

A photograph of a street in Wuppertal, Germany. The street is lined with historic, multi-story buildings featuring ornate facades and balconies. On the left, a large, leafy tree with white blossoms partially obscures the view. In the distance, a church with a prominent green spire is visible against a backdrop of a hill. The sky is clear and blue. The text "The SUDPLAN Wuppertal Pilot" is overlaid in white, sans-serif font across the upper portion of the image.

The SUDPLAN Wuppertal Pilot

Stefan Sander, City of Wuppertal

Stefan Sander, Stadt Wuppertal

The Wuppertal Pilot – What is it all about?

- **Overall issue**
 - Urban stormwater management
- **Goal**
 - Prevention of infrastructure damages
- **SUDPLAN context**
 - Use of Common Services "Rainfall"
 - Linking with external local models (including model execution)
 - View results on detailed 3D topography model
- **Intended Solution**
 - Decision support about building measures for flood risk mitigation



swollen creeks are blocking the sewer system → storm water is running of on the surface

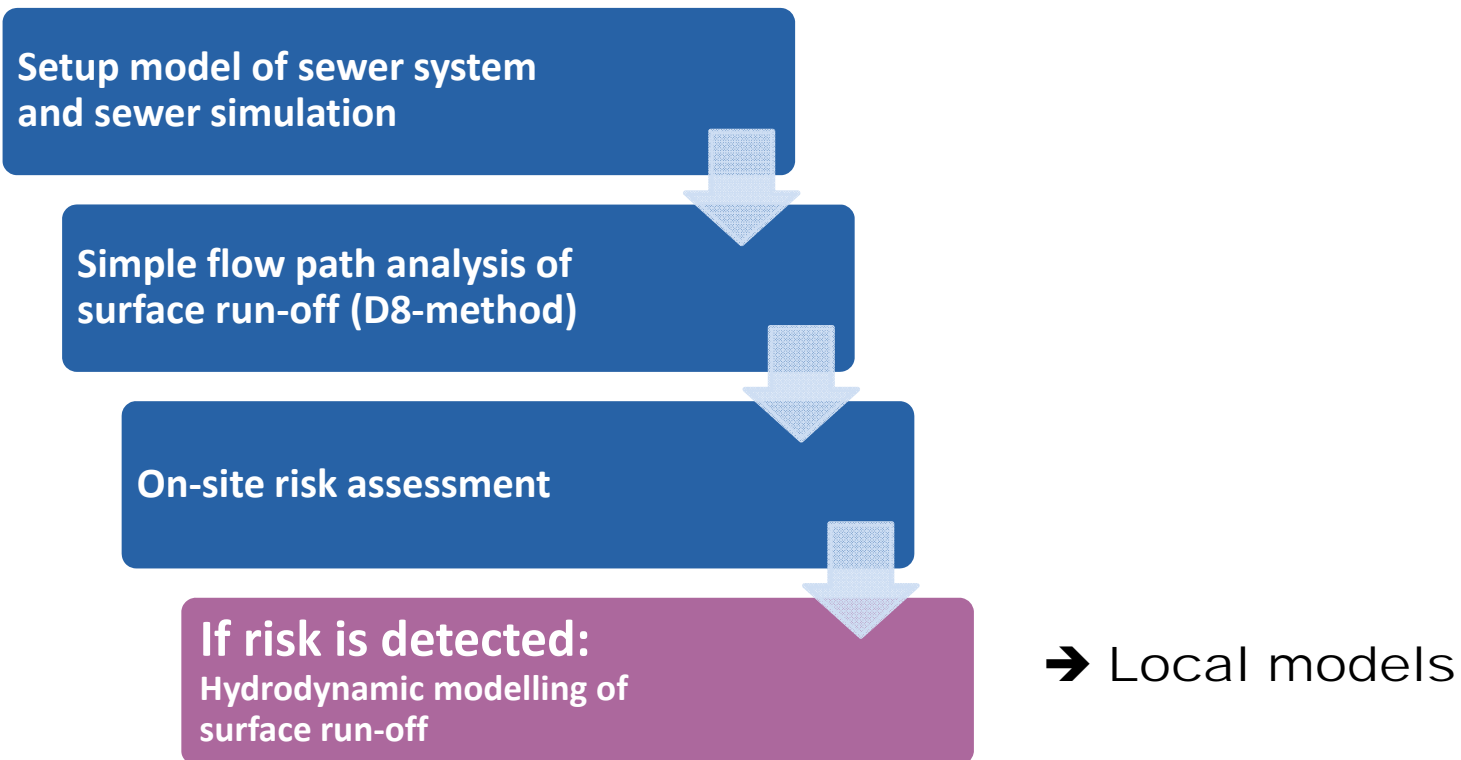
low-lying assets (natural basins) are flooded



