Newsletter of the V.I. Planning Office and the V.I. Water Resources Research Conference



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There is seemingly a galaxy of problems concerning the water resources of the Virgin Islands. The complexity of the issues involved often confuses anyone wishing to understand any single problem. It is clear however to those who reside in these islands that many people do not have access to an adequate and dependable supply of potable water. There is a difficulty with both the quantity and quality of public water supplies. To better understand why this situation exists, let's first look at the stated role that the government plays in water resources; then, the administrative structure that has evolved in order to carry-out that role.

#### WATER LAW:

In areas of insufficient water supply, increased management of stream systems and ground water is required to increase and maintain water yields of good quality. Such management depends not only on correct knowledge of natural water conditions, but also, and equally important, on legal control of water use that is both reasonable and practical.

A water right is a right, granted by law, to take possession of water occuring in a natural source of water supply and to put it to beneficial use. In the United States, two major doctorines of water law for establishing water rights have been followed: the common-law doctorine of "riparian rights" and the doctorine of "prior appropriation."

A) Contiguous to a natural water supply; thus, for surface water this applies to high 42/242.3 ng a stream and for groundhip a land overlying a y.2 no.1 formation. The term "land"

ownership right" is more expressive of this doctorine which is based on location.

A prior appropriation right is based on appropriation and use of water belonging to the public, with earlier rights having perference over later ones. This doctorine, which is the operative one in the U.S. Virgin Islands, is based on time.

The basic concept of prior appropriation is that the landowner has no inherent rights to use water from sources on, contiguous to, or underlying his land, but that rights to these sources are based on priority in time of beneficial use and may be lost after the use ceases. Thus, an appropriator is one who uses water that had been regarded as common property or had been used by others.

In essence, the doctrine states that a person who is first in time to beneficially use water is the first in right, so that during shortages the later appropriators must cease their use in reverse order of priority. No rights are acquired for non-beneficial use of water.

#### V.I. WATER RESOURCES POLICY:

Government policy on water in the US Virgin Islands is set forth by the Water Resources Conservation Act of 1965, Title 12, Chapter 5, Sec. 51 (V.I.C. as amended): "It is hereby declared to be the public policy of the Government of the Virgin Islands, in recognition of its sovereign duty to conserve and control its water resources for the benefit of the inhabitants of the Virgin Islands, that comprehensive planning and regulation be undertaken for the protection, conservation and development of the water resources of the Virgin Islands to the end that they shall not be wasted and shall be used to the fullest extent to meet the present and future needs

for domestic, agricultural, commercial, industrial, recreational, and other public beneficial purposes. It is further declared that an emergency condition exists with respect to the availability of surface and underground water in the Virgin Islands and that restrictions are necessary to prevent over-pumping from wells, the depletion of surface and underground water, the intrusion of salt water and resultant permanent destruction of underground water reservoirs as sources of potable water supply.

"In view of the foregoing, all waters within the Virgin Islands are hereby declared to be public waters belonging to the people of the Virgin Islands, subject to appropriations for beneficial use....." (emphasis added)

Furthermore, the term, water, is defined in the law as to include "ponds, springs, wells and streams and all other bodies of surface or underground water, natural or artificial, inland or coastal, fresh or salt, public or private". Title 12 V.I.C., Sec. 151 (d).

The basic principle mandated by the Water Resources Conservation Act is that of "beneficial use". Beneficial use is the basis, measure and limit for the right to the use of water in the US Virgin Islands. Priority in time of appropriation shall be given the better right. Any right to the use of water is subject to the valid and existing rights to the use os such water by all prior appropriators of those waters. Excessive, wasteful or otherwise nonbeneficial use does not constitute a valid right to take or withdraw water. Any person may take or withdraw less than 500 gallons of water per day for beneficial use. An example of such a use is domestic use, meaning the use of water for household purposes, the watering of livestock, poultry and domestic animals, and the irrigation of not more than 1/2 acre of gardens and lawns.

