

## **Study on the apportionment coefficient for computing economic benefits of an individual flood-control work in a river network**

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**Abstract** The existing methods for computing economic benefits for a flood-control system or an individual work where beneficial scope can mainly be determined are the frequency curve method of flood damages, the method based on a series of typical years, and the method of insurance cost. Based on the applicability analysis, the methods of apportionment coefficient for both project investment and the design flood discharge capacity are analysed. And the method of the apportionment coefficient for frequency flood discharge and storage, and practical approaches are studied. In the paper, some concepts are defined and the numeric model on the method of apportionment coefficient for practical flood discharge and storage is established. According to theoretical study, this numeric model could be applied to an individual flood-control work in a networked river region. The result showed that the method is both credible and effective for similar projects.

**Key words** apportionment coefficient; economic benefit; flood-control project; post-evaluation

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