining resources, and to develop complementary investment projects in the sanitation sector.

1.25 The engineering and administration category, totaling US\$57 million, involves specific studies and projects, including an environmental communication and education program, the hiring of the management and supervision firm, and support for efficient program management. The program's audit, monitoring, and evaluation will be financed as associated costs.

C. Cost and financing

1.26 The total cost of the program is US\$639,550,000, with US\$451,980,000 financed from the loan proceeds and US\$187,570,000 million in counterpart funding from the State of Rio de Janeiro. The program's financial costs will total US\$18 million. The expected breakdown of costs by source is shown in Table I-1.

D. Key indicators in the Results Matrix

1.27 The main expected results include the following: (i) a reduction in the organic load discharged into Guanabara Bay; (ii) a larger volume of the zone's wastewater receiving secondary-level treatment; (iii) a larger number of households with access

to wastewater collection; and (iv) institutional strengthening of sector agencies (CEDAE, INEA, AGENERSA) and municípios to contribute to the sustainability of the program's actions.(.....)

<http://riotimesonline.com/brazil-news/front-page/guanabara-bay-cleanup-plan-launched-rio/>

Guanabara Bay Cleanup Plan Launched

April 3, 2012 | Filed under Front Page, Politics | Posted by Contributing Reporter

By Sarah de Sainte Croix, Senior Contributing Reporter



Brazil's iconic but heavily polluted Guanabara Bay, around which Rio de Janeiro was built, photo by Brian Snelson/Flickr Creative Commons License.

RIO DE JANEIRO, BRAZIL – At the end of March, Rio State Governor, Sérgio Cabral, announced new plans to clean up Guanabara Bay, one of Brazil's most iconic and beautiful natural landmarks. The Environmental Sanitation Program for the Guanabara Bay Area (PSAM) will be one of the state government's biggest environmental programs, relying on around R\$1.1 billion in investments. Of this, R\$800 million will come from the [Inter-American Development Bank](#) (IDB) and R\$330 million from the Rio state government.

When the IDB deal was signed in Montevideo, Uruguay, on March 20th; Luis Alberto Moreno, the bank's President, said, "This program is emblematic for its magnitude, which will bring improved living conditions for a large part of the state's population."

He continued, "[It will bring] benefits in terms of public health and it will have a big impact on improving social indicators in a region which is seen as one of Brazil's foremost picture postcards," he continued.

The PSAM's mandate is to reduce the amount of [pollution that reaches the bay](#), principally by improving and expanding the sewage collection and treatment system in the central and northern parts of the city of Rio, in the municipalities of Baixada Fluminense (lower Rio State), and in São Gonçalo (outside of Niterói).

The program aims to up sewage treatment rates from 6,000 liters of sewage per second currently, to 16,000 liters per second by 2016 – all of which would otherwise be running into the bay untreated. The PSAM is integral to Rio de Janeiro's Sanitation Pact,

approved in April last year, which pledges to expand basic sanitation services by eighty percent by 2018.

At a press conference on March 23rd, Rio de Janeiro's Environment Minister, [Carlos Minc](#), also called attention to the problem of garbage being deposited or leaking into the bay from nearby garbage dumps, and he announced that all the dump sites in the region would be closed by the end of the year.

According to the IDB, the [Guanabara Bay region](#) is home to more than ten million people. Fifteen municipalities stand to benefit from the plans, among them the cities of Rio de Janeiro and Niterói.

The IDB estimates that its financial contribution will allow more than 359,000 households to gain access to the official sewerage network, directly benefiting more than 1.68 million people.



Luis Alberto Moreno, President of the IDB, photo by Fabio Rodrigues Pozzebom/ABr.

Speaking at the IDB meeting in Montevideo, Rio de Janeiro State Governor Sérgio Cabral, said, “These resources will be fundamental in enabling us to finish the cleanup of Guanabara Bay and, finally, guarantee basic sanitation to more than 1.5 million people living in the Guanabara Bay area.”

This is not the first time the state has announced grand plans to cleanup the heavily polluted bay. At the beginning of the 1990s the Guanabara Bay Depollution Program (PDBG) was created, but despite heavy funding from both inside and outside the country, the plans stalled, the money disappeared and the work was never completed.

Minc said that this time things would be different: “We will provide total transparency in the implementation and progress of the PSAM works. All information will be available on the internet.”

“The funds will be managed by teams of CEDAE engineers, the Secretary of State for the Environment and the State Environmental Institute (INEA) and not by contractors, as was the case with the PDBG program,” Minc explained.

Guanabara Bay Committee

Background: The National Water Agency (ANA) creates and strengthens entities involved in the implementation of integrated water resources management in Brazil. One of its programs supports the creation and operations of Watershed Committees. These committees function as “water parliaments” that establish water use systems for individual water basins that balance the competing interests of government, water users, and civil society organizations that make up their membership. Brazil has approximately 200 Watershed Committees throughout the country, 8 in the State of Rio. These committees meet periodically at a regional and national level to share information, address joint challenges, and coordinate efforts.

The State of Rio formally established the Guanabara Bay Committee in 2005. However, the Committee existed informally since 2001, when civil society and water user initiatives led to the creation of two Guanabara Bay committees – one for the eastern side of the bay and one for the western side.

The Guanabara Bay watershed includes 17 municipalities – 11 completely within the watershed and 6 partially within the watershed.

