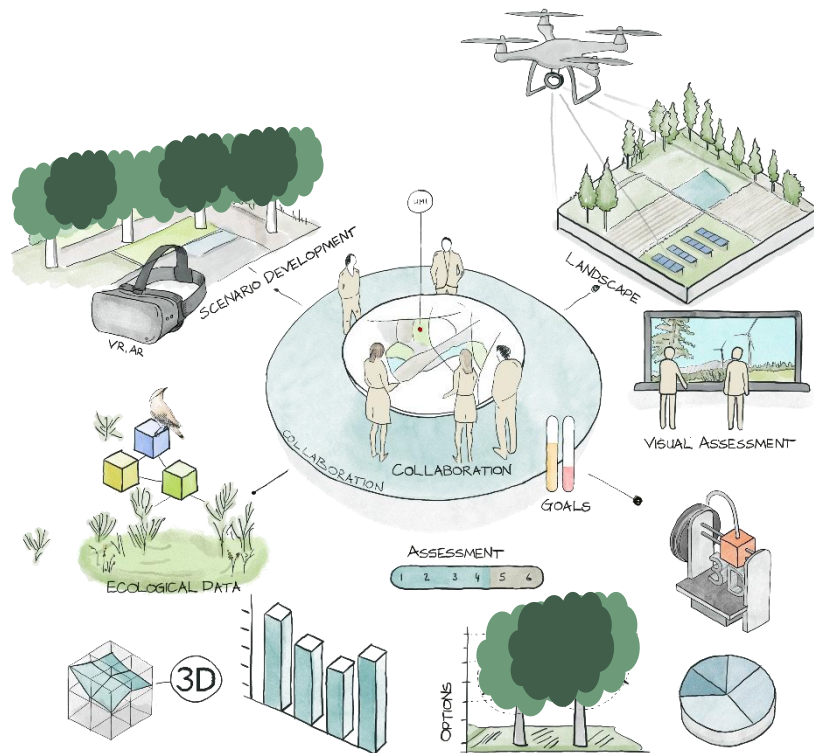


CommonGround

Workshop for Co-Designing Nature-Based Solutions



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Exploring and Prioritising Nature-Based Solution Scenarios



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Publication Information

Title	CommonGround: A participatory Spatial Co-Design Workshop
Format	Participatory planning method, digital co-design workshop and facilitator guide
Origin	Adapted from established Geodesign approaches and applied to Nature-Based Solutions planning with the LandscapeLab platform
Authors	Birthe Uhlhorn, Karl Bittner, Beatrix Schiesser, BOKU University
Main users	Local authorities, community stakeholders, researchers, educators and students, spatial and environmental planners
Recommended duration	2– 3 hours for one workshop; expandable into a semester-long course

At a Glance

CommonGround is a participatory spatial co-design method for exploring Nature-Based Solution scenarios. Groups can work with printed maps and tangible materials or with the open-source LandscapeLab platform. In its digital set-up, an interactive planning table, a game-based feedback system and a GIS-based 3D visualisation help participants compare spatial options, potential effects and trade-offs.

PURPOSE

Use CommonGround to support structured co-design and collective learning around complex spatial challenges such as flood-risk reduction, heat mitigation, climate change adaptation, soil protection, biodiversity enhancement or multifunctional land use.

What This Guide Provides

- A concise explanation of the method and its three core components.
- Practical requirements for participants, physical set-up and spatial data preparation.
- A facilitation flow for a 2 – 3 hour workshop, including expected outputs and options for adaptation.

1. From Spatial Question to Shared Scenario

CommonGround is a participatory spatial co-design workshop that brings together local knowledge with geographic, environmental and socio-economic information to explore planning ideas and propose how a place could change. Participants work with a concrete spatial question and identify suitable and alternative locations for Nature-Based Solutions, as well as potential no-go areas where constraints or conflicts may be too significant. Together, they develop and compare possible configurations and reflect on consequences, trade-offs and unresolved issues. The aim is not to produce a single technically “correct” plan, but to build a shared understanding of spatial options and priorities.

CommonGround can be run with printed maps and tangible materials or with the digital LandscapeLab platform. In the digital set-up, the platform adds a game-based geodesign layer by connecting collaborative design to a modelled feedback system and 3D visualisation. This enables the group to move between local experience, mapped evidence and design proposals within the same conversation.

Digital LandscapeLab component	What participants can do
Interactive planning table	Participants place, move or combine tangible tokens and draw areas directly on a shared, data-based map.
Gamified feedback	A transparent rule set translates spatial choices into accessible indicators, so participants can compare potential effects, synergies and trade-offs.
3D landscape visualisation	An immersive GIS-based visualisation makes landscape changes visible from selected viewpoints and supports discussion across knowledge backgrounds.

In a low-tech version, printed maps, transparent overlays and indicator cards can be used to support the same co-design and reflection process.

What the Method Supports

- Co-design and communication among participants with different knowledge backgrounds.
- Collaborative learning and consensus-building between participants.
- A shared spatial language for discussing local opportunities, constraints and priorities.
- Systemic thinking by showing relationships, co-benefits and trade-offs between proposed interventions.
- Tangible outputs - scenario maps, priority areas and a documented set of measures or follow-up questions.

USE IT WELL

CommonGround works best as part of a broader collaborative process. Prepare the problem framing and data carefully, and make clear how workshop outputs will be taken forward afterwards.

