

Appendix 2 Connectivity goals and objectives supported by Portland plans

To develop the Connectivity Benefits Framework (CBF) process and to demonstrate how to populate the CBF tools, we reviewed regional, city, county, and community planning documents that were published between 2005 and 2018 for the Portland Metro region. Cross disciplinary and organizational teams participating in the development of these published planning documents capturing key goals and objectives most important to local decision makers and community groups. We recorded all goals and objectives that support connectivity features and functions that were documented in these plans in a spreadsheet using the key below (Table A 2.1). We then identified the type of connectivity that could help achieve the objectives and goals and identified the desired change in ecosystem function resulting from potential management actions. We tallied the goals and objectives from each plan (Table A2.2). Those more frequently cited within and across plans were assigned a higher Rank in examples of Connectivity Causal Webs and Connectivity Planning Matrices included in this paper.

Table 2.1

Code	Name of Plan	Publishing Entity
35CP	2035 Comprehensive Plan	City of Portland
BES	Portland Watershed Plan	Portland Bureau of Environmental Services
FP	Greater Forest Park Conservation Initiative	Forest Park Alliance
HSP	Healthy Streams Plan	Clean Water Services
RCS	Regional Conservation Strategy	The Intertwine Alliance
RVA	Climate Change Preparation Strategy: Risk and Vulnerability Assessment	City of Portland/Multnomah County
TP	Metro Regional Transportation Plan	Metro Regional Government
UFP	Portland Urban Forest Management Plan	Portland Parks and Recreation
UG	Urban Growth Boundary Management Functional Plan (updated)	Metro Regional Government
WC	Washington County Comprehensive Plan	Washington County

Table 2.2. Connectivity goals and objectives support by Portland Plans

		HABITAT CONNECTIVITY FEATURES/FUNCTIONS			
		Connected, quality terrestrial habitat	Connected, quality aquatic habitat	Reduced hazards to organisms in urban matrix	Biological functions/services where valuable
Infrastructure	Enable community access to nature and greenspace	BES, FP, HSP, RCS, TP [5]	BES, FP, HSP, RCS, TP [5]	BES, FP, HSP, RCS, TP, UFP [6]	35CP, BES, RCS, (RVA), TP, UFP, UG [7]
	Improve efficiency and effectiveness of transportation	RCS, TP, (UG) [3]	RCS, TP [2]	RCS, TP, UFP [3]	TP [1]
	Maintain greenspace and natural resources in urban landscape	35CP, BES, FP, HSP, RCS, UG [6]	BES, FP, HSP [3]	35CP, BES, FP, HSP, (RVA), UFP, (UG) [7]	35CP, BES, FP, HSP, RCS, (RVA), UFP, WC [8]
	Mitigate negative impacts of infrastructure	RCS [1]	BES, HSP, RCS [3]	BES, FP, RCS, (RVA), TP [5]	35CP, BES, FP, HSP, RCS, (RVA), TP, UFP [8]
	Reduce disaster hazards and increase resilience	[0]	[0]	[0]	35CP, BES, FP, HSP, RCS, (RVA) TP, UFP [8]
Biodiversity	Conserve and restore priority ecosystems in urban landscape	BES, FP, RCS [3]	RCS [1]	BES, FP [2]	35CP, BES, FP, HSP, RCS, (RVA), UFP, UG [8]
	Conserve and recover priority species in urban landscape	BES, FP, HSP, RCS [4]	BES, FP, HSP, RCS [4]	BES, FP, HSP, RVA [4]	35CP, BES, FP, HSP, RCS, (RVA), UFP [7]
	Contain spread and manage impacts of invasive species	[0]	[0]	BES, FP, (RVA) [3]	BES, FP, RCS, (RVA), UFP [5]
	Enable species and ecosystems to adapt to climate change	FP [1]	[0]	BES, FP [2]	35CP, FP, RCS, (RVA), UFP [5]
Water	Meet or exceed water quality and quantity goals	[0]	BES, HSP [2]	RCS, UFP [2]	35CP, BES, HSP, RCS, (RVA), UFP, (UG), WC [8]
	Protect usability and function of water resources	FP, RCS [2]	BES, FP, HSP [3]	BES, FP, HSP, RCS, TP [5]	35CP, BES, FP, HSP, RCS, (RVA), UFP, (UG), WC [9]
Society	Equitably improve environmental quality of life in communities	(BES), RCS [2]	(BES), RCS [2]	(BES), RCS [2]	35CP, BES, RCS, RVA, UFP, UG [6]
	Equitably include stakeholders in planning	RCS [1]	RCS [1]	RCS [1]	RCS, UFP [2]
	Reduce societal barriers to accessing nature and ES	[0]	[0]	FP, RCS, TP [3]	35CP, (BES), RCS, UFP, UG [5]

