An Analysis of Evolution of Water Rights in South African Society: An Account of Three Hundred Years

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Introduction

Water is an essential element for life and development of societies and cultures in general. The supply or availability of water in the South African context is more or less fixed as it depends on climatic factors which have not changed at least within the last ten thousand years (Department of Water Affairs, 1986). The average annual rainfall is about 497mm, which falls more on the East Coast and very little in the interiors. South Africa is thus classified as a water-stressed country. The evolution of water regulation and development of new water rights is thus intricately linked with the increasing demand for water over the years and the political scenes as they unfolded. Both forces – economic and politics--contributed to the evolution of water rights in the country. This study is aimed at tracing the evolution of water rights in South Africa as they occurred in the last 300 years or so. It is important to mention at the outset that colonization and economic development proceeded simultaneously. The story of water rights development is thus woven with both fabrics of economic and political colors.

The development of a water policy in South Africa should be understood within the context of conquest and colonization. As the country changed hands from the Dutch to the British and to the Afrikaners, and very recently to a democratic Government of National Unity representing all ethnic groups in the country, so did water rights regulation. The Dutch *conquistadores* favored the Roman-Dutch Law, while the British chose the English Law, the Afrikaners used a hybrid of both systems, and finally the democratic state co-opted aspects from both systems with the view to ensure democratic access to water and sustainable use.

The water rights in the colonial and apartheid era were meant to satisfy the needs of the dominant communities in the society at the expense of the majority of the native society. During the Dutch rule, water rights decisions in the water courts favored the Company which assumed *dominus fluminis* (overall rights of control) over water, that was considered public. During the British era, water was considered private and, therefore, water rights decisions favored individuals. The post-apartheid system is a populist regime as it sought to provide free water to the poor communities and to charge for water for commercial uses (includes industrial, agricultural, or any profit-making purpose). These themes will be followed in the study and examples and court cases will be supplied to demonstrate the political and vested interests by different regimes in water rights. It is also for these reasons that the periodization in water rights evolution tend to follow closely that of the political history of the country, as the two are inalienably related. For that purpose, the evolution of water rights shall be discussed under three broad phases: (1) Company rule under the Dutch spanning from 1652 to the first decade of the nineteenth century, (2) the colonial period under the British and under the apartheid period under the Afrikaners (running from about 1810 to 1990), and finally, (3) the post-apartheid period when the country becomes a democracy starting from about 1991 to the present. However it is important to mention that before long the colonial rule the African customary law prevailed in South Africa. A brief background of African customary law is thus warranted as well. The material of this study is organized under four sections. The first section delineates a brief theory of water rights with special reference to South African context. The next three sections deal with the evolution of water rights under African custom, under Dutch rule, under British and Afrikaaner rule, andfinally under democratic regime. Summary and conclusions are discussed at the end.

A Brief Theory of Water Rights

The need to regulate and control the supply of and demand for water by policy measures is necessitated by the need to supply the resource on sustainable

basis to all users. One of the important factors in developing water rights is climate. Even cultural advancement is considerably influenced by climatic conditions. Hall argued that:

> Climatic and geographical conditions are therefore of the greatest importance when questions of water rights come to be considered. If there is a scarcity of water the efforts of the community will be directed towards conserving the water and those of the individual to obtaining as much of it as he can for himself. If there is a superfluity of it the inhabitants will be occupied with efforts to get rid of it by drainage and canalization, and they will make strenuous efforts to add to their land by reclaiming new areas from inundation (Hall, 1939: 7).

The objective of water rights should be to achieve the sustainable water supply. Supplying water on sustainable basis refers to the ability to provide for all the water needs, whether they be social, economic, physical, biological, religious, and so forth of the current generations without jeorpardizing the needs of future generations. The sustainable supply of water to all users is an immense task complicated by hydrological, logistical, economical, sociological as well as political issues (Department of Water Affairs, 1986: 1.1). Apart from climate, the variation in water uses and hydrological conditions across the country also influence the development of water rights in a country. For example, distribution of South African rivers system is concentrated in a few provinces such as Mpumalanga, Kwazulu-Natal, and the Cape, and the rest of the country is dry. Water scaricity thus induces more stringent rules for water use. It can be said, therefore, that climatic conditions, hydrology and water uses are among the important factors in the evolution of water rights in South Africa. Among other factors, socioculturural contexts are also important determinants of water rights.

There are two important legal doctrines that define the terms and conditions of water use derived from a combination of cultural and environmental factors: riparian and appropriation. Under the riparian doctrine, the right to the use of water resides in the ownership of riparian lands—property that borders the water body. Under the appropriation doctrine, the right to use water requires (1) a diversion from the natural channel on a first-in-time, first-in-right basis, (2) subsequent continuous use, and (3) beneficial use The third corrective rights doctrine combines certain elements of both doctrines. Under all three doctrines, water rights are usufructuary, that is person obtains the right to use but not to the water body (Black and Fisher, 2001). In South African contexts all the doctrines are relevant as we will discover later.

Water Rights under African Customary Rule

The history of water rights in South Africa can be traced back to the pre-settlement of Europeans in the Cape in 1652. Prior to European settlement, the water rights were governed by the African Customary Law. Needless to say though that these water rights were not pronounced but were just common knowledge and were also not contested among individuals in a community. They only came up when a community or a tribe felt another tribe or community was unfairly encroaching into its resources to its disadvantage.

The Bantu people of Southern Africa had a subsistence economy based on hunting of animals and gathering of food. The *San* in particular were hunter-gatherers while the *Khoikhoi* were stock farmers (Davis, 1989: 10). In these communities, water like land was free. However, there was a feudal system of land tenure by which the chief controlled the use of land and did not allow private ownership. For quite some time the settler community and the African communities ran as separate entities, one on its own without control over the other. This resulted in a dual system of land ownership and as a result a dual system of water rights developed. There was the colonial community establishing

and aligning itself increasingly in commercial terms and brought its foreign values, as opposed to the native community which was subsistence-inclined and had ownership of resources based on the chief's control without individual tenure. Until such time when African communities were fully subjugated and brought under the control of the settler regime, water rights remained separated. Unfortunately however, the leave-alone attitude and policy of non-interference adopted by the early settler community was not based on the principle of respect of the natives but a gloom view of them as savages. By the time of British colonization, their so-called 'civilizing' mission did not take particular interest in a uniform policy development for these communities but instead they chose to exploit them. Thus water rights for the greater part of the history of the republic in a way refer to the access to water and water use by the colonists, the Dutch under the Company, and subsequently the British and the Afrikaners.

