

Emergence and Development of Public Trust Doctrine in Various Dimensions: Its Uses and Control over Water.

Md. Shamshad Ansari

Assistant Professor

School of Law

Guru Ghasidas Vishwavidyalaya, Bilaspur (CG)

Abstract

Across the globe there are growing concerns for the issue of water that is closely related to social, economy, culture of the society. In the present scenario, the crisis of water is big challenge all over the world. In this backdrop, the paper analyses evolution, development and implementation of Public Trust Doctrine at the global, national and state level which holds that certain natural resources belong to all and cannot be privately owned and controlled. Moreover, Authors of the paper have tried to investigate the role played by various stakeholders like State, Private owners, civil society and environmentalist in controlling and using the water as a natural resource with particular reference to Chhattisgarh state of India.

Key Words: Public Trust Doctrine, Water Crisis, Stake Holders, Ownership.

INTRODUCTION

Throughout history, water has always been considered to be an essential requirement for human survival. Not surprisingly, the early civilizations developed near major perennial rivers such as the Nile, the Tigris-Euphrates and the Indus. However during the earlier times, the clusters of human population were small and the range of the human activities was very limited. However, the human population increased over the century and the range of the human activities expanded, especially after the industrial revolution, thereafter most of the human activities are depended over it and demands for higher quantity of water for various uses have increased. Water has become a "primary need" because there is no substitute of water in terms of human survival and the survival of all species those who are on earth.¹ Although, there are different kinds of food, energy, shelter and health care. There are different ways of achieving security, educating citizens, and providing opportunity for employment. But only water is water. There is no person, industry or nation that does not depend on water and it is embedded in every product and service. Across the globe, the world water crisis has been emerging rapidly due to massive amount of industrialization, urbanization, and environmental degradation. Currently, 2.3billion people live without access to

¹ Wolf, T. Aaron (1993). "Criteria for equitable allocations: The heart of international water conflict". Natural Resources Forum Vol.-23, pp 1- 30. Available at <http://www.transboundarywater.orst.edu>. Accessed on March 10, 2012.

adequate water supplies and approximately 6000 children under the age of five die every day due to water related disease². As nations face increasing water stress, drought, famines and epidemic could lead to greater conflict over scarce and disputed water resources³ as well as the shortage and deterioration in quality and quantity of existing stock of water has become a conflict among the nations. In this situation the Public Trust Doctrine can play a particular and significant role to allocate the natural resources among the nations, different activists and private entity. Public Trust Doctrine would be an effective way of recognizing a positive right to water, which is essential for the more equitable distribution of and access to water.

The Public trust doctrine (PTD) is one of the unusual, potential, powerful and useful doctrines for managing natural resources⁴. The public trust doctrine has three primary components- the trustee, trust principal and the beneficiary of the trust. In the public trust framework, the state is a trustee, which manages the specific natural resources, trust principal for the benefit of the current and future generations.⁵

The public trust doctrine is considered to be a blend of common law, state law, and property law.⁶ Across cultures and continents the communities have always imbued certain natural resources with a sense of public ownership. This unique status for these resources like ocean, water, submerged land, and air reflect their immense importance for individual and society as a group. The resources belong to public, and no private entity can ever have the right to monopolize or deprive the public of the right to use them. And in legal term this concept is known as the Public trust Doctrine (PTD).

DEVELOPMENT OF PUBLIC TRUST DOCTRINE (PTD)

In 19th Century, public trust doctrine became famous by the case which appeared in Supreme Court in America 'Illinois Central Railroad Corporation v. Illinois' 146 U.S. 387(1892). And the Supreme Court of America stated that "The state can no more abdicate its trust over property

² M. Fitzmaurice, The human right to Water 18, Fordham ENVTL L. REV. 537,539(2007). "Water stressed" Occurs where inadequate water quantity or quality prevent water supply from meeting demand during a period of time. available at -<http://www.law.arizona.edu/.../Aug%2024%20Enrichment%20Paper4.pdf> Accessed on March 2012

³ Wolf, T., Aaron, (2002). "The geography of water conflict and cooperation and international manifestation, published in The Geographical Journal, Vol.168, pp, 293-312.

