



Abstract

Operation Status and Management Improvement Recommendations of Environmental Rearrangement Zone within Water Source Protection

The designation of Environmental Rearrangement Zone within Water Source Protection Area, which is deregulation system for residents, is improving a living environment and preserving the water quality of water sources. Analysis results for operation status of ERZ(Environmental Rearrangement Zone) in Paldang(four cities; Namyangju-si, Gwangju-si, Yangpyeong-gun, Hanam-si) and Gwanggyo watershed(one city; Suwon-si), each condition of the cities is different but all residents require expanding and additioning the ERZ continuously. The practitioners of each cities say that the absence of subsection could create conflict with residents such as reckless expansion and additional application for the designation of ERZ. This happens deregulated residential communities in Green Belt, as well, resulting the concerned about that regulatory effectiveness and significance are degraded.

This study suggest the scenario, for establishing the sub-criteria for designating the ERZ, that could be devided into 2 alternatives; 1. Conservative regulatory, 2. Deregulation. 'Conservative alternative' is based on the native' s interest who have been lived for at least 20 years, building site, which would minimize the designation of ERZ, but causing by the difficulties for receiving additional complaints and the fairness problem between the cities. On the other hand, 'Deregulation alternative' is based on the extending the native concept, the expansion of sewage treatment that would defuse the conflict between residents and practitioners in the cities, but resulting in more water resource pollution.

And then to compensate these problems, 2 alternatives in the scenario are used as indicator for three main issues in the ERZ operational system. First, when the designated ERZ is approved, practitioners focus on ‘Compensating for missing land category’ and ‘Inducing for regular boundary’ primarily, if they need additional designation, recommend the ‘Conservative alternative’ . Second, when the ERZ is designated or rearranged, clear sub-criteria are required that the fairness index for considering the each condition of the cities, and the detailed analysis such as in designated number of houses per unit area and drawing boundaries of a village district. Third, detailed regulations for redefining the concept of the native residents and additional subsections for restricting the land category that only possible to "building sites" should be considered.

These proposed methods are required that considering the prior arrangement with central government such as Han River Basin Environmental Office, then approved for a limited area which are already deregulated residential communities in Green Belt. Also, best practice for Green Belt operating system, it is necessary to differentiate the level of deregulation by diversifying the management and support measures to meet the residents’ characteristics, such as the residence period and the practical requirements for regulations.

Preserving and managing Paldang water resources is essential for Seoul Metropolitan Population, in spite of, it caused economic damage and inconvenient living environment for the residents in Water Source Protection Area. Prioritizing a qualitative management of the water source should be the first consideration, Gyeonggi-do need to play a leading role in providing detailed provisions for the establishing principles of institutional management and clear sub-criteria.

Keyword Water Source Protection, Environmental Rearrangement Zone, Designating Sub-criteria