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MORALITY BEFORE KNOWLEDGE

Artificial wetlands in the conservation of water resources: An ecocentrism perspective

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ABSTRACT

Background: Water pollution is a kind of environmental damage. Water pollution occurs in developing countries and developed countries. The government has made efforts to preserve water resources. However, it has only reached some levels of society because there are still many facilities that are more important than transportation, food security, and the security system. This research sees ecocentrism given the artificial marsh technique as the conservation of water resources as well as highlights equality of the purpose of the artificial marsh technique with the principle proposed ecocentrism about morality against the universe, so the proposed environmental ethics principles that have to be met in the implementation of the artificial marsh technique on sustainable preservation of water resources planning. **Method:** This research is library research. The research analysis is an analysis of the approach to a concept; the first phase is the interpretation and categorization, the second phase is data classification, the third phase is the analysis of synthesis, and the fourth phase is a critical evaluation by using element methodical as description, verstehen, interpretation, hermeneutic, inductive, and heuristic. **Findings:** The result shows that human beings have a duty to manage and preserve nature, and man is forbidden to exploit nature. Views ecocentrism is seen in the preservation of water resources as an effort to protect and preserve nature. **Conclusion:** Human beings are a part of the universe and are obliged to manage and preserve the guard, so the artificial marsh technique can be used in planning to preserve sustainable water resources. **Novelty/Originality of this study:** This research could lead to a new model for engaging communities in water conservation projects emphasizing the ethical relationship between humans and nature. This model could include educational programs and practical activities that help communities understand and apply the principles of ecocentrism in their daily lives.

KEYWORDS: water pollution; technique of artificial wetlands; ecocentrism.

1. Introduction

Water is a resource that essential for human life. Water used to be consumed and for other purposes that becomes a routine about living, but in fact currently clean water was hard found because the depleting caused water sources is polluted. Water pollution happened because people do the activity of production and consumption in a copious manner and carelessly then disposing of sewage the result of the water channels, to of the polluted water into a ditch, then go down the rivers until empties into the sea as last.

River in big cities such as Jakarta, Surabaya, Medan, Bandung and so on, more similar to a large water drains black thick with a very pungent smell nose. Odors caused by water pollution, which is already very heavy. Currently the clear water on land as well as sea waters in the major cities of Indonesia is impossible to be discovered (Khiatuddin, 2003).

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Unlike the case with Countries highly pay attention to results Sweden waste consumption, such as the city of Stockholm. The city of Stockholm is made up of small islands located between the sea and the Lake. The waters always clear except in the late winter and early summer, as the snow melted mud material so as to bring the River into clear and not brown. The Government of Sweden in its promotional proclaimed "Beauty on Water" to due the crystal clear water channels in the capital.

The water is very essential in the sustenance of life. Water needs not only concerning quantity but quality also. The quantity of water available in an area are related to climate especially rainfall (Soemarwoto, 2001). Sustainability quantity and quality water relies on social conditions and the human inhabitants of the area (Pawitra & Tan, 2003). Human activities having great influence whether the water everlastingly stay clear and clean, or is being polluted and destructive some components life who were in it. The environment is in a position to see if a threatened State of now and the future. Environmental threats can be a food crisis, a crisis of human and mineral crisis as a staple in human survival. Because of such threats as a result of reciprocal human treatment to natural resources that are available. Growing population and excessive use of technology in meeting the needs of the everyday environment resulted in the verge of a breakdown. The question of damage to the environment gave rise to fears of dwindling energy elements and minerals in the natural environment that threaten human survival and well-being (Zen, 1979).

One of the serious impacts is the negative consequences of environmental damage to human life, even the fate of the entire humanity. The problem with regard to the subject of Justice. The human living conditions are extremely limited so that human beings able to survive only with the specific ecological circumstances. Damaging or even destroying the ecological balance and robs the same requirements that need to be seized for a human being to find a decent living (Carm, 1989). Environmental damage is the injustice of human treatment. Environmental damage occurs to the impossibility of man in control over the consequences of the acts of destruction of the environment, so that people became victims of ecological damage itself.

A variety of environmental cases that occur on today in both the global scope as well as the national scope, there is no denying that the majority come from human behavior. Cases of pollution and environmental damage such as oceans, forests, atsmosfer, land and water also is the result of a human treatment is not responsible, no matter the personal ego and selfishness. The consequences arising show that humans are the main cause of the damage and environmental pollution (Keraf, 2010).

