

Groundwater Management in Saijyo : Focusing on the Awareness of Residents

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1, ABSTRACT

The groundwater resource in the city of Saijyo, Ehime, Japan has been very fortunate that it has always been a part of the city's necessary revenue. With or without awareness of residents, the resource is facing number of problems as the amount of use increases due to the city being more urbanized, and industrials intake being more secured. The problems include chloride damage of seaside farmland, water pollution by agrichemicals. The influenced area spread over and outside the city and it becomes more and more complicated as the number of cities and authorities grows larger. To preserve groundwater, the city of Saijyo revised its Law and the limit of water coverage which restrict the area to secure water needs. The city also does scientific research on the groundwater quality as well as collecting data of awareness of residents. This paper presents possibilities in practicing the Law on groundwater preservation for the sustainable use of its water resources in Saijyo. The examination includes analysis of city questionnaires for residents in the Saijyo in 2008, and field study in 2009. The field study involves feedbacks from users of common watering place for the residents, farmers, workers in forestry, officers, and citizens. The outcome is visibly presented by GIS comparison, combined with essentials of current problems and transformation of the water use through its city history.

In conclusion, awareness of residence regarding water and environmental change relate well with their level of awareness in environmental preservation. The city authority recognize groundwater as limited resource, but specific policy to operate is tend to postponed while immediate business climate and society needs have priority over long-term affairs.

