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An approach to link water resource management with landscape art to enhance its aesthetic appeal, ecological utility and social benefits

Anita Mukherjee (1), Somnath Sen (2), and Saikat Kumar Paul (3)

 Indian Institute of Technology Kharagpur, Architecture and Regional Planning, Kharagpur, India (anitageo10@gmail.com), (2) Indian Institute of Technology Kharagpur, Architecture and Regional Planning, Kharagpur, India (snsen@arp.iitkgp.ernet.in), (3) Indian Institute of Technology Kharagpur, Architecture and Regional Planning, Kharagpur, India (skpaul@arp.iitkgp.ernet.in)

Landscape art or land art is the discourse of scientific application of artistic skill to integrate man-made structures with the natural landscape for planning, design, management, preservation and rehabilitation of natural and built environment. It does beautification of the landscape enhancing its utility for habitats. Availability of water with acceptable quality is crucial for economic growth, social peace and equality and of course for environmental sustainability. Development of new and growth of existing urban and suburban units are obvious. It postulates the increase of population density and percent of the impervious area in an urban unit. The demand for water is increasing with progressive concentration of population, the volume and velocity of surface runoff increase and the travel time decreases. At the same time, an increase in the volume of gray water not only contaminate water bodies, it also reduces the quantity of available freshwater transforming a portion of blue and green water to gray one and would intensify the pressure on water resources of the area. Therefore, to meet the incremental pressure of demand for and pollution of water collection, treatment and reuse of wastewater, both sewage and storm water, are on the requirement to improve urban water security. People must be concerned not to stifle urban lives with concrete; rather must provide all basic amenities for achieving a higher standard of life than the previous one with the essence of natural green spaces. The objective of the study is to propose a conceptual design and planning guidelines for developing urban and suburban drainage network and reuse of surface runoff and sewage water utilizing less used natural water bodies, such as paleo-channels or lakes or moribund channels as retention or detention basin. In addition to wastewater management, the proposal serves to promote the aesthetics of environmental engagement, ecological utility and restoration of moribund channels incorporating the perception and principles of landscape art. Successful implementation of such project not only upgrade the aesthetic appeal of the process of water resource management but also would benefit the society reducing flood risk, creating riparian habitat and recreational sites and in long turn may help in climate change adaptation by reducing maximum temperature and increasing evapotranspiration.