

The River Nith: A Sustainable Future Visioning Workshops 2023 Report



Prepared for Galloway and Southern Ayrshire UNESCO Biosphere
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Contents

Summary	3
Synthesis of Results	4
Asset Map – Current Resources for Sustainable Change	4
Shared Strategy Aspirations.....	5
Shared Vision, Objectives & Priorities	6
Feedback on the engagement process and the sustainability guidelines.....	7
Introduction	9
Sustainability guidelines & the workshop process.....	11
Analysis of ideas from across the engagement	13
Nature, Open Space and Landscape.....	15
Recreation, Access and Wellbeing.....	16
Water and Flood Management	17
Livelihoods and Local Economy.....	18
Skills, Learning and Volunteering	19
Collaboration, Communication and Coordination	20
Neighbourhood and Built Environment	21
Culture, Heritage and Art	22
Key themes specific to different areas along the river.....	22
Regional stakeholder workshop	27
Regional stakeholder feedback after sharing initial analysis.....	27
Feedback on workshop process and sustainability guidelines.....	28
Leading to action.....	29

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¹ This report has been collated and produced on behalf of the Galloway and Southern Ayrshire UNESCO Biosphere. Ownership of the data used in the report belongs to GSAB. All participants in the workshops were aware that the data collected in the workshop would be anonymised and made publicly available and accessible to all partners (excluding any personally identifiable information). All participants were aware that this data could be made available for research and for developing new ideas for the Future River Nith.

Summary

During 2023, a series of sixteen engagement events and workshops were designed and delivered in a partnership² focussed on the river Nith, the longest river in Galloway and Southern Ayrshire UNESCO Biosphere, to collaboratively envision and think creatively towards a more sustainable future for the local environment and surrounding communities.



All events were centred around an innovative approach to sustainability—the RoundView³. The RoundView takes the overwhelming mess of pressing environmental and social issues we face, and offers a simple yet comprehensive new way to understand both their root causes and potential solutions to them. It gives an accessible handful of guidelines that can be understood by anyone.

Feedback has been very positive and there is enthusiasm to continue and extend this work—in more contexts, and with more key stakeholders and community members. The ideas in this report represent the seed of a truly shared vision and strategy, with the process potentially marking a new phase in the cross-sectoral, cross-agency co-production with the community that will be needed in for transformation towards systems that work equally well for nature and people.

Based on the feedback and analysis of this process, a key recommendation for GSAB is to extend this work across the UNESCO Biosphere and river catchment, acting as an umbrella organisation, in partnership with Nith Life. Delivering practical project ideas developed in the workshops offers an opportunity for further engagement and collaboration to develop synergies amongst partners. This would include making the RoundView and Ketso kits available as a resource loaned to project partners. This has the potential to become a global exemplar of inclusive sustainable management of a region, and a further recommendation is the should be trialled and rolled out in other river catchments and UNESCO Biospheres.

Workshop participants were facilitated through a structured process⁴: identifying existing assets and positives; exploring new possibilities for sustainable change in the region; and considering how best to collaborate and communicate to take this forwards.

² Partners were: UNESCO [Galloway and Southern Ayrshire UNESCO Biosphere](#), Nith Life, the Stove Network, and the University of Manchester

³ Developed through research at the University of Manchester the [RoundView](#) is a science and systems based framework for more sustainable thinking, decision-making and design.

⁴ Workshops used [Ketso](#), a workshop toolkit designed to support inclusive and creative collaborative thinking.

In addition to the facilitated workshops (roughly 80 participants), ‘installations’⁵ in libraries and cafes brought an estimated 60 members of the public into the process in a fun and scalable way. There was a huge amount of enthusiasm and positivity from all involved, appreciating current work, looking forwards, and finding collaborative solutions to shared challenges. The river is seen as an underappreciated asset, full of beauty and potential as the focus for transformational change.

A brief summary of many of the key results (all being ideas generated by participants) follows. This is subsequently explored in greater depth in the main body of the report below.

Synthesis of Results

Asset Map – Current Resources for Sustainable Change

<p>Nature, open space & landscape</p> <ul style="list-style-type: none"> • The River Nith – beauty & biodiversity • The freedom to roam • Local topography: saltmarshes, mudflats and peatland • Large open spaces with clean air and low noise levels • Riparian habitat 	<p>Recreation, access & wellbeing</p> <ul style="list-style-type: none"> • Being able to access and walk along the river is an ‘Invaluable resource for people’s health and wellbeing’ • Walking • Swimming • Water sports • Fishing & hunting
<p>Water & flood management</p> <ul style="list-style-type: none"> • Scientific analytical surveys • DAMP – ‘Dumfries Archive Mapping’ • Lidar surveys • Natural flood mitigation measures 	<p>Livelihoods & local economy</p> <ul style="list-style-type: none"> • Farming & produce from the land • Tourism • Guiding • Angling & wildfowling (noise concerns)
<p>Skills, learning & volunteering</p> <ul style="list-style-type: none"> • Broad experience, knowledge and skills of the different people within the area • Local communities & community spirit • Passion & courage • Education opportunities 	<p>Neighbourhoods & built environment</p> <ul style="list-style-type: none"> • Parks and walking paths along the river • Cute cottages • Small towns and settlements • Public transport
<p>Collaboration, communication & coordination</p> <ul style="list-style-type: none"> • Nith Life • Organisations: the Stove, UNESCO Biosphere, Nith Fishing Trust, Solway Yacht Club • Local council support, NithRaid • Close knit communities 	<p>Culture, heritage & art</p> <ul style="list-style-type: none"> • Local historical links to the poet Robbie Burns • Connections with heritage sites: Striding Rock, Drumlanrig Castle • Artists, creatives, activists • Singing & music making

⁵ The installations featured hands-on games using images and poetry based on the RoundView to appeal to and engage with a wide range of audiences.

Shared Strategy Aspirations

Create a Shared Vision

- Bring delivery partners together to create a catchment wide vision we can jointly work towards.
- Give people a glimpse of the future in the present.

Collaborate

- Umbrella project/brand that everyone can work under, perhaps GSAB, working in partnership with Nith Life?
- Meaningful community engagement. Work through solutions.
- Good communication between different organisations and communities.
- More of these kinds of events. Meet different people.
- Land management plans - integration of stakeholder aspirations.
- Helping land managers identify nature based solutions.
- Forum for academic - expert - public knowledge exchange.

Decision making

- Long term planning – avoid 'short-termism'.
- Ensure synergies and trade-offs of any 'solutions' are analysed.
- Periodic reviews.
- Collect data about outcomes and changes in perception to inform future planning.

Connect / Share

- Work under the umbrella of GSAB to develop synergies.
- Have the Ketso/RoundView resources available to be loaned for groups.
- Use consultation techniques/learning for other projects.

Funding

- Nature based finance. Government regulation.
- How we feed the Nith Visioning into reality for the investment opportunities in Dumfries?

Consider the broader context

- Community Empowerment Act.
- Regional Economic Strategy.
- Agricultural subsidy system.
- Enforcement of existing legislation?

Shared Vision, Objectives & Priorities

Overall Vision

- People enjoy the landscape and take care of it.
- Healthy for nature *and* people; resilient communities.

Measures of success / longer term objectives

- The UNESCO Biosphere and partners is a global exemplar in inclusive sustainable management of the region.
- UK's first river based national park.
- Regenerative farming practices implemented.
- Nith requires cool clean water - get that right and many of the issues will be fixed.
- River containing a healthy population of salmon. A good environmental monitoring species.
- Highly wooded landscape - habitats and riparian.
- Continuous ecological habitat pathway along river.
- Functioning peatlands.
- Heritage/culture integrated with the natural management of the river/region.

Nature recovery & regeneration

- Increase biodiversity and good quality habitats throughout catchment.
- Reduce or eliminate pollution, increasing water quality.
- Improve farming practices.
- Natural flood management.
- Shift towards renewable energy.
- Increase re-use, recycling: towards a circular economy.

Maintain, improve and create infrastructure

- Many repairs needed to existing walkways, paths and other infrastructure (e.g. bridges).
- New, connected, long distance pathways for greater accessibility.
- Increase quality information provision (access information, signs, maps, etc.).
- More information and support for swimming, watersports and accessing the river.

Education

Enhance and support sustainability education in schools, e.g.

- Education pack for schools to help reconnect pupils with natural and cultural heritage. (Physical and digital).
- Outdoor educational lessons and activities for children.
- Dedicated education officer to work with schools.