PREPARATION

2. Set up a Workshop that People Can Use

Data preparation and the development of a clear workshop question are the primary tasks. Start with a challenge that is specific enough to work on spatially, yet open enough for participants to contribute different perspectives.

People	One moderator/facilitator; ideally 8-12 participants; a deliberate mix of local authorities, practitioners, residents, researchers, educators or students.
Physical Set-Up	A computer with sufficient graphics performance; a projector or large display; an interactive planning table with overhead projector, webcam, tangible tokens and erasable area-input surface. A VR device is optional.
Spatial content	A concrete planning challenge; base maps; GIS layers for visualisation and game logic; a set of feasible NBS measures; and clear indicators for the discussion.

Prepare the Content Together with the Facilitation Team

- Formulate a focused question, for example: Where could NBS reduce surface-water flood risk while also improving biodiversity?
- Decide what participants may change, what is fixed, and which constraints must be respected.
- Choose a limited set of understandable indicators and explain how each indicator is calculated or interpreted.
- Create or compile GIS layers for the base map, NBS options, relevant assets and protected or constrained areas.
- Test the installation, data layers and workshop instructions with a small pilot group before the event.

PRACTICAL NOTE

The physical table is only one possible interface. If the full installation is not available, the same co-design logic can be used with projected maps, printed layers or other digital mapping set-ups. What matters is that participants can jointly make spatial choices and discuss their implications.

FACILITATION GUIDE

3. Suggested Workshop Flow

The sequence below is a starting point for a 2–3 hour workshop. Timings can be adjusted to the group, the complexity of the data set and whether participants already know the place and the NBS options.

Step	Phase	What happens	Time
1	Frame the Challenge	Introduce the planning question, objectives and decision boundary. Clarify what the workshop can and cannot decide	10 min
2	Explore the Place	Present the study area, relevant NBS options, planning constraints and the indicators used to explore scenarios.	10 min
3	Identify Sites	Each participant selects sites on the map and argues for or against developments at these locations.	30 min
4	Build Scenarios	Participants place, move or combine interventions on the interactive map to develop alternative NBS configurations.	30 min
5	Test, Discuss and Iterate	Use the visualisations and indicators to compare emerging effects. Discuss uncertainties, synergies and trade-offs; then revise scenarios.	30 min
6	Compare Scenarios and Agree Next Steps	Identify priority areas, preferred measures, open questions and practical pathways for follow-up.	20 min

Facilitation Tips

TIP

Keep the number of measures and indicators manageable. A workshop becomes more meaningful when participants have time to interpret feedback, question assumptions and revise a scenario rather than simply placing many tokens on the map.

Make participation inclusive by assigning clear turns, inviting different forms of knowledge and recording points of disagreement. The aim is a well-informed conversation, not forced consensus.

FROM WORKSHOP TO PRACTICE

4. Use the Results Beyond the Workshop

A CommonGround session should leave a trace that is usable beyond the event. Save the scenarios and capture the discussion.

Typical Outputs

- Spatial data or screenshots of participants' plans and scenario maps.
- Priority maps or shortlists identifying locations that merit further investigation.
- A documented selection of NBS measures, design ideas and implementation questions.
- A shared record of perceived opportunities, constraints and trade-offs.

FOLLOW-UP	Share a short workshop record with all participants. State which outputs are inputs to further analysis, which require political or technical validation, and when the group will hear back about next steps.
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Adapt It to Your Context

Format	How to adapt it
One-off workshop	Use the five-step flow above for a focused planning dialogue with a defined local challenge.
Course format	Develop the data layers, intervention library and scenarios with students over a semester; use the workshop as a synthesis moment.
Longer co-design process	Run several sessions with the same stakeholder group, refine scenarios between sessions and integrate outputs into the wider planning process.

5. Reuse and Technical Resources

LandscapeLab platform: [Visit the LandscapeLab platform](#)

Application for Photovoltaic Planning: [Use Case Renewable Energy](#)

Open-source code: [Open the LandscapeLab code repository](#)

Interactive table set-up: [Open the interactive-table set-up documentation](#)

6. Example: Multifunctional Hedgerows

Workshop question: Where could multifunctional hedgerows strengthen biodiversity and climate resilience while remaining workable for local farming?

1. Frame the Challenge

The facilitator introduces the local challenge, the workshop objective and the decision boundary: the session develops and compares options, but does not decide where a hedge will ultimately be planted.

2. Explore the Place

Participants examine the map together, including existing hedgerows, field boundaries, farm access, settlement edges, protected areas and other relevant landscape features.

3. Identify Sites

The group identifies suitable and alternative locations for hedgerows, as well as fixed exclusion zones and potentially contested areas where land use, access or ownership may create constraints.

4. Build Scenarios

Participants place and compare hedgerow options on the map or interactive table. They specify the location, length, width, structure and orientation of each proposed hedge.

5. Test, Discuss and Iterate

The group considers potential benefits, such as habitat connectivity, shelter and microclimatic effects, alongside constraints including land take, shading, field access, maintenance and ownership. In the digital set-up, indicators and 3D visualisation support this discussion; in a map-based set-up, overlays and indicator cards can be used instead.

6. Compare Scenarios and Agree Next Steps

Participants compare the scenarios, identify promising locations and document unresolved trade-offs.