Mission and Role: The mission of the Guanabara Bay Committee is to integrate the public sector, water users, and civil society into one organization to develop regional solutions for the protection, conservation, and recovery of water bodies, thereby enabling the sustainable use of natural resources, environmental recovery, and conservation of the quantity and quality of water resources in the bay. Its many objectives include:

- Using the entire watershed as a fundamental physical and political geographic unit for planning and management
- Supporting actions that defend against critical water events that pose a risk to public health and security
- Define the causes and adverse effects of pollution, deforestation, floods, droughts, soil erosion, and siltation in the watershed
- Protect water resources against actions that can compromise current or future use of the resource
- Balance the management of surface and groundwater with regional development and environmental protection – ensuring that water quantity

and quality can adequately serve multiple uses, e.g., biotic, economic, social, cultural, and historical

- Develop, approve, and manage the execution of a watershed plan
- Promote environmental education and exchange of regional and technical knowledge, recognition of cultural traditions and celebrations, historical and archeological protection – all with the view of building civic engagement

Governance: Committee governance consists of: Plenary of 45 voting members – 15 from government, 15 from water users, and 15 from civil society; and a 6 person Board -- consisting of a Director-President, a Director-Secretary, and 4 Directors – that coordinates the work of the Committee. Members of the Plenary and the Board serve a two-year term. Current members serve from 2013-2014.

In addition, the Committee has 4 Technical Chambers – Instruments and Management, Institutional and Legal, Project Analysis, and Environmental Education and Mobilization. Beginning in 2011, 6 regional subcommittees were created – one for each subregion in the watershed.

Key Rio Institutions Working on Guanabara Bay

Rio State Environment Secretariat (SEA)

SEA is the Rio State organization responsible for the formulation and coordination of state policy for the conservation and protection of the environment and for the management of water resources, with a view toward sustainable development. Several agencies attached to the Secretariat support environmental management in Rio State, including: the State Environmental Institute (INEA), which protects, conserves, and restores the environment, and promotes sustainable development; the State Commission for Environmental Control (CECA), which establishes environmental standards, oversees the Environmental Impact Assessment process as well as permitting and licensing processes, and applies penalties for environmental infractions; and the State Fund for Environmental Control (FECAM), which finances projects that support and implement State environmental policy.

Key projects and programs of SEA include the:

- Clean Guanabara Program, which combines several State of Rio initiatives under one umbrella to advance the cleanup of Guanabara Bay;
- Green Factory Project, an initiative to recycle computers for the purpose of bridging the “digital divide” and generating employment and income in impoverished, “pacified” communities (those where the government has removed organized criminal activities and provided enhanced services like health, education, and/or environmental improvements); and
- Pact for Sanitation, a program to double sewage treatment and eradicate waste dumps in the state by 2014, as well as to implement municipal sanitary landfills.

State Environmental Institute (INEA)

The State Government of Rio de Janeiro created the State Environmental Institute (INEA or “The Institute”) in 2009 with the mission to protect, conserve and restore the environment, and to promote sustainable development. INEA’s establishment represented the merger of the three previously existing environmental agencies linked to the Secretary of State for the Environment (SEA): the State Foundation for Engineering and Environment (FEEMA), the State Superintendent of Rivers and Ponds (SERLA), and the State Forestry Institute (IEF). INEA’s responsibilities include the mandates of these three agencies as well as new topics.

The Institute also intends to play a strategic role in the development agenda of the State of Rio de Janeiro with qualified technical staff. To this end, INEA will add 214 new technical experts to its approximately 1,000 existing staff.

INEA conducts its work through nine decentralized regional superintendencies, which correspond to hydrographic regions in the state, thus integrating general environmental management and water resources. The regional superintendents have authority to expedite environmental permits for the activities of small businesses.

New State Company for Water and Wastewater (Novo CEDAE)

Created in 1975 through a merger of 3 different water and sanitation companies, CEDAE is a State of Rio-owned water and wastewater utility that operates and maintains the drinking water collection, treatment, and distribution for more than 9 million people, as well as the wastewater collection, transportation, treatment and final disposal for 5 million people. The utility holds water service concessions in 65 of the state's 92 municipalities and sanitation concessions in 17 municipalities.

CEDAE collects monthly payments of approximately \$USD 150 million and undertakes various projects to guarantee that its water quality is up to consumer expectations and state standards.

CEDAE has worked on Guanabara Bay clean up since the 1990s. To date, CEDAE has been responsible for executing approximately \$USD 800 million worth of water and wastewater projects funded by the State of Rio or international loans. Originally, these projects provided only pre-treatment and primary treatment, and had a goal of reducing BOD by 30%. In more recent years, the State of Rio has raised the bar by requiring secondary treatment in all wastewater plants, with a goal of reducing BOD by an average of 92%.

Since 2001, CEDAE has received approximately \$USD 310 million in funding from the State of Rio to install sewer systems in 3 major areas of Rio: Barra da Tijuca, Jacarepaguá, and Recreio dos Bandeirantes. Once completed, the systems will provide the collection, treatment and final disposal of 5.3 thousand liters/second of sewage.

CEDAE operates a corporate university, which has the permanent capacity to train 500 collaborators/students per day.

[Drafted by Secretary Summers December 2013; Updated July 2014]

Subject: Guanabara Bay – Chesapeake Bay Cooperation Agreement

Purpose: To provide a brief overview of pollution in Rio De Janeiro’s Guanabara Bay and the proposed Guanabara Bay – Chesapeake Bay Cooperation Project Agreement to be signed by Governor Martin O’Malley and Governor Sérgio Cabral Filho on December 4, 2013 in Rio De Janeiro, Brazil.

Guanabara Bay: Guanabara Bay is much smaller (3% of the surface area), but is much deeper than Chesapeake Bay. The watershed of Guanabara Bay is also much smaller (3% of the size) and much more densely populated (18) times than Chesapeake Bay Watershed.

| | Guanabara Bay | Chesapeake Bay | GB/CB |
|-------------------------------------|-------------------|---------------------|-------|
| Surface Area | 144 square miles | 4,480 square miles | 3% |
| Average Depth | 130+ feet | 21 feet | 6x |
| Watershed Area | 1776 square miles | 64,000 square miles | 3% |
| Population | 8.6 million | 17 million | 51% |
| People per Square mile in watershed | 4,842 | 266 | 18x |

There are 16 municipalities in the Guanabara Bay Watershed and 7 of these are on the waterfront. The most significant environmental problems in the GB Watershed come from municipal sources: untreated sewage/wastewater (30-55% of the sewage is currently treated), solid waste dumping in the rivers, industrial effluents discharge, environmental accidents, etc. This has resulted extremely poor water quality, contaminated sediment and conflicts involving fisherman and other infrastructure uses.