Enhance and support sustainability education for the public, e.g.

- River literacy.
- Community engagement in habitat improvement and biodiversity monitoring.
- Guided walks, tours and talks about the history of the area.

Art, culture & heritage

- Celebrating cultural heritage.
- Display of Haaf net construction and assembly.
- Focus on current local artists as well as Robert Burns.
- Exhibitions of art, along the river, inspired by ever-changing but eternal beauty.
- Find ways to link Nith community along its length - connect them.
- Local festivals and heritage tours.

Livelihoods & opportunities

- Eco-tourism has hugely untapped potential.
- Local production / traditional crafts & skills.
- Locally grown produce available to communities (and affordable).
- Funding more citizen science projects, monitoring and restoration.
- River Stewardship: Groups to monitor the river and wildlife in local area, especially create skills development and opportunities for young people.

Feedback on the engagement process and the sustainability guidelines

The engagement process (structured process using Ketso)

- It was very inclusive - the chatty didn't dominate and everyone gets a chance to put in ideas.
- it is like watching a neural network coming together.
- Good basic idea which kept everyone engaged. Really good way of exploring a complex issue. I liked the colour coded progress from what we have to what we would like to have. Very simple, easy to understand and effective.
- There were some strands [on the Ketso] that didn't have a lot of info on them, that helped us to focus on those areas, and work to balance it out, we could see that some areas were under-developed.
- Interesting discussion, Think tank for ideas.

Sustainability guidelines framing (The RoundView)

- This has given me hope.
- The jigsaws were especially useful - we spent a lot of time with them trying to work out what the three causes of environmental problems were (but I got less from the word games).
- I really liked the word games, and the way they were 3d and you could turn them around, learning new things about Carbon and I liked the Cotton and Poison game.
- I was surprised how difficult the challenge was - not just thinking about what was relevant, but thinking about what was most fundamental.
- We needed the RoundView to bring it back together, otherwise it would have just been some visioning not connected. It did make people think differently and develop some new ideas.
- Made me drill down more on thought processes and implications.
- Like the clarity about the three main causes of eco-trouble.
- Very powerful solution narratives about the sources (of environmental problems).
- Thinking of whole lifecycle.



Introduction

The River Nith catchment covers approximately 1,230 km², flowing from the industrial uplands and coal mining around New Cumnock, through agricultural land of Dumfries & Galloway, the town of Dumfries itself and the village of Glencaple, where it enters the sea.

The [Galloway and Southern Ayrshire UNESCO Biosphere](#) (GSAB) was designated as one of 700 UNESCO Biospheres around the world in 2012. It spans almost 9,800 km² in SouthWest Scotland, including the River Nith catchment on its North and Eastern edge. GSAB works in partnership to support conservation, learning, and a sustainable local economy. GSAB were interested in working in partnership with the University of Manchester and Nith Life, an emerging network of local enthusiast for the River, supported by the Stove Network, to engage communities, land and fisheries managers as well as wider stakeholders in creating a vision for a future sustainable River Nith.

This report summarises ideas developed in a series of engagement events run along the River Nith in 2023. Workshops were held to identify what people valued about the river Nith, key opportunities and how these ideas could be brought together to develop a shared and sustainable vision for the future of the river catchment.

There were 16 events, including: 4 community visioning workshops, 3 workshops in schools, 1 with regional stakeholders, 1 feedback event, 7 pop-up events / interactive displays in libraries and cafes with an estimated number of 140+ participants. Each workshop was supported by GSAB and members of Nith Life, community members from the wider area, who were invited by newsletters, social media and notices on local notice boards, and members of organisations working in the local area, such as the Development Trusts, Councillors and the Scottish Environment Protection Agency. As such they represent a shift towards co-production, where community members and agencies work together to develop new solutions and take action for change.

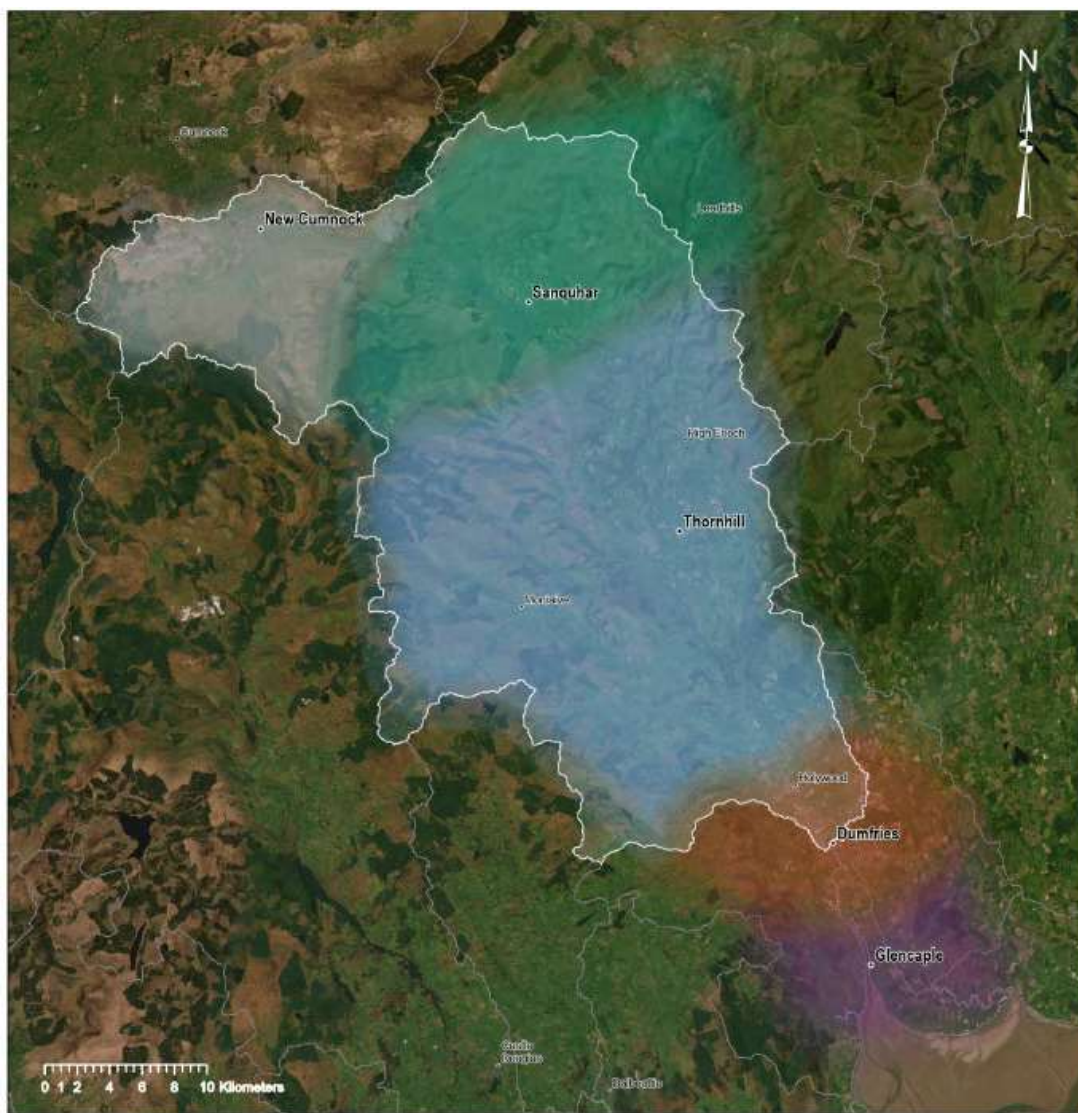
Longer, visioning workshops were delivered in Sanquhar, Thornhill, Glencaple and Dumfries. The map⁶ below shows the locations and rough geographies covered by the workshops. The engagement included pop-up events at community festivals, and installations in community spaces such as cafes and libraries where people were invited to leave feedback. It was noted by a member of the Nith Life group that the pop-up stalls in community spaces helped increase the visibility of the initiative, as well as gathering ideas from a wider range of people than those who were able to attend a longer workshop. There was an observation that several passers-by in these spaces commented that they had seen the stalls in other places, and that this seemed to help with recognition and interest.