The Government is actively promoting its enterprising and implement development programs providing a clean source of water. The construction of the subject is known by the term samijaga (means of family latrines and drinking water), but yet affordable all walks of life and make use of this facility. Community groups that are difficult to get clean water facilities plus the lack of knowledge about clean water, utilization of polluted water will be very risky and dangerous to survival. Utilization of polluted water is dangerous because water is a very good media in the development and growth of the disease commonly known as the water borne deseae (Soerjani, 1987).

Water pollution problems can be overcome by preventing the entry of pollutants into water drain, in other words the existence of prior treatment of the wastes will be disposed of. Usually liquid waste from industrial or household prepared in advance on the cleaner water facilities before being dumped into the sewer or river. Water treatment can be done by using simple technology and advanced technology. Pollutants are separated from the water through the process of physics, chemistry and biology so that the water coming out of facilities relatively cleaner compared to the waste water coming out directly from the source (Khiatuddin, 2003).

The Governments of developed countries providing water purification infrastructures with the tax withheld from the people (Khiatuddin, 2003). Waste, cleaner facilities appears to have not been a priority in Indonesia because it is still a lot of other more important facilities such as transport and energy that has yet to be felt on all citizens and communities. Water sustainability in Indonesia requires the other way by finding and presenting

technology in a cheap but effective way to eliminate material from waste water. One of the technologies that may be presented by the ecological technologies that empower is nature to always be in balance. The technology is very close to the natural life of Indonesia as a country that is lush and rich with nature. The principle of ecological technologies that work similar to a natural cycle on marshes that spread across much of the Indnoesia region. This technology is also often referred to by the term artificial Marsh technique. Artificial Marsh technique is a powerful technique in cleaning up the waste, which has been upheld with success in developed countries such as America, Europe, China and Japan (Khiatuddin, 2003).

Presence of artificial Marsh technique with the purpose of processing the waste polluted water is one of the concrete steps of mankind in continuing and preserving clean water. Artificial Marsh technique into a new conservation model would also have to get the assessment study-delivering on good relations of man with his environment and ultimately suppress human behavior over damage to nature. Man is responsible for the pollution that occurred by presenting solutions and improvements. The solution demands the presence of the ethical attitude of man towards nature and environmental sustainability are expected to build awareness of the ethical environment in man (Marfai, 2012; Sastrosupeno, 1984).

The expectation from this research are able to expose the artificial Marsh technique advantages as a model suitable to be developed in a sustainable environment, especially in the case of water pollution. Preservation and accountable actions in environmental management are expected to engender the ethical attitudes of humans towards nature. The correlation of a number of the previous term-term results in an artificial Marsh technique research juxtaposed with the ethics of the environment which would be one reference in Indonesia in the future development of sustainable planning the conservation of water resources.

2. Methods

This research is qualitative research is categorized as a philosophy that has the data source in the form of libraries. The elements contained on the methodical research is: (1) Descriptive, Outlining the results of the systematic understanding about artificial Marsh technique in the preservation of water resources and ecocentrism perspective so that a clearer picture is obtained about research topics, (2) Verstehen, Data obtained in the study are gathered and understood based on the characteristics of each. Tries to understand the meaning of or obtained in research related to the processing about the technique of artificial wetlands in the conservation of water resources. (3) Interpretation, Interpretation is used to get a clear picture and more in depth based on the data obtained concerning the technique of artificial wetlands, materials in the manufacture of artificial wetlands, artificial swamp implementation process as well as the role of the human being as a subject in the utilization, further analyzed using ecocentrism perspective. (4) Hermeneutics, Tries to capture the essential meanings according to the context, the interpretation of the data is done by the technique of artificial wetlands in the conservation of water resources, so that the essence of meaning can be captured and understood in accordance with the context of the current time. (5) Inductive, The author tried to do a false assertion based on the data obtained, so as to obtain a theoretical construction to find a logical construction of clarity, and (6) Heuristics, Formulate a solution of the problems occurred in the preservation of water resources through the results of the analysis that has been done.

