

Table 38.1 The potential of novel components to bolster ecosystem services in example novel urban ecosystems. The top row in each service line gives the relative value of each service in these environments as currently perceived (the more ticks, the greater the value); support for these assertions can be found in the main text where references to each service are provided. The bottom row for each service hypothesizes the ability of novel components to boost service provision (the more plus signs, the more likely novel components are to boost provision); novel components would typically be non-native species but may also be artificial substrate e.g. when looking to bolster rare native populations or for the sequestration of carbon using biochar. Consideration needs to be given to the potential for dis-services to arise from novel components and other management actions (Pataki et al. 2011), while experiments are required to investigate trade-offs among services as well as the potential contribution of novel components. The table highlights the benefits that already exist in ‘wild’ remnants and highlights the importance of retaining native vegetation where possible.

	Example novel urban ecosystem		‘Wild’ remnant	Agricultural remnant	Abandoned industrial	Abandoned residential	Gardens/parks
Ecosystem Service	Carbon sequestration and storage	Current state	✓✓✓	✓✓	✓	✓	✓✓
		Potential beneficial novel component	-	++	+++	+++	++
	Air quality	Current state	✓✓	✓	-	-	✓✓
		Potential beneficial novel component	-	++	+++	+++	-
	Flood regulation and Water quality	Current state	✓✓✓	-	-	✓	✓✓
		Potential beneficial novel component	-	+++	+++	+++	+
	Spiritual/psychological/health	Current state	✓✓✓	✓	-	-	✓✓
		Potential beneficial novel component	-	++	+++	+++	+
	Education/Recreation	Current state	✓✓✓	✓✓	-	-	✓✓
		Potential beneficial novel component	-	++	+++	+++	+
	Biodiversity maintenance	Current state	✓✓✓	✓✓	-	-	✓✓✓
		Potential beneficial novel component	-	Could use unusual aspects of the urban environment to bolster rare populations elsewhere or test out translocation policies			