# POLICY DETERMINATIONS:

Section 163 of the Water Resources Conservation Act directed that there be established a policy group which will be known as the V.I. Water Resources Commission. It further designates this this group to be composed of six (6) members: the Commissioner of Public Works, who is the Chairperson, the Commissioner of Conservation and Cultural Affairs (or the Commissioner of Agriculture), the Executive Director of the V.I. Water and Power Authority, and one resident from each of the Districts of St. Croix, St. John, and St. Thomas.

The functions and duties of the Commission are (1) to conduct a comprehensive study of the availability of surface and underground water in the Virgin Islands, (2) to establish standards and programs for the protection, conservation and development of the water resources of the Virgin Islands, (3) to issue rules and regulations governing the use of these water resources and the nature, form, and content of licenses and permits issued pursuant to the provisions of Chapter 5. and (4) to review determinations of the Commissioner of Public Works relating to the issuance of licenses and permits to take or withdraw water. Rights for the taking or withdrawing of water for beneficial uses may be granted only by the Water Resources Commission. The taking of surface water or the drilling of wells for the withdrawal of underground water can be permitted only after proper application and receipt of approvals from the Commission. Any person who desires to take or withdraw water must make application with the Commissioner of Public Works. The Commissioner must then make an investigation to determine whether the approval of the application will adversely affect existing water rights and identify any possible conflicts. A public hearing must also be held by the Water Resources Commission to assess the beneficial use for each application.

After a public hearing and approval by the Commission, the Commissioner of Public Works may then authorize a permit for withdrawal of a quantity of water within the guidelines determined by the Water Resources Commission for a period of not more than three years from the time of issuance to the permit. This procedure clearly encompasses withdrawals from ponds, springs, wells and streams and all other bodies of surface or underground water, natural or artificial, inland or coastal, fresh or salt, public or private in the U.S. Virgin Islands.

## POLICY IMPLEMENTATION:

Responsibility for the development and administration of programs which fulfill the policy goals for water resources management in the U.S. Virgin Islands is scattered among various offices and agencies. A listing of some of the responsibilities includes the following agencies:

# Public Works Department

The Commissioner of Public Works is mandated the responsibility for supervision and control of the construction, repair, maintenance, operations (including water treatment), and administration of the potable water supply system in accordance with rules and regulations issued by the Governor.

The potable water supply system includes all fresh water stored or collected by the Government, whether in catchments, dams, wells, or reservoirs. The Department procures potable water from Government-owned facilities as well as by purchasing water from the V.I. Water and Power Authority (WAPA) and from private water companies, then sells and distributes the water to the public. Title 30 V.I.C., Sec. 51.

In addition to the potable water system, the Department is responsible for operation and maintenance of the salt water distribution system that is used for sanitary flushing and firefighting.

Public Works is responsible for monitoring compliance with the building codes, one of which requires roof catchment of rain water. The code requires all buildings (except for certain churches and warehouses) to have a system of rain water collection devices and mosquito-proof storage containers (minimum cistern storage capacity of 4 1/2 gallons per square foot of roof area). Title 30 V.I.C., Sec. 62.

Should a building not meet the basic requirements, or if the collection system and storage container are not maintained properly, the Commissioner is authorized to undertake the necessary construction, reconstruction, or repair of the cistern and conducting devices at the expense of the owner of the structure. Title 30 V.I.C., Sec. 65.

Public Works is required to make a review and approval of permit applications from private individuals and development companies for Earth Change Permits, and for monitoring those permits to insure

the protection of soil and water resources of the Virgin Islands. Title 12 V.I.C., Chapter 13, Sec. 534.

The Department is responsible for the administration, repair, maintenance, and operation of the wastewater collection system and treatment facilities.

By directive of the Governor, the Commissioner of Public Works is also responsible fro the coordination of Federal programs and agencies which are involved in the effort to solve a number of critical water problems in the U.S. Virgin Islands. (Governor's letter dated February 27, 1978).

The Commissioner of Public Works is the designated Chairperson of the V.I. Water Resources Commission. Title 12 V.I.C., Sec. 163.

# V.I. Water and Power Authority (WAPA)

WAPA was created in 1964 in order to serve the public interest by insuring an adequate supply of water and electric power to benefit the public welfare and economic health of the Virgin Islands.