This research was conducted through several stages. First, Inventory and categorization, namely the collection of as much literature data as possible and other support related to the material object and formal object of research. The literature study was conducted in an effort to obtain a complete picture of the artificial swamp technique in terms of the materials or materials used, the process of program continuity and program application so as to produce clean wastewater, as well as by highlighting human treatment of nature as human ethical awareness in managing and preserving the environment. Data classification, namely grouping primary data and secondary data. Synthesis analysis,

namely analyzing primary data and secondary data, then executing or eliminating unnecessary data, and synthesizing according to ideas in an effort to strengthen research. The last is Critical evaluation. Checking is carried out after going through several stages of synthesis analysis, so as to produce a balanced and objective presentation of critical research results.

3. Results and Discussion

3.1 A view of ecocentrism perspective against the technique of artificial wetlands

The preservation of water resources constitute a concrete steps undertaken to environmental sustainability (Noor, 1992). Water resources conserved on the basis of the needs and survival of mankind in the future. Humans have never been off the natural needs such as water, air, soil and minerals. The preservation of water resources is a way humans connect with nature in harmony and in tune. Harmony acquired when humans and nature coexist and love one another as well as meet the needs of each or known by the term mutualism symbiosis.

The preservation of water resources to techniques of artificial wetlands suggests that humans have a responsibility as perpetrators of moral. Humans are required to protect the universe instead of the man. Ethics or morality is not centered on humans, but more focused on the overall ecological creature (Keraf, 2010). Human have a moral obligation to keep the balance of the ecosystem of the universe because the value of the ecosystem itself. Preservation of nature (including sustainability) become the responsibility of the whole person.

Moral issues are not only discussing the question of living beings, but discusses the ecology as a whole. The management or preservation of water with technique of artificial wetlands is a common view expressed on Deep Ecology. Deep Ecology (DE) is not just talking about the relationship of organisms with living things. DE spoke about the organisms in the environment associated with the assessment of indigenous knowledge in accordance with the principles of the environment.

Deep Ecology see environment problems in a rational perspective that is more holistic. DE focus attention on the root issues of environmental destruction in a comprehensive manner later made efforts in addressing the root of the issue (Keraf, 2010). The technique of artificial wetlands in the conservation of water resources does not rely on water treatment instantly just like on water cleanup method with conventional technology. Preservation of water with technique of artificial wetlands see the question at the root of problems of water pollution. Polluted water occurs due to the abundance of waste consumption and production were dumped into the water stream directly, giving rise to reactions to physical, chemical and biological processes that cause the water looked murky and foul-smelling (Khiatuddin, 2003). The technique of artificial wetlands tackle of polluted water by means of buffering or interception prior to the flow of water in the main channel.

Polluted water (from waste production and waste consumption) were detained on artificial swamp facilities in hopes of filtration and chemical reactions occur in the direction of cleansing water. Various compounds undergo chemical reactions, biological and physics so that the polluted water that has flowed better conditions. Event buffering streams of water on the technique of artificial wetlands is a top issue in the proposed DE root. Artificial Marsh technique tackle issues of polluted water by looking at the root of the matter, that eliminates contaminants from the water before it enters the water, so the water in the main channel and waters off looks more clean and calming.

Arne Naess persuaded several levels of an important component in the change towards the preservation of the environment. The first level of inspiration, thought and intuition that comes from both religious and cultural traditions that are handed down in the form of the premise and the norm (Martin, 2002; Mujib et al., 2015). The second level is a platform that enables a man to perform joint actions. The third level is a general hypothesis related to patterns of behavior and dealing with the preservation of natural resources. The fourth level

in the form of tangible action based upon the rules of the State and the situation of the environment (Naess, 1993).

Inspiration and thought derived from premises tradition and religious to be a base from preservation water with artificial marsh technique. Preservation water resources with artificial marsh technique is not a new idea at all. Idea making artificial marsh technique have emerged by human life on a thousand years back when hold production food for man (Khiatuddin, 2003). Imitate human performance rawa naturally in tamed some kinds of species of wild to the needs of human life. Performance natural marsh is premise and intuition from first appearance artificial marsh technique preservation in water resources. The process of recycling in marsh naturally inclined be included main preservation water resources with artificial marsh technique.

The preservation of water resources with artificial Marsh technique describes some actions that correspond to the platform at the thought of Deep Ecology. DE's attitude to do on the biosphere and the attitude of respect for the values that exist in the environment and the universe as a whole (Keraf, 2010). Humans preserve water with artificial Marsh technique because it realized that environmental crisis afflicting the welfare of the human being are the result too tend to be antroposentris (Suharto, 2010). People realized that nature and the environment is of value in itself. Humans make the effort of preserving the water because it has an obligation to protect the ecosystem of the universe as a whole.

