



## Supporting Multi Stakeholder Involvement for Flood Risk Management Planning

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### ABSTRACT

For development of Flood Risk Management Plans (FRMP), governance approaches are to be developed and implemented to meet the requirements of the EC Flood Directive (2007/60/EC). The authors developed and implemented a governance approach, which aims at broad stakeholder involvement in the planning process. It uses Learning & Action Alliances- LAAs as communication and decision-making platforms in which public and professional stakeholders develop a FRMP together in a 4-step-cycle composed of scoping, understanding & envisioning, experimenting and evaluation steps. As this process is very learning intensive and requires a high level of expertise for decision making, corresponding methods and tools are required to support this process. The key to decision making on the measures to be implemented is the assessment of their efficiency and effectiveness. The software tools KALYPSO Planner-Client has been developed in order to support professional and public stakeholders to define their own planning options and to evaluate their efficiency and cost effectiveness in mitigating flood risk. This approach to develop FRMP with the application of supporting tools is demonstrated in a real case study- the Wandse catchment area, Hamburg, Germany, and the results and experiences are discussed.

### KEYWORDS

EU Flood Directive, flood probability reduction measures (FPRM), flood risk management plans (FRMP), participatory planning, stakeholder involvement