

Wildlife rain garden
Submitted by Sally Bower Landscape Design

Awards category
Regeneration and retrofit – private properties



Lead or collaborating organisation(s)	Sally Bower
Location of SuDS	Confidential

1. SuDS overview


SuDS components used	<ul style="list-style-type: none"> • Rain planter • Water butts • Rills in the form of a dry stream bed and brick channels • Wildlife pond • Raingarden • Permeable hard surfaces
Size of the scheme and its local context	301m ² – suburban back garden connecting to a belt of trees
Approximate age of scheme (years)	Completed 2023
Benefits of the scheme	<ul style="list-style-type: none"> • Social and mental benefit for family and visitors: the scheme provides a nature-rich garden with a sense of play and engagement with the natural world. • Biodiversity and wildlife: the garden, including micro SuDs, provides habitats for local wildlife especially creation of wildlife pond. • Aesthetic enhancement: SuDs is an integral part of the design and narrative of the garden, over and above its practical function. • Resolves a drainage problem: sustainably directs rainwater away from property (avoiding potential damage). • Sustainable management of rainwater rather than further burdening the drainage system.
Briefly describe the scheme	<p>This private wildlife garden weaves and celebrates rain through the scheme. The downpipes from the existing roof used to drain straight onto the sandy ground by the house. Now rain runs through the garden via a rain chain, rain planter, water butts and rills all leading to a wildlife pond. When it is really wet, the pond overflows into a raingarden.</p> <p>As a wildlife garden, biodiversity is enhanced through rich planting and structural elements such as log pile wall. The rain planter and raingarden have plants that suit their aspect and conditions of drought and wet such as tufted hair grass, primrose, bugle and ferns. The wildlife pond and margins have only native aquatic plants. As well as biodiverse SuDs the garden is complemented with edible planting around a picnic table, with an apple tree, blackcurrants and alpine strawberries. Herbs are placed in the sun just outside the kitchen back door. The small lawn is species-rich in wild flowers. Along the back, native woodland planting merges the garden into a wood which is a home for red squirrels.</p> <p>My design demonstrates what is possible for a modest size garden, incorporating lots of different elements, from biodiverse sustainable urban drainage to enhancements for wildlife.</p>




2. SuDS details

No.	Question	Answer
1	What difference has this scheme made to the local community or area?	<p>This is a private modest sized garden not open to the public. As a result local and community benefits can only be indirect. As well as the owners, it does benefit to the local wildlife and works as a micro SuDS intervention. Thus it plays a role in the wider ecology, green infrastructure and management of water as a resource.</p> <p>As multiple contractors were approached, many of whom were unfamiliar with SuDs, the project served to educate them with the potential of SuDs on a domestic scale.</p>
2	What is exceptional about this scheme beyond a standard approach?	<p>Innovative and integral use of sustainable urban drainage on a domestic scale.</p> <p>Playful narrative use of SuDs within a garden, supporting the dynamic design and wildlife aspects.</p>
3	How much work went into getting this scheme realised?	<p>Design work / design development was extensive (including continuing professional development, discussions with industry experts) as this was the first opportunity for me to design a garden with both a rain planter and raingarden. Full calculations and percolation tests were undertaken to ensure the scheme would be successful.</p>
4	Is this scheme part of a masterplan or integrated into other initiatives?	<p>The biodiverse SuDs elements are part of the overall back garden design.</p>
5	What value does this scheme provide to the local area and beyond?	<p>Similar to question 1, the value to the local area is a positive contribution to biodiversity, green infrastructure and sustainable water management. Cumulatively private gardens can provide a significant contribution to these values which would have a wider impact beyond one garden's boundary.</p>
6	What challenges/problems needed to be addressed to realise this scheme?	<ul style="list-style-type: none"> • Very flat site (careful levels design was needed to fill pond using gravity) • Percolation tests showed the sandy soil was extremely freely draining so was enriched in the raingarden • Access to the garden was via a very narrow alley • Finding a suitable landscape contractor • Mature sycamore trees within the garden – protecting and avoiding damage to the trees and their roots during construction

