# COM 25 Definition study: Biesbosch in times of Climate Change

| | | | |
|---|---|---|---|
| **Project manager** | Wim G. Braakhekke | | |
| **Institute** | Stroming Ltd | | |
| **Email** | wim.braakhekke@stroming.nl | | |
| **Consortium** | Stroming Ltd | State Forestry | |
| | WL Delft Hydraulics | Ministry of Traffic and Waters, directorate Zuid-Holland | |
| | KIWA | Province Zuid-Holland | |
| | IVM/VU | Municipality Dordrecht | |
| | Alterra | | |
| **Project website** | | | |
| **Starting date** | 1 September 2007 | **Completion date** | 15 December 2008 |

**Social problem and communication objective**

In the lower parts of the Netherlands, at the mouth of the rivers Rhine and Meuse, important urban and economic centres exist. The centres will be affected by the consequences of climate change and in the long run even the security of the inhabitants is at stake. The challenge is, in addition to other measures (such as energy saving measures, $CO_2$ sequestration and energy production form renewable sources), to anticipate the upcoming changes in a spatial manner. In the highly urbanised areas space is scarce and expensive, certainly if one realises how much space is necessary to buffer the (hydraulic) consequences of climate change. For this purpose, other areas, where space is less scarce and less expensive, will have to be found. The sparsely populated Biesbosch area is one of the areas qualifying as a "climate buffer", absorbing the consequences for a much larger region. The question is which role (both quantitatively and qualitatively) the Biesbosch are can play and to what extent the existing functions in the area (agriculture, drinking water production etc) are compatible with this – also in the light of the "autonomous" changes these functions will undergo of climate change. Complex spatial issues like these present themselves in many other places in the Netherlands and it is therefore interesting to investigate whether it is possible to use the Biesbosch area for the development of a strategic concept which can be applied in other places as well.

**Target groups and intended scope**

Principal target groups for the definition study are the existing users and functions of the Biesbosch area and the wider surrounding: agriculture, nature, recreation, drinking water production, flood control, urban development, energy production and navigation. Representatives of these sectors will be involved in the study.

**Intended results and products**

- A deskstudy will generate information on the effects of climate change in downstream sections of the Dutch rivers, with a focus on the Biesbosch area. In addition an inventory will be made of existing studies on the effects of climate change and the models needed. What is known, what is yet unknown? The information will collected on basis of the knowledge of each of the team members and literature research. On the basis of this information a discussion paper will be drafted.
- Organisations involved (directly or indirectly) in the Biesbosch area will be interviewed on what questions they have with relation to climate change and how it will affect their modus operandi. The discussion paper, outlining the issue and some possible directions developments could take, will be the basis for the discussion and should encourage the people interviewed to take a long term perspective. The interviews will not only collect questions but also give insight in the forecasts used by the various sectors, the time horizon used and possible actions already undertaken or planned to anticipate climate change.
- The different climate scenarios (drought, floods, sea level rise) will be linked to the wishes and expectations of the different functions in the region. This will generate crude adaptation strategies and spatial scenarios for the Biesbosch region, which will serve as a basis for the generation of targeted research questions (research agenda) for future research programs.