Water Rights under Dutch Rule

The Dutch East India Company was set out with legal precepts pertaining to the legal system in the Netherlands. The arrival of the Dutch and their decision to settle at the Cape of Good Hope in 1652 led by Jan van Reibeeck invoked the application of Roman-Dutch Law in the emergent society. The evolution of water rights in South Africa were highly influenced by legal developments in the Netherlands as in the latter half of the seventeenth century and the whole of the eighteenth century; the Cape of Good Hope was a Dutch Colony subject to ultimate control from Netherlands. In Netherlands the doctrine of state ownership of all public rivers was generally accepted in the seventeenth century. It should be clarified at this point that in Netherlands, unlike in South Africa, consumptive use of water played a subordinate role in water uses. (Uys, 1996: 468):

> In Holland, water was described as being rather a nuisance than a strategic resource, and due to its abundance, peaceful common consumptive use was not a problem or a source of dispute …

> navigation and fishing, both being non-consumptive purposes of use, were the main causes of user disputes, and the water law revolved around peaceful common utilization of the navigable and perennial rivers for these purposes (Uys, 1996: 469-470).

To be able to fully control and legislate the use of these waters, the law gave the state *dominus fluminis* over all rivers and water bodies of the country. This doctrine was to be applied in South Africa and persisted without challenge throughout the eighteenth century, although the situation of South Africa was very different from that of Holland. The Cape had a few perennial streams but these were not comparable to the navigable waters of Holland. Inland water use was mainly for consumptive purposes, and fresh water was used for domestic and agricultural purposes rather than for fishing and navigation. However, writers of South African water rights laws often incorporated and cited precedence from the Dutch Law or made reference to the Emperor of Netherlands.

The key writers of seventeenth century water rights which became the main source of authority in South Africa include, Grotius, Groenewegen, Vinnius, van Leeuwen and Johannes Voet. Their works became the basis upon which the water rights of South Africa in the seventeenth and eighteenth centuries were based. For instance, in a statement of general principles applicable to the diversion of water Voet argues that:

> While the Emperor's permission was necessary for the leading of water from a navigable stream, from an important tributary of such stream, or from a public aqueduct, if the stream was not navigable, or if the water was not being used for the public benefit, it might be diverted unless the Emperor or the Senate had forbidden such diversion (Hall, 1939: 13).

Voet also incorporated the rules laid down in the *Digest* for control of the use of public streams in the Roman State. This directly influenced the water law in South Africa. Another of these legal entities was that the state was *dominus fluminis* in respect of all respects of all running water, and it was also accepted that only those streams which flowed perennially were public. It is this **doctrine of perenniality,** adopted by the courts of South Africa, which distinguished between public and private rivers until the Cape Irrigation Act of 1906. As a result, this doctrine can be regarded as a basis upon which a system of water rights was built upon.

At the end of the first three years of settlement (by 1655), Van Reibeeck came under pressure to control water use and activities for hygienic reasons. A contingent of the Dutch East Indian Merchantmen became ill as a result of impurities in the drinking water obtained from the streams of Table Valley. The burghers on the up-stream were using the river water for bathing and washing their personal belongings, which affected the health of downstream users who depended on the same river streams for drinking water. Van Reibeeck issued a proclamation prohibiting the washing of persons and personal belongings in the streams in 1655. When this did not stop immediately, he tabled penalties to be imposed on would-be-offenders. This was the first sign of the state, in the name of the company, taking the position that it had the right to control the use of running streams in the colony. At this stage consumptive use did not demand any major focus and this was to be so for much of the following century. Although that the new territory was relatively arid, the lack of technological skill regarding large-scale water abstraction and irrigation, accompanied by small-scale farming and a relatively small population, saved the natural running water sources from over-utilization, and had the total effect of negating the necessity for strict consumptive control (Uys, 1996: 469).

Company voice with regards to water was in the form of prohibition to interference with the furrows and watercourses of Table Bay which were

publicized in Company *Placaats*. Individual use of water was for irrigation by producers of vegetables and sheep farmers on small farms, then called 'gardens'. Until about 1671 the Company's main business entity was agriculture (Davis, 1989: 19). The company therefore competed with the settler farmers for water for irrigation. In the decade subsequent to 1652 about 120 burghers had settled on the Cape and gardens mushroomed beginning at the Table Bay and some moved into the interior (later to be referred to as Trek-Boers), and became pastoralists. It soon became clear to these settlers and the company that South Africa, unlike Netherlands, was a water scarce country with limited river water available, relatively low rainfall and prone to droughts. It is this limited availability of water for the Boer pastoralists that led to the introduction of the merino breed of sheep from Spain, for instance (Davis, 1989:21). This breed of sheep had the ability to withstand high temperatures and dry conditions and at the same time develop a rich, thick fleece. Sheep farming in nineteenth century South Africa became more widespread even under scarce water resources.

As a result of rising water demand from the mushrooming gardens and also the water needs of the Company Mills, there was constant friction between the garden owners among themselves and also against the company miller. In 1761, the Council of Policy passed a resolution that authorized the use of water for irrigating the gardens for four hours a day. In the last quarter of the eighteenth century, the demand for water had become overwhelming. The growing town, for instance, demanded the whole of the undiminished flow once a week for the flushing of its open drains. According to Resolution 1773 (65C) of the Council, this overwhelming demand "occasioned great inconvenience to the inhabitants living near them owing to the stench emanating from them" (Hall and Burger, 1974). Court ruling in cases in this period followed the principle that 'the Government was *dominus fluminis* in regard to flowing water and that it had the absolute right to grant that water to whomsoever it chose'. Whenever the company gave individuals rights to water, it impressed upon them that those rights were granted as a privilege which could be withdrawn at any time if it

appeared to the Council that the conditions were not observed and where water needs of the company came under threat or perceived itself threatened(see the case of Stellenbosch v. Lower Owners in 1805) (Hall and Burger, 1974).

Box 1: Stellenbosch Town v. Lower Owners.