⁴ . California State Land Commission (2010). "The public trust doctrine", chapter-2, available at [http://www.SLL.cg.gov.policy.../public_trust doctrine .pdf](http://www.SLL.cg.gov.policy.../public_trust%20doctrine.pdf). Accessed on December10, 2011

⁵ Brewer, Jedidiah and D. Libecap (2007). "The cost of the Public Trust Doctrine in Environmental Protection and Natural Resources Conservation", International centre for Economic Research (ICER), The property and Environment, available at http://www.reserchgate.net/publication/4645_1596, accessed on February 13, 2012.

⁶ The Public Trust Doctrine, the California State land Commission, available at- http://www.slc.ca.gov/...statements/public_trust/public_trust_doctrine.pdf accessed on May 2013.

in which the whole people are interested ... than it can abdicate its police power in the administration of the government and the preservation of the peace”⁷. It means that government holds all natural resources, with strict obligation to protect such natural resources for the public. PTD is a common legal doctrine with its roots in Roman and British law recognised in many countries, for protecting natural resources, water is a natural resource and state is the only trustee whereby providing facilities to citizens. And the origin of the public trust doctrine is traceable to Roman law concept of common property.

ROMAN LAW

The Public Trust Doctrine is a classical concept that provides public trust lands, waters and living resources in a state held by the state in trust for the benefit of all of the people, and establishes the right of the public to fully enjoy public trust lands, waters and living resources for a wide variety of recognized public uses. The Roman law is the origin of the public trust doctrine which initiated in 6th Century A.D. in Rome. The Roman concept rested on the notion that state owned property is held for the sole benefit of and use by the entire public for the public good. The “Corpus Juris Civilis” exclaimed, “by the law of nature these resources, are common to mankind, such as the air, running water, the sea and consequently the shores of the sea.”⁸ This concept that the tides and submerged lands are unique and that the state holds them in trust for the people has endured throughout the ages.

ENGLISH COMMON LAW

In England the Magna Carta of 1215 A.D. is considered as a corner stone of the English Common Law and it largely adopted much of the Roman Empire’s civil law.⁹ The Magna Carta is important for English jurisprudence because it defined the rights and restrictions of the king and England’s ruling class.¹⁰ Some chapter of Magna Carta emphasis on the ownership of king over water resources and restrict the citizens and it created contradiction between king and public for ownership over water because another chapter gave right to use navigable water to the citizens. But Paragraph 5 of the Magna Carta made explicit reference of the guardianship of house, park, fish pond, tanks, mills, and other things pertaining to land. As early as 1865, the English House of Lords defined the concept of public trust in the case of *Gann v. Free Fishers of*

⁷ Outlook Environmental and resource section (2009), available at – <http://www.osbernviro.homeestead.com/.../09-12-outlook-vol10>, no.2, accessed on May 2013.

⁸ Dana M. Saeger, (2007). “The Great Lakes – St. Lawrence River Basin Water Resources Compact: Groundwater”, Fifth Amendment Takings, and the Public Trust Doctrine,12 Great Plains Nat. Resources J. 114

⁹ *E.g.*, Johanna Searle, (1990) Private Property Rights Yield to the Environmental Crisis: Perspectives on the Public Trust Doctrine, 41 S.C. L. REV. 897, 898

¹⁰ *E.g.*, Johanna Searle, (1990) Private Property Rights Yield to the Environmental Crisis: Perspectives on the Public Trust Doctrine, 41 S.C. L. REV. 897, 898

Whitstable holding that the bed of all navigable rivers where the tides flow and all estuaries or arms of the sea, are by law vested in the crown. But this ownership of the crown is for the benefit of the subject, and cannot be used in any manner so as to derogate from, or interfere with the right of navigation, which belongs by law to the subject of realm¹¹.

EARLY AMERICAN COMMON LAW

When the American Revolution drew to a close, the newly independent Thirteen Colonies became successors of the Crown and adopted the English common law. Because that time English common law was suitable for the new states and gradually they changed according to their interests. State courts began adopting their own perspective of the doctrine. As early as 1810, the first recognized American case dealing with the public trust doctrine and tidelands came down with a New Jersey Supreme Court decision in *Arnold v. Mundy*. The New Jersey Court held on behalf of Mundy reasoning neither the King nor his delegate, the Duke of York, had the power to alienate the bed itself. The Supreme Court declared “the shores, and rivers, and bays, and arms of the sea, and the land under them as a public trust for the benefit of the whole community, to be freely used by all for navigation and fishery.”¹² After decision of this case again most seminal case has come into Supreme Court of America. The most seminal case in American public trust jurisprudence is 1892 decision of *Illinois railroad Corporation v. Illinois*¹³. The Illinois railroad corporation was authorised and required by its charters to construct a railroad in Chicago. In 1852, the common Council of Chicago passed an ordinance granting consent for location of the city. The railroad was located and built in reclaimed water of Lake Michigan. After the filing of case, hearings arguments on the issue, court found that the state, in its sovereign capacity, was the fee owner of submerge lands in the harbour and that the legislature’s modification of that sovereignty was inoperative. We cannot cite any authority where a grant of this kind has been held invalid, for we believe that no stance exists where the harbour of a great city and its corners have been allowed to pass into the control of any private corporation.