This has been iterative process, with several rounds of feedback and development. The initial set of themes that were used to structure the dialogue were developed in discussion with GSAB and Nith Life, and they were refined after the first workshop. There were two key feedback workshops December 2023, one for the members of Nith Life and one for key stakeholders from agencies

⁶ Map created by James Tomlinson, Gis Technical Specialist, School of Environment, Education and Development, University of Manchester

Role : working in the region. In these workshops the summary of results to date from the community visioning workshops were presented. The workshop with the regional stakeholders gave an opportunity to develop ideas for action and synergies amongst their work, as well as exploring the policy drivers, barriers and ways to overcome barriers.

FIGURE 1 MAP OF RIVER NITH AND WORKSHOP LOCATIONS



Earthstar Geographics, Contains public sector information, licensed under the Open Government Licence v3.0, from Crown Estate Scotland

Note that the geographies are rough, and shown here as “fuzzy boundaries” as the focus of the workshops was on the River Nith and the local area.

The workshops aims were to:

- Deepen understanding of what is already working, and the key assets and resources of the area
- Develop creative ideas to move towards a more sustainable future along the river
- Ensure that the River Nith is a significant part of the region’s sustainability plans for the future
- Provide opportunities to learn from each other
- Develop new ideas of how to work together

The ideas shown here reflect a summary of the discussions in the workshops and engagement events, and as such an important resource for guiding future activities. There are still gaps. Whilst there was an endeavour to gather ideas from a wide a range of the population, there are inherently gaps in geographical and demographic coverage. For instance, to date there have not been any of the more in-depth workshops held in the north-west reaches of the river, around Cumnock.

To an extent, this gap was countered by lighter-touch engagement with exhibits and pop-up events at community festivals that were carried out as part of the project.

People who might not have the time, inclination or capacity to attend a longer workshop were able to give their feedback at these stalls, such as the one shown here in the Stove Café. There were pop up stalls in cafés, libraries and at community events, such as Nith Raid.



FIGURE 2 ROUNDVIEW POP UP STALL

To move towards truly effective collaboration and co-production requires on-going engagement, and this represents a step in the journey, building upon the earlier work of partners and community groups, and providing a foundation for further exploration of these key ideas, and learning from future action and engagement.

Sustainability guidelines & the workshop process

A key aim of these workshops was to spark new thinking around sustainability for the area and the river. To spark such dialogue, the workshops and pop-up events included a brief introduction to the [RoundView](#). This is a big-picture, positive framework for sustainability learning and communication. The RoundView offers a simple set of guidelines to redesign our systems so we don't cause environmental problems in the first place.

The RoundView approach recognises that 'sustainability' is about both nature recovery and human wellbeing. As both are necessary; our thinking needs to systematically consider both, finding the best trade-offs in the short and long term, and ideally seeking 'win-win' solutions for nature and people together.

Hands-on learning tools bring the RoundView to life, and enable conversations across multiple audiences from primary school children to community groups to policy makers.

Dr Joanne Tippett and Jamie Farrington, University of Manchester and Faith Hillier, GSAB, facilitated the community visioning workshops on behalf of GSAB, with members of Nith Life facilitating workshops in schools and community events, in particular Ben Hobman working in schools.⁷



FIGURE 3 HANDS ON LEARNING TOOLS (ROUNDVIEW)

A hands-on toolkit for creative engagement, [Ketso](#), was used in the workshops to ensure that everyone had a say, and to make sure that all ideas were harnessed and structured into key themes. Participants were asked the following questions, on a different coloured ‘leaf’:



Existing Assets and Resources



Creative New Ideas



Ideas for Sustainability (developed after introducing the RoundView framework of sustainability)

⁷ This work was supported by a British Academy Innovation Fellowship, held by Dr. Joanne Tippett of the University of Manchester, and Matt Rabagliati, Head of Policy, Research and Communications at the UK National Commission for UNESCO, and an AHRC and ESRC Impact Acceleration Account Secondment with UK National Commission for UNESCO and Manchester UNESCO City of Literature.

FIGURE 4 PARTICIPANTS USING KETSO TO DEVELOP IDEAS AT THE WORKSHOP



For each question, participants first had the opportunity to develop ideas on their own.

These ideas were then shared with the group at the table and placed on the shared Ketso workspace, forming clusters of similar ideas.

Ideas were placed around themes (on the branches of the Ketso felt) to structure the conversation.

The resulting picture of participants' thinking served to record the ideas, structure the discussion and stimulate more ideas as they went along.

The themes used to organise the discussion themes were:

- Nature, Open Space and Landscape
- Recreation, Access and Wellbeing
- Water and Flood Management
- Livelihoods and Local Economy
- Skills, Learning and Volunteering
- Collaboration, Communication and Coordination
- Neighbourhoods and Built Environment
- Culture, Heritage and Art.

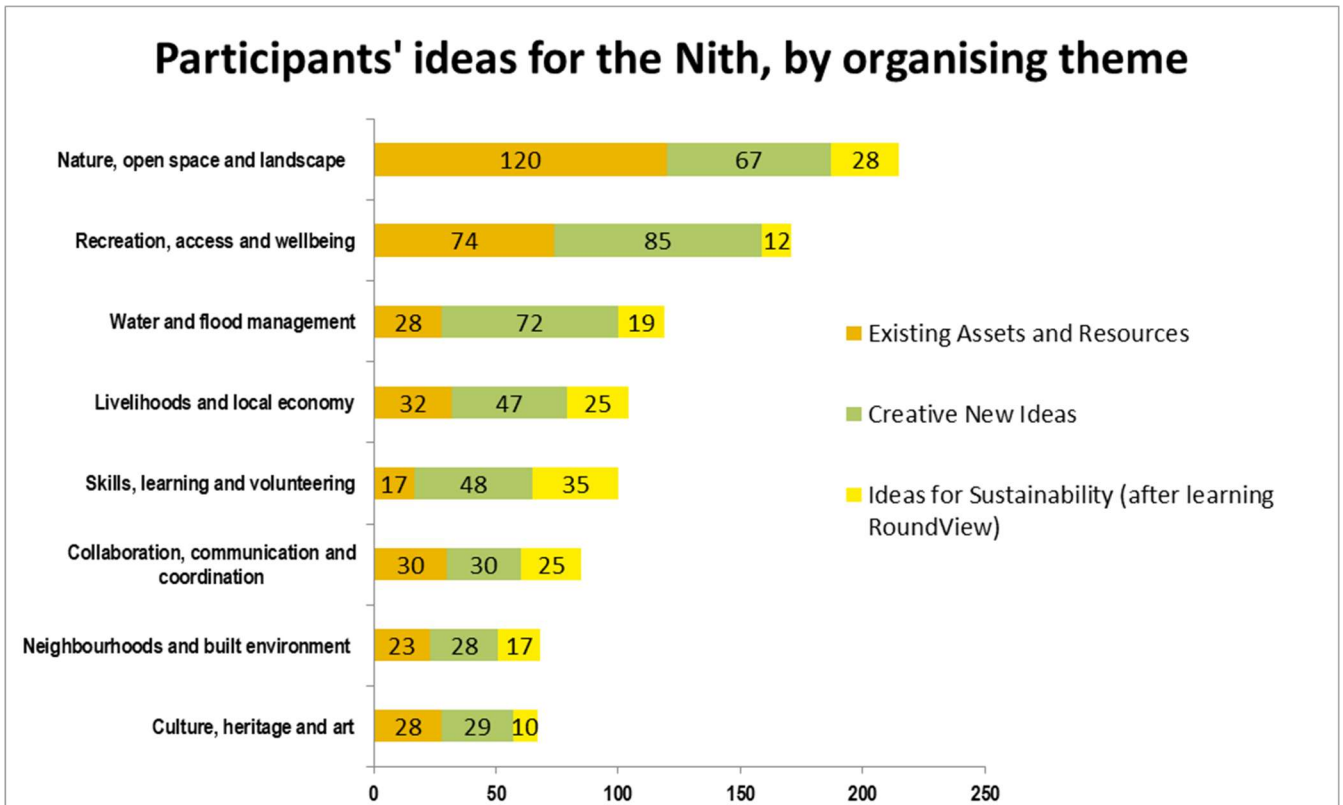
The rest of this report summarises the key themes and ideas for action that emerged in the dialogue.

[Analysis of ideas from across the engagement](#)

Participants across the workshops and pop-up events contributed a total of 951 ideas about the River Nith and the surrounding area. A further 250 ideas were gathered in the stakeholder workshop, summarised at the end of this report.

The overall distribution of ideas developed in the community workshops across the themes that were used to structure the dialogue can be seen below.