The Council of Policy handled the case between the town of Stellenbosch and the Lower Owners when the lower owners complained about the town's water use activities as limiting and in fact denying them any access to water. The Eerste River which runs down from the town has a very rich river base supporting market gardening ventures below the town. Many farmers owning land riparian to this river course did not have an adequate supply of water for their gardening ventures. This was subject of several contested actions in the water court and a commission of inquiry was set up. In reacting to this case the Company's Council of Policy acted upon the principle that the Government was *dominus fluminis* in regard to flowing water and that it had the absolute right to grant that water to whomsoever it chose. In several of these court actions the Stellenbosch town municipality won against the garden owners.

Source: Hall and Burger (1939: 19-20).

In the Roman Law the general rule was that running water was *res communis* (community property), except where the stream was a very small one, or it had an intermittent flow. Under these circumstances, it became subject of private ownership (Hall, 1939: 12). In this case, water rights and land tenure were closely connected as, according to the same principle, the surface of the public stream and the bed in which it flowed were public property and subjected to state control. The ownership of the banks was vested in the riparian owners[1] although the bed of the stream was public so long as it was occupied by the flowing river. Interference with the flow of such public streams was only prohibited where it would cause an inconvenience to downstream users. This was because rivers were considered *res publicae* (public property) in the sense that they belonged to the nation as a whole which made them automatically subject to all its inhabitants (Hall, 1939: 15). However, the *dominus fluminis* status of the state was exercised in the use of water for irrigation. From the earliest years of Dutch settlement, streams of the Table Valley were used for irrigation. Where landowners

possessed land adjoining the courses of streams, the Company retained absolute control over any use whatsoever of any river. This was essential as the company had to protect the water needs and interests of mills and other undertakings. Riparian landowners did not have any special rights to the river streams that either ran across or contiguous to their property, and using the same water for irrigation. According to Hall:

> It is perfectly clear that the free burgers, alongside or through whose land the water of the stream ran, had no water rights. The company gave them permission to use the water for a short period each day when it could spare it, and then it was a special favor and not a right upon which that permission was based (Hall, 1939: 13).

The company remained *dominus fluminis* for the whole of the seventeenth century. The case of Ackerman illustrates the fact that land ownership along riparian zones did not reduce the status of the state as *dominus fluminis* (Box 2). Riparian owners had a larger advantage in terms of access to river water even when the sate either directly or through the Company had the power of veto over who accesses what water and in what quantities. According to Hall (1933: 52) upper riparian owners were entitled to the secondary use (use for irrigation) of the normal flow of a public stream provided that they did not prevent its primary use (for animal drinking and domestic purposes) by any lower riparian owners who were entitled to such primary use.

It can be argued from the above that the rights of ownership in land which was in contact with a running stream did not *ipso jure* carry with them rights to make use of the water of that stream. This is one major factor differentiating between water rights under Dutch rule and under the British rule. However, the right to make use of the water could be obtained from the state, which granted it as a privilege as opposed to legal right.

Box 2: The Case of J. Ackerman Vs. Dutch Company

J. Ackerman was a burger who bought property and its title from a fire master, Jan Gintsenberg, who had a private arrangement with the Governor permitting him to take water from the company's wooden trough which ran over part of his land. His land was between two properties which had been given turns to draw water from streams according to the 1763 ruling (see time-line in Appendix A). The fire master had been well supplied with water from the company sources and did not seek to participate in the much more restricted daily turns. After he died, his land was sold and the privileges that went with being a fire master were withdrawn from the new property owner—Ackerman.. As Ackerman could no longer appropriate the Company's water to his own use, he started to bale what he required from the river. This naturally led to trouble with his lower neighbors, who compelled him to desist. His petition to the Council stated that he could not make a living out of his garden without a supply of water for irrigating his land and requested the Council to consider allowing him to lift water from the river to his property for irrigation. The Council, after duly considering the report on Ackerman's circumstances gave its approval for water use.
Source: (Hall, 1939: 14-15)

This allowed the state to withdraw such access as and whenever it deemed necessary. The company required water to turn its mills and it used this water irrespective of its prejudice to the landowners, whose properties were situated in the up-stream. The land owners had to be content with what was given by the company. This principle was reinforced in the 1774 Resolution, which clearly stipulated that:

> … the owners and occupiers of gardens are to get defined turns of water leading in such a way that the Company's undertakings are not inconvenienced and, over and above that the Burgerraden are given power to shut down the sluices supplying water further down –at times over and above their accorded water-leading time–should the need arise for the general good of all those involved (Hall, 1939: 16).

There were several cases heard between 1750 and first half of the nineteenth century where burgers raised complaints about the inadequacy of water for use. Most of these cases were between upper and lower river stream users, with the former being the complainants and the latter defendants. The Roman-Dutch Law was challenged and therefore changed when the British took over political power in South Africa. The British Law drastically changed the status of the State as *dominus fluminis* in water rights and replaced it with a dual water rights system of public and private water rights. This was clearly constituted and codified in the Irrigation Water Act No. 8 of 1912.

Water Rights under British and Apartheid Rule

The British consolidated their occupation of the Cape in 1806 and by 1813 a drastic change had been introduced by Sir John Cradock through a proclamation which was to have a profound effect on water rights in the colony. As stated before, the history of the evolution of water rights is closely tied to the changing political influences and the power struggles. With the take-over of the British from the Dutch Company, Roman-Dutch law was to an extent toppled by the English Law. The British adopted a fusion of both legal systems thus leading to a hybrid. However, the influence of Roman-Dutch law in the legal fraternity of South Africa was not to be completely buried. The Roman-Dutch Law in general in the years following the ascendance of Afrikaner nationalism under apartheid received a renewed glory as the Afrikaners had more sympathy with the Dutch system than with the British system .

When the British took over control of the Cape Colony or South Africa they were very eager to anglicize (transform everything to reflect British control) the colony. A lot of the Trek-Boers were forced further into the interior, disenfranchised and made into subjects. British arrogance disguised in the so acclaimed need to establish ‘Christianity, Commerce and Civilization’ in Africa saw them changing

everything including water rights regulation. Under the Dutch Law, the state as *dominus fluminis* took precedence in water rights allocation than the influence of land tenure. In the English Law, land tenure was a very important aspect. All the developments in water control and regulation to this date reflected the predominance of agriculture in the economy. As a result, irrigation development played a major role in the molding of early water policy as well as in the infrastructure, economic and social development of South Africa (See Appendix B).