DE explains that plants and small creatures have great contribution to the richness and diversity of life (Keraf, 2010). This platform statement looks at the process of cleaning up polluted water in artificial swamp facilities. Cleaning of polluted water in the artificial Marsh technique relies on natural processes in the breakdown of contaminants. The parsing is done in physics, chemistry and biology. Unravelling the physics basis using a variety of energy generated by the environment and the universe. The decomposition of chemically happens by changes made to the chemical compound and assisted physical processes in the decompose. Biological process looks at the use of plants creatures in removing pollutants in water (Khiatuddin, 2003).

DE assumes the life as a long evolutionary process that takes place naturally. The evolution was understood in the higher dimensions, and aiming for a better life. This platform statement reflected on the technique of artificial wetlands that rely on the natural processes on the removal of contaminants in the water. Preservation of water with artificial Marsh technique presents a natural swamp ecosystem with a range of filtration and process decipherment (Khiatuddin, 2003). Artificial Marsh technique making the value returned at conservation of nature. Nature is attempting to tackle the question of environment with natural laws that apply. Artificial marshes are presented in order to provide land and terrain corresponding to natural laws in doing recycling naturally.

Deep Ecology put forward the vital needs and differences in awareness efforts of nonvital necessities of life and happiness with natural wealth to taste (Keraf, 2010). Water resource management is human effort in the vital needs for both current and future. The technique of artificial wetlands is a reflection and a guarantee of the continuity of the human need to water. The preservation of water resources since the early is a human effort in maintaining the happiness of man in the future with assurance of well-being will be water which is a vital necessity (Situmorang, 2013).

DE directs the fact that human intervention of nature has been extremely excessive and exceeds the limit. Earth's changing human history continuously. People can use the universe to the vital needs of the discerning and wise (Keraf, 2010). Artificial marshes are presented in an effort to conserve water resources. The preservation of water resources with artificial Marsh technique showed that human intervention was carried out in the framework of the preservation of the environment. DE pursues sustainable environment into fundamental things that must be done on the basis of human responsibility of man towards the environmental crisis going on (Manahan, 2001). Artificial Marsh technique presents human intervention that arif and wise over the continuity and preservation of water resources. Water treatment is naturally possible difficulties in processing the natural water pollution already exceeds the limit. Industrial policy is a challenge for environmental conservation.

Environmental damage is a side effect of industrial processes (production and consumption) in excessive and beyond the limits of reasonableness. Industrial policy in the preservation of water resources constitute a concrete steps that should be implemented in addition to polluted water processing is also done with artificial Marsh technique.

DE open space for a priority over someone's life (Keraf, 2010). Opened as a priority to tackle the opportunities of environmental issues that are increasingly widespread. The management of water resources to techniques of artificial wetlands is a priority which is taken to meet water needs in the foreseeable future. Water management is a top priority of the implementation techniques of artificial marshes. Application of the artificial Marsh technique on management of water resources is a top priority of human dependence on conventional technology that be bad for the environment. Artificial Marsh technique is the technique of cleaning polluted water that uses a natural principle as swamps in General.

DE posited a general hypothesis in relating to environment (Keraf, 2010). A general hypothesis that are found on the preservation of water resources with artificial marsh technique is that water is vital necessity human experience pollution so will probably disturb human survival in the future. The artificial marsh technique is a move human connection with nature as a member of ecological as a whole. The water preservation with artificial marsh technique as an effort readiness human in facing various possibilities that occurs as embodiment an environmental crisis happened. The artificial marsh technique was based on hypothesis that water resources to preserve by this facility guarantee the continuity of water resources requirements clean for basic human and organisms.

The principle and hypotheses deliver Deep Ecology at a real action that is driven by consciousness of environmental (Keraf, 2010). A real action seen in an effort to the preservation of water resources. The technique of marshes made on the preservation of water resources constitute a real action in maintaining the quality of clean water as the main necessity for humans (Khiatuddin, 2001). A stunt performed on artificial marsh techniques describing an interest and human responsibility for natural devastation as a whole. The preservation of water is carried out in the effort to maintain the sustenance of human life in the especially the need to recources clean water.