FIGURE 5 CHART SHOWING DISTRIBUTION OF IDEAS ACROSS ALL VISIONING WORKSHOPS



The theme of ‘Nature, open space and landscape’ had the most ideas in total – and the highest number of ‘Existing assets and resources’ (what is already working / good about the area, at 120). The theme with the highest ideas of new ideas for the future was ‘Recreation, access and wellbeing”, closely followed by ‘Water and Flood Management’, which conversely had a relatively low number of ideas around what was working.

The theme with the highest number of ideas for sustainability prompted by the RoundView element of the workshop was “Skills, volunteering and learning”. The relatively low proportions of ideas around the more socially-orientated themes of skills, collaboration, neighbourhoods and culture could be explained by the focus on the river and environmental sustainability. There were still key ideas for the future of the area under these themes.

The following analysis pulls out key ideas from the database of ideas transcribed, in the order of which organising themes had the most ideas, as shown above.

Spreadsheets with all ideas transcribed can be downloaded from the following link: roundview.org/nith⁸.

⁸ This report has been collated and produced on behalf of the Galloway and Southern Ayrshire UNESCO Biosphere. Ownership of the data used in the report belongs to GSAB. All participants in the workshops were aware that the data collected in the workshop would be anonymised and made publicly available and accessible to all partners (excluding any personally identifiable information). All participants were aware that this data would be made available for research and shared to enable development of new ideas for the Future River Nith.

Nature, Open Space and Landscape

This theme had highest number of ideas around what is going well. The River Nith was noted as being a very important asset across all workshops, with many comments on its beauty, 'reflection of light on its surface' and its key biodiversity and wildlife, from kingfishers and herons, to otters, brown trout and salmon graylings, to moss and lichen.

Further key ideas around assets included:

- Parks and walking paths and the freedom to roam.
- Local topography: saltmarshes, mudflats and peatland.
- Large open spaces with clean air and low noise levels.

Whilst this was the theme with the highest number of ideas around what was working, with a particular focus on the incredible asset of the landscape and the landforms itself, there was a sense of great potential to do more, to 'Work with nature to renew the river'. Peatland, riparian and montane habitat restoration were all discussed, along with multiple options to improve biodiversity.

Aspirations included introducing beavers (with some notes of caution, and the idea that this should start small and scale up) and White-tailed eagles, and other top predators, along with discussion of 'rewilding for catchment management purposes'.

Participants wanted to increase the biodiversity, through introducing montane plants, planting native trees to improve biodiversity and prevent flooding, and riparian planting (whilst the riparian habitat was seen as a key asset, there was awareness of considerable scope for improvement).

There were at least 28 mentions of trees and woodlands, and specific ideas included:

- community tree nurseries and local seed collection,
- grow and plant legacy trees in valley,
- restore native forests,
- manage forestry towards less flooding,
- forestry mounding helps slow the water flow into the river.

In addition to trees, there was an emphasis on the creation of wildflower meadows and wetland and peatland regeneration, with a strong emphasis on the need for more wetlands and the potential value of creating reed beds for habitat as well as for water purification.

There was interest in community wildlife monitoring and observation, and consideration of wider climate change implications, such as the need for adaptation for drought.

An important step forward that was discussed was the removal of 'short-termism'. For ideas for future sustainability, participants suggested that gaining a 'Wildlife reserve status' for the river could be a powerful way to think on a bigger, more ambitious scale. One participant commented after learning the RoundView, that they had "Never thought about the Nith as an organism", and another commented that we should "Treat the river as a living thing".

Recreation, Access and Wellbeing

A key theme was the fact that being able to access and walk along the river is an 'Invaluable resource for people's health and wellbeing', with at least 30 mentions of walking, 39 mentions of swimming and water sports (e.g. boating, canoeing, boarding), and 11 mentions of fishing and hunting.

Participants indicated that the walkways along the rivers were well used and were important in bringing people closer to the river. A key theme to emerge was, however, the need to repair existing walkways and pathways where needed (for example, Glencaple to Kingholm), and to improve connectivity for people as well as wildlife, with specific ideas including:

- Improved access for active travel, walking and cycling along the riverbanks.
- Producing a map of Nith Amenities and more information about recreation.
- New long distance paths, and connect pathways for greater accessibility.
- Increase accessibility to walk alongside the river, including creation of new footbridges and crossings.
- More walks published.
- Access sign posting for potential visitors
- Information boards on local wildlife
- Build infrastructure to allow people to enjoy the river.
- Develop places to engage in water sports: rowing, canoeing, kayaking, paddle-boarding, swimming, and create water sports facilities to accommodate existing clubs,
- Running a tourist boat from Whitesands to Glencaple.

A desire to 'allow wild swimming' was expressed, and a key theme to emerge was the need to improve water quality to make swimming and water sports more feasible, and to communicate about these improvements. There was some discussion about uncertainty about water quality – and the need for more communication about where the water is clean enough to allow for swimming and water sports.

There were concerns raised about safety – and in particular at Glencaple discussions around how water safety signs can be especially off-putting, making the river seem a forbidding and dangerous place. There was discussion of the need to explore ways to combine important safety information and warnings with the possibility of more nuance and invites to enjoy the river safely. It was felt that more could be done to explore ways to improve the communications around dangers from the water. This was seen as needing to be done in conjunction with improving facilities and access to the river, and communication about that safe access to make more people aware that they can enjoy the river.

There was also discussion around enabling and encouraging a greater number of waterside activities, such as: supporting more kayaking groups, art activities such as river painting and sculpting, mindful events, Haaf netting workshops and activities and 'Have A Go' events.

Suggestions provided by participants as a means of increasing sustainability included:

- Providing tourist boats to use that were powered by electric, sail or were pedalos.
- Work more closely with Sustrans to better utilise existing walkways and cycle paths.

Water and Flood Management

Participants across all workshops highlighted awareness of the issues around flooding and the need for better flood protection and management. They highlighted importance of current scientific analytical surveys that have been conducted such as the 'DAMP – Dumfries Archive Mapping' and 'Lidar surveys' to map the river and the flood plain for the purpose of understanding it and to analyse any changes that may be happening to the river.

Natural flood mitigation measures (re-meandering of sections of the river that have been straightened and peatland restoration) were highlighted in all of the workshops outside of Dumfries, with one comment noting that this was 'to protect homes / businesses in Dumfries and further down'.

The concept of rewilding for catchment management was also discussed under the nature theme. There were 15 mentions of Natural Flood Management and related Nature-based solutions including interest in:

- Natural flood plains reinstated to reduce flood risk in the built up area and downstream flooding.
- Connectivity mapping of all attributes feeding into Nith.
- Put back the bends and flood plains and slow the river down.
- Introduction of new species into the river system, e.g. beavers.
- Work in partnership with landholders to allow natural flood management.
- Local council to take control of the flood plains and plant with native trees, goat willow, alder, birch etc. Slow the flow.

It was highlighted that the council requires more funding to enable greater investigation and maintenance of the river.

Participants indicated that they wanted 'stronger policing of water quality' including conducting testing and cleaning, and a 'Dedicated SEPA River Officer'. In particular, participants indicated that they wanted an investigation to examine if there was any 'toxic waste (heavy metals - ICI?)' present in the water.

There was a strong sense of wanting to 'stop rivers being treated as sewers' and to 'protect the River Nith from pollution and waste', with ideas to improve water quality including:

- Improved farming practices that affect water running into waterways (this is discussed in more detail under the theme of livelihoods).
- Road improvements to reduce erosion and sedimentation into waterways.
- Reed bed filtration.

There was also discussion of the need to consider the estuary:

- Address coastal and sea fish-farm diseases.
- Reconnect flood plain.
- Salt marsh regeneration.

Livelihoods and Local Economy

Across all workshops participants noted a range of different economic activities and roles that were connected to the river and local landscape, in particular: angling, guiding, and farming. Wildfowling was also mentioned as an asset, but with some disagreement, as the 'noise is bad for animal and humans'.

Tourism was highlighted as a key asset, including the activities of angling and guiding, with an idea for the future of guided kayaking and river expeditions. Eco-tourism was highlighted as a key venture for sustainability, with the potential for more ecotourism, such as foraging, bird watching and other nature based tourism and the tourist industry. The important role of local businesses, such as the Swan, Nith Hotel and Boathouse, was highlighted.