The most fundamental changes in water rights were brought by changes in land tenure. The Company's land policy in general was to grant leases of farming land for limited periods only and to retain its inherent ownership of soil. There were however minor exceptions to this rule as in its last days of control it granted small areas of land in freehold to certain favored individuals. The Cradock's proclamation in 1813 provided land owners with security of tenure and devolved land from the state to individuals. Every lessee was given ownership of the land that one was in occupation of on the condition that the owner paid an annual quitrent, a basis on which crown land was later administered. The 1813 proclamation had the effect of introducing a change in the general attitude of public opinion towards the ownership of the soil.

The disparity between Dutch water rights principles and those of the British can be understood from the point of view input scarcity. For example, when the Dutch arrived land was not the problem but water; on the other hand, by the time of British take-over, land had increasingly become a scarce resource as there was competition from the British, the Trek-Boers, and the native African populations. As a result, water rights became largely tied to land tenure and riparian water rights became the mainstay and legacy of British water rights policy. Under the British rule, private water rights had precedence over public water rights and land ownership was the main determining factor in terms of private and public streams water rights. To understand water rights under the British system, it is imperative

to review the operation of riparian rights emanating from the codification of water rights in the Water Act of 1912. The important starting point in understanding water rights under British control is to look at the way the British viewed different water resources in the colony and how they applied or modified the riparian principle to different situations.

Categorization of Water Rights

The British recognized that South Africa had very limited water resource in rivers, dams and groundwater. Water regulation was therefore disintegrated with different water resources being controlled by different pieces of legislation and also managed differently. This difference was quite marked between river water and groundwater resources. A discussion of the three main categories of water resources-- river, ground and dam--follows with the aim of enunciating how these were regulated by the state.

River Water

South Africa's farming system was highly dependent upon its river system. This made river water resources the most important one in the evolution of water use in South Africa as irrigation was generally by direct diversion from rivers (Department of Water Affairs, 1986). As a result the water related legislation enacted in these early years were aimed at protecting the water rights of farmers along rivers (Appendix B). Besides water regulation, the state also concentrated on the construction of dams for irrigation. This did delay the comprehensive legislation to control and regulate the use of water and brought the agriculture and industrial water users at loggerheads as the legislation could not suit both. Industrial users lobby became very strong and overrode the concerns of agriculture. This became the basis of new Water Act of 1956. The Water Act of 1956 (Act 54 of 1956) has been hailed as representing a very important benchmark in the history of water regulation in South Africa (Uys, 1996). This managed to harmonize water regulation in the interest of the economic

heavyweights, agriculture, mining and industry. According the Department of Water and Affairs (DWA) report, the Act came closest to:

> … ensuring equitable distribution of water for industrial and other competing users, as well as to make possible strict control over abstraction, use, supply, distribution and pollution of water, artificial atmospheric precipitation and the treatment and discharge of effluent (Department of Water Affairs, 1986, 1.9).

Water use activities which reduced the access of water for downstream users were also controlled. These were regarded as 'stream flow reduction activities'. The Act allowed the Minister to regulate land-based activities which reduced stream flow, by declaring such activities to be stream flow reduction activities. This provision brought forestry and horticulture under scrutiny under control as major water users. Afforestation was regarded as a major culprit in the reduction of stream flow. As a result an Afforestation Permit System (APS) was instituted for the purpose of the regulating and ensuring the availability of water for downstream water users.

Ownership of water rights emanating from a river stream source was also closely linked with land rights. However, it suffices here to mention that ownership of land contiguous to a river source either advantaged the land owner and disadvantaged those who were not owners of such land. This land found parallel to river-streams was referred to as riparian land. The owner of a riparian land could sell the access to water on his land to other water users who were geographically disadvantaged. According to Hall and Burger (1974: 23), the mere fact that the owner of riparian land has sold his right to use water on that land did not deprive the land of its riparian characteristics. Any owner of that land may purchase water rights from some other owner of riparian land that has water rights attached to it and may use the water on the first-mentioned land. Where

the owner of riparian land, in respect of which a specific share of water has been awarded to others for use by the former owner, may revoke such allotment, unless the award has specifically restricted the use of the water to some defined area of defined riparian land. One such case that demonstrates this concept is that of *De Wet v Estate F. J. Rossouw.* In this case, the water of a public stream was divided among the riparian owners. A riparian owner who had received a share in water acquired other riparian land (second piece) which was not entitled to water . However, he proposed to use his water entitled from the first piece of land to the second piece of land, to which the other riparian owner objected. The court held the case in favor of the latter stating that subsequent apportionment of water to second piece of land is not rightful.

Box 3: De Wet v. Estate F. J. Rossouw

In the case between De Wet (applicant) v. Estate F. J. Rossouw (respondent), the applicant received (under an agreement between owners which was confirmed by court judgement) an allocation of the use of a share of the water of the Hex River, as owner of a portion of the farm Oudewagendrift and the adjoining farm Tweefontein. In this case he proposed to take some of this water to another portion of Oudewagendrift acquired by him. The share of water (from the Nonna River) allocated to this portion (to be called the second portion hereafter) has been disposed of to others, so that the applicant purchased the ground without any rights to water. Both portions are situated in the same watershed and are riparian to the Hex River. The respondent in this case, the owner of a further portion of Oudewagendrift, objected to that the applicant had no right to use water. The respondent based his objection upon two contentions. The first is that the applicant's second portion can receive no water from the Hex River as it is no longer riparian to that river. The second contention was that the use of the applicant's water was allocated to a certain definite area, that its use is inseparable from such area, and that he had no right to use this water on any other ground to which it has been allocated. The court decided in favor of the respondent.
Source: Hall (1963: 156-167)

Ground Water

The British administrators recognized that ground water is one of the important sources of water available to South Africa, which can be made use of as a water scarce country. It is defined as all water naturally existing under the ground, whether in a defined channel or not (Vos,1968:25). Water rights for underground water have also gone through several changes. The first Act to clearly address and directly deal with ground water issues was the Water Act, No. 54 of 1956. However, as early as 1914, concerns arising from ground water and conflicts were heard in different water courts in the country. One such case was that of *Smith v. Smith* in 1914 where it was considered a "fundamental principle that the owner of land owns a *centro ad coelum* and accordingly underground water is the absolute property of the land owner" (Vos, 1968). However, by common law this principle had the exception that, if the groundwater is public, the landowner has no absolute right to it. This raises other concerns of ground water as private and public that was not easily defined as with streams. There were gray areas in the definition and conceptualization of ground water and streams. Where ground water was flowing in a common law public stream, which is a perennial stream capable of being put to the common use of the riparian proprietors, such ground water was considered as public (Vos, 1968). Otherwise, until recently, groundwater in South Africa has been managed as a separate entity to surface water. Furthermore, the status of groundwater as private has led to unsustainable management and subsequent resource degradation, and has become the basis upon which environmentalists and other water lobby groups have demanded a new approach to water rights that recognized ground water as endangered.