The Clean Guanabara Plan of the State of Rio De Janeiro includes 12 government programs to improve sanitation and sewage treatment systems, eliminate illegal dumping and control solid waste, clean up beaches by diverting stormwater and sewage discharges, treat polluted industrial discharges and contaminated river water discharging to the Bay, dredging and removal of contaminated sediment and restoration of mangrove/wetland and forested areas in the Bay. The largest environmental program is the Environmental Sanitation Program for the Municipalities of the Surroundings of Guanabara Bay (PSAM) with goal of establishing treatment for 80% of the sewage currently discharge into Guanabara Bay. The attached document prepared by the Environment Department of Rio De Janeiro provides maps and additional details about the Bay, its watershed and the restoration efforts.

The State of Rio De Janeiro is under considerable pressure from the 2016 Olympic Organizing Committee to improve water quality conditions quickly. Recent news articles discussing the challenges they face are also attached.

The Guanabara Bay-Chesapeake Bay Cooperation Agreement: The Guanabara-Chesapeake Bay Cooperation Agreement between the State of Rio De Janeiro and Maryland emanates from discussions in Rio where officials from the State of Rio Secretariat of Environment and other key stakeholders expressed a desire to learn from other international governance models that would help facilitate the rehabilitation and sustainable management of the Guanabara Bay. The State of Maryland is one of the principal partners in the Chesapeake Bay Program, a multi-state initiative that has developed a successful governance structure based on high-level political engagement, science-based decision making, measureable goals and outcomes, and local government and stakeholder involvement. The objective of the Cooperation Agreement is to share information and provide technical assistance to the State of Rio as it develops a governance structure to strengthen the management of the Guanabara Bay.

With assistance from the U.S. Environmental Protection Agency and the Inter-American Development Bank (IDB), the State of Maryland is working with the State of Rio to develop this partnership ,which builds on the positive relationship enjoyed by our two states since 1965 and is being carried out within the framework of the Rio De Janeiro – Maryland Sister-State Agreement and the 2011 Memorandum of Understanding between our state governments signed by Governor O’Malley and Governor Cabral. The State of Rio De Janeiro will be signing a funding agreement with the IDB

To initiate and plan for the signing of a Cooperation Project Agreement when the Governors meet in Rio in December, 2013, environmental officials from Maryland travelled to Rio in April, 2013 and met with Rio state, municipal and nongovernmental organization representatives to exchange information regarding the two Bay restoration efforts. In June 2013, environmental officials from Rio visited Maryland and participated in a similar series of meetings with representatives of federal, state, local and private-sector participants in the Chesapeake Bay restoration.

Maryland and the State of Rio have both been entrusted with the management of important natural resources that can be measured in many ways – from the value of our fishers and tourism, the vitality of our ports and cities, and the health and livelihoods of everyday citizens. The Guanabara Bay – Chesapeake Bay Partnership Agreement provides a framework for the organization of a series of technical exchanges and site visits leading to the development of Guanabara Bay Program that will strengthen the governance and management of the Guanabara Bay based on experiences from the Chesapeake Bay Program

Events related to the Guanabara Bay – Chesapeake Bay Cooperation Agreement during Governor O’Malley’s visit to the Rio De Janeiro in December, 2013.

- 1) On December 4, 2013, Governor O'Malley signed a Cooperation Project Agreement (copy of Cooperation Project Agreement attached). At the same ceremony, the State of Rio De Janeiro also signed with IDB to support the project (also attached).
- 2) On December 5, 2013 Governor O'Malley and Secretary Summers participated in a Technical meeting to discuss the environmental recovery of Guanabara Bay and the Cooperation Agreement between Rio De Janeiro and Maryland. The agenda for the meeting was as follows:

10h30 – 10h45: Welcome remarks by Mayor Rodrigo Neves

10h45 – 11h15: Perspectives of the environmental recovery of Guanabara Bay/IDB Technical Cooperation/ Rio de Janeiro/Maryland: Strengthening Governance and Management of Guanabara Bay.

Presentation by Secretary of State for Environment of Rio de Janeiro and Gelson Serva – Executive Coordinator of PSAM

11h15-11h45: The Experience of Governance and Management of the Chesapeake Bay.

Presentation by Robert Summers – Secretary of Environment of the State of Maryland (USA).

11h45-12:45: Open discussion with the Mayors and with participation of Governor O'Malley.

Governor O'Malley addressed the mayors about the importance of political leadership to be fully engaged to oversee and ensure success of the restoration effort.

13h00: Lunch

TC ABSTRACT

I. BASIC PROJECT DATA

| | |
|---------------------------------------|---|
| ▪ Country/Region: | Brazil |
| ▪ TC Name: | Strengthening the Governance and Management of the Guanabara Bay |
| ▪ TC Number: | BR-T 1290 |
| ▪ Team Leader/Members: | Fernando Bretas (INE/WSA) Team Leader, Yvon Mellinger (WSR,CBR); y Yolanda Galaz (INE/WSA) |
| ▪ Type of TC: | Client Support |
| ▪ Reference to Request ¹ : | IDB docs #38165422 |
| ▪ Date of TC Abstract: | October 15, 2013 |
| ▪ Beneficiary: | Government of the State of Rio de Janeiro, Brazil |
| ▪ Executing Agency and contact name: | State Secretary of Environment of Rio de Janeiro (SEA) |
| ▪ IDB Funding Requested: | US\$1000.000 |
| ▪ Disbursement period: | 12 months |
| ▪ Required start date: | November 1 ST 2013 |
| ▪ Types of consultants: | Firms and individuals |
| ▪ Prepared by Unit: | INE/WSA |
| ▪ Unit of Disbursement Responsibility | WSA |
| ▪ Included in Country Strategy/CPD: | No |
| ▪ GCI-9 Sector Priority: | Yes -Protecting the environment, respond to climate change, promoting renewable energy, and enhancing food security |