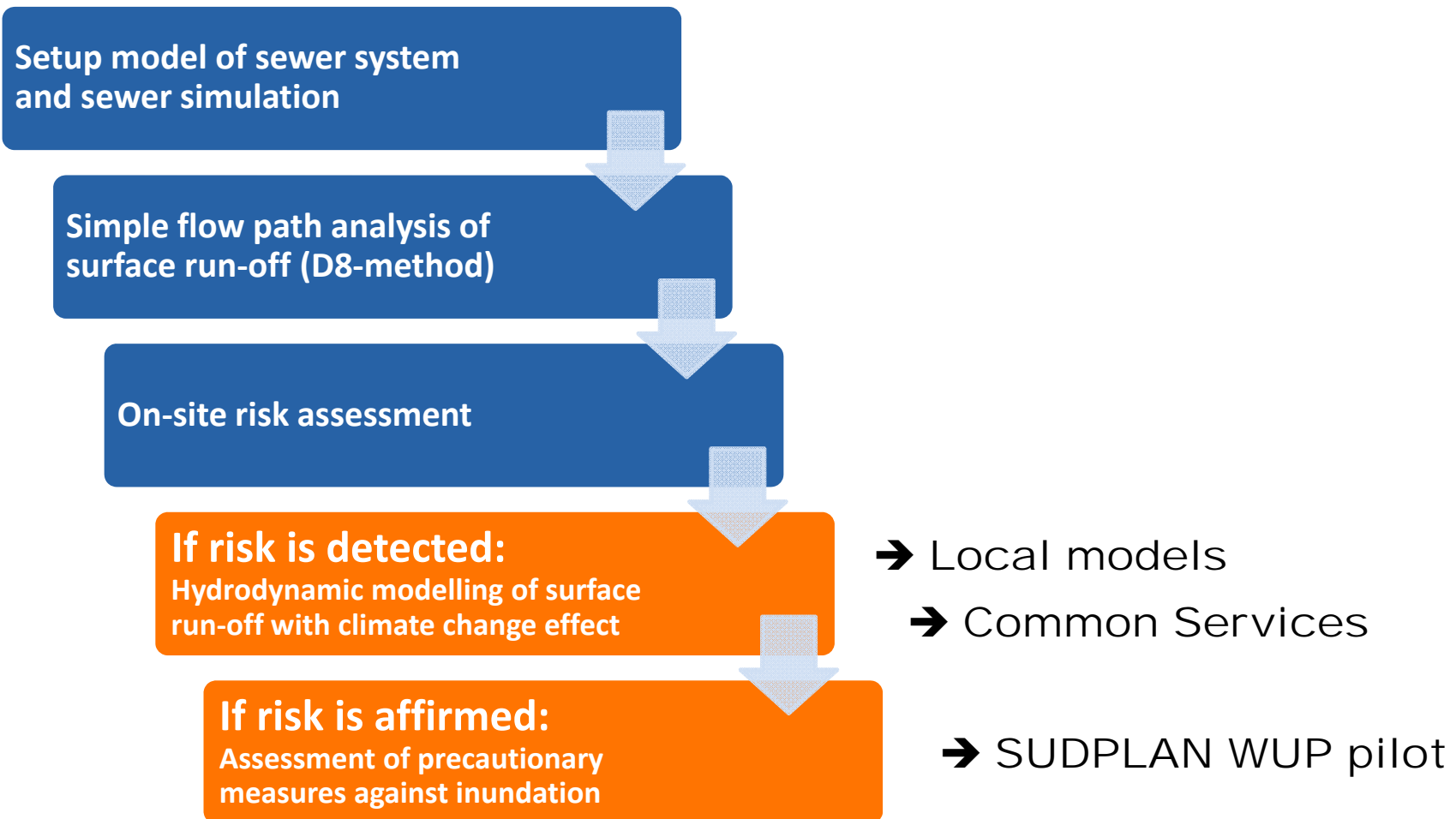
public infrastructure and private property might be damaged or destroyed



