

THE RESTORATION OF THE COTSWOLD CANALS : AUGUST 2013 UPDATE

Theo Stening

The serene and steady pace of cruising along a canal has many attractions. The restoration of a canal can rarely be described as serene, but in the case of the Cotswold Canals, it has certainly continued to be steady. The opening of the new vehicular Chestnut Lane swing bridge last October, the installation of the new pedestrian swing bridge at Ebley Mill and the successful completion of the Capel's Mill diversion, both in June, are typical examples of what continues to be achieved.

The refurbishment of the two Dudbridge locks is due to be completed by November 2013. Wallbridge Lower Lock and five more locks on the Thames and Severn between Bowbridge and Brimscombe remain to be restored and the pounds between them dredged. Work is already in hand on three of these locks. Although Lodgemore Bridge issues remain to be resolved and the re-routing of the canal through the Hope Mill industrial estate yet to be arranged, there is now a much more confident prospect than hitherto of the Phase 1A project, excluding Brimscombe Port, being completed in the foreseeable future.

Phase 1A: The Ocean, Stonehouse to Brimscombe Revised plans

The progress of any project needs to be monitored constantly and reassessed in the light of available resources and changing circumstances. The slow response to development opportunities at Brimscombe Port, mainly due to the current economic situation, means that this part of the original Phase 1A plan is unlikely to be achieved within the time scales envisaged when funding was agreed with the Heritage Lottery Fund (HLF). Moreover, this delay could act as a deterrent in obtaining funding for and progressing Phase 1B.

Because of this, immediate plans have been changed. With the agreement of the trustees of the HLF in November 2012:

- (a) The redevelopment of Brimscombe Port has been separated from the remainder of the HLF-funded project and will be managed by its owners, the Stroud Valleys Canal Company (SVCC).
- (b) The completion of the canal restoration from the Capel's Mill diversion to Bowbridge and the resolution of problems associated with Bowbridge Bridge itself will be achieved with additional funding of £800,000 from the HLF.
- (c) The restoration of the canal and locks between Bowbridge and Brimscombe will be achieved largely by voluntary effort led by the Cotswold Canals Trust (CCT), with funding for the materials and new lock gates remaining within the Phase 1A budget.

Progress: The Ocean to Bowbridge

One of the benefits of restoring the canal is the opportunity it provides for the surrounding countryside to be enjoyed. Walking along the reconstructed towpath, now almost complete between The Ocean and Bowbridge, has made this very much easier. Most of this work was undertaken by REACH, the community 'not for profit' organisation described in a previous report (1).

Discussions are continuing between Stroud District Council (SDC) and The Ocean swing bridge contractor to resolve the remaining balance and gearing problems. This opened for the vehicular and pedestrian traffic last autumn after its realignment.

At Ebley Mill the new pedestrian swing bridge (made in Portugal), part of the adjacent redevelopment scheme, is completed and operational. Further towards Stroud, between Hilly Orchard and Dudbridge, the Payback Community team working with REACH has raised the towpath to reduce the likelihood of flooding reoccurring from high water levels in the canal. The lower landing stage been completed, with two mooring bollards, and the towpath opened beneath the bridge.

On the other side of the bridge roadway, the newly completed flood wall bordering Avocet Park will ensure high water levels in the canal will not affect the business park.

SDC has awarded the contract to restore the upper and lower Dudbridge locks to Land and Water Services. The work has started and is likely to last until November 2013: two open days are planned for October. Meanwhile the towpath from Dudbridge to Chestnut Lane will have to be closed for safety reasons. On completion of this work, three continuous miles of the restored waterway will then be open for use by trail boats from Lodgemore Bridge to The Ocean. Regular boat trips for members of the public are already available on the CCT boat Endeavour from Cloth Mills Bridge (SO 828046) at Ebley.