II. BASIC PROJECT DATA

- 2.1 The Guanabara Bay (GB) is one of the most important natural recreational and economic resources in Brazil and home to over 10 million people. The State of Rio de Janeiro made a commitment to the International Olympic Committee to invest in the restoration of the GB when Rio de Janeiro was chosen to host the 2016 Olympics Games. In March 2012, the State of Rio de Janeiro announced new plans for the clean up the Guanabara Bay with support from Inter-American Development Bank's Environmental Sanitation Program for the GB Area –PSAM (BR-L1282). PSAM is US\$200 million loan that is directed towards the collection and treatment of the sewage generated by the municipalities located around the GB.
- 2.2 To complement PSAM's initiative, in November 2012 the Brazilian Institute for Sustainable Development hosted a meeting with experts on environmental issues with the goal of launching an initiative to clean the GB. The IDB and the U.S. Environment protection Agency (USEPA) were invited and after the meeting, could coordinate with representatives from the Rio de Janeiro State Secretary of Environment (SEA) to start a

¹ A copy of the Letter of Request, Programming/Portfolio Review Mission Aide Memoire or Report requesting the TC should be submitted with the Abstract.

partnership, that eventually involved the Government of the State of Maryland, to launch a process of identification and consolidation of a governance structure and the necessary instruments to clean the GB. To have a good understanding of the issues involved and to better design this technical cooperation, representatives from the Maryland's secretaries of environment and natural resources went to Rio de Janeiro on May 2013 and a delegation from the SEA with representatives from two of the ten municipalities located around the GB visited Maryland and got acquainted with the work done in the Chesapeake Bay. After these meetings, the SEA requested the IDB support to finance the next steps of the process.

- 2.3 With this background, the present Technical Cooperation was conceived to finance a Program to establish and ensure the effectiveness of the governance structure and management programs for the GB. This cooperation will build on the existing partnership between the State of Rio de Janeiro, the State of Maryland, and the USEPA to share experiences from the GB and Chesapeake Bay and on the IDB role as the financing institution for the PSAM in execution. This TC is aligned with the Bank's GCI-9 sector strategy "Protecting the environment, respond to climate change, promoting renewable energy, and enhancing food security". IDB support will be fundamental to guarantee an open dialogue with the stakeholders and community at large in the search for effective governance for the GB cleaning initiative.

III. DESCRIPTION OF ACTIVITIES AND OUTPUTS

- 3.1 The TC will be executed in 12 months and have two components: **Component 1 – Establish a Governance Structure for the Guanabara Bay**
- 3.2 **Activity 1: Guanabara Bay Authority** – Will finance a consultant to conduct an institutional analysis of the current governance structure for the GB, prepare comparative analysis of other Bay governance structures particularly the Chesapeake Bay Program, and develop recommendations for a new governance model for the Guanabara Bay. This activity will involve extensive stakeholder consultations, including at least four workshops to engage the public in the development and review of recommendations. Output: an agreed governance model for the GB.
- 3.3 **Activity 2: State of the Bay Report** – Will finance the assessment of the environmental and social issues facing the GB, taking a comprehensive and prospective examination of these issues, and develop a shared vision for the situation encountered. This activity will involve extensive stakeholder consultations, including at least four workshops to gauge public awareness and discuss vision for GB. Output: an Assessment of the actual environmental and social issues of the GB in lieu of the state environmental standards and the goals set by the Olympic Committee.
- 3.4 **Activity 3: Public Private Partnership for the GB** – Will finance the establishment of a public private partnership between state and local governments, industries, businesses,

community organizations, civil society to restore the GB. The Partnership will combine energy and resources to raise public awareness, support citizen action programs, and fund cleanup projects in the GB Bay. Output: Agreed PPP model and a strategy for its implementation.

- 3.5 **Activity 4: Steering Committee/Unit for GB** – This activity will establish a Steering Committee/Unit within INEA to lead and coordinate the restoration, cleanup and public awareness efforts for the GB. Output: Steering Committee formed and operational.
- 3.6 **Component 2 – Strengthen the Regulatory Framework for the Guanabara Bay. Activity 1: Wetlands sanitation pilot project** – Will finance the hiring of experts to develop a pilot project that will use constructed wetlands for wastewater treatment and flood control. Output: Pilot wetland sanitation project implemented.
- 3.7 **Activity 2: Solid waste management pilot project** – Will finance the hiring of experts to develop a pilot project that will improve trash collection and solid waste management, particularly in undeserved communities. Output: Pilot solid waste project implemented.
- 3.8 **Activity 3: Technical workshops** – Will finance the three workshops to share technical expertise and best practices in wastewater treatment, solid waste management, monitoring and modeling, and enforcement and compliance to strength institutional capacity. Output: Three workshops conducted.
- 3.9 **Activity 4: Performance Indicators** – Will finance the development of specific performance goals and milestones for key regulatory programs to measure progress towards restoration of the GB to ensure accountability and transparency. Output: An agreed set of Goals and Milestones will be set to pursue the objective of cleaning the GB.