Finally, Central Illinois Railroad corporation case was critical in public trust law because it recognizes that government holds natural resources for public as a whole and that the government has a strict obligation to protect such natural resources for the public.

Other cases have come to the Supreme Court of U.S.A. in which the public trust doctrine was recognised in its various decisions such as that in case of *Geer v. Connecticut*, 161, U.S. 519(1896).

¹¹ *Gann v. free fishers* (1865), House of Lords 11,E.R. 1305,cas. 192, available at [http:// www. Lead-journals.org/content/07195.pdf](http://www.Lead-journals.org/content/07195.pdf)

¹² Johnson, B. steven, (2005). “The History and Duties of the Public Trust Doctrine in South Carolina how do we fare?”

¹³ Out Look, Environmental & Natural resources Section,(2009), available on , <http://www.obsenviro.homestead.com/.../09-12>, vol.10, no.2, accessed on May 2012.

PUBLIC TRUST DOCTRINE IN MODERN AMERICA

In 1988, the public trust doctrine was again expanded to include those areas known as non-navigable tidelands. The decision to expand the doctrine came within the opinion of Phillips Petroleum Co. v. Mississippi by the United States Supreme Court. The Court found that the public trust in the state of Mississippi includes title to all lands under water influenced by the ebb and flow of the tide. The Court rejected the plaintiff's navigability argument and held the doctrine's scope to include *all* lands beneath waters influenced by the ebb and flow of the tide. Some important case came in twentieth century in America over the protection of natural resources for community and again SC recognizes the public trust doctrine. Some famous cases are - State of Georgia v. Tennessee Copper co. 206 U.S., 230 (1907), United States v. 1.58Acres land 523 F. Supp. 120,121(D. Mass, 1981) and National Audoban Society v. Superior Court of Alpine Country,(1983), Although, The Public Trust Doctrine is a common legal doctrine recognized in many countries, whereby water is seen as held in trust by the government for the benefit of all citizens. The public trust doctrine is applied differently throughout the world, it is recognised as a legal doctrine in many parts of Africa, Asia, the Americas, and the Europe¹⁴. There are many countries like Canada and Russia which do not recognize the public trust doctrine. But India recognises the public trust doctrine. Although India is a newly independent nation after long colonial period yet the Supreme Court of India recognized the public trust doctrine with the judicial interpretation in Article 21 of the constitution. The brief interpretation of public trust doctrine in India is as follows:

PUBLIC TRUST DOCTRINE IN INDIA

The public trust doctrine has emerged as a fundamental right to water. However, the right to water has been derived from the fundamental right to life under Article 21 of the constitution¹⁵. The fundamental right to water has evolved in India, not through legislative action but through judicial interpretation. Many verdicts have been made by the supreme court of India for the protection of human rights, environmental protection and pollution control. But the 'Vellore Citizens' Welfare Forum v. Union of India is one such case where for the first time the Supreme Court of India incorporated principle of customary international law.¹⁶ A landmark decision was made in the case of M.C. Mehta v. Kamal Nath where the Supreme Court has recognised that water is a community resource to be held by the state in public trust¹⁷. In the case of M.C. Mehta v Kamal Nath, the Court declared, "Our legal system – based on English Common law – includes the public

¹⁴ Michel C. Blumm & Rachel D. Guthrie, (2012), "Internationalizing the public trust doctrine: Natural law and Constitutional and statutory Approaches to Fulfilling the saxon vision", 45U.C. Davis L.Rev.741.

¹⁵ India Constitution, art.21, "Protection of life and personal liberty. - no person shall be deprived of his life or personal liberty except according to procedure established by law."