Dam Water

Having acknowledged the limitation in the river water resources and the complications associated with using groundwater resources, the British colonists turned to dams as very important water resource in South Africa. The

establishment of legislation promoting irrigation boards culminated in the proclamation of the Irrigation and Conservation of Waters Act of 1912. This Act distinguished between a dam and a 'weir'. A weir was defined as 'an obstruction to a watercourse aimed at raising its volume for the sake of its diversion, while a dam seeks to store the water. Water rights for diversion and storage also considered the access of other riparian owners as well as government use (Hall, 1963). Water courts allowed water rights for storage of water upon the land of an adjoining owner. Such applications were awarded 'servitude of abutment'. A number of cases were heard where other riparian owners complained when neighboring or downstream users mapped up dams that encroached into their property. As generally applied to all water sources, under the more liberal British system the old principle of the state as *dominus fluminis* struggled for survival. The British legislature appointed lawyers and officials trained in the British Isles to the Supreme Court Bench to influence change in legislation. They challenged the idea of state ownership of water courses as incomprehensible and put it to disuse gradually. Individual rights to water were granted and courts dealt with water disputes in exactly the same manner as they handled disputes regarding land rights. In 1856 the common law as to water rights became the subject of authoritative judicial definition and it was then that the foundation was laid upon which the structure of the republic's water law of present day was gradually built upon.

In a court case (*Retief v. Louw)* that marked a clear movement away from the state ownership of watercourses, the Court cited from the American text book, Angel's *Treatise on the Law of Watercourse.* From this text the Republic's water rights law adopted the 'system of the proportionate sharing of the use of perennial streams by riparian owners' which was evolved in the United States of America (Hall and Burger, 1974). There were other important results from this development such as the division of water for the support of both animal and human life and the drawing of the registration of water rights. What came out as an outstanding development in the evolution of water rights in this case was that

domestic and animal use, the use for irrigation and industrial use became clearly distinguished.

Riparian Principle Superseded the State Control

The next important benchmark in the development of water rights in the nineteenth century was the ascension in 1873 of Sir Henry de Villiers (later to become Lord de Villiers) to the helm of the Cape Judiciary as the Chief Justice of the Cape Colony. His distinguished contribution was that he treated water law as *res nova* and took upon himself the credit and responsibility for laying down the principles governing rights to the water of public streams. In the next sixty years (that is into the 1930s) the law of water rights gradually moved away from state control to common riparian use. Thus riparian principle superseded the dominus fluminis status of the state.

The riparian principle remained effective as time passed on. The ownership of riparian land gave automatic access to the water that flowed therefrom. Actually speaking, the riparian principle was already being practiced in the northern province (Transvaal) since 1894. A riparian owner was given the rights to use all water of a public stream provided it was used in a “reasonable” manner. This however, favored to the upper owner as opposed to lower owners along the public stream. The British system put a lot of trust in the hands of individuals. The basic principle applied to claim water rights was based on individual rights with logical reasoning. For example, when a stream formed the boundary between two adjacent farms, each of the riparian owners was allowed to divert one-half of the available water, but not more as this being logically unreasonable (Hall and Burger, 1971: 35). While the British system favored individuals, riparian rights were also extended to the local authority by section 11(b)(1) of Act 8 of 1912, where the local authority’s areas of jurisdiction was riparian to a public stream. In this case the local authority was not required by law to apply to a water court for permission to abstract and store water from the stream for the public benefit.

The riparian rights did not rule out the water rights for non-riparian owners. The test of riparianism laid down in section 2 of Act 8 of 1912 was applied in respect of conditions existing at the time of the dispute. Section 11 (2)(b) empowered the water courts to grant permission to use public water on non-riparian land to a person 'who is not entitled (according to the Act) to use public water'.[2] However the permission was granted where evidence indicated beyond reasonable doubt that granting the permission would be to enable a considerable number of people in that area to be profitably employed. This also applied where water was to be used for urban purposes by a municipality when the existing water supply was inadequate to satisfy the needs of the village and the new supply would help to satisfy the needs (Hall and Burger, 1971).

The result of the codification of water rights was that public water of a stream shall be subjected to primary, secondary and tertiary uses.[3] The court case of *Pretoria Municipality v. Bon Accord Irrigation Board and others* gave each riparian owner a preferent and exhaustive rights to the water of a public stream for primary purposes as against all owners below him on the stream. In this case, the British system considered water as private by virtue of it streaming through land that was privately owned by certain individuals. Section 8 of the 1906 Act (Cape) ensured that a person should have and retain the full benefit of works which he had constructed before the passing of the Act for obtaining water from public stream. It however limited the amount of water which could be taken to the quantity which the works then constructed could divert (Hall and Burger, 1971).

Given the principle stated earlier that every person has entitlement to the exclusive and unlimited use and enjoyment of all water rising on his own land, private water use from private streams was accepted provided that there would be no negative effect on the right of a riparian owner. Non-riparian landowners were permitted access to a reasonable share of water rising on the land of an

upper riparian owner. According to Section 8(1) of the Irrigation Act No. 8 of 1912:

> The water of a private stream is the sole property of the owner of the land on which it rises. He can do whatsoever he pleases with it and neither the owners of lower-lying land nor even the public can claim to be entitled to make any use at all of that water, except, in the case of a lower owner, where he can claim a right based upon a user of thirty years. Where a stream is declared to be a private stream, the whole of its watershed is lost to public use and reserved for the exclusive use of the owner of the soil (Hall, 1933: 28).

However, this rule had its exceptions and was not universally applicable. It was only applicable where the stream was considered public in common law definition.