3.2 The environmental movement on the technique of artifical wetlands

The preservation of the water resources with the technique of artificial wetlands describe a optimism human in the face of the future need clean water. The environmental damage in the form of water pollution overcome by technique of artificial wetlands. The technique of artificial wetlands presents in human responsibility as an offender moral and as a member of an ecological whole. The preservation of water resources took place in line with the principle of environmental movement put forward Deep Ecology as the act of man action with a new relationship with nature.

The biospheric egalitarianism-in principle is recognition that all creatures and an organism having a notch and the same standard, then are expected to appear a gesture of respectful against nature and fellow (Keraf, 2010). Recognition same is the basis of on the principle of the movement of the environment. Man looked at the same upon the interests of life and biodiversity. Water is vital that are necessary for life. The problem water is the problem of human beings.

The water conservation with the technique of artificial wetlands is a responsibility human against the environmental damage. Human exercise techniques rawa artificially make polluted water become more clean so the environmental damage insurmountable. Human carry out environmental management from damage is predicated on attitude human to regard as over life biotis and abiotis. Same attitude to all beings ecological was the embodiment gesture of respect human against nature and the environment.

Human appreciate all that exist in nature including the way nature recycling naturally. The use of conventional technology on the preservation of water resources constitute a human intervention that excess so that the possible effects bad happens to be struck in the future. Cleansing the water with conventional technology produce the waste that is difficult

to disentangle back (Khiatuddin, 2003). To obtain water clean, humans finding the environmental damage on the other, as damage the ground and air.

The preservation of the water resources with the technique of artificial wetlands is an award for nature in reuse the same materials contaminant in water. Performance artificial marshes is a copy of the performance of natural marshes in deprive of material contaminant in water. Human just do a few intervention against technique rawa artificial. Human intervention that wise as well as in accordance with the principle of the environment live as mutualists with the preservation of water with the technique of artificial wetlands especially on to form designs and performance rawa in deprive of material contaminant.

The principle of non-antroposentrism maintained that the human not as master of all other creatures, but human beings are part of the ecosystem of the universe as a whole (Keraf, 2003). Man is part of nature and don't have a more in the universe. The position of predominance human replaced by the interdependence humans for against nature. Human life depends on its natural state and the environment a human residence. Human nature, requiring to continue life, and human beings are required to conduct the preservation of the elements of life in the universe.

The preservation of the water resources with the technique of artificial wetlands is an attitude of man over the sustainability of water resources in the environment. The preservation of water resources based on attitudinal man that is hinged to nature. Human meet daily needs of nature. Humans with the universe to meet the needs of vital to the wise attitude. The technique of artificial wetlands presented in order to ensure human need to clean water in the present and the future. The technique of artificial wetlands shows that human beings are very much dependent on natural so that the efforts made by man is preserve nature would continue to be a source of basic needs a human being.

DE admit that human survival and other species depend on sustainability the universe. The comity against nature made man careful in making use of the universe. Human advisable keep behave according to the principles that is plotted environment. Preservation water resources carried out solely to save the humans and other beings and inflict attitude respect each other, good fellow beings and with the universe as a whole.

The principle of the realization of self on the Deep Ecology is the fulfillment of and embodiment of all beings and as part of an ecological in at all. The realization of self took place on the interaction of an organism with the nature and environment (Keraf, 2010). The preservation of the water resources with the technique of artificial wetlands is human effort in achieving the realization of self in the form of interaction with nature (Safitri & Suharno, 2020). Man is a part of nature, then human being have to do the preservation of nature. The preservation of water resources constitute a human tasks as a member of the universe ecosystem. Embodiment of the needs of man may not be achieved if the living environment are at a position crisis and broken (Saeni, 1989).

The preservation of the cosmos is a depiction of defend yourself. People do a bid to the preservation of water as if constituting human effort in surviving himself. Clean water was a necessity vital man. The preservation of is the main task of to the quality of the water in the guaranteed for the necessities of life. The preservation of the water resources with the technique of rawa artificial describe human consciousness will his involvement as a member of the ecosystem of the universe.

DE proposes recognition and appreciation against as well as ecological complexity in a relationship symbolic. Symbolic relations intended that an organism is a member of an ecological community as a whole. The diversity in a universe maintained because maintain the sustenance of the ecosystem itself (Keraf, 2010). The struggle to maintain life is understood by the ability to live together in relation which is complex. The preservation of the water resources with the technique of artificial wetlands turn back to the realization that a human being is a member and part of the ecosystem of the universe as a whole. The preservation of water resources undertaken in the hope of maintaining the complexity and relations symbolic who were on the environment. Human conserving water due to maintain the quality of water. The technique of artificial wetlands carried out in the preservation of water resources hinted that human beings have the capability of being either in a life

together with the universe. A life together reflected when human coexistent with nature that raises the interaction of mutually beneficial each other.