The Dudbridge hydroelectric scheme (a joint SVCC/CCT project) is essentially complete and has produced electricity. It is anticipated that this will result in an annual average income of about £20,000 towards the cost of maintaining the restored canals. It has been a complex task, taking longer than originally envisaged and owing much to major input from volunteers. Major financial contributions were made by the Gloucestershire Land Trust and the Summerfield Trust with significant help too from other businesses and individuals. However, the turbine will have to be closed down during the lock restoration programme (2).

At Chestnut Lane the new £300,000 road bridge was opened in early October 2012. This heavy-duty swing bridge is operated by an electro-hydraulic system controlled by a key normally carried by boaters.

Further eastward, delays still remain in finalising the replacement of Lodgemore Bridge. Planning permission has been granted for redevelopment of the land adjacent to the north side of Wallbridge Lower Lock. This should enable the potentially unstable wall above the path to be modified and secured. A start can then be made to restoring this lock, depending on the timing of the land redevelopment.

Much has already been written about the successful Wallbridge area development. This continues to receive awards. In May, for example, the Wallbridge to Ebley canal restoration won the Design and Construction category of the Waterways Renaissance Awards. These awards recognise exceptional projects that are helping to care for canals and rivers across the UK.

Landslips need to be removed and prevented from reoccurring above the Wallbridge Upper Lock. All being well, remedial work will start in September. It had been hoped to use this stretch for in-town mooring. However, it now seems likely that the resolution of the landslip problems may limit the width of the canal at this point, preventing as many boats as has been hoped originally from mooring along this stretch.

The dog-leg Capel's Mill diversion through the railway viaduct crossing the Dr. Newton's Way Stroud by-pass below Waitrose, led by SDC, is another large restoration project completed (Figs. 1-3). This £2 million complex engineering scheme incorporates a full size winding hole for boats coming from the west which do not wish to proceed beyond Stroud.

The scheme involved the installation of 53 special ground anchors to prevent the remains of the domestic waste tip falling into the newly-cut concrete-lined channel, east of the viaduct. Many canal restoration supporters and local residents took the opportunity to walk along the new canal bed during two open days in May to inspect the new structures for themselves before the new channel was filled with five million litres of water (equivalent to two Olympic swimming pools).



The new waterway rejoins the former line of the canal to continue towards Bowbridge along the repaired original aqueduct over the River Frome at the eastern end. A newly laid footpath runs adjacent to but above the canal on the by-pass side, reopening the through route from Wallbridge to Bowbridge and onwards. The remaining tip site has been seeded with a grass and wildflower mix.

Areas of trees are also planned. This will soften up the appearance of the area. Some softening may also be advisable in due course on the concrete right-angled corners of the bends in the canal. These will sorely test the steering skills of the boat owners! Many will hope too that the appearance of the concrete piles which hold back the remaining tip will mellow with age.



Fig 1. Capel's Mill Stroud canal diversion: The public enjoying access to the new channel between the concrete piles of the old domestic waste tip and the railway viaduct during an open day in May 2013.



Fig 2. Capel's Mill Stroud canal diversion: Another view of the public taking the never to be repeated opportunity to walk in the new channel. The height of the old tip retained by the concrete piles may be clearly seen in the top right hand corner.



Fig 3. Capel's Mill Stroud canal diversion: Soon after the public open days in May 2013, the newly completed diversion channel was filled with water.

Contracts will be placed shortly for reconstructing the road bridge at Bowbridge, together with a retaining wall below the veterinary surgery car park. This will also provide better access to the southern side of Bowbridge Lock. The resolution of the remaining problems at Lodgemore Bridge and Wallbridge, coupled with the restoration of the existing canal from the Capel's Mill diversion to Bowbridge will not only open up the canal to further restoration eastwards, but also complete the revised Phase 1A waterway from The Ocean to Bowbridge.

Progress: Bowbridge to Brimscombe

Five locks (Bowbridge, Griffin's Mill, Ham Mill, Hope Mill and Gough's Orchard) together with the intervening pounds: 1.5 miles before Brimscombe is reached! That's the challenge for the Cotswold Canals Trust (CCT) who will be mainly responsible for organising the voluntary labour undertaking most of the work involved. Funding will be from a mixture of Phase 1A project funds and a major contribution of more than £250,000 from the CCT.