There was discussion revolving around long-term planning and the need to implement periodic reviews of ongoing strategies and projects. Participants noted the need to preserve the UNESCO Biosphere, as they believed it is 'helpful to businesses/organisations', and helps to raise the profile of local businesses, and their moves towards more sustainable practices. Participants highlighted there was still a need to encourage more recycling and reusability of resources amongst local businesses, whilst there has been progress a lot remains to be done.

Farming and local landowners were signified as being especially important for the future of the River Nith, with 46 mentions – the majority under the theme of 'livelihoods and the economy', but with mentions across all of the other themes (apart from 'neighbourhoods and recreation').

There was emphasis on the need to produce fresh, local food, to make the most of locally produced fruit and wool, and a strong sense that farming is a key asset in the area, with high quality food production. Whilst regenerative farming and gardening was also noted as an existing asset, there were many ideas for new practices to be more sustainable, including:

- Regenerative farming and provide ways for farmers to conserve environment and make a living.
- Embrace innovative technology and products (with a caveat that some older farmers could struggle with new technology)
- Digital farm support.
- Organic and regenerative farming
- Locally grown produce available to communities (and affordable)
- Significant tree planting upriver and restore floodplains (subsidies to farmers)
- Bulrushes, farming of wetlands
- Food from water, e.g. seaweed and salt.

There was a good deal of discussion of the need to tackle run-off and pollution from farming:

- Increase water quality, decrease agricultural pollutants - pesticides etc.
- More innovation to reduce pollutants.
- 1. Collect Dumfries Food Waste 2. Process in anaerobic digester 3. Produce organic fertilizer 4. Use on fields instead of fossil fuel fertilizer
- Working with farmers to reduce pollution of river from agricultural practices
- Farmers education programme to maintain river and target pollution organisations
- Change agricultural rules. Less fertilizer use
- Support the law makers who are brave enough to tackle sewage and farm run-off and make sure farms get paid to do bio-friendly things.

There was a strong sense of a need for better collaboration, to 'Encourage knowledge sharing between sustainable farmers and landowners and other local farmers and landowners', with the idea that 'farmers, landowners, and fishing clubs all need to work together. It was seen there was more of a need to 'work with farmers and landowners for biodiversity', promoting practices such as leaving farm margins. There was a call for dedicated project officers to work with farmers and landowners.

Participants wanted to change to more sustainable economies and sustainable practices around the Nith. There were several ideas developed around the need to consider alternative energy generation, micro hydro and energy generation from the river and tides. Participants were highly supportive of greater research being conducted into both greater sustainability and links between the local economy and ecology.

Skills, Learning and Volunteering

Across the workshops, participants highlighted the importance of community and the assets of the broad experience, knowledge and skills of the different people within the area.

A key asset highlighted in this theme was the current educational opportunities provided by the Nith. However, participants thought this could be developed further. One idea that was highlighted was the creation of a dedicated 'Education Centre' for the river. There was also discussion about collaboration between schools across the catchment, and ways to organise trips where children could see the source of the River to Solway. As well as taking children to the river, it was seen as important to bring the river into the classroom.

There were a great deal of ideas for the future collected, with a lot of ideas for ways to 'Get children outside and grubby':

- Education pack for schools to help reconnect pupils with natural and cultural heritage. (Physical and digital)
- Outdoor educational lessons and activities for children
- Dedicated education officer to work with schools.
- Sustainability awareness and call to action through art
- New school curriculum
- River schools and Eco-schools

Participants from all four workshops wanted to see greater engagement and opportunities for the public to be educated about the river. There were a good deal of ideas around community activities and engagement in future river improvements:

- River literacy
- Finding more citizen science projects, monitoring and restoration.
- Water testing (train volunteers)
- Wildlife recording and involving people in monitoring nature on the river.
- River Stewardship: Groups to monitor the river and wildlife in local area, especially for young people
- Opportunities for work, to keep young people in the area.
- Hosting mass litter picking events in strategic locations, clean up groups.
- Guided walks, tours and talks about the history of the area
- Writing and storytelling activities inspired by the river and wildlife.
- Display of Haaf net construction and assembly.

However, participants stated that they believe greater awareness and education is needed to ensure people made 'good sustainable choices'. They also suggested the need to give more information to local residents on how to recycle and reduce waste in the home. Another point put forward by participants involved informing residents about the health benefits of nature and to encourage health and wellbeing through exercise.

Collaboration, Communication and Coordination

Participants thought that collaboration provided an important method for encouraging sustainability as it could enable the creation of a 'shared vision to promote change', which would create new funding opportunities.

There was a good deal of mention of the strong, and close knit communities, and important assets in the form of organisations that work with them, especially the Stove, the UNESCO Biosphere, River Nith Fisheries Trust and Solway Yacht Club.

Support of the local council and activities such as 'NithRaid' were identified as important. The key asset identified was Nith Life itself, especially as being an important organisation for greater collaboration, with the key idea for the future 'Nith Life constituted to allow fundraising and dedicated staff to deliver improvement'.

There was also a general sense of the need for 'greater communication with everyone', In the future, participants suggested the opening of communication channels with Scottish Government officials and politicians to discuss and get support for any future changes, for example through securing funding. Participants also wanted greater communication between local farmers with the aim of encouraging greater understanding regarding environmental issues and to help them foster new methods that were considerate and helped to protect the river. There was a need seen to create more community links to the River Nith. A participant suggested creative projects that encourage community engagement.

Future ideas that emerged included the need for:

- Clear government environmental policy
- More collaboration between local government and the communities.
- Council leadership on Environmental issues
- Work with academics
- Give people a glimpse of the future in the present
- A greater communication network (using social media) to discuss tides and tidal bores.

In terms of future sustainability, participants indicated the important for outreach and community engagement for the purpose of keeping people connected. They also suggested forming agreements with local businesses and organisations, with the purpose of forming commitments towards being more sustainable in their work practices.

Neighbourhood and Built Environment

Participants highlighted the importance of 'community' and 'community spirit' and 'people who care' across the workshops. To achieve the future aspirations for the River Nith, however, there is a need for greater communication, discussion of community issues and concerns and collaboration with landowners.

There was a sense that local residents felt a connection to the River Nith. A key asset noted by participants under this theme was the idea of there being 'wild river elements. Surrounded by communities.' However, some participants stated that more could be done and there was need for 'More human connection and understanding of the river'.

A key point put forward that could improve the connection between residents and was to pilot 'new innovative schemes and projects'. Participants put forth the suggestion of 'community ownership of the river catchment' as a means of ensuring sustainability.

In addition to this participants also highlighted a need to 'upgrade waste water treatment' and 'repair the sewage treatment wall'. There was discussion of the need for 'A better solution to waste and sewerage' and consideration of the flows of materials from the built environment into the river to prevent pollution, alongside implementing restrictions on 'one use' materials. Greater sustainability could be achieved through reuse of existing building and installing solar panels roofs.

Participants highlighted that the existing paths alongside the river were important and used currently for walking and cycling. There was discussion of the need to promote active transport: 'N.U.D.G.E, public transport, cycling, minimise pollution', working more closely with Sustrans, and mention of the need for 'Integrated public transport' and the possibility of river transport (with a note that this would need careful consideration of possible pollution and disruption to wildlife).

Future ideas to promote wider sustainability included:

- Creating an official waterways route for tourism.
- Repairing bridges, e.g. Kelton to allow through route.
- An ambition to restore Dumfries to Stranraer rail link
- The use of alternative energy in the neighbourhood, e.g. water and wind turbines and harnessing tidal power.

Culture, Heritage and Art

Participants noted a number of existing key assets under this theme, in particular local historical links to the poet Robbie Burns, alongside connections with other heritage sites such as Striding Rock and Drumlanrig Castle.

However, whilst the link with Burns and the cultural heritage of the area was seen as an important and a key resource, there was also one comment that there could be 'Less Robert Burns focus and more focus on current local artists'. Further key assets that were highlighted were 'Artists, creatives, activists' and 'singing and music making'.

Participants wanted to see more cultural and historic connections being depicted along the Nith and suggested the installation of information boards, which could include poetry, art and general information about the Nith and surrounding areas.

Art and celebrating long cultural heritage were clearly seen as key to the future of the river, with ideas for new possibilities including:

- Local festivals and heritage tours
- Art, sustainability workshops or festivals.
- River races (with some disagreement that there could be disruption environmentally).
- River Artists Commissions.
- Tap into awe and joy.
- Exhibitions of art, along the river, inspired by ever-changing but eternal beauty
- Find ways to link Nith community along its length - connect them.
- Stories and memories presented about growing up near the river.
- Employ technology, e.g. augmented reality & QR codes to connect people to heritage.
- A local museum, information points, and an interactive talk.

