economy, more so when that economy is less affluent and the very area which would benefit most from that spend.

Thus we recommend that these two schemes should form at least "beads" on a chain that takes the form of a path or multi-user route following the canal from Langley Mill to Pinxton. Given that the canal also survives from Ironville Top Lock (the site of which is on this route) to the east Portal of Butterley Tunnel, this leaves an eight kilometre gap between an eastern system of routes following the canal and the isolated Cromford to Ambergate section.

Leaving aside interest in the canal itself linking the two lengths would create a largely off-road route from Langley Mill (and beyond if the Canal Network Towpaths are included) to Cromford and the Peak District, with connection to the High Peak Trail, on the track bed of the Cromford and High Peak Railway, shortly before the terminus at Cromford. Thus an unbroken route could be created from the urban areas to the West of Nottingham to the heart of the Peak District. This is likely to create significant interest and result in higher levels of use, which in turn results in greater benefits to surrounding communities.

13.4. Partial Restoration

For the purposes of the study the scope of partial restoration is defined as being a restoration of navigation to the eastern part of the canal, from Langley Mill to the East Portal of Butterley Tunnel, including restoration of navigation to the Pinxton Arm.

A detailed consideration of the engineering considerations for partial restoration (either full or phased) is given in the Options Appraisal (section 11.1 of this report). There is also discussion of environmental considerations, including potential impacts, mitigation and opportunities for enhancement of nature conservation for each section of the canal.

Potential solutions for each of the key engineering issues listed above are identified.

The estimated costs and proposed phasing for partial restoration (excluding professional fees) are given.

The first two sections (from Langley Mill to the end of the infill, and from the end of infill to Codnor Park) would have to be delivered sequentially. Either of the remaining sections to Pinxton or to Butterley Tunnel East Portal could be restored next, with the remaining section done last.

Operation and maintenance costs and boat movements have been estimated. In terms of likely benefits against capital and operations and maintenance expenditure the partial restoration scheme actually appears at first sight to offer better value than full restoration.

A strong interim plan would therefore be to implement the do nothing plus improvements in the Codnor Park / Jacksfield area, then create the Linear Water Park / Destination Nature Reserve and move on to undertake the partial restoration. Subject to detailed analysis of the benefits this may well offer better value than a full restoration, and this should be establish as the scheme progresses.

13.5. Full Restoration

Full restoration has been considered and it must be accepted that restoring the canal to navigation from Langley Mill to Cromford would be a major undertaking that would require substantial funds and take several years to complete. This is not a reason for deciding against restoration. Historically canal restoration has been a slow process, especially once the early schemes of the 1960's and 1970's were complete, as these schemes basically involved undoing a backlog of maintenance. The Droitwich Canals reopened this year (2011) after a forty year campaign. Any full restoration of the Cromford Canal is likely to take at least that long. Like most modern restoration proposals, the Cromford Canal needs significant infrastructure provision to be achieved. To summarise the works

Replace 3km of canal and six locks between Langley Mill and Ironville

- Implement a solution to replace lock one that still allows the canal to act as a spillway
- · Recreate the canal channel past Codnor Park Reservoir or allow navigation through the reservoir
- Build a new canal over Butterley Tunnel or bore a new tunnel
- Reinstate the canal from Butterley Tunnel to Ambergate, some 5km including a new aqueduct at Sawmills

In addition use of the existing Cromford to Ambergate Section is less than straightforward if it is connected to the rest of the system. As a whole, full restoration offers greater benefits than any other option, but at a substantial financial outlay: however for Cromford to Ambergate it can be argued that full restoration offers fewer benefits and unless subsequent use is very carefully controlled could substantially harm both the ecology and the existing amenity of this length.

There are combinations of full restoration and interim options that can be pursued, whereby some lengths of canal are fully restored but not others.

13.6. Overall Conclusion

Given the range of scenarios that have become apparent we are not in a position to simply identify a single option and state that it should be pursued. We acknowledge that full restoration is a major and expensive task and is further complicated by question marks over the acceptability of full restoration for the last 8 kilometres to Cromford. Thus we conclude that full restoration should remain an aspiration for the long term future, whilst accepting that setting a timescale for its achievement is a difficult task. We recommend that canal asset should be developed in the following stages:

13.6.1. Stage One:

- Maintain and improve the Cromford to Ambergate section, for the benefit of wildlife habitats along the entire route and for limited navigation (suggest unpowered boats including trip boat) between Cromford and Gregory Dam;
- Undertake basic clearance and enhancement works at Ironville Locks to a standard that allows subsequent restoration;
- Identify routes and secure landowner agreements for shared use trail links between Langley Mill and Ironville, along Pinxton Arm and from Butterley Tunnel East Portal to Ambergate (to facilitate stage 2):
- Progress existing proposals for restoration of the Smotherfly Opencast section, and for the former British Coal site between Pye Bridge and Pinxton.

13.6.2. Stage Two

- Construct / complete shared use trail throughout and launch Linear Water Park / Destination Nature Reserve;
- Possibly dredge sections at Jacksdale and in Golden Valley to provide further angling and unpowered boating opportunities.

13.6.3. Stage Three

- Full Restoration Langley Mill to Codnor Park, and onwards subsequent interim termini to be
 - Pye Bridge
 - Pinxton
 - Golden Valley

This in effect completes partial restoration.

13.6.4. Stage Four

• Full Restoration to Ambergate, dependent on redevelopment at Bullbridge: operational regime from Ambergate to Cromford to be established prior to opening

13.7.Timescales / Programme

It should be emphasised that the above is not a recommendation for full restoration. The linear park is achieved at the end of stage two and a decision could be made to stop at that time, similarly partial restoration is complete at the end of stage three, and the scheme could stop there. It should also be noted that there is a significant time shift on the completion of each stage. Stages one and two could be implemented in about five years. More realistic timescales for stages three and four is thirty to fifty years. In such a long timescale the entire context of canal restoration may alter. For example, when the campaign to reopen the Droitwich Canal began in 1971 the last referendum on membership of the EU was still four years in the future, privatisation was an alien concept, environmental assessments were unheard of and lottery funding wouldn't be seen for another 22 years. Change on a similar scale, the character of which cannot be predicted, will occur over the next forty years.