Urban planning process without SUDPLAN-Tools

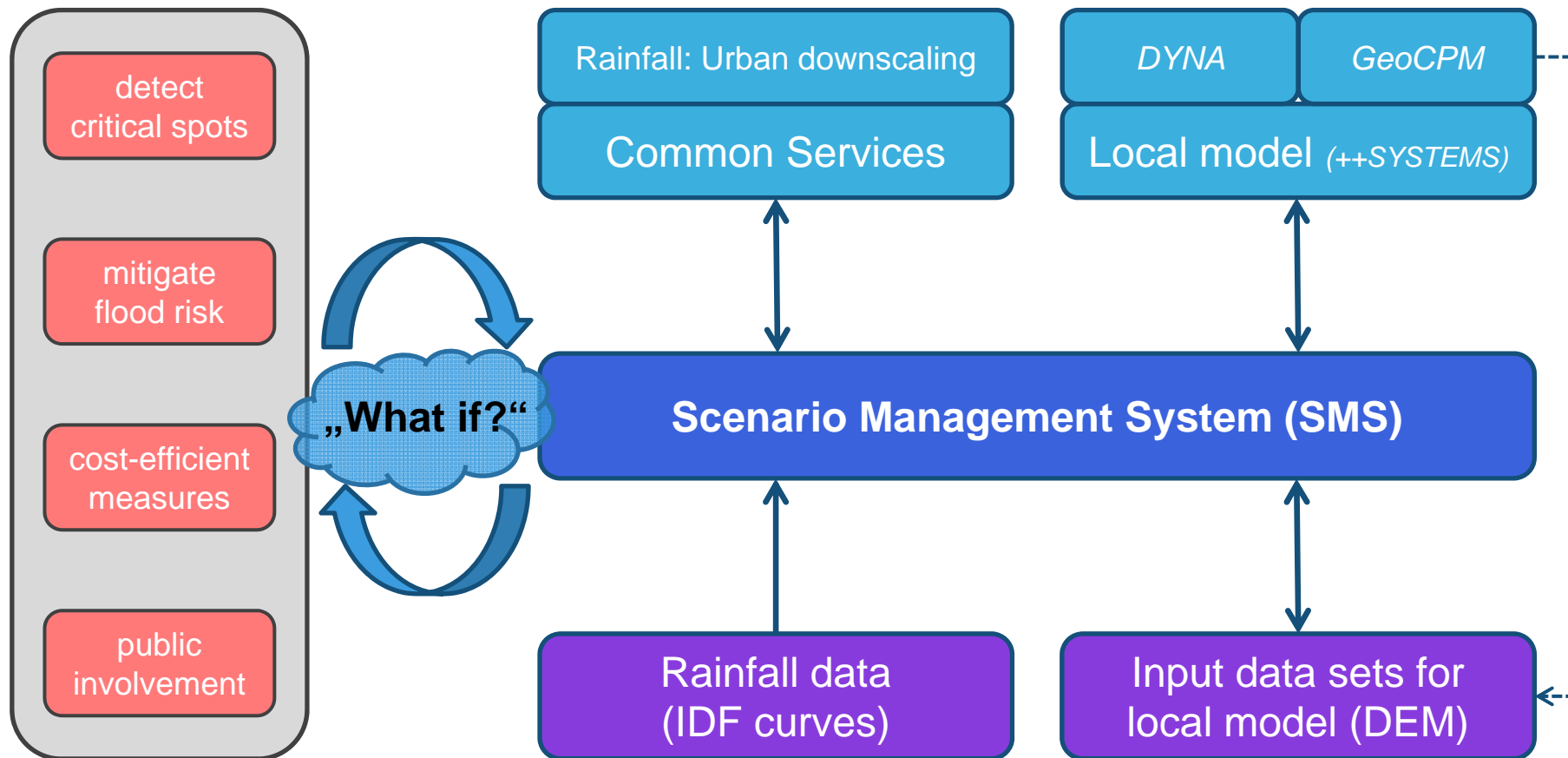