A system of riparian rights was constituted in the Water Act No.54 of 1956. It was a hybrid of Roman-Dutch, English, and American law. The result of this combination of legal system on the history of the water rights in South Africa was that it resulted in the idea of a river from which all adjacent landowners could take their share. The ideas of normal flow (which would be divided between the riparian owners), and surplus flow (where, in flood times, riparian owners could take as much surplus as they were able to use beneficially) were introduced. The problem with this arrangement was that for many years, those water users (urban and industrial) who did not have access to water as a result of land ownership could only get access to water through a water court application. When granted it was stipulated in no uncertain terms that they would only get water to meet their needs without affecting the allocation of riparian owners. The only other way they could access water was by buying land which was contiguous to a river stream of with access to water. This water rights policy

excluded the Africans who could not compete in the land markets freely and also did not have the resources to do so where such access was possible. The Land Bank of South Africa, established in 1912, specifically catered for white farmers as a policy to reduce white unemployment and address the poor white problem.

The Republic at this stage was sufficiently industrialized and urban population had grown. This required provisions for the domestic as well as industrial uses of water. The Act vested in the Minister of Water Affairs a large measure of the control of public water. The principle of government control was introduced. This principle was systematically extended to cover in some or other measure all sources of natural water by the Act of 75 of 1957, Act 56 of 1961, Act 63 of 1963, Act 71 of 1965, Act of 11 of 1966, Act 79 of 1967, Act 77 of 1969, Act 36 of 1971, Act 45 of 1972. By these amendments, state was re-invested as *dominus fluminis* for all practical purposes, bearing in mind the increasing demand for water and fixed water supply[4]. These arrangements specifically singled out whites and totally excluded Africans. Redressing this scenario became the principle aim of democratic government

Water Rights under Democratic Rule

The most important challenge for post-apartheid South Africa with its neo-liberal inclination was to balance the traditional view about water with its commercial value. Traditionally, the majority of water users considered water as a public good that is naturally available and abundant, and therefore expect it to be available at low cost. This view was also raised in the White paper on Water Policy published in 1997. In the preamble to the White Paper entitled 'Water in our lives' signed by then Minister of Water Affairs and Forestry, Kadar Asmal, the government recognized that access of water was a matter of constitutional right. The Bill of Rights and Constitution of South Africa recognize the right of all citizens to have access to water in sufficient amounts to meet their rights to human dignity (www.polity.org.za/govdocs/whitepapers/water.html). It should be

made clear that governments (throughout the history of formal governance from Dutch rule to British colonial rule following to apartheid administration and right up to post-apartheid regimes) had high regards and clear understanding of the importance of water. The difference could be that under apartheid water access and availability was seen as important for a certain racial group which was regarded as more important, and also as the mainstay of the economy. The focus of the post-apartheid regime was to transform that differential distribution and ensure that every individual had access to water. In drafting the new water legislation this history was considered:

> South Africa's water law comes out of a history of conquest and expansion. The colonial law-makers tried to use the use the rules of the well-water colonizing countries of Europe in the dry and variable climate of southern Africa. They harnessed the law, and the water, in the interest interests of a dominant class and group which had privileged access to land and economic power (DWAF, 1995).

In the interest and pursuit of democracy, the review of water use policy and water law was aimed at addressing the issues of equitable access to water of those who had been previously marginalized in the earlier policy legislation. In fact, the Government had to consider the recommendations of the Water Research Commission (WRC) since the 1980s that water has to be paid for. It was advised that water should be provided at a price, which should not be kept artificially depressed through administrative decisions. The argument put forward was that the application of a realistic price policy that reflects underlying scarcities is one of the most efficient ways of ensuring the effective exploitation of a country's resources. In a free economy, it is the best way of effecting a balance between supply and demand and preventing waste of a scarce commodity (Department of Water Affairs, 1986: 1.29). In drafting the current water legislation, the South African legislature based its considerations on two ideas: (1) a link between the

right to use water and the ownership of land adjacent to that water (that is, the principle of riparian zones), and (2) a separation between private and public water. As mentioned earlier, the development of water rights in South Africa is largely hinged upon Roman-Dutch law in which rivers were seen as being resources which belonged to the nation as a whole and were available for common use by all citizens, but which were controlled by the state in the public interest. These principles fitted in well with African customary law which saw water as a common good used in the interest of the community. Keeping these social values in background, the South African parliament passed two laws: (1) the Water Service Act of 1997; and (2) the National Water Act of 1998.

The National Water Act recognizes that water is a scarce and unevenly distributed resource, belonging to all people and no discriminatory law should be established to prevent access by other people and that the sustainability should be the aim in distribution through which all users could derive benefits. Until very recently, river water resources were regarded as public while groundwater was considered private. The new Act has called for the uniform protection of all significant water resource, emphasized on resource sustainability and integrated water resource management principle; the Act attempts to redress the problem of past groundwater mismanagement by presenting a number of policy principles for the guidance of groundwater protection strategies (Van der Merwe, 2000: 17-18). The main users, as classified according to their importance with the exclusion of international commitments are; basic human needs, ecological needs, and any other uses directed towards economic development (industrial and non-industrial). The Water Services Act on the other hand focuses on the roles and functions of the various water services institutions responsible for providing water and sanitation services. The key objective is to ensure the effective partnerships between various water institutions and for sustainable water use in the country.

In democratic South Africa, the concept of water as public good gives the legislators the power to regulate who gets water in what quantities. Besides, it also became possible to provide the water at a certain price for various users and uses. From this developed the concept of 'water marketing' which was advocated as one means of reallocating scarce water supplies in South Africa (Schwulst, 1995: 39). Allocation of water through the market was envisaged to offer several potential advantages. Firstly, it promotes efficiency in allocation by placing water in the most highly valued uses in a flexible manner. Property rights to water empower water users as their consent is required for any reallocation of water and compensation is required for any transferred water. It is also argued that, decentralized information is brought to bear on water management decisions by enabling individual users to apply the first-hand knowledge in determining how much water to apply and which crops to produce.

The discussion of the evolutionary history of water rights is not complete without consideration of state efforts to preserve the limited water resources available. One of the most important aspects of post-apartheid water rights developments is, therefore, the move to control activities that affected streamflow in the interest of downstream users. In this regard, the National Water Act (Act no. 36 of 1998) called for the licensing of stream flow reduction activities (SFRAs) as one of several forms of water use (Section 36) (Warren, 2000). Afforestation was identified as one of the major water users that has direct effect on the availability on streamflow to downstream users. SFRA licensing was designed to replace Afforestation Permit System (APS) which had been the instrument for controlling land-based water use under the old Forest Act (No. 122 of 1984) by commercial forestry.