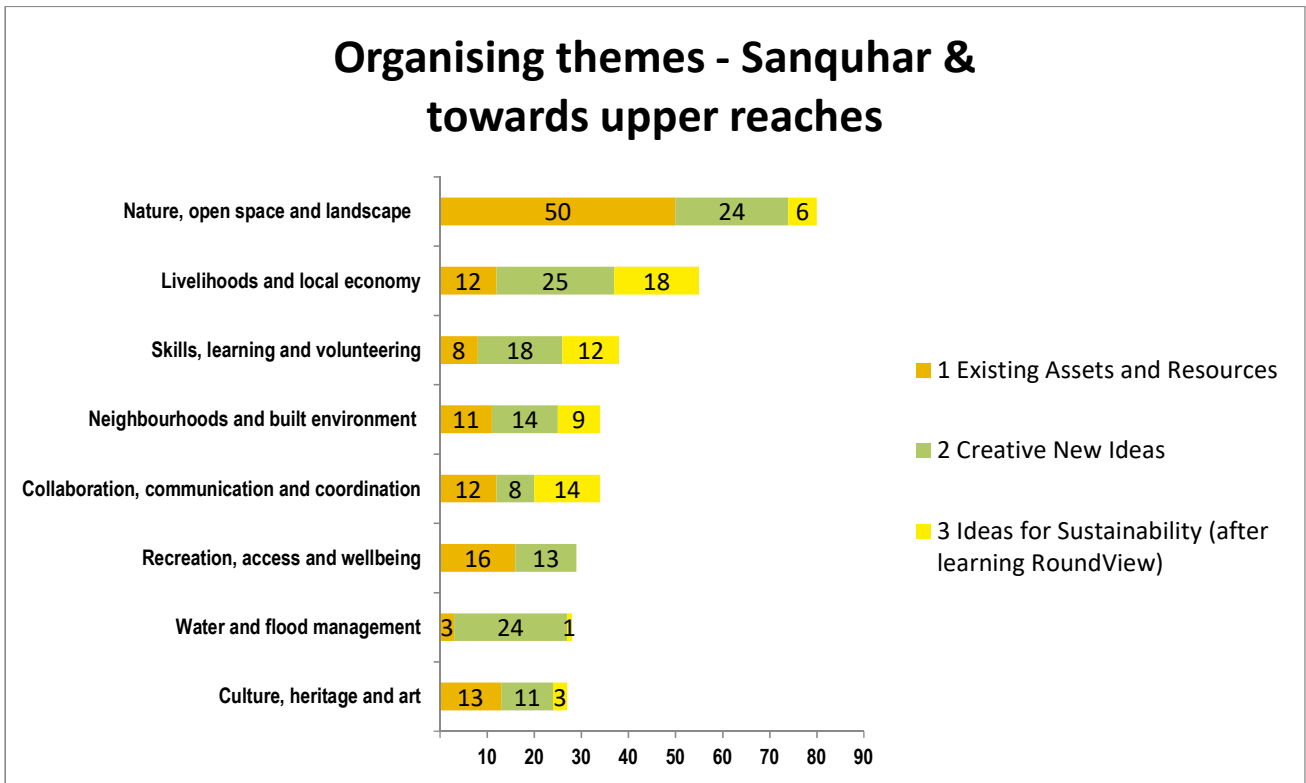
Participants also suggested they wanted to celebrate local heritage and cultural traditions. In particular Haaf Net Fishing, a traditional method of fishing for salmon and sea trout⁹.

Key themes specific to different areas along the river

The above analysis draws on the full data set. There were also key themes and differences noticeable from the outcomes of the workshops along the river, reflecting the particular geographies and community interests. Further engagement in each area needs to be carried out in each area to gather more input as projects are developed, but the following analysis give an indication of some of the differences between the areas to emerge in the discussions. This analysis starts by comparing the distribution of ideas by organising theme, broken down by the areas where the ideas were gathered in the charts below (and the rough geographies covered by the engagement).

⁹ "Fishermen walk out into the shallow waters with the Haaf Net. Fish swim into the net and are trapped in one of the two 'pockets'". (Definition from [Solwayfirthpartnership](#): Solway Firth Partnership).

FIGURE 6 OVERVIEW OF IDEAS SO EMERGE IN ENGAGEMENT IN THE UPPER REACHES OF THE NITH, SANQUHAR



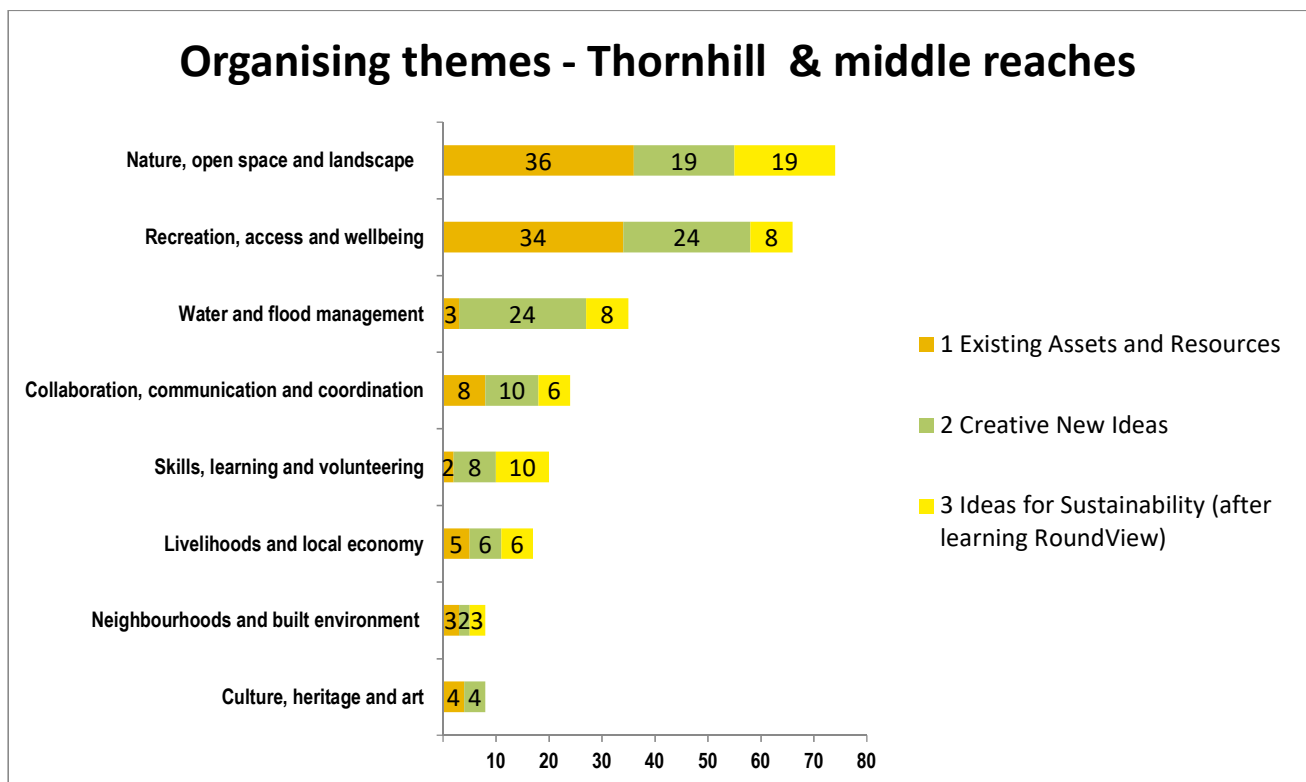
The branch that gathered the greatest number of ideas by a good margin was ‘Nature, open space and landscape’, with a particularly high number of ideas around ‘existing assets and resources’, suggesting a strong awareness of the importance of the open space and nature for the community. participants suggested increasing or introducing beavers, red squirrels, barnacle geese, salmon, lamprey, otters and White-tailed eagles.

The greatest numbers of creative new ideas were clustered around ‘Livelihoods and local economy’, including the greatest number of ideas after considering a big picture of sustainability with the RoundView. This was closely followed by a high degree of creative new ideas around ‘Skills, learning and volunteering’.