Urban planning process with SUDPLAN-Tools

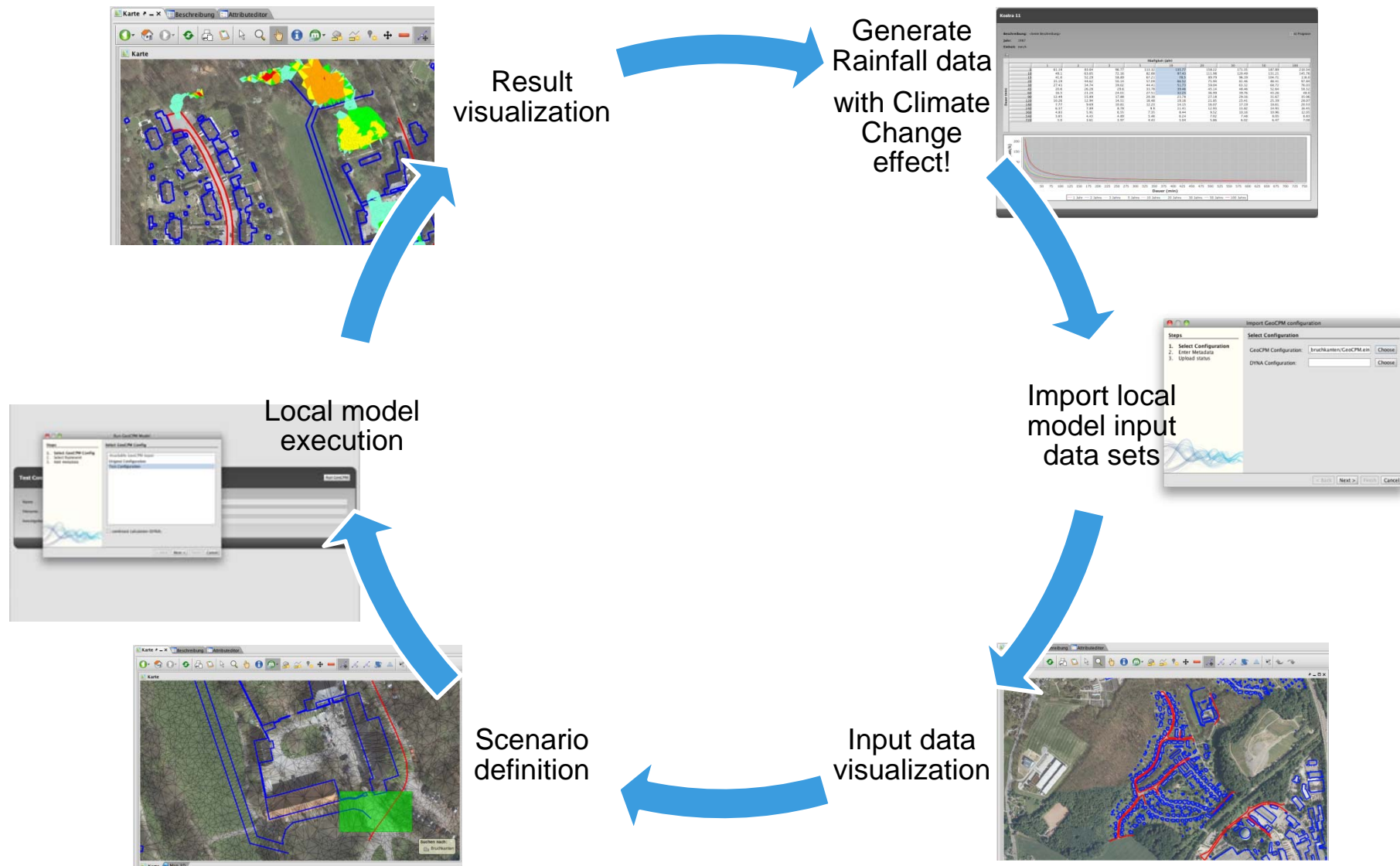


Issues ...