IV. INDICATIVE BUDGET

| Component/Activity | Description | IDB Funding | Counterpart | Total US\$ | Timeframe |
|--------------------|----------------------------|----------------|--------------|------------|---------------|
| C1. Activity 1 | Guanabara Bay Authority | US\$ 300,000 | | 300,000 | March 2014 |
| C1. Activity 2 | State of the Bay Report | US\$ 250,000 | | 250,000 | December 2013 |
| C1. Activity 3 | Public Private Partnership | US\$ 100,000 | US\$ 50,000 | 150,000 | March 2014 |
| C1. Activity 4 | Steering Committee/Unit | US\$ 50,000 | | 50,000 | November 2013 |
| C2. Activity 1 | Wetlands/Sanitation Pilot | US\$ 50,000 | US\$ 50,000 | 100,000 | May 2014 |
| C2. Activity 2 | Solid Waste Manag Pilot | US\$50,000 | US\$ 50,000 | 100,000 | June 2014 |
| C2. Activity 3 | Technical Workshops | US\$ 150,000 | | 150,000 | March 2014 |
| C2. Activity 4 | Program goals/milestones | US\$ 50,000 | | 50,000 | April 2014 |
| TOTAL | | US\$ 1,000,000 | US\$ 150,000 | 1,150,000 | |

V. EXECUTING AGENCY AND EXECUTION STRUCTURE

- 5.1 The executing agency will be the SEA through the GB Environmental Sanitation Program (PSAM) Executive Unit, known as UEPSAM, directly related to the SEA. The UEPSAM has acquired the necessary experience to execute the TC acting as PSAM's executing unit which required expertise on procurement and project supervision of a US\$200 million IDB

loan to the State of Rio de Janeiro and it is in the second year of execution. The UEPSAM will be responsible to hire the necessary consultants and to supervise the execution of the TC.

VI. PROJECT RISKS AND ISSUES

- 6.1 The major risk toward the establishment of effective governance for the GB cleaning initiative is institutional. If institutions do not want to participate in a coordinated way, the major efforts laid down in the strategic plan may fail. The mitigation is to conduct a transparent process of defining the governance structure with a broad participation of stakeholders and representatives of the community. The TC includes a series of workshops to obtain consensus on the chosen governance structure.

VII. ENVIRONMENT AND SOCIAL CLASSIFICATION

- 7.1 The TC main objective is to create the governance structure and the instruments to unleash the process that would result in the appropriate actions to clean the GB. Presently, the GB is being contaminated by untreated effluents and solid wastes. Being the objective of the financing mainly studies and plans, no negative environmental or social impact will be generated. Nevertheless, in the medium and long run, the TC's results may promote positive environmental and social impacts. Following the IDB policies and procedures, the project team proposes the Classification C for the operation.

RIO DE JANEIRO



Map not to Scale

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- Highway
- Other Roads
- Railway
- Tourist Places
- Rivers
- Airport
- Airfield

The New York Times

Note to Olympic Sailors: Don't Fall in Rio's Water

By SIMON ROMERO and CHRISTOPHER CLAREY MAY 18, 2014

RIO DE JANEIRO — Nico Delle Karth, an Austrian sailor preparing for the 2016 Summer Olympics, said it was the foulest place he had ever trained.

Garbage bobbed on the surface, everything from car tires to floating mattresses. The water reeked so badly of sewage that he was afraid to put his feet in it to launch his boat from shore.

“I’ve never seen anything like this before,” Mr. Delle Karth said of [Guanabara Bay in Rio de Janeiro](#), where the Olympic sailing and windsurfing events will take place.

Even as Brazil scrambles to finish an array of stadiums for the start of the 2014 World Cup soccer tournament in less than a month, it is already coming under scathing criticism for its handling of the next mega-event on its plate, the 2016 Summer Games.

Francesco Ricci Bitti, president of the [influential association](#) representing various Summer Olympic sports, said the Rio Games were in “the most risky position” of any Olympics he could remember. John D. Coates, an International Olympic Committee vice president, said last month that Rio’s preparations were “[the worst I have experienced](#),” with construction yet to begin on the [Deodoro sports complex](#), the second most important site after Olympic Park.



Well-financed efforts to clean up the bay have proved disappointing for decades, undercut by mismanagement and allegations of corruption. Credit Ana Carolina Fernandes for The New York Times

Guanabara Bay, nestled between Sugarloaf Mountain and other granite peaks, offers the kind of a postcard image Rio’s authorities want to celebrate as hosts of the 2016 Summer Olympics. But it has become a focal point of complaints, turning Rio’s polluted waters into a symbol of frustrations with the troubled preparations for the Olympics.

“Welcome to the dump that is Rio,” Germany’s [sailing team said](#) in one typically blunt assessment of the site for the Olympic regatta.

Brazilians training here agree.

“It can get really disgusting, with dog carcasses in some places and the water turning brown from sewage contamination,” said Thomas Low-Beer, 24, a Brazilian Olympic hopeful who sails in the bay. He shuddered when recalling how his dinghy crashed into what he believed was a partly submerged sofa, capsizing him into the murky Guanabara.

Though international officials complain that Brazil has had almost five years since [winning its Olympic bid](#) to make headway, some of the delays stem from chronic problems the nation has long fought.

Well-financed efforts to clean up the bay have proved disappointing for decades, undercut by mismanagement and allegations of corruption. The political rivalries among local, state and federal layers of government have led to infighting, including an impasse over who should pay for certain Olympic projects. [Protests over forced evictions](#) to make way for the Olympics have slowed construction.

The Olympics are hardly the only pressing concern for a country grappling with an [economic slowdown](#). The World Cup begins on June 12, and several of the 12 stadiums where soccer games are supposed to be held [are not finished](#), while a number of transit projects will not be completed until after the tournament. Underscoring the troubles, a construction worker died in an electrical accident [this month](#) — the eighth worker killed in an accident at a World Cup stadium site.

Preparing for the Olympics may prove even more challenging. Brazilian officials had contended that 2007 Pan-American Games venues could be refurbished at low cost. But last year they had to demolish the cycling venue because it failed to meet Olympic standards. Now Rio plans to build a new structure costing 10 times as much as the original.

Strikes have delayed repairs at the Engenhão stadium, a Pan-American Games venue intended for 2016 track and field events, after it was closed last year over fears that its roof might collapse. Violent clashes between striking workers and security personnel have also delayed work on Olympic Park, the main cluster of venues.

Some officials say the situation is more precarious than the troubled run-up to the 2004 Olympics in Athens.

“I think in terms of time available, we are even worse,” said Mr. Ricci Bitti, president of the Association of Summer Olympic International Federations.