But a good start has already been made. The response to the March appeal made to CCT members, charitable trusts and corporate sponsors for funds to reconstruct Bowbridge Lock continues to be very encouraging. This project is likely to cost about £160,000, including £70,000 for a new set of lock gates. It is hoped that the work will be started later this year by construction students from Stroud College (SGS) as part of their training, helped by their lecturers and volunteers. The damaged spill weir guard at Bowbridge will also be repaired.

Work is well advanced on restoring Griffin's Mill Lock. The offside lock wall is essentially completed: good progress has also been made on the wall on the towpath side where defective brickwork has been removed and is now being replaced with new bricks.

Here the restoration team have had the assistance of visiting Waterway Recovery Groups (WRG) at weekends and for two week-long camps in June. They have already started on Ham Mill Lock too: more help is planned at the end of September.

Gough's Orchard lock chamber underwent substantial restoration by the WRG and others in 2008-2010, but there is still much uncertainty about Hope Mill Lock. This was infilled many years ago when the small industrial complex (the former Abdella and Mitchell boatbuilding site) was constructed. It may have to be moved depending on the arrangements eventually agreed to enable the canal to be opened up again.

Volunteers working on Tuesdays and Thursdays under SDC supervision have been improving the towpath from Bowbridge towards Brimscombe. Based at Ham Mill Lock they have been reconstructing the towpath from the mill towards Bagpath Bridge and are now going to work on the new paths across the Capel's Mill site.

Community Payback volunteers working with REACH, following a very significant contribution westwards along the Stroudwater, have now completed the resurfacing of the towpath from near Bowbridge to Griffin's Mill Lock. Now based at Hope Mill they are working back towards Bagpath Bridge to meet up with the path completed by the Tuesday and Thursday volunteers.

When will the restoration of the Bowbridge to Brimscombe stretch be completed? It is hard to estimate at this stage, but it must take several years. It is hoped that the Brimscombe Bridge replacement will be completed in 2014.

At Brimscombe Port itself, buildings continue to be rented out whenever possible. Ongoing support from the Homes and Community Agency continues to be sought. Parts or all of the port

site remain available for regeneration by interested developers. A mix of retail, business, leisure and residential uses remains just one of the possibilities.

Phase 1B: The Ocean, Stonehouse to Saul

Understandably, attention has been focused hitherto on completing Phase 1A. However, once the canal has been restored from Bowbridge to The Ocean the next major obstacle is facing it. This is the Birmingham to Bristol main-line railway bridge through which the canal route needs to be restored.

Perhaps fortuitously, Network Rail had originally scheduled a potential stoppage on this section of the route in May 2015 but this now seems likely to be delayed. It would be very timely if the canal restoration work could be done at the same time. The appropriate funding of probably just under £2 million will need to have been raised. The canal restoration team is making every effort to make this possible. The recent appeal to the Gloucestershire Local Transport Board for some funding was unsuccessful, but other sources will be sought. Success in restoring the Stroudwater through this bridge would extend the waterway by a further mile to Eastington. Then only three miles to go to Saul Junction!

Further west, new bottom gates and refurbished top gates have been installed at Blunder Lock, replacing those fitted in 1992. This has enabled water levels to be restored as far as Pike Lock again.

Phase 2: Inglesham to South Cerney

Many of the achievements which continue to be made at the eastern end of the Thames and Severn are not seen easily as they are on private land. Typical is the clearing of scrub and stumps from the towpath and canal bed going east from Rucks Bridge. This was undertaken in very wet weather between Christmas and New Year by a team of 14 WRG volunteers helped by others. In addition to what has been done and what is being done at Rucks Bridge, Eisey Lock and Inglesham, much is going on in other ways to provide a firm basis for forward planning and further fund raising. Key areas include a clear understanding of all the environmental issues arising from the proposed canal restoration; a detailed design of the provision and storage of the water necessary; and the attainment of the approved water quality standards. Information is being gathered steadily in conjunction with the relevant authorities. One novel idea being explored is the possible use of the large volume of water discharged from the Swindon Sewage Treatment Works. Could this be fed into the Thames and Severn at Latton by the North Wilts Canal?