... and the tool to manage them



Integrated Workflow

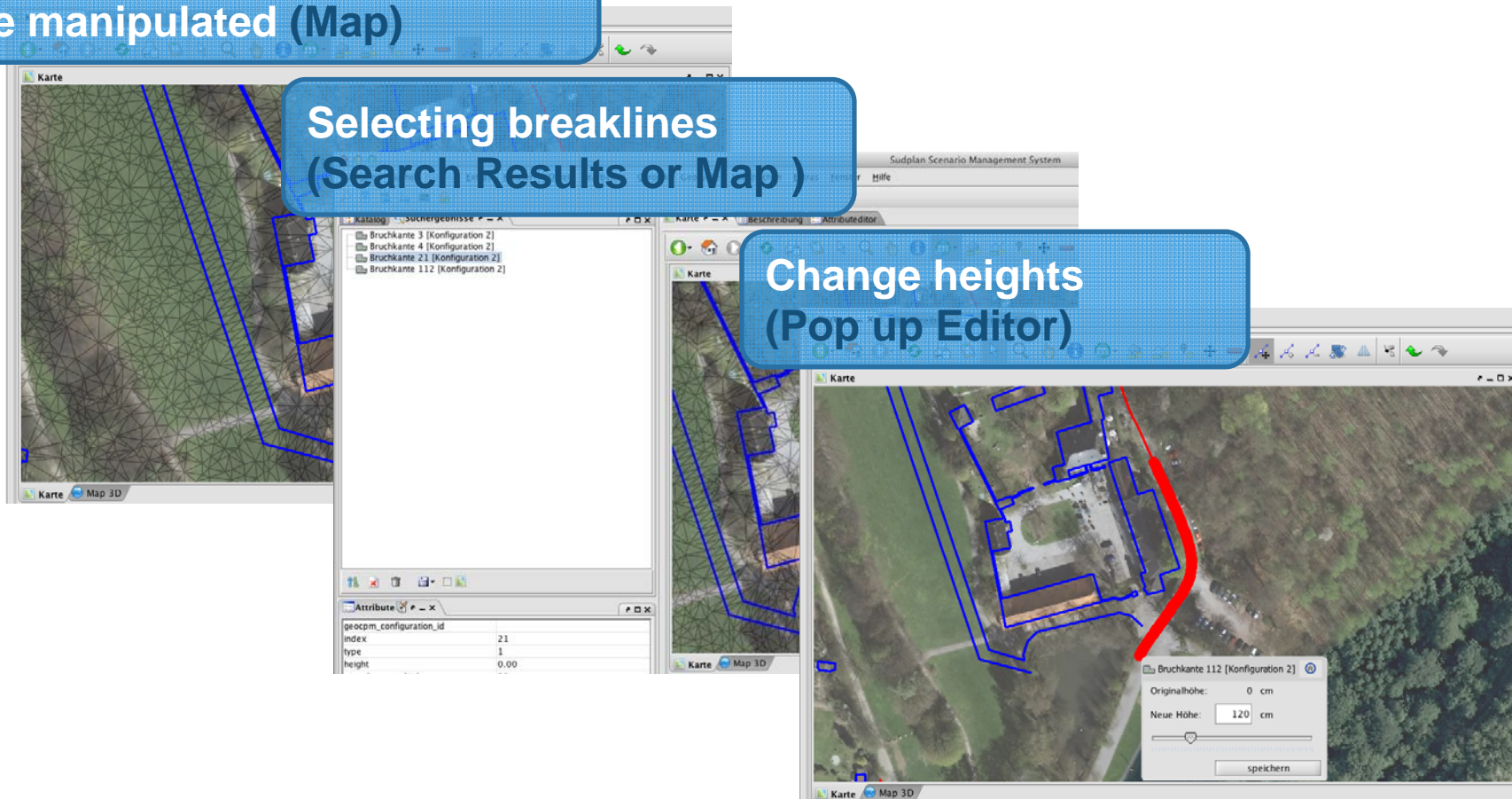


Scenario Definition: Breakline Manipulation (local measures)

Search for breaklines that can be manipulated (Map)

Selecting breaklines
(Search Results or Map)