¹⁶ Vellore Citizens Welfare Forum v. Union of India (1996), 5 S.C.C. 647,10Available at <http://www.Ielrc.org/content/e/9607/pdf>.

¹⁷ M.C. Mehta v. Kamal Nath (1997)1, S.C.C. 388 34.

trust doctrine as part of its jurisprudence. The state is the trustee of all natural resources which are by nature meant for public use and enjoyment. Public at large is the beneficiary of the seashore, running water, airs, forest and ecologically fragile lands. The state, which is a trustee, has a legal duty to protect the natural resources. These resources are meant for public use and cannot be converted into private ownership”¹⁸.

Despite this well-developed jurisprudence affirming the justifiability of the right to water and imposing a duty on the state to protect the water resources, many times judiciary has to actively interfere and quash the legislations over natural resources and recognises the public trust doctrine and right to water. Even then all citizens do not have adequate access to water. Where, on one hand, the Supreme Court imposes the duty to state of securing natural resources and avoiding the privatization of the natural resources, on the other hand, the government imposes and encourages the privatization of natural resources through legislation. Privatization of water has been recommended by the Indian government through National Water Policy 2002.¹⁹ This water policy in a way encourages privatization of water resources as provided in Article 13 of this policy, in this way it is an encroachment of the Public Trust Doctrine as well as human rights to water.

FUNCTIONS AND RESPONSIBILITIES OF THE PUBLIC TRUST DOCTRINE

Public trust doctrine is regarded as a blend of common law, state law, and public right (Dawson 1999; Sax 1999). Apart of this consciousness involves the view of public and state ownership of certain natural resources that benefit all. The doctrine holds that certain natural resources belong to all and cannot be privately owned or controlled because of their inherent importance to each and every individual and society as a whole. State is primarily responsible for how water resources are used and allocated applying the public trust doctrine to state laws that provide the legal authority to enhance and enforce the state management responsibilities.

The trust imposes three kinds of restrictions on the state –

1. The property subject to the trust must not only be used for a public purpose but must also be held available for use by the general public.
2. The property must not be sold even for fair cash equivalent, and
3. The property must be maintained for particular kind of uses such as Primary needs, navigation, recreation or fisheries.

Above situation has also resulted in governmental accountability and citizen empowerment by permitting citizen suits against the failure to uphold trust duties.

The most important fundamental duty that a trustee has is the duty to be loyal and obliged to act solely in the interest of beneficiaries. The trustee also has a duty to use, care and skill to preserve the trust property (including the duty to protect against invasion of the trust). In addition, the

¹⁸ M.C. Mehta v. Kamal Nath (1997)1, S. C. C. 388 34.

¹⁹ National Water Policy (2002), available at <http://www.wrmin.nic.in/policy/nwp2002/pdf>.

trustee has a duty to furnish information to the beneficiaries. In settings where applicable, the public trust doctrine creates a duty of supervisory control, stewardship over water and navigable streams, their non-navigable tributaries, and fisheries and wild-life resources. (Sax: 1999).

The most important duty of the Public Trust Doctrine is to prohibition and defeat private ownership of natural resources and provides facilities to all people of the community.

CONFLICT OVER WATER & PUBLIC TRUST DOCTRINE

Water is one of the precious assets for human survival and all human activities depend on it. Human beings cannot live even a few days without it. But the world's water exists naturally in different forms and location: in the air, on the surface, below the ground and in the ocean. Less than 1% of water present on earth is available for human use and rest of the water marine and frozen as icebox, and present in such places where is can't be accessed. Huge demand of water in various sectors like, industrialization, urbanization, semi -urbanization and recreation sectors, are increasing gradually and other traditional uses of water as it is a basic need for human survival like drinking water, domestic purposes and agricultural use are going on increasing, but the quantity of water resources are finite and it is decreasing day by day due to increase in population, deforestation, rapid industrialization, pollution (often stemming from industrial production and large scale agriculture). Climate change and environmental degradation have become the threat for the nations. The scarcity of water significantly increases potential for international and domestic conflict. On one side, there are more powerful private interests, trans-national water and Food Corporation, the major international institutions – including the World Bank, the International Monetary Fund (IMF), the World Trade Organisation (WTO), and the World Water Council. For these forces water is a commodity to be sold and traded in open market. They have established an elaborate infrastructure to promote the private control of water and they work in close tandem with one another. Most importantly, corporations want governments to deregulate the water sectors and allow the market to set water policies. Every day they get closer to this goal,(Maude Barlow: 2007). On the other side, there is a large global water justice movement made up of environmentalists, human rights activists, indigenous and women groups, petty farmers and thousands of grass root communities fighting for control over their local water sources. Members of this movement believe that water is the common heritage of all human and other species, as well as a public trust that must not be appropriated for personal profit or denied to anyone because of inability to pay for it. The latter group achieves little success to attract legislation for making policies in their favour.