The ideological transition from the Reconstruction and Development Programme (RDP) to the Growth Equality and Redistribution (GEAR) in 1997 was a basic turnaround in South African basic needs delivery policy. The policy change re-aligned basic service delivery to market forces. This policy, as a result to its

inclination to neo-liberal market economic policies, dictated little government involvement in service delivery subjecting them to market forces. Tradable water rights (a situation where users pay for the water they use) is currently operational. Even though, in 1999, in its campaign statements for the Local Government elections, the ANC government continued to promise free water for the poor, the working principle is that of tradable water rights remains in effect. The ANC committed itself to supplying poor families living under the poverty line with 6000 liters of water free per household (ANC Manifesto, 1999). However, the need to afford free water embodies both realism and an element of paternalistic morality for the government. Ironically, local governments no longer receive subsidies from the national government to be able to supply their communities with the basic needs, for daily survival. However the Durban Uni-city Metro Council has set precedence in this regard. Its billing system is structured in such a way that any household that uses less than 6 kiloliters per month, (irrespective of social standing of economic status - rich or poor, executive or pensioner) is not billed (Ruiters, 2001: 18).

On the whole, the current government's water rights thrust should be seen as that of commodification of services which should be understood within the macro-economic policies followed by the government. Part of this policy is informed by the environmental spin that regards water as a scarce resource and therefore hedonistic users should be made to pay. As a result of this view, stepped tariffs and penalties for excessive water use are advocated alongside life supplies for the poor. Water rights management in this period can best be seen as a mix of demand side management, increasing block tariffs, cross-subsidies, lifeline tariffs and a minimum free water quarter per month.

Summary and Conclusions

Something have remained unchanged during the last 300 years in South Africa--the fact that South Africa is a water scarce country. The result was that

increasing water demand, necessitated the regulation of water resource. The main factors determining water rights in South Africa can be argued to be its scarcity (as a factor of climatic conditions and hydrology) *vis a vis* its demand by various users (ranging from domestic and primary users to secondary users in agriculture, industry, construction and mining). Various phases can be identified in the evolution of water rights in the history of modern South Africa. Mention has been made that prior to the arrival of the settlers (both Dutch and British) water rights under the African Customary Law were unwritten and only considered as essential when a community came under threat from another encroaching tribe. Otherwise in this period, water rights like land were not privatized. There were no individual controls of water rights. The leader of each community had the right to control and determine the use of resources and presided over disputes over natural resources. The first phase in the evolution of water rights in South Africa can be argued to be that of company rule which opted for the Roman Dutch Law. Under this dispensation the status of the Company and or state as *dominus fluminis* to water rights was upheld. In this period individuals only held temporary and revocable rights to water where such rights did not undermine company access to water. This phase can be said to have been the longest spanning from 1652 up until British rule in the first decade of the nineteenth century (about 1810).

The second phase includes both periods of British control to that of the apartheid era under Afrikaner control (1810 to 1990). The British were more liberal than their predecessors, they allowed individual rights over water as in the land tenure. This led to the codification of water rights and the giving of riparian rights to individuals. Water sources were defined and categorized in order to systematize the water rights regulations. Differences between private and public river streams were clarified and so were the different rights emanating from them. The key legislation of this period was the Irrigation Act of 1912. As time passed, the Irrigation Act, despite amendments, became inadequate to cope with the social and industrial progress of the nation. This gave birth to the third

comprehensive codification of water laws in the form of Water Act No. 54 of 1956.The country at this stage was sufficiently industrialized and urbanized. This required that provision for water should be made for all sectors. The new law under the apartheid rule promoted the segregation of development on different paths for the different races. There was not much difference in terms of water legislation during apartheid besides the fact that African values, needs, and commercial aspirations were undermined. The key legislation of this period in terms of the water rights was the Act 54 of 1956. This legislation did not represent any fundamental change in terms of policy direction but simply regulated the access and availability of this resource for the mining and manufacturing industry.

The third phase could be identified as the current phase of democratic South Africa where the main thrust in water rights is to facilitate the access to water by communities which were previously disadvantaged by the deliberate segregating policies of the past. The policy also aims at providing water to users in such a way that promotes development without compromising the sustainability of the resource. It implies that water rights in the current phase are more inclusive and focus on development, sustainability within the context of equitable distribution, justice and human dignity.

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APPENDIX A

Timeline of Water Rights in South Africa, 1652-to date

1652: Arrival and establishment of Dutch Colony at the Cape of Good Hope.

1655: Van Reibeeck makes the first act of State control over public streams to prohibit uptream use of streams for washing their persons and possessions.

1657: Repetition of the General *Plaacat* (Proclamation) prohibiting upstream water pollution as it was used for drinking purposes.

1661: Prohibition of use of upstream water by free burghers for irrigation and Company control of river streams begins..

1740: General *Plaacat* prohibiting the damaging of water courses by crossing river streams at points other than bridges.

1761: Council of Policy resolution authorized the use of water of the Table valley streams for irrigating gardens for four hours out of twenty four hours. Also, the then governor of the Cape, Ryk Tulbagh, and the Council of Policy considered the matter of water use by some riparian users from the stream above the Company's mills and fined them, confirming the *dominus fluminis* status of the state.

1773: The water leading time was extended to 8 hours out of 24 hours and a new systen of water distribution by turns was adopted.

1774: The proposed arrangements of turns of water-leading for private owners was adjusted so that the Company's gardens situated lower down the stream should not be deprived of a proper supply of water. The *dominis fluminis* status of the state was forcibly applied from this year.

1806: The final occupation of the Cape by British took place in this year.

1813: Second British governor, Sir John Cradock established a new land tenure policy which was latter to affect the State's status as *dominis fluminus* status in water rights.

1820: Beginning of preference of appointment to the Supreme Court Bench of lawyers trained either in England or Scotland.

1855: The doctrine that an owner of land is the absolute owner of all water, which rises upon his land, was accepted. After a gradual process beginning with the 1813 new land policy, the state finally faded out as the *dominius fluminis.*

1856: The doctrine of state as *dominus fluminis* had completely disappeared from the cognizance of the Courts. The new foundation of South African water rights were laid upon riparian ownership.

1857: The first permission was given to a Hugo of Cabriere to divert water from certain mountain streams on to his farm.