Mr. Ricci Bitti and other Olympic officials have publicly asserted that there is no Plan B, that the Games will not be moved from Rio. Still, Brazilian officials have reacted to criticism with statements that have not exactly reassured Olympic officials.

Eduardo Paes, the mayor of Rio, told reporters that he and other authorities were “pretty sure” they would deliver on their promises to have the venues ready in time.

Brazil’s sports minister, Aldo Rebelo, lashed out at unconfirmed reports that Olympic officials were considering moving the Games.

“You can be guaranteed it is nothing but a bluff,” Mr. Rebelo said. Pointing to large sponsorship agreements for the Rio games, he said, “I doubt the Olympic Committee wants to lose that business.”

Of all the challenges Brazil faces, cleaning up Guanabara Bay may be the toughest.

Officials vowed to [tackle the problem](#) after the [United Nations Earth Summit](#) here in 1992 drew scrutiny of Rio's foul waters. The Rio state government secured more than \$1 billion in loans from Japan's government and the [Inter-American Development Bank](#) for cleanup projects, but they have not been even remotely successful, according to environmental experts. The State Environmental Institute in Rio de Janeiro estimates that more than 10 percent of the trash here is not collected, much of it flowing into the bay through canals and degraded rivers.

Vast amounts of raw sewage leak into the waters. Officials set a goal of treating as much as 80 percent of it by the 2016 Olympics, but less than 40 percent is currently treated.

State environmental officials have acknowledged they would fall short of that goal, The Associated Press reported over the weekend, citing a letter sent to federal authorities requesting more funding to battle pollution.

Calling the bay "dark, brown and stinking," Lars Graef, 50, a Brazilian sailing legend who won two Olympic medals, said he had encountered human corpses on four occasions while sailing in the bay. He [told reporters](#) that officials should move the sailing events to a resort area hours away by car.

The authorities here insist that nothing of the sort will happen. Carlos Portinho, Rio's top environmental official, said the criticism of Guanabara Bay was exaggerated, contending that recent tests had shown that fecal contamination in the Olympic regatta area was within "satisfactory" standards in Brazil.

Acknowledging that reversing pollution in the bay was a "long-term project," Mr. Portinho said that officials had deployed three small "ecoboats" to collect garbage; by the Olympics, he said, 20 or 30 might be operating. He said that new sewage treatment plants were being built, while floating "ecobarriers" would facilitate the collection of trash in the bay.

Brazilian environmental experts say the efforts are a fraction of what needs to be done.

"The government could deploy aircraft carriers to collect the bay's garbage and the problem would not be solved," said Mario Moscatelli, a biologist. "The bay is still a latrine. It's an insult to Rio's people to say it will be clean for the Olympics."

In 2008, China grappled with [an algal bloom](#) that threatened the Olympic sailing at the Beijing Olympics. But Chinese authorities deployed about 1,000 boats, compared with the dozens that could ultimately constitute Rio's garbage fleet.

"China did a really good job cleaning up the water," said Ian Barker, a former Olympian who is a coach with Ireland's sailing team.

As for the few boats now collecting trash in Rio's bay, he said, "that seems to be the sum total of what they've done so far, which is not even scratching the surface."

Associated Press

Sailing official wants Rio water pollution tests

By [STEPHEN WADE](#) (Associated Press writer Jenny Barchfield contributed to this report) — May. 19 2014 4:01 PM EDT



In this May 15, 2014 FILE photo, trash floats on a polluted water channel that flows into Guanabara Bay in Rio de Janeiro, Brazil. Rio de Janeiro Mayor Eduardo Paes said Saturday, June 7, 2014 that the city will fail to keep the promise of cleaning polluted Guanabara Bay for the 2016 Olympics, which it made five years ago when it was awarded the games. (AP Photo/Felipe Dana, FILE)

RIO DE JANEIRO (AP) — Sailing's governing body may conduct independent water-quality tests in Rio de Janeiro's polluted Guanabara Bay, the sailing venue for the 2016 Olympics and the site of Rio's first test event in 2½ months.

Any hope Brazil would be able to clean up the sewage-filled bay soon was quashed in a document obtained by The Associated Press over the weekend.

In a May 7 letter to sports minister Aldo Rebelo, Rio's state environment secretary Carlos Francisco Portinho acknowledged in a best-case scenario that pollution flowing into the bay could be cut to "over 50 percent" — well below the promised reduction of 80 percent.

Alastair Fox, head of competitions for the international sailing federation, told the AP the body is likely to test on its own, hoping to allay athletes' health concerns.

The tests could also push Rio organizers to move more quickly on the problem.

Fox said he hoped the International Olympic Committee would do independent testing, although the IOC indicated it had no such plans.

"If the IOC are not conducting water-quality tests, then I think it is very likely the ISAF will," Fox said Monday in an email. "Certainly compared to most sailing venues, the water quality is very, very bad."

Danish Olympian Allan Norregaard, a bronze medalist at the 2012 Olympics, said Guanabara was "the most polluted place I've ever been." Other sailors interviewed called it an "open sewer."

The bay and similar concerns about Rio's iconic Copacabana and Ipanema beaches add to the disarray plaguing South America's first Olympics.

The IOC has sent a special troubleshooter to monitor progress, and last month IOC vice president John Coates said Rio's preparations were the "worst" in memory.

Spending on Rio has reached \$17 billion and is expected to rise.

Nearly 70 percent of Rio's sewage goes untreated into its waters. Exposure to fecal matter can cause hepatitis A, dysentery, cholera and other diseases.

The visible problem involves old couches, tires and dead animals floating in the 148-square mile (383-square kilometer) bay. State officials are using garbage boats to collect floating debris, with the detritus weaving giant blankets of human and industrial waste along noxious shorelines.

"If someone picks up a bag, or hits a sofa or something like that, then clearly that is going to affect them in the race," Fox said.

"We've seen numbers from teams of the fecal content in the Guanabara Bay, which clearly are not safe," Fox added. "For us, that's a matter of concern. We've been assured again by the organizers that they are doing everything they can."