Across cultures and continents, communities have always imbued certain natural resources with a sense of permanent public ownership. Due to the scarcity of water human right activists and environmental groups want to take ownership of these natural resources for the entire community because water is for all and no private entity can exploit this resource for its own benefit. Several other factors are pushing the public trust doctrine to the forefront for water resources protection.

Some of them are:

1. There is growing public awareness that water is not an infinite resource and that the current rate of use is depleting supplies. The private stakeholders and the other stakeholders of society are struggling among themselves over the control on water resource. Asia, Africa Latin America and some parts of the Europe are facing water related problems.
2. Overshadowing this entire is the negative impact of climatic changes on water resources and future water supply. Increased global surface temperature will impact the timing and rate of water resources and it will increase the boundaries of oceans which will be hazardous for mankind.
3. The problems are compounded by the privatization of water resources. This is a growing unwelcome trend leading to conflict among nations over world water.

Myriad demand of water resources and many activities related to water created frightening situation across the globe. Some scenarios have been pointed out and explain below:

SCENARIO FIRST

The world is running out of fresh water supplies. It is not just a question of finding that many to hook up the two billion people living in water stressed region (Maude Barlow2007). Over the world, humanity is polluting, diverging and depleting the earth finite water resources and playing a dangerous role. The abuse and displacement of water is a great cause of climatic Changes.

SCENARIO SECOND

Everyday more and more people are losing access to clean water. The global water crisis has become the most powerful symbol of the growing inequality in our world. In the last decade, the number of children killed by diarrhea exceeded the number of people killed in all armed conflicts since the Second World War. Every eight second a child dies as a result of drinking dirty water.

SCENARIO THIRD

A powerful corporate water cartel has emerged to seize control of every aspect of water for its own profit. Corporate delivers drinking water and puts massive amount of water in plastic bottles which are being sold at exorbitant prices. Corporate bodies are building sophisticated new technology to recycle the dirty water and sale in the market. The Corporate want government to deregulate the water sector and allow the market to set water policy.

SITUATION OF WATER IN INDIA

Millions of Indians, in particular women and children do not have adequate access to water. According to the World Water Development Report 2003, "In terms of availability of water, India is at 133rd position among 180 countries and as regards the quality of the water available, it is

120th among 122 countries.”²⁰ Seventeen percent of Indian population does not have access to potable water, 80% of children suffer from water-borne diseases, and a total 44 million people have illness related to poor quality water.²¹

The fore-mentioned scenarios are sufficient to comprehend the global situation of water. Lack of access to safe water has a major effect on people’s health. Poor health constrains development and increases poverty. Water is essential for farming and for manufacturing processes. Making more water available to communities can improve families’ incomes, for instance, by boosting crop production and the health of livestock. Water sources have been put under great pressure by increasing population in developed and developing countries, through pollution by agricultural, domestic and industrial waste, and by environmental changes. Due to these reasons, Public trust doctrine is one of the best legal doctrines for control of water related rights and to facilitate the community interests. In many parts of India water related stress is proving to be a course in terms of water accessibility and inadequate sanitation. In spite of it, State governments demonstrate reluctance in recognising public trust doctrine as well as water rights.

Violation of Public trust doctrine in India

Article 13 of National Water Policy, 2002 defines, “Private sector participation should be encouraged in planning, development and management of water resources projects for diverse uses, wherever feasible. Private sector participation may help in introducing, innovating ideas, generating financial resources and introducing corporate management and improve service efficiency and accountability to user. Depending upon the specific situations, various combinations of private sector participation, in building, operating, leasing and transferring of water resources facilities may be considered”.²² Many states of India like Tamil Nadu, Rajasthan, Maharashtra, Punjab and Chhattisgarh have formulated policies on water resource and have recognized the privatization of water resources according to their own interests.