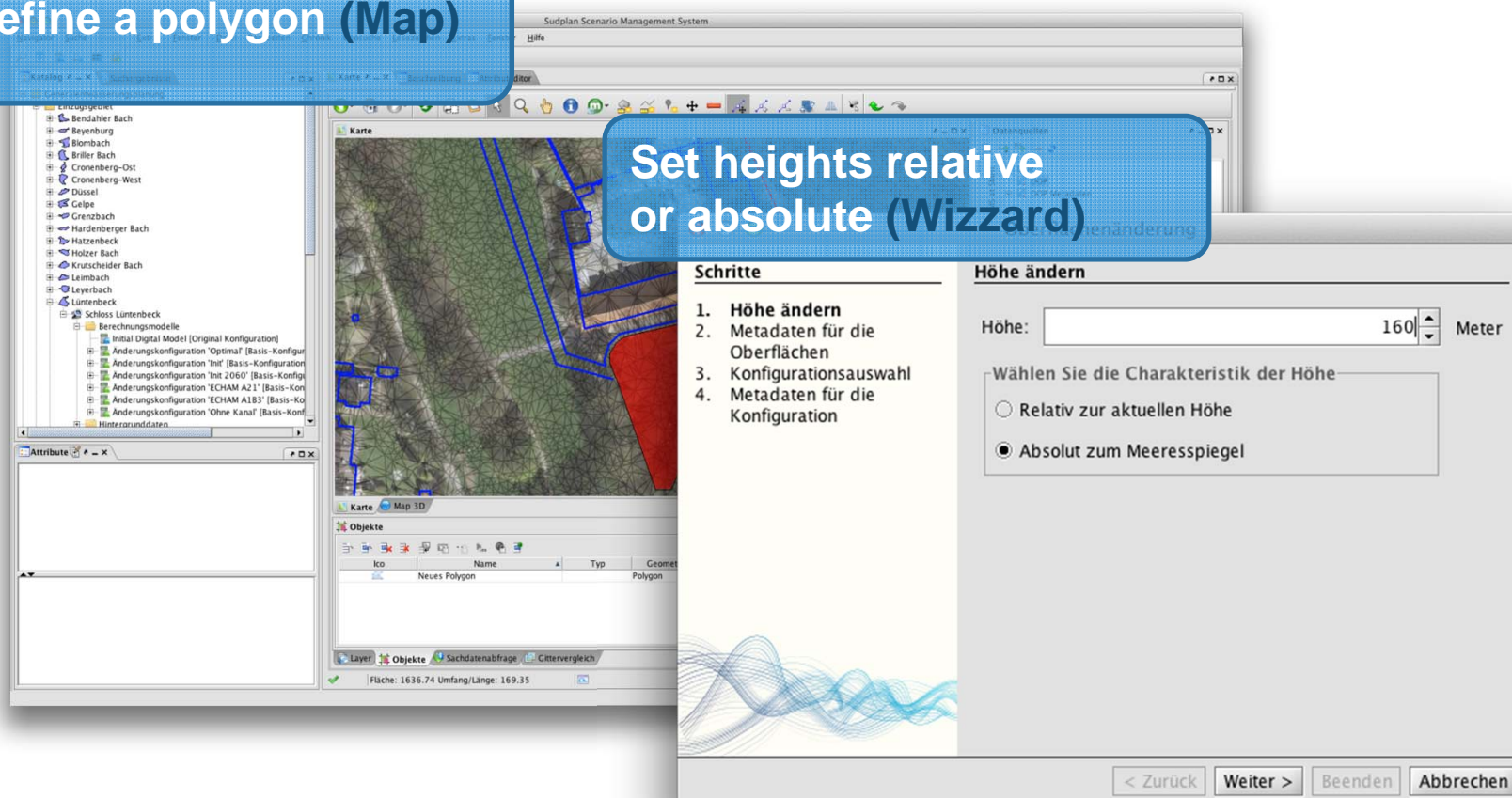
Change heights
(Pop up Editor)



Scenario Definition: Area Manipulation (extensive measures)

Define a polygon (Map)

Set heights relative or absolute (Wizzard)



The screenshot displays the Sudplan Scenario Management System interface. On the left, a tree view shows the project structure, including 'Berechnungsmodelle' and 'Initial Digital Model [Original Konfiguration]'. The main window shows a map with a red polygon and a blue line. A 'Höhe ändern' dialog box is open, showing a list of steps and a form for setting heights.