The IOC said it had no plans to test, but suggested others might.

"We trust the organizers and (the) ISAF will carry out the necessary research and analysis that will be carefully considered in order to ensure the safety of the athletes," the IOC said in a statement.

The IOC did not respond to repeated requests to interview IOC Medical Director Dr. Richard Budgett about potential health risks to athletes. In March, Nawal El Moutawakel, head of the IOC inspection team in charge of preparing Rio, said she had been assured the bay could be "clean from garbage."

"I don't think we will forgive ourselves if we let the athletes compete in an environment that is not safe and secure," she said.

Malcolm Page, a two-time Olympic gold medalist and chairman of the sailing federation's Athletes' Commission, said he trusted state tests, but welcomed independent testing.

"If the Brazilians are happy to receive any of that independent help, it only makes dealing with the problem easier and removes any sugar-coating," he said. "The sailors are certainly worried about it."

An analysis last year of a decade's worth of government data on Guanabara and other waterways showed that sewage pollution indicators consistently spiked far above acceptable limits, even under Brazilian laws that are far more lenient on pollution than those in the United States or Europe.

Fox said at least five courses — three inside the bay and two in the open Atlantic — would be used at the test event beginning Aug. 2. He said courses outside the bay had always been planned, not driven by the pollution problems.

Fox said plans call for the medal race — the final race where the gold, silver and bronze medals are decided — to be held in Guanabara near Flamengo Beach, a venue convenient for fans.

Signs around that beach warn against swimming.

Mario Moscatelli, a biologist and outspoken environmentalist, said retrieving the floating garbage in the bay was fine, but did not address the problem of untreated sewage.

In an open letter to Brazilian President Dilma Rousseff, he asked for the "release of the funds needed to recover the environmental assets, which are being used in Rio as garbage dumps and latrines."

John S. Creamer
U.S. Consul General



John S. Creamer entered the U.S. Foreign Service in 1986, and has served at the U.S. Embassies in Nicaragua, South Africa, Haiti, Argentina and Colombia. In Washington, he has served as Senior Desk Officer for Brazil, South Africa, and Colombia, Deputy Director of the Office of Andean Affairs, and Executive Assistant to the Assistant Secretary for Western Hemisphere Affairs. He has received four individual Superior Honor Awards and various Group awards.

John has a Bachelor's degree in Government from Georgetown University, as well as a Juris Doctor from Georgetown University Law Center. He also received a Masters in National Security Strategy from the National Defense University.

John received a Fulbright Scholarship in 1985 to Malaysia where he researched the legal aspects of economic integration within the Association of Southeast Asian Nations. He is married and has four children.

Luiz Fernando de Souza ("Pezão")
Governor of Rio de Janeiro (Brazilian Democratic Movement Party, PMDB)



Luiz Fernando de Souza, known as "Pezao" ("Bigfoot"), is the current Governor of Rio de Janeiro. A member of the Brazilian Democratic Movement Party (PMDB), then Vice-Governor Souza took over the position in April 2014 when Sergio Cabral resigned from office.

Souza will be the PMDB's candidate in the October 2014 election for Rio Governor. He is considered less charismatic than his predecessor, and as of July 2014, he was trailing other probable gubernatorial candidates in the polls. Still, Souza has a reputation for getting projects done, and he will benefit from the massive party machinery the PMDB and its allies have constructed in Rio State. This makes him a serious contender in the election.

Souza is expected to emphasize the Cabral administration's successes in improving public security and promoting economic development while simultaneously distancing himself from the controversies that marked Cabral's last term in office. The once-popular Cabral saw his approval ratings plunge to record lows in June 2013 as his political rivals managed to paint him as out of touch, and he became the target of demonstrations calling for his resignation.

Souza is a former mayor of the city of Pirai, his hometown, which is located in southern Rio State. He is also the former president of the Rio de Janeiro State Mayor's Association and a former Rio de Janeiro State Secretary for Public Works and Development. He holds degrees in economics and business administration. Souza was born in Pirai on March 29, 1955 and is married to Maria Lucia Cautiero Horta Jardim.

Carlos Francisco Portinho
Secretary of Environment, State of Rio de Janeiro



Carlos Francisco Portinho [CAHR-los Frahn-SEES-cu Pohr-CHEEN-yo] has been the Rio State Secretary of Environment since April 2014. He is expected to continue in that position until December 2014. Previously, he was a campaign coordinator and a parliamentary advisor to Congressman Indio da Costa (DEM-RJ). Da Costa is a former Rio Municipal Secretary of Sports and Leisure who served as State Secretary of Environment from February 2014 to April 2014. Da Costa replaced longtime Secretary

of Environment Carlos Minc, who resigned the post as part of a political shakeup in advance of the October 2014 gubernatorial elections.

Portinho is a lawyer with experience in the areas of environmental, administrative, and civil law. He holds a BA in law from the Catholic University of Rio de Janeiro (PUC) and a post-graduate degree from Cândido Mendes University. Portinho was Vice President of the Legal Department of the Flamengo Athletic Club in 2002 and has been an associate at the C.E. Chermont de Britto law firm since 2003. He has represented Brazilian soccer clubs and athletes in various legal actions.

Marcio Santa Rosa
Environmental Technical Consultant, PSAM

[Not available at this time]

Gelson Baptista Serva
Executive Coordinator, PSAM/SEA



Gelson Serva, since 2011, is the Executive Coordinator of Environmental Sanitation Program for Municipals in the Guanabara Bay Area, a program of State Government of Rio de Janeiro, with financial and technical support from Inter-American Development Bank.

In 2010, Gelson was the undersecretary of Sustainable Development of Environmental Secretariat of State of Rio de Janeiro.

From 2005 to 2009, Mr. Serva served as the Petroleum, Gas and Biofuels Superintendent and Director for Energy Research Enterprise (EPE), an institution which provides planning studies for the Energy Ministry of Brazilian Federal Government.