WAPA is enpowered with the means for procuring facilities for water and electric power supply and distribution systems, including distillation plants, plants for generating electricity by any means, stations, distributions lines, reservoirs, dams, canals, tunnels, conduits, wells, intakes, mains, laterals, standpipes, hydrants, meters, valves and other structures and equipment, and any other works, together with all parts and appurtenances and lands, rights and privileges which the Authority deem necessary in connection with its activities of production, collection, distillation, utilization, transmission, distribution, sale, exchange, rendering, or other disposition of water and electric power. Title 30 V.I.C., Chapter 5.

Currently, WAPA operates four (4) seawater distillation plants on St. Thomas and two (2) on St. Croix. The sole purchaser of the water produced by WAPA is the Government (Public Works Department) of the U.S. Virgin Islands.

### Department of Health

The Commissioner is responsible for the analysis of the bacteriologic and chemical content of private water containers (cisterns) and wells and also the enforcement of the requirements that all water containers (cisterns, etc.) and wells be cleaned at least once in every five-year period. Title 30 V.I.C., Sec. 66.

# Department of Agriculture

The Commissioner is responsible for the protection of the soil and trees along water courses (guts). Any person wishing to cut or cause injury to any tree or vegetation within 30 feet of the center of any natural watercourse, or within 25 feet of the edge of such watercourse (whichever is greater) must obtain a permit from the Commissioner of Agriculture. A natural watercourse is defined as any stream with a reasonably defined channel, and includes streams which have a permanent flow, as well as those which result from the accumulation of water after rainfalls. The Commissioner may secure the assistance of the Department of Public Safety in enforcing the law. Title 12 V.I.C., Sec. 121-125

The Department also has the authority through the V.I. Conservation District Board to cooperate with private landowners and the U.S. Department of Agriculture (Soil Conservation Service) for the planning, design, and construction of dams and reservoirs for purposes of flood protection and enhancement of water supplies. Title 7 V.I.C., Sec 46 & 47

#### V.I. Planning Office

Act 2774 in 1970 added a new chapter to Title 3 of the Virgin Islands Code and established the V.I. Planning Office. It authorized the Planning Office to undertake the preparation of comprehensive plans and development programs. The Act clearly established the role of the Planning Office as that of suggesting and promoting public policies, policies that fairly reflect the goals of Virgin Islanders on the one hand the potentials of the environment on the other.

The responsibility for comprehensive land use and water resources management planning is included in the Planning Office authorization to perform long-range functional development planning. Title 3 V.I.C., Sec. 28 (f)

By directive of the Governor, the Director of the Planning Office is responsible for

organizing a Water Production and Distribution Inter-Agency Task Force which will address various issues, problems, and policies relative to the critical water situation in the U.S. Virgin Islands. (Governor's letter dated February 14, 1978)

# Department of Conservation and Cultural Affairs (DCCA)

The primary responsibility of DCCA concerning water resources is the administration and enforcement of all laws relating to water resources management and pollution control. Of particular importance is the responsibility for monitoring and enforcing the safe drinking water standards for public water systems. Public water systems are defined as piped water for human consumption which have at least fifteen (15) service connections or that regularly serve at least twenty-five (25) individuals. Title 19 V.I.C., Sec. 1301-1311

In addition, the Commissioner is mandated to promulgate an adequate plan for the provision of safe drinking water under emergency circumstances and take those actions that he may deem necessary during such an emergency in order to provide water where it otherwise would not be available. Title 19 V.I.C., Sec. 1306

The Department has the responsibility to plan, design, and construct wastewater treatment facilities in cooperation with the U.S. Environmental Protection Agency under the Federal Water Pollution Control Act (PL 92-500) and Section 208 Planning. Title 12 V.I.C., Sec. 181-198

The Department is responsible for the review and approval of permit applications from public agencies for Earth Change Permits, and for monitoring the permits to insure the protection of the soil and water resources of the Virgin Islands. Title 12 V.I.C., Chapter 13

By directive of the Governor, the Commissioner is authorized to set-up the mechanisms for a water conservation program for the Virgin Islands with emphasis on the needs of St. Thomas. (Governor's letter dated February 27, 1979).