GEOPHYSICAL CONNECTIVITY FEATURES/FUNCTIONS			
Hydrologic function and water quality	Air quality and climate regulation	Stability of soils and geology	Regulation of disturbance processes
BES, FP, RCS, TP [4]	BES, FP, RCS [3]	FP, RCS [2]	[0]
RCS, TP, UFP [3]	RCS, TP [2]	RCS [1]	[0]
35CP, BES, FP, HSP, RCS, (RVA), TP, UG [8]	35CP, BES, FP, HSP, RCS, RVA, TP, UG [8]	35CP, BES, FP, RCS, UG [5]	35CP, BES, FP, HSP, RCS, (RVA), UG [7]
HSP, RCS, RVA, TP [4]	BES, FP, RCS, (RVA), TP [5]	BES, FP, RCS [3]	35CP, BES, FP, HSP, RCS, (RVA) [6]
UFP [1]	[0]	35CP, (HSP), UG [3]	35CP, BES, FP, HSP, RCS, (RVA), WC [7]
HSP [1]	[0]	[0]	BES, FP, HSP, RCS [4]
BES, FP, HSP, (RVA), UFP, WC [6]	BES [1]	(HSP) [1]	BES, HSP, RCS [3]
BES, HSP [2]	[0]	[0]	BES, FP, HSP, RCS [4]
BES, FP [2]	[0]	[0]	35CP, RCS, RVA [3]
35CP, BES, FP, HSP, RVA, TP, UG [7]	(RVA) [1]	BES, FP, HSP, (RVA) [4]	35CP, BES, HSP, RCS, (RVA), UG [6]
35CP, BES, FP, HSP, UG [5]	WC [1]	BES, FP, HSP [3]	35CP, BES, FP, HSP, RCS, (RVA), UG [7]
35CP, BES, RCS, RVA, UFP [5]	35CP, RCS, RVA, UFP [4]	35CP, (BES), RCS, UFP [4]	35CP, (BES), RCS, RVA, UFP [5]
RCS, RVA, UFP [3]	35CP, RCS, (RVA) [3]	RCS, (RVA) [2]	RCS [1]
TP [1]	TP [1]	[0]	RCS [1]

ECO-SOCIAL CONNECTIVITY FEATURES/FUNCTIONS			
Access to nature	Human health and wellbeing	Community resilience and prosperity	Environmental equity and justice
BES, FP, RCS, TP, UFP, UG, WC [7]	FP, RCS, TP, UFP [4]	(BES), RCS, (RVA), TP, UG [5]	TP, UG [2]
RCS, TP, UFP [3]	RCS, TP, UFP [3]	35CP, (RVA), TP, UG [4]	RCS, TP, UFP, UG [4]
35CP, FP, RCS, UFP, UG [5]	35CP, FP, RCS, RVA, UFP, UG [6]	35CP, (BES), HSP, RCS, (RVA), UG [6]	35CP, RCS, RVA, UG [4]
FP, RCS, TP, UFP [4]	RCS, (RVA), TP, UFP [4]	35CP, (BES), HSP, RCS, (RVA), TP [6]	RCS, (RVA) [2]
[0]	35CP, UG [2]	35CP, (BES), HSP, RCS, (RVA), TP [6]	TP [1]
RCS [1]	RCS [1]	(BES), HSP, RCS [3]	[0]
RCS [1]	RCS [1]	(BES), RCS [2]	[0]
[0]	(RVA) [1]	(BES), RCS [2]	[0]
[0]	[0]	(BES), RCS, (RVA) [3]	[0]
[0]	BES, FP, HSP, RVA [4]	35CP, BES, HSP, RCS, (RVA) [5]	HSP [1]
35CP [1]	BES, FP, HSP, (RVA) [4]	35CP, BES, HSP, RCS, (RVA) [5]	(RVA) [1]
35CP, (BES), RCS, RVA [4]	35CP, (BES), RCS, RVA, UFP [5]	35CP, (BES), RCS, RVA, TP, UFP, UG [7]	35CP, (BES), RCS, RVA, UFP [5]
35CP, RCS, TP, UFP [4]	35CP, RCS, TP, UFP [4]	(BES), RCS, TP, UFP [4]	35CP, (HSP), RCS, TP, UFP [5]
35CP, (HSP), RCS, TP, UFP, UG [6]	35CP, FP, RCS, (RVA), TP, UFP [6]	RCS, RVA, TP, UFP [4]	35CP, RCS, TP, (RVA), UFP [5]