Since 1983, he is employee of Petrobras, a petroleum company controlled by Brazilian Federal Government.

He graduated as civil engineer and economist and post graduated as petroleum engineer and administrator.

Rudolph S. Chow
Director, Department of Public Works, City of Baltimore



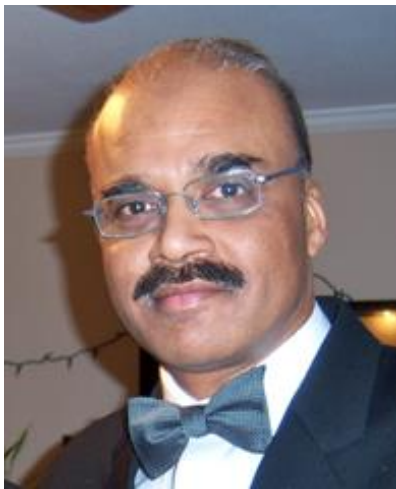
Rudolph S. Chow, P.E., was appointed the Director of the Baltimore City Department of Public Works (DPW) by Mayor Stephanie Rawlings-Blake in February 2014. Mr. Chow brings more than 30 years of executive and managerial experience from both the water industry and public works. He most recently served as Deputy Director of Baltimore City's DPW and was its Bureau Head for Water and Wastewater for three years prior to becoming the Deputy. Mr. Chow spent 27 years with the Washington Suburban Sanitary Commission (WSSC) where he planned and designed major construction projects; oversaw the operation and maintenance of critical treatment facilities and processes; and directed water, wastewater, and stormwater maintenance activities.

Joseph P. Gill
Secretary, Department of Natural Resources, State of Maryland



Joe Gill was appointed Secretary of the Maryland Department of Natural Resources by Governor Martin O'Malley in May 2013. Joe took over the agency's leadership after having served 3 years as DNR's deputy secretary and 14 years as the agency's Principal Counsel. After beginning his professional career as a Law Clerk with the District of Columbia Court of Appeals, Joe moved into private practice in 1983. In 1987, Joe joined the Maryland Office of the Attorney General, serving first as an Assistant Attorney General in Contract Litigation, and later as Deputy Counsel for the Department of Health and Mental Hygiene.

Anwer Hasan
Senior Vice President and Director of Water Resources, Louis Berger Water Resources Inc.



Anwer Hasan has more than 33 years of comprehensive experience in the areas of Regional Operation, Business Unit Management, Program and Project Management, Project Controls and Engineering, and Contract Administration for large transportation, water/wastewater, stormwater, school, solid waste, remediation and water quality projects. He has been in Washington Metropolitan Area for over 25 years and has assisted the City of Baltimore's DPW, Baltimore County DPW and the Baltimore City Public School System in the organization and management of the Capital Improvement Program, which has brought greater predictability, accountability and identification of deficiencies.

Additionally, he has been actively engaged in the Chesapeake Bay Cleanup with Sanitary Sewer Overflow Consent Decrees, ENR upgrades and Stormwater improvements.

Thomas G. Lewis
President, Louis Berger Water Services Inc.



Thomas G. Lewis is the president for Louis Berger's U.S.-based operating company, which serves U.S. clients domestically and abroad as well as international development clients worldwide. In this role, Lewis provides strategic direction for operations, client delivery and company growth. Lewis fills this role following service as the U.S. segment group vice president and previously as the environmental and disaster management services business unit manager. He is a licensed professional engineer in three U.S. states and has been a national committee member for the Transportation Research Board for more than 10 years.

Cam Hill-Macon
Senior Advisor for Latin America and the Caribbean, U.S. Environmental Protection Agency/Office of International and Tribal Affairs



Cam Hill-Macon leads EPA's bilateral and regional program with Latin American and Caribbean governments and other partners to reduce environmental degradation and its impacts on public health, particularly for vulnerable populations, and ecosystems. This collaboration focuses on exchanging best practices for environmental management; building capacity to address priority challenges and implementing environmental laws, policies, and programs; and promoting public participation, social inclusion, and transparency in environmental decision-making. Prior to coming to EPA, Ms. Hill-Macon managed World Wildlife Fund's Training and Management Program for Brazil which carried out capacity building assistance for non-governmental organizations working on forestry and conservation issues. She has lived in Brazil, speaks Portuguese, and is conversational in Spanish.

Dave Nemazie
**Associate Vice President for External Affairs, University of Maryland Center
for Environmental Science**



Dave Nemazie has extensive experience in aquatic research, science and policy interface, university administration, partnership development, as well as government and public relations. He has developed new partnerships with the public, private, and non-profit sector, locally as well as internationally. He is passionate about environmental science: both communicating its relevance to the public and its impact on the decision making process. He has been with UMCES for over 25 years.

Robert M. Summers
Secretary, Department of the Environment, State of Maryland



Robert M. Summers, Ph.D., was appointed Secretary of the Maryland Department of the Environment by Governor Martin O'Malley on April 2011. Dr. Summers leads the Department's planning, regulatory, management and financing programs to protect public health, ensure a safe and reliable water supply, restore and protect air quality, water quality, wetlands and waterways, clean up contaminated land and ensure proper management of hazardous and solid wastes.

Halle Van der Gaag
Executive Director, Blue Water Baltimore



Halle Van der Gaag is an experienced nonprofit executive with over 15 years of building non-profit organizations dedicated to improving our natural resources and building strong communities. Halle has been successful in building citizen advocacy to help create change in the public policy arena in the Chesapeake Bay area through grassroots organizing, and engagement with decision makers and elected officials. Halle is also an expert on issues of water quality, particularly in the urban areas around issues of sewage and stormwater pollution, and is well regarded for translating the technical aspects of water quality pollution to the general public. Her work in the creation of Blue Water Baltimore, through a merger of five organizations, was to increase on the ground restoration efforts to manage and mitigate stormwater, as well as grow the citizen voice needed to make clean water a reality.