1869: Privy Council expressed doubt in the correctness of the 1855 doctrine

1874: Beginning of a series of decisions by the Supreme Court, taking from the Roman Law the basic idea that running streams are *res publicae*, adopted from the English and Scottish Law principle that the riparian owners are entitled to the common use of water of a stream to which their properties are contiguous.

1894: The first legislative step in the direction of providing substantive rules for the use of public water taken in the Transvaal under Law 11 of 1894. These rules ignored the principle of proportionate sharing amongst all the owners riparian to a stream which the Cape courts had laid down as a fundamental rule of common law.

1899: Act 40 of 1899 (Cape) provided the second step in the codification of the law of water rights by creating water courts with jurisdiction to decide all disputes and claims as to water rights.

1906: Cape parliament passes a comprehensive measure by which the existing law relating to the use of the water of streams which were public at common law was effectively codified and the principle of common use was

extended to streams which had hitherto fallen outside the scope of its operation.

1912: Completion of the codification of the law of water rights for the Union of South Africa. Also an Irrigation and Conservation of Waters Act was passed to promote and facilitate the provision of irrigation water and structures.

1952-72: Commission of Inquiry set up with pressure from the lobbying of the industrialists who had the support of Mining and Commerce overrode those of agriculture and became the basis upon which the new Water Act No. 54 of 1956 was promulgated. The principle of government control was introduced. This principle was systematically extended to cover in some or other measure all sources of natural water by: Act of 75 of 1957, Act 56 of 1961, Act 63 of 1963, Act 71 of 1965, Act of 11 of 1966, Act 79 of 1967, Act 77 of 1969, Act 36 of 1971, Act 45 of 1972. By the amendment of Water Act No. 45 of 1972 the state was re-invested as *dominus fluminis* for all practical purposes, bearing in mind the increasing demand for water and fixed water supply. Commission of Inquiry into Water Matters was set up to report on the water needs of various secondary water users as well as their effects on water availability.

1984: Water rights for the forestry sector controlled by an act of parliament after its identification as a major water user with direct effect for downstream users.

1994: The democratic transition necessitated a water legislation rationalization and amendment process. Consultations that led to the writing of a new Water Act began.

1995: A Green Paper of the new Water Act was published and circulated for discussion with the view of passing the law.

1997/8: The new Water Act and Water Services Act were passed and published.

Appendix B

River Related Regulations Enacted in South Africa, 1914-2000.

Year	Act No.	Short Title of Act
1914	32	Hartebeeestport Irrigation Sceme (Crocodile River) Act (Amended by Act No. 22 of 1948, Act No. 45 of 1957)
1916	40	Mapochs Gronden Water and Commonage Act, (Amended by Act No. 14 of 1923, Act No. 19 of 1937)
1919	11	Riparian land (Erven and Commonages) Act
1925	15	Sunday River Settlements Administration Act
1926	4	Brandvlei Land and Irrigation Works Act
1926	16	Winterton Irrigation Settlement (Local Board of Management) Act
1929	21	Irrigation Loans Adjustment Act (Amended by Act 34, of 1949)
1930	41	Irrigation District Adjustment Act (Amended in Act No. 11 of 1934)
1932	10	Marico-Bosveld Irrigation Scheme Act (Amended by Act No. 59 of 1960)
1934	38	Vaal River development Scheme Act (Amended by Act No. 4 of 1937, Act No. 18 of 1944, Act No. 21 of 1948, Act No. 71 0f 1967, Act No. 105 of 1977, Act No. 11 of 1982)
1935	38	Kopjes Irrigation Settlement Act (Amended by Act No. 18 of 1951, No. 35 of 1964)
1939	15	Cannon Island Settlement Management Act (Amended by Act No. 1 of 1962)
1943	10	Oliphants River Irrigation Works Act
1945	23	Saldanha Bay Water Supply Act (Amended by Act No. 43 of 1951)
1946	37	N'jelele Irrigation District Adjustment Act
1947	23	Klipdrift Settlement Act (Amended by Act No. 50 of 1963)
1947	24	Skanskop Settlement Act
1948	31	Buffelspoort Irrigation Scheme Act
1949	7	Irrigation Commission Repeal Act
1949	24	Bospoort Irrigation Scheme Act
1950	23	Olifatsnek Irrigation District Adjustment Act
1950	24	Breede River Conservation District Adjustment Act
1954	37	Mooi River District Adjustment Act
1954	42	Mapochsgronde Irrigation Scheme Act

1956	31	Irrigation Districts Adjustment Act (Amended by Act No. 34 of 1978)
1956	54	Water Act (Amended by the Water Amendment Act No. 75 of 1957, No. 56 of 1961, No. 63 of 1963, No. 71 of 1965, No. 11 of 1966, No. 79 of 1967, No. 77 of 1969, No. 36 of 1971, No. 45 of 1972, No. 42 of 1975, No. 27 of 1976, NO. 108 of 1977, No 73 of 1978, No. 51 of 1979, No. 92 of 1980, NO. 96 of 1984, No. 110 of 1986, No. 68 of 1987, No. 37 of 1988, No. 68 of 1990, NO. 16 of 1991, No. 92 of 1993, No. 51 of 1995, No. 58 of 1997). Replaced by the new National Water Act No. 36 of 1998.
1964	36	Olifants River (Oudtshoorn) Act
1968	34	Waterval River (Lydenburg) Act
1969	78	Orange River Development Project Act
1984	122	Forest Act
1994	32	Water Laws Rationalisation and Amendment Act
1998	36	National Water Act

Notes

[1] According to the Irrigation Act No. 8 of 1912, the 'riparian owner' was defined as "the owner of riparian land." Riparian land was in relation to a public stream and subject to all rights existing under agreement entered into in accordance with law or under order of a competent court, under an award, affecting the sub-divided land. The Act specified also that the "mere fact that the owner of riparian land has sold his right to use water on that land does not deprive the land of its riparian characteristic."

[2] These words mean a person who is not entitled to use the water in respect of which the application is made. In terms of the section the court must be satisfied that the grant of permission will be in the public interest.

[3] Primary water use was defined as such water use that supported animal life, and the use for domestic purposes for riparian owners. Secondary use referred to the use of water for the irrigation of land, while tertiary use referred to use for mechanical and industrial purposes.

[4] The state defended this status on the basis that increasing scarcity of water in the country required the state interference for the purpose of rationing and development of water resources of the country.