Schritte

1. Höhe ändern
2. Metadaten für die Oberflächen
3. Konfigurationsauswahl
4. Metadaten für die Konfiguration

Höhe ändern

Höhe: Meter

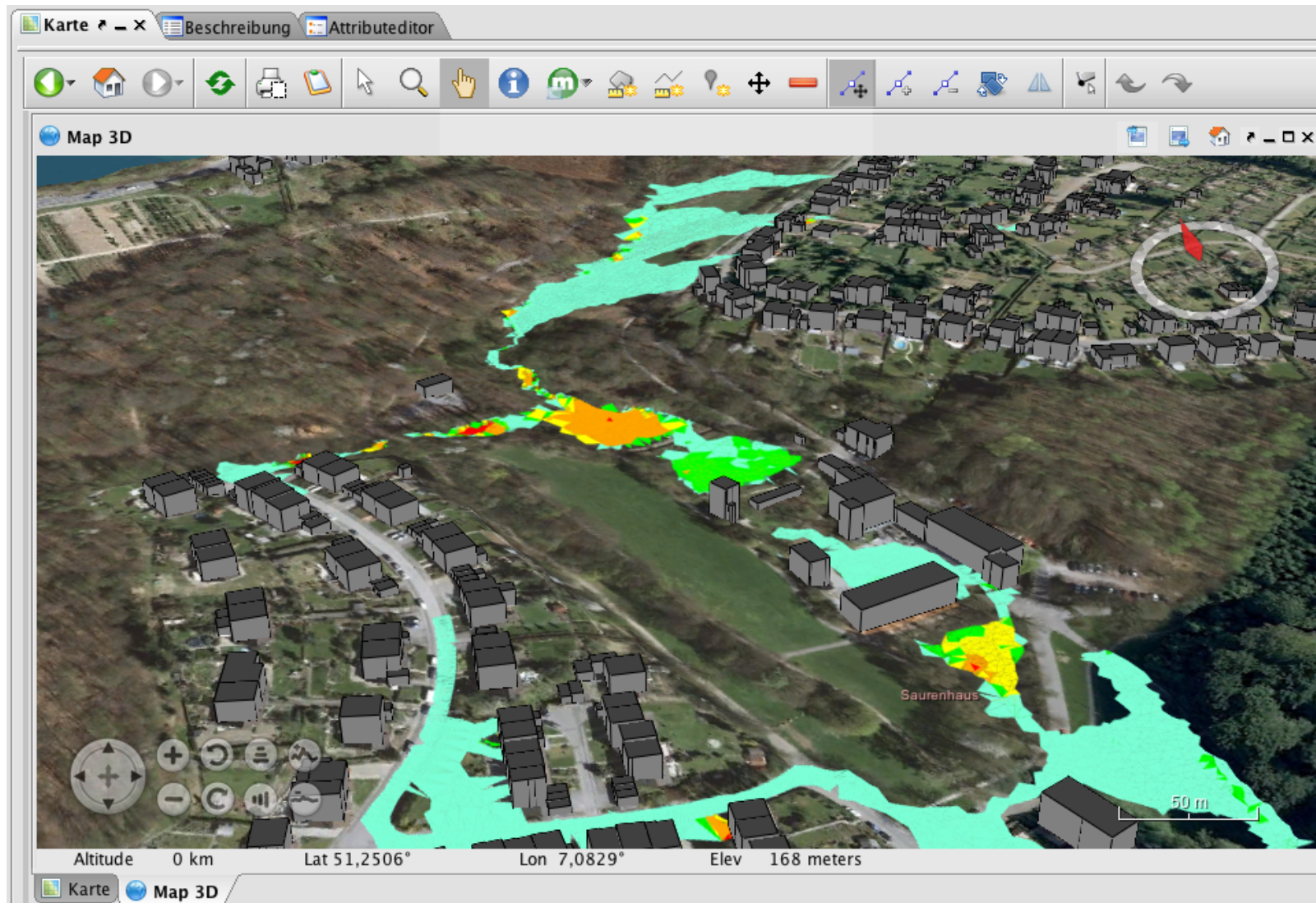
Wählen Sie die Charakteristik der Höhe

☐ Relativ zur aktuellen Höhe

☒ Absolut zum Meeresspiegel

< Zurück Weiter > Beenden Abbrechen

Public involvement: 3D and 4D Visualization of simulation results



The background image shows a cable car with orange and blue sections, numbered 12 and 6, crossing a green metal bridge over a river. The scene is surrounded by lush green trees and a paved walkway in the foreground. A blue banner at the top contains the text 'Thank you for your attention!'. A white text box at the bottom right contains information about the SUDPLAN project.

Thank you for your attention!

*SUDPLAN is a Collaborative Project
(contract number 247708) co-funded by the
Information Society and Media DG of the
European Commission*