Chhattisgarh is the only state which has sold 23.7 km. of a river (River Sheonath) to a private owner and nobody is allowed to take even a single drop of water from this length of river for drinking, domestic and agricultural uses²³. In fact, before separation of Chhattisgarh from Madhya Pradesh, Aydhhyogik Kendra Vikas Nigam Ltd (MPAKVN) provided authority over 23.7 km. of a river (River Shionath) to Radius Water Company for a term of 22 years on BOOT System (Build, Own, Operate and Transfer) which means that the company will be responsible for both construction and maintenance through its own resources. After the formation of Chhattisgarh in the year 2000,

²⁰Muriladhar, S., (2006). “ The Right to Water: An Overview of the Indian legal regime”, in Eibe Riedel & Peter Rothen (eds), “Human Right to Water, Available at <http://www.ielrc.org/content.a0604.pdf>.

²¹ Panth, Ruchi, (2003), “Hands to MNCs’ BOOTS: A Case study from Indida on Right to Water, UK, available at [http:// www.right to water.info/pdsf/ndia_cs.pdf](http://www.rightto water.info/pdsf/ndia_cs.pdf).

²² National Water Policy (2002), available at <http://www.wrmin.nic.in/policy/nwp2002/pdf>.

²³ Putul, Alok (2007), “Privatization unlimited: River sale in Chhattisgarh”, available at <http://www.infochangeindida.org>.

the government of Chhattisgarh didn't reconsider this prior contract made by MPAKBN and Radius Water Company. Along with it, the government of Chhattisgarh encouraged privatization of water resources by its newly formulated water policies. It is violation of international common law, public trust doctrine, and fundamental rights as well as the Indian Constitution because the river is a natural resource and state is its only trustee and it doesn't have the right to sale the natural resources for benefiting any private entity.

The Sheonath River is the main source of water for most of the villagers residing nearby and was freely available to everyone. But after Radius Water Ltd. took possession of the river, the villagers residing at its banks have been prohibited from using its water for irrigation, bathing, or anything else. Hundreds of fisher men, whose forefathers had fished here, have been forced to move out. Domestic animals are prohibited to drink water from the river. The river was a way of livelihood not only for the residents of nearby villages. But also for the village Panchayts which have been culminated due to the private ownership over this length of river. Radius Water Company has fenced the banks of river so that the villagers may not go there.

After success of privatization of Sheonath River, many rivers of Chhattisgarh like Kelo, Kurkut, Kharun, Shabri and Mand have been privatized for private interest (Putul: 2008). And another interesting incident has happened. The Rogda Dam was constructed in Rogda village in 1965. This dam was destroyed in 2008 in the name of development of the area. Rogda is a village in the district of Janjgir-Champa, under the development block of Akaltara in the state of Chhattisgarh, where according to villager Kachhe Ram Norge, under the first five year plan, in with a view to increase irrigation facility, central government constructed a dam on 76 acre land of the village of Rogda, Nariyara and Taraud and 30 acres of government land. An amount of rupees 72 lacs was spent for the construction of this dam.

In the year 2008, 207 acres of land along with dam has been handed over to K.S.K. Mahanadi Vardha Power Project. Without taking the proper concern of the villagers residing nearby who were being benefited by the dam because as the Tahsildar, in his report stated that the land area near the dam was infertile and ravine and so there was no utility of a dam in that area. But this report was not true. The state government sold this dam to private company for the construction of a power plant. At present there is no existence of this dam and construction work of power plant is under progress. Dam has been destroyed for the development of power plant. It's complete violation of soul of public trust doctrine.

CONCLUSION

Water is a basic need for human survival, and demands for water have been increasing day by day because of the increase in demands due to growth of population, industrialization, urbanization, climate change and environmental degradation. Privatization as a result of multinational and corporate interests potentially threatens equitable and affordable access to clean water. By transfer of community ownership to private actors. The government is encouraging such transfer

of ownership. Public Trust Doctrine when used under right circumstances is an efficient tool for protecting the natural resources for being used by community. PTD does not only correct government decisions of allocating water for the benefit to the multinational and private entities, but also the secures community ownership over water for the benefit for all species. It also avoids the encroachment of private entity over the natural resources. The government must protect and save water for coming generation and hence it must recognize the public trust doctrine. As state is the only a trustee of natural resources and has no right to sale the natural resources for benefiting any private entity.