It is notable that in this former coal-mining area, an idea that was highlighted as important was to ‘Generate alternate ideas, options, opportunities’, including ‘River expeditions’ ‘Kayak guiding’ and the need to ‘embrace innovative technology and products’, an example of which was ‘Bulrushes, farming of wetlands’.

Following learning the RoundView, participants discussed the need to ‘Reconsider the concept of prosperity’ and ‘Reverse the throwaway society’.

FIGURE 7 OVERVIEW OF IDEAS TO EMERGE FROM ENGAGEMENT IN MIDDLE REACHES OF THE NITH, THORNHILL



Similar to the engagement around Sanquhar, the theme with the greatest number of ideas in the area around Thornhill, in the agricultural heartland of the catchment, was also ‘Nature, open space and landscape’, with a notably high number of ideas around ‘existing assets and resources’, however the next theme with the greatest number of ideas was ‘Recreation, access and wellbeing’ – again with a high preponderance of ideas around what is working well (unlike in Sanquhar, where there were few ideas around what is working well under this theme).

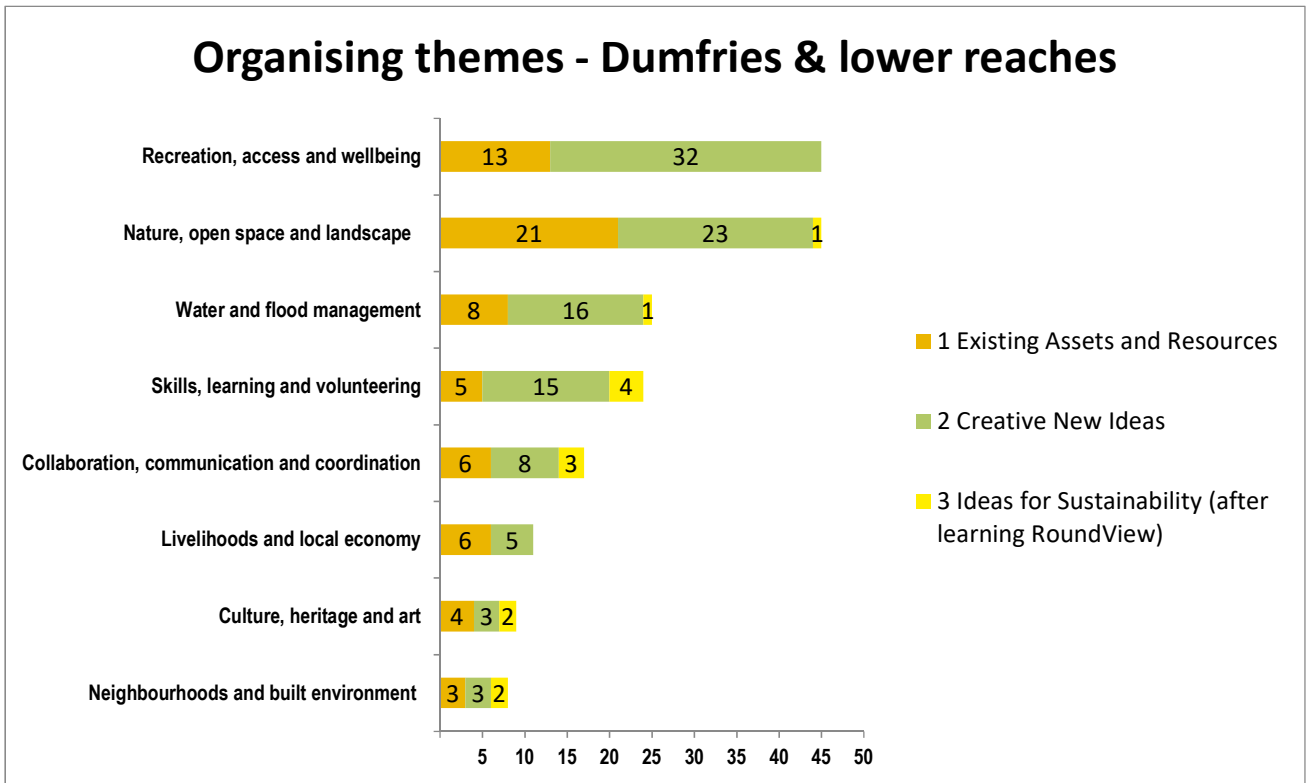
There were only a small numbers of assets recorded in the ‘Water and flood management’ and ‘Skills, learning and volunteering’ themes. However, participants for both of these themes provided a high number of new creative ideas and ideas for sustainability, with specific ideas including:

- Allow beavers (and other top predators).
- Connectivity mapping of all attributes feeding into Nith.
- Better management of resources.
- Stop farm run-off (Nitrates etc.), no slurry spreading.
- Stop treating rivers as sewers.
- Farm bigger strips.
- Sympathetic planting on riverside.

Related ideas to emerge under skills:

- Creating opportunities to educate about benefits and importance of the river.
- Increased local knowledge, Education of landowners.
- Nudge landowners towards sustainable practices.
- Introduce RoundView into school curriculum.

FIGURE 8 OVERVIEW OF IDEAS TO EMERGE FROM ENGAGEMENT AROUND THE TOWN OF DUMFRIES

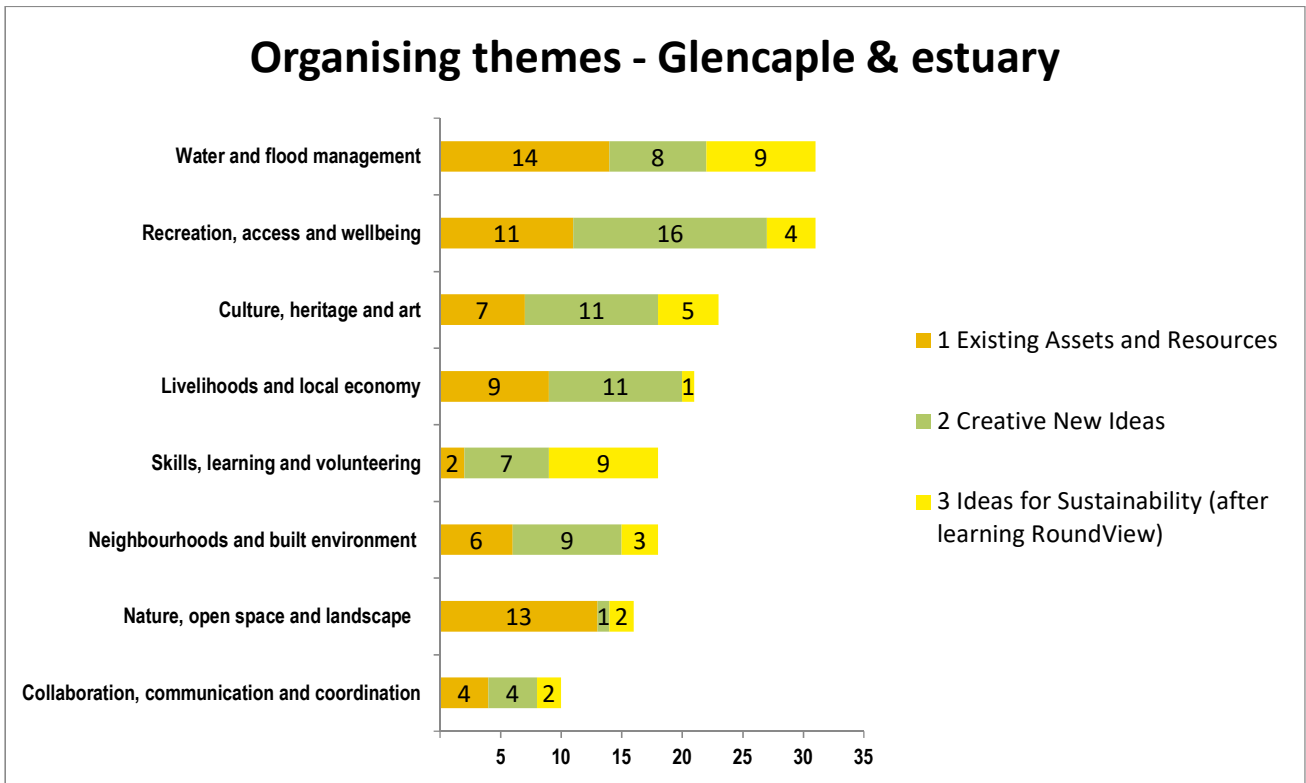


In this workshop it is striking that the theme with the greatest number of ideas, in particular of new ideas for the future, was around ‘Recreation, access and wellbeing’, followed closely by ‘Nature, open space and landscape’, but with a much higher proportion of ideas for the future than around what is working well in the higher reaches of the catchment. ‘Water and flood management’ is the third most mentioned theme, again with a relatively high proportion of ideas for the future versus what is working well.