7	How does the scheme address related issues such as water scarcity, nutrient neutrality, or biodiversity net gain?	A biodiversity net gain was not completed. However the design includes new planting, many of which are native, several new trees and a new pond. The scheme also followed current best practice on enhancements for wildlife such as including wildlife habits.
8	Is learning from the scheme continually captured and communicated? Please give examples.	<p>I communicated the design via social media (Instagram) and from this I now get regular enquiries from other designers who want to do similar projects and learn more about biodiverse SuDs.</p> <p>My scheme is used as an example on a continuing professional development workshop with the Society of Garden Designers.</p> <p>I showcase this scheme to other clients encouraging them to have biodiverse SuDs within their gardens.</p>
9	What approaches/measures are taken to ensure the scheme is properly managed and maintained?	<p>Discussed with client during design and at completion. I provided guidance on management of the planting and pond. I also made recommendations on how to use the water butt to maximise its micro SuDs potential.</p> <p>I am still in contact with the client to provide advice if they need it.</p>
10	Have you collected any feedback on your scheme? What do people say about it? Can you provide any quotes?	From clients' review: "Sally designed our wildlife garden; she did the planting scheme, its landscaping, tendering and managing the contractors. It's all worked out well and it's so much better than we could have hoped to have achieved on our own. We are very happy with it."

3. Supporting materials

Image (low resolution)	Caption	Image credit
 <p>Wildlife rain garden Sketch design plan 1:100 @ A3</p> <p>This wildlife garden evolves from formal spaces immersed in planting near the house to softer wilder areas merging into the woods beyond. The biodiverse SuDs are integral to the design flowing from the roof via a rain planter, water butt and channels to a natural pond. The pond overflows into a raingarden.</p> <p>Legend</p> <ol style="list-style-type: none"> 1. Outdoor picnic area with edible planting and fruit trees 2. Terrace steps and raised beds with Mediterranean herbs 3. Lawn wildflower rich 4. Rain planter in a galvanised trough fed from the roof by a rain chain 5. Rain rills - a dry stream bed and brick channels 6. Main patio with fire pit. Patio is framed by a simple pergola structure 7. Natural pond with stepping stones across. 8. Raingarden - fed by overflow from pond filled with plants tolerant of both semi-shade, wet and drought. 9. Compost area 10. Log walls & dead hedges for wildlife 11. Woodland walk 12. Swing on sycamore 13. Sillie to wood beyond 14. Galbon Bench filled with brick off cuts 15. Hammock linked between sycamore and pergola 16. Alleyway - with water butts, shed and storage <p>Susdrain SuDs Awards 2024 Member ID: 153361, Registration Order Number: 122552</p>	Overall sketch design of the back garden	Sally Bower Landscape Design

<p>Wildlife rain garden Sustainable Urban Drainage 1:150 @ A3</p>  <p>Biodiverse SuDs elements</p> <ul style="list-style-type: none"> A. Rain planter in galvanised trough feed by a rain chain from the roof B. Dry stream bed a rill for overflow from rain planter C. Two water butts fed by roof D. Rain channel a brick rill taking overflow to the pond E. Natural pond F. Raingarden - fed by overflow from pond <p>Permeable hard surfaces</p> <ul style="list-style-type: none"> G. Existing paving of free draining loose gravel H. Clay brick paving laid flexibly on permeable subbase and sand subsoil <p>Susdrain SuDs Awards 2024 Member ID: 153361, Registration Order Number: 122552</p>	<p>Sketch plan showing sustainable urban drainage elements</p>	<p>Sally Bower Landscape Design</p>
<p>Wildlife rain garden Sketch visual of garden</p>  <p>Susdrain SuDs Awards 2024 Member ID: 153361, Registration Order Number: 122552</p>	<p>Illustration of garden</p>	<p>Sally Bower Landscape Design</p>
<p>Photo 1</p> 	<p>Rain planter in the foreground, natural pond is just visible on the right</p>	<p>Sally Bower Landscape Design</p>

<p>Photo 2</p> 	<p>Rain planter overflows into a dry stream of pebbles and gravel within swishing grasses. The brick channel, running diagonally across the view, collects overflow water from the dry stream and water butts.</p>	<p>Sally Bower Landscape Design</p>
<p>Photo 3</p> 	<p>Drainage channel from the water butts and rain planter leading to the pond. A flag bridges over the channel creating a safe route across. The wood beyond is visible in the distance.</p>	<p>Sally Bower Landscape Design</p>
<p>Photo 4</p> 	<p>Natural wildlife pond sits adjacent to the main patio wrapping around a wildflower rich lawn</p>	<p>Sally Bower Landscape Design</p>

Photo 5



The main patio sits in the distance with pond on the right. In the foreground the plant rich raingarden acts as an overflow to the pond.

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Photo 6



Garden prior to its transformation

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