

## **A Boundary between Surface and Ground Water in Japanese Legal System -Its Consequence and Remedy-**

Takahiro ENDO\*

\*Research Institute for Humanity and Nature, Kyoto, Japan  
endo@chikyu.ac.jp

Recently, Japanese government began to advocate the necessity of integrated management of surface and ground water, paying attention to hydrologic cycle. But, from a legal perspective, it is hard to say that such an integrated management is realized well. In Japan, while surface water is usually regarded as “public” water that is subject to a water law named the River Law, groundwater is basically regarded as “private” water that just belongs to land ownership. So, it is often said surface and groundwater connect with each other in physical sense, but those are divided in legal sense.

Why do we need integrated management of surface and ground water? A reason is efficient use of water resources. Where there is legal boundary between surface and groundwater, it will be hard to internalize external diseconomies (an activity that impose involuntary costs on others) that arise between surface water users and groundwater users. This problem can be observed in Ehime Prefecture, Japan where there is a potential conflict between two cities; Matsuyama which tries to promote a water diversion plan and Saijo which is anxious about the plan’s impact on its groundwater resource.

Saijo city government is now trying to create a new ordinance to protect groundwater that many residents totally depend on for their domestic use. In this paper, A consequence of legal boundary between surface and groundwater and its remedy will be discussed.

**Keywords:** public water, private water, external diseconomies, local ordinance