

## River investigation system operated by citizens in Muroto Geopark

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Local people in Muroto UNESCO Global Geopark, southwestern Japan, are worried about environmental changes of the forest in the drainage areas as this may cause changes in the quality of the water, increase the risk of overbank flooding, erosion of river channel, and landform change of beach areas. Our project has established an investigation system for the river and forest environment operated by local people with geopark staffs. This investigation system includes a method of estimating the volume of suspended sediment in river water by simple and easy techniques, such as differentiation of river water colour or transparency. 80% of Muroto Geopark area is covered by forest which is characterized by evergreen broad-leaved trees (mainly *Castanopsis* and *Quercus*). Agricultural lands on riverside plain had been urbanized after 1970s, but the condition of the forest has been kept favorable in Muroto Geopark area. Forest industries including charcoal makers in Muroto efficiently manage forest environment. The forest environment keeps moderate sediment amount and gentle river behaviors in Muroto in comparison with drainage basins in the adjacent regions. On the other hand, decrease of river sediment caused reduction of beach deposits and regression of the coast line. Our research project on river and forest environment will be continued next years.

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