

Greenspace 4- Flint Mill

1.0 Introduction

1.1 Flint Mill is a large area of open greenspace on the Moors Burn with a mix of grassland and woodland plantations of a similar age with boundary hedges onto adjacent farmland. It was the location of a mill in the 19th Century (which initially involved using sluice gates along the Houghton Burn) and later on the site became part of a sewage works. Presently, the greenspace lacks any entrance signs and identity. There is also evidence of anti-social behaviour particularly from motor bikes. Flint Mill is used as a cut through between housing estates and for dog walking.

1.2 The Moors Burn flows along the west edge of the site, heading north to join the Herrington Burn to become the Lumley Park Burn around 780 metres north-west of the site. The Houghton Burn also flows directly beneath the site in a culvert, and only emerges as it reaches the Moors Burn.



2.0 Location and Accessibility

2.1 The Flint Mill site is between two residential areas within Houghton-le-Spring, Sunderland. The eastern site boundary borders the Burnside Estate, and the western boundary is adjacent to Dubmire Industrial estate, north of Mulberry Way, and adjoins the Dubmire and Fencehouses residential areas. Areas immediately north and south form continued greenspace and green corridor.

2.2 Although the local area is generally built-up and residential, the site sits in within a corridor of greenspace along the river corridor which leads into larger expanses of arable and pasture fields towards Herrington Burn (north) and Rainton Bridge (south). Towards the southern end of the site lies an electricity substation and access road.

3.0 Existing Management and Maintenance

3.1 Environment Services cut the footpaths 2 or 3 times per year, empty the bins and maintain the site's entrance features. There are rights of way through Flint Mill are maintained by Highways. Property Services maintain the barriers and other site infrastructure. Moors Burn is classed as main river and so it is the responsibility of the Environment Agency along with SCC.

4.0 General description and observations

4.1 Flint Mill is a large open site with mosaic of semi-mature woodland blocks, areas of open grassland and scrub. The site is bounded by the Moors Burn, open farmland, sports field and residential housing. Flint Mill feels very natural and is a valuable informal open space, providing habitat for wildlife and opportunities for residents to experience nature. However, there is no signage, little maintenance and so it lacks identity or sense of place. Local residents use Flint Mill as a cut through between the Burnside Estate and Fencehouses, and for dog walking. There is also evidence of anti-social behaviour in one woodland block close to the Moors Burn and use of motor bikes. There are extensive tracks around the centre of the site and evidence of recent damage to barriers on the bridge over the Moors Burn.

4.2 The main habitats improvements include additional woodland planting in areas around the substation and central space hedgerows, management of existing woodland, scrub and hedgerows, grassland management and creation of wetland scrapes.

4.3 Through proactive management and community engagement activity, Flint Mill can be transformed as part of Link Together, creating a greater sense of ownership and identity.

4.4 The Moors Burn, designated as main river, skirts along the edge of Flint Mill. It should also be noted that the Houghton Burn flows directly beneath the site in a culvert, and only emerges as it reaches the Moors Burn - in the long term, options should be considered whether this section of river could be de-culverted.

4.5 Invasive species, including Himalayan Balsam and sea buckthorn, have been identified on site and should be treated in order to prevent further spread.

Access and Interpretation

4.6 There is a tarmac path through the centre of Flint Mill, which connects the residential housing and other conurbations. Access barriers at the Moors Burn bridge (seeking to restrict motorbike and quad bike use) have been vandalised and subsequently repaired (this will be monitored and repaired by the project, should further vandalism occur). There is also a secondary route past the substation and an area of open space which is suitable for additional trees.

4.7 A new footpath (which can be part of a circular walk around the site) will encourage greater use by local residents. Vegetation management to open out scrub and thickets will deter some anti-social behaviour and encourage more legitimate community use. General vegetation management to create better access and feelings of security will be beneficial.

5.0 Proposed Works

Locations of proposed works are shown in the map below.

5.1 Habitat Management aims at Flint Mill:

- To increase area of new woodland and tree planting in identified areas including area behind substation and central space;
- To set up mowing regime on grassland by cutting and removing arisings;
- To improve quality of other areas of grassland by planning a programme of scrub management to maintain open areas, and putting in place suitable grazing or mowing regime;
- To treat and remove invasive species, including Himalayan Balsam and Sea Buckthorn;
- To protect bankside from erosion and slow flows in heavy rain;
- To manage existing woodland plantation, which are encroaching onto footpath, to create new woodland edge habitat and improve woodland understory.

5.2 Access and Interpretation Aims

- Erect site signage and waymarks to give Flint Mill greater identity;
- To redesign entrances to reduce motorbikes and quad bikes using the site and make entrances more welcoming;
- To improve access around new planting with surface footpath, vegetation management and additional fencing.

6.0 Budget

Source of Funding	Amount (£)
Section 106	40,364
Area Committee	55,917
NECF	35,865
NLHF	24,083
Total	156,229

Habitat	Project	Season Completed	Budget
Woodland Management	Removal of old fencing	September - October	2,412
	Selective thinning of non-native species to create woodland edge and improve sight lines and thinning out scrub	October – March	14,500
	Understory Planting	March/May	2,700
New Woodland Planting	Provide new hedgerow, heavy standards and whips	October - March	28,678
	Design Fees		3,600
Grassland	Cut and remove arisings	August - September	9,000
Wetland	Create new Scrapes	October - February	1,350
Moors Burn Intervention WRT costs combined.	Green Bank Protections	October – March	6,308
	Woody debris	Anytime	-
	Earth Bund	Anytime	-
	Management Fee WRT	Anytime	3,217
Invasive Species	Treatment and removal of Himalayan Balsam	Anytime	1,800
Access	Entrance gateways	Anytime	7,200
	Footpath 260m 2.5 carboniferous limestone footpath	Anytime	52,712
	Paint existing railings	Anytime	2,306
	Entrance Signage & Promoted routes and waymarkers		4,823
Contingency – DWT		-	2,408
Contingency – SCC		-	13,215
Total			156,229

The specification for each area of work is outlined in the Specifications Links with Nature document and details of future maintenance and management are outlined in the Maintenance and Management Plan document.