The diversity of being intertwined look at a performance technique of artificial wetlands. Artificial marshes use for various aspects of clear water. The aspect of used in cleaning polluted water on facilities artificial mashes is biomass, minerals, energy, plants and animals such as befits a community on the ecosystem rawa natural (Mulyadi, 1997). The use of various kinds of organisms is a form of human consciousness that nature having many wealth and that affects balance and environmental sustainability.

Naess spells out the need for political change into ecopolitics. DE advocated change not only involve individuals, but also involves the transformation of culturally and politically in preserving the natural resources (Keraf, 2010). Ecopolitics is policy direction tending to pro the environment. Pro environment policy is a strategic step in implementing the balance on ecosystems universe as a whole (Saad & Salman, 2017). The preservation of the water resources with the technique of artificial wetlands is one form eopolitics in overcome the problem of environmental crisis. The policies concerning sustainability of water by technique of artificial wetlands expects a solution to the problem of water in a region do not become a ecological sustainability who takes the risk of harm for the environment to another.

The conservation of water resources efforts with artificial marshes is an environment preservation of crisis that accord with the principles environmental movement on thinking Deep Ecology. The conservation water resources with technique of artificial wetlands is a concrete steps on human pollution in the problem of water resources. The preservation done as the human embodiment is that members involved in ecosystems universe as a whole (Sinukaban, 1996).

4. Conclusions

The artificial marshes are a system designed and built to water resources management polluted. The water resources management with technique of artificial wetlands imitate performance natural marshes in the implementation. The process of water management in technique of artificial wetlands is a process alamian involving water, sediment microorganisms light and the sun as energy sources. The technique of artificial wetlands use chemical reaction, physics and biology in unravel material contaminant in water. Physical processes seen in process the deposition and sedimentation. The chemical process seen in the decipherment of those compounds of chemistry in remove material pollution. The biological process technique rawa artificial seen in the role of aquatic herbs and semi aquatic in removing material contaminant in water. The preservation water resources with technique of artificial wetlands can presented around areal production or farm, areal fishery land, areal mining, areal industry, areal landfill, And the shelter used as rain storms.

Ecocentrism is focus to the whole community of ecological in the universe, good things animate or inanimate things. Creatures living and inanimate objects mutually related to each other ecologically, hence its liabilities and moral responsibility not only a restricted in the living thing. Deep Ecology having four tiers important in forming a unity pattern of behavior as the movement of moral. In the form of inspiration, the first degree thought and intuition derived from the premise of tradition and religion. The second degree as platform-platform which unites and push the man to perform joint action. The third degree in the form of a general hypothesis in line with inspiration and plaform. The fourth degree in the form of a real action that is driven by tiers before. DE proposes the principle of the movement of the living enviromnet to base in pattern of behavior. The principle of the movement of the living environment on de is biospheric egalitarianism-in principle, the principle of non-antroposentrisme, the principle of the realization of self (self-realization), recognition and appreciation for diversity complexity symbiotic relations and change from a political toward ecopolitics (Suharno, 2011).

The preservation of the water resources with the technique of artificial wetlands is a human conserving and face an environmental crisis. The technique of artificial wetlands

presented as a concern as of an offender moral man. Humans have the responsibility to maintain and preserve nature. The technique of artificial wetlands is a way to realize themselve against human nature. Man is a part of ecosystems as a whole. Humans have moral responsibility not only to living creatures, but human beings have the responsibility to nature as a whole. The artificial of marshes made on the preservation of water resources constitute a form of embodiment of Deep Ecology in addressing the issue of an environmental crisis. DE facing environmental crisis with look at to the root of problems, then the wise problem solving. The preservation of natural resources with the technique of artificial wetlands see pollution water in the subject matter. Polluted water occurs due to the abundance of consumption and waste production are dumped directly into waterways. Artificial Marsh technique tackle issues of polluted water by removing the pollutants found in the water. Preservation of water obtained by perfectly when pollutants removal efforts on the water and done perfectly coupled with behavior patterns that are in accordance with the principles of the environment. Polluted water cleanup effort will prove fruitless if not coupled with a change in mindset, attitudes and lifestyles.

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