The remains of Weymoor Bridge, which are just visible at this point, were first exposed in 2008, but are now increasingly hidden by new vegetation. Planning approval is being sought to start its restoration, but it is another example of how quickly nature moves in if nothing is done. Indeed the whole sheltered tree-lined stretch of the canal between here and the Gateway complex on the Spine Road is now overgrown again after substantial clearance a few years ago. It rivals the stretch between Chalford and Sapperton as one of the most attractive along the Cotswold Canals. The overgrown bed provides a natural habitat for wildflowers, birds and insects, but unfortunately it is already beginning to harbour the dreaded Himalayan Balsam and Japanese Knotweed, early warning of an unrelenting eradication campaign yet to come.

Water Transfer Scheme

The increasing need for water to be transferred from the north-west of the country to the south-east continues to be an opportunity for our canals to be used. Indeed, it offers what could be the quickest route to full restoration of the Cotswold Canals. Thames Water (TW) opened

its draft 2015-2040 Water Resources Management Plan for consultation from 1 May to 25 June 2013. It is stated in the report that the three main potential long-term solutions being considered are increased storage (historically their preferred option), regional transfers and waste water reuse. Each of these has advantages and disadvantages. Waste water means indirect reuse of treated sewage effluent from sewage works.

The three options being considered as parts of a regional transfer scheme are moving water by the Cotswold Canals, the Oxford Canal or by a direct Severn -Thames pipeline. All these would involve high pumping costs.

Present thinking is that in the case of the Cotswold Canals option, water would be raised from the Gloucester and Sharpness Canal to the Thames and Severn summit at Sapperton by a series of pumps and pipelines. It would then be piped beneath the base of the Sapperton Tunnel before falling to the River Thames by gravity, passing over weirs around the locks. A key measure in assessing the merits of different options is the estimated cost of transferring one million litres per day of deployable water (3). The CCT has examined carefully some of the conclusions reached so far about the relative merits of the schemes and is trying to refine the information and assumptions used so far in assessing the early studies of the Cotswold Canals option.

TW will publish a summary in October of responses received during the consultation period, explaining how they are being taken into account in the preparation of their final plan. This should be published in Spring 2014.

Organisation

On 7 November, 2012 Mike Guest was elected as Chairman of the CCT to take over from Liz Payne, who had been acting as Chairman since the sad death of Tony Robinson early in 2012. Already he had been the director responsible for developing the Eastern section of the Thames and Severn. Now his great enthusiasm and energy are already being felt advancing the whole restoration programme.

Conclusion

Last November the Gloucestershire branch of the Campaign to Protect Rural England awarded a commemorative plaque to the team responsible for the restoration of the waterway and surroundings at Wallbridge. Recording the new life breathed into the canal area, the raising of the profile of volunteer and community action, and providing an important focus for visitors by creating an attractive environment, similar achievements are being repeated all along the canal. Professional contributions are essential in many situations, but both there and elsewhere, many volunteers continue to make significant contributions. These are for no other reason than the pleasure of doing something worthwhile in the company of others, and creating a source of pleasure for generations to come. Their support, energy, and contributions have been described by the new CCT Chairman as incredible.

What has been referred to disparagingly from time to time as a dirty ditch increasingly belies that name. All those involved in the restoration continue to think and act very positively: their continuing commitment, determination and perseverance are invaluable. Although it seems to have been a long time, the completion of the revised Phase 1A is at last in sight.

References

- (1) Gloucestershire Society for Industrial Archaeology (GSIA), *Journal for 2010*, p 53.
- (2) Cotswold Canals Trust, *The Trow*, No. 162, Autumn 2013, p.11.
- (3) Cotswold Canals Trust, *The Trow*, No. 159, Winter 2012, p.15.