References:

1. Alexandra Class B., and Ling- yie huang, (2009). "Restoring The Trust : Water Resources and the Public Trust Doctrine A Manual for Advocate", available at [http://www.progressivereform.org/public-trust-water .ctm](http://www.progressivereform.org/public-trust-water.ctm); accessed on March 8,2011.
2. Anderson, Kristor, P. C.Lark, C. Gibson, and Fabrice Lehoueq (2004). "The Public of Decentralized Natural Resources Governance", available at [http://www.apsanet .org](http://www.apsanet.org). Accessed on October 12, 2011.
3. Brewer, Jedidiah and D. Libecap (2007). "The cost of the Public Trust Doctrine in Environmental Protection and Natural Resources Conservation", International centre for Economic Research (ICER),The property and Environment, available at http://www.researchgate.net/publication/4645_1596_the_cost_00_the_public accessed on February 13, 2012.
4. Burlow, Maude, (2007). "Blue Covenant: The Global Water crisis and the coming battle for the right to water", New press, New York.
5. Carol, M. Rose (1998). "Joseph sax and lake of the public trust", yale law school faculty school series, available at http://digitalcommons.law.yale.edu/fss_papers/1805. Accessed on March18, 2011.
6. California State Land Commission, (2010). "The public trust doctrine, chapter-2", available at [http://www.s.l.l.cg.gov.policy.../public_trust_doctrine .pdf](http://www.s.l.l.cg.gov.policy.../public_trust_doctrine.pdf). accessed on December 10, 2011.
7. COHRE (2007), "Human rights and access to water and sanitation", acting on the report of the OHCHR, available at http://www.right-to-water.info/pdfs/2007_HRC_web.pdf.
8. Joseph L., sax(1970). "The Public Trust Doctrine in Natural Research law: Effective Judicial Intervention", in J.D.(1959) (ed.) :Michigan law Review."vol. 48, pp.471-566.

9. Horlemann, Lena and Susanne Seubert, (2007). "Virtual Water Trade: A Realistic concept for resolving the water crisis"? , German Development Institute (DIE), Lena Bonn.
10. Kameri, Patricia and M., Bote (2007). "The use of the Public Trust Doctrine", Published in Environmental and Development Journal p.195, available at <http://www.leadjournal.org/org/contant/07195.pdf> accessed on march 10, 2011
11. Merrett, S, J.A. Alan and C. Lant (2003). "Virtual Water- The Water,Food and Trade Nexus Useful Concept or Misleading Metaphor", IWRA, Water International,Vol.28(1)PP U-11.
12. Miroso, Orisa, and leila M.Harirs (2011). "Human Right to water: Contemporary Challenges and Contours of a Global debate", Research Journals antipode vol.00, No-00,pp:1-21.
13. Outlook, Environmental & Natural Resources Section (2009), "The Public Trust Doctrine, Climate Change and Future Generation", A Newspaper published by the Orgen State Bar vol. 10(2), accessed on December 12, 2012.
14. Olleta, Andres(2010), "An Overview of common trends in the water legislation of selected jurisdiction" in philipe cullet, Alix Gowlland Gualtieri,Roopa Madhaw and Usha Ramanathan (eds.2010),water law for the Twenty first century: National International Aspect of water law Reform in India, Routledge publication London and New York.
15. Richard, A. Epstiin, (1987). "The Trust Doctrine", Cato Journal, vol, 07,No-02,PP-411-430.
16. Shiva,Vandana (2003), "Water Crisis: The Hydro politics of Blue Gold,"
17. Scanlon, John, Angela casser, and Noeni Nemes (2004), "Water as a Human Right"? IUCN Environmental Policy and law paper no-51,IUCN publication service Cambridge UK.
18. The California State Land Commission. Public Trust Policy (2012), Available at www.scc.ca.gov/policy,statment/public_trust_doctrine.accessed on Oct 5.
19. United Nation Expert groups meeting, (December 2009) "Natural Resources Climate Change and conflict: Protecting Africa's Natural Resources Base in support of Durable peace and sustainable Development."17-18, United Nations, New York, USA, Available at,www.un.org/org/africa/usa/report.html.
20. WHO, UNICEF, (2006), Meeting the MDG Drinking Water and Sanitation Target: The Urban and Rural Challenge of the Decade, available at http://www.wao.inf/water_sanitatur_health? monitoring/jmpfinal.pdf. accessed on July 8, 2011.