There were several ideas around the need for collaboration and engagement highlighted as important in this workshop, including some specific ideas:

- Nith Life continues.
- Tidal Bore awareness/notices.
- Small business promotions.
- Ice cream van at Whitesands.
- Lay byes especially on A16 for folk to stop and appreciate.
- Brand new fish ladders with windows for kids etc.
- Writing/storytelling activities inspired by the river and wildlife.

FIGURE 9 OVERVIEW OF IDEAS TO EMERGE FROM ENGAGEMENT TOWARDS THE ESTUARY, AROUND GLENCAPLE



The branch that gathered the greatest number of ideas was ‘Water and flood management’ with participants highlighting a high number of existing assets and resources. There was a similarly large number of assisting assets and resources in the ‘Nature, open space and landscape’ category and a smaller but still substantial number under the ‘Recreation, access and wellbeing’ theme.

Participants provided a high number of creative new ideas across all themes, apart from ‘Nature and open space’. Participants provided a number of ideas of sustainability with the highest number of ideas in this category being in the ‘Water and flood management’ and ‘Skills, learning and volunteering’ branches.

Participants brought attention to the ‘Nith Inshore Rescue’ an local independently run rescue organisation operated by local people for the purpose of monitoring and saving lives along the Nith.

The river itself is well used by residents, with one participant referring to the people of Glencaple as a ‘boat-owning community.’ Participants highlighted how there is a rowing club and that others used the river for kayaking and paddle boarding. Other participants stated that children swam at the Plainstains and that people held barbeques on the beach. Other assets highlighted included the hosting of festivals in the area in which visitors noted a ‘Wild Goose Festival’ and ‘Nith Raid.’

Participants noted that the parks and harbours were important to people’s livelihoods and the local economy. Participants highlighted the historical importance of the coast and waterways as part of Nith’s and Glencaple’s heritage. The area has historical industrial links that could provide a useful heritage tourism trade. There was a suggestion that there could be regular Haaf net fishing demonstrations. There was also suggestion of a Haaf Net Festival where people could have a demonstration and be taught how to fish using this method.

Regional stakeholder workshop

There were many similar themes to emerge in the workshop with regional stakeholders as in the community workshops, with some key measures of success:

- THE UNESCO Biosphere and partners is a global exemplar in inclusive sustainable management of the region.
- Good communication between different organisations and communities.
- People enjoy the landscape and take care of it.
- Healthy for nature and people, resilient communities.
- Regenerative farming practices.
- How we feed the Nith Visioning into reality for the investment opportunities in Dumfries.
- Nith requires cool clean water get that right and many of the issues will be fixed.
- River containing a healthy population of salmon. A good environmental monitoring species.
- Functioning peatlands.
- Re-naturalise watercourses (meanders) and all landowners buy in to flood plains.
- Highly wooded landscape - habitats and riparian.
- Continuous ecological habitat pathway along river.
- UK's first river based national park.
- Heritage/culture integrated with the natural management of the river/region.

There were several ideas developed around the need to get beyond silos and short-termism:

- Regularly bring together communities and land managers.
- Agencies and NGOs and communities act together.
- Action needs to be joined up.
- Be ambitious in ideas and action and scale.
- Shared vision of loss/understanding of challenge that creates critical pathway for action.
- Long term funding schemes/ ecosystem service contract.
- New inclusive practices/framework where complex land decisions can be made through compromise.

This include some specific policies / levers for change, such as:

- Nature based finance. Government regulation.
- Agricultural subsidy system.
- Regional Economic Strategy.
- Helping land managers identify nature based solutions.
- Meaningful community engagement. Work through solutions.
- Community empowerment act.

Regional stakeholder feedback after sharing initial analysis

After hearing a summary of the key themes and ideas emerging from the community visioning workshops, the stakeholders were asked for further ideas to find synergies and make the most of the opportunities. Key ideas to emerge included:

- Bring delivery partners together to create a catchment wide vision we can jointly work towards.
- Land management plans - integration of stakeholder aspirations.
- Ensure synergies and trade-offs of any 'solutions' are analysed.
- More of these kinds of events. Meet different people.
- Forum for academic - expert - public knowledge exchange.
- Umbrella project/brand that everyone can work under, is that 'Nith Life'?
- Have the Ketso/RoundView resources available to be loaned for groups.
- Use consultation techniques/learning for other projects.

There was also interest in taking this work further, to 'Share learning across the catchment/rivers' and specifically, 'Upper Nith Restoration Project could be used as a 'Case Study' for knowledge exchange' and 'Connecting with the Solway Coast and Marine project'.

Feedback on workshop process and sustainability guidelines

Whilst the summary of key themes and ideas for action in this report offer a solid foundation for project planning and decision-making, the process and discussion and connections made amongst participants are at least as important as the summary of findings.

Feedback on the engagement process included:

- It was very inclusive - the chatty didn't dominate and everyone gets a chance to put in ideas
- it is like watching a neural network coming together
- Good basic idea which kept everyone engaged. Really good way of exploring a complex issue. I liked the colour coded progress from what we have to what we would like to have. Very simple, easy to understand and effective
- there were some strands [on the Ketso] that didn't have a lot of info on them, that helped us to focus on those areas, and work to balance it out, we could see that some areas were under-developed
- Interesting discussion, Think tank for ideas.

Feedback about thinking about the bigger picture of sustainability (the RoundView) included:

- this has given me hope
- the jigsaws were especially useful - we spent a lot of time with them trying to work out what the three causes of environmental problems were (but I got less from the word games)
- I really liked the word games, and the way they were 3d and you could turn them around, learning new things about Carbon and I liked the Cotton and Poison game



- I was surprised how difficult the challenge was - not just thinking about what was relevant, but thinking about what was most fundamental
- we needed the RoundView to bring it back together, otherwise it would have just been some visioning not connected. it did make people think differently and develop some new ideas
- Made me drill down more on thought processes and implications
- Like the clarity about the three main causes of eco-trouble.
- Very powerful solution narratives about the sources (of environmental problems).
- Thinking of whole lifecycle
- Solution of solar power - scale of its potential
- Managed to instil some hope for future life.

Leading to action

A key outcome of this process has been the capacity building amongst project partners and the wider Nith Life Group. Members of Nith Life have used the RoundView tools and Ketso toolkit to engage with wider audiences in pop-up events. A key finding from the process has been the value of the three-dimensional learning tools in enabling core messages of sustainability to be embedded into this engagement. With this shift in focus, the engagement has enabled a more in-depth discussion about the future of the river than might otherwise have been expected.

This engagement by partners has included several workshops run in schools, where the facilitators (from Nith Life) using the RoundView toolkit commented: “It has made an emotional impact. I think pupils were just scared that the Earth's going to end. But this really nails what's happening with the Earth's journey in such a clear way, and that actually gave them a lot of hope”.

Faith Hiller, GSAB Community Officer, has taken the lessons from this project further across the UNESCO Biosphere, running a [Climate Art project](#) in four primary schools in East Ayrshire, teaching about climate change and writing messages on lollipop sticks and attaching them to a piece of recycled furniture. This involved working alongside colleagues at the Coalfield Communities Landscape Partnership (CCLP), Muirkirk Media, and the New Cumnock Development Trust. She reflected: “Learning for sustainability is a whole area that schools have to cover, and this is almost like giving them a one stop shop”. This has led to discussions with the East Ayrshire outdoor education team about the potential to embed the RoundView in their offer, with particular interest in Scottish Gaelic translations of the learning tools for use in Gaelic medium schools.

In terms of the process of questioning possible futures through the lens of sustainability, the GSAB team continue to explore ways to find beneficial synergies between projects and partnerships across the landscape. This includes exploring ways to embed the innovative sustainability education pioneered in this project in schools within the UNESCO Biosphere.

The value of ongoing engagement was emphasised, with the need for further opportunities to continue and extend this work—in more contexts, in more depth, with more key stakeholders and community members. One idea that was put forward was to use the outcomes of these workshops as a ‘baseline’ of perceptions about the landscape, and track changes over time through further rounds of analysis of the outcomes of engagement.