Agenda item 5

For decision - Future plans for Boyles Cross Fountain
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Summary

Frome Town Council (FTC) reinstated a working fountain in Boyles Cross between 2017-18. Above ground is an ornamental fountain with 4 water outlets. The system is based on a below ground system of some complexity that circulates and purifies the water. This requires weekly in-house inspection and monthly contractor supervision. Because of the access being a confined space, specialist equipment, training and ways of working are required. The purifying system experienced faults and was switched off earlier this year.

Due to difficulties with the original contractor, costs have been recalculated with an experienced contractor based in Wincanton. The annual running costs once the latest repairs have been made are estimated at £17.4k. This is an uplift of £2.4k (16%) on the original £15k current annual budget. These annual running costs could be further reduced if the fountain were run for only part of the year (e.g. not over winter).

Alternatively, the fountain could be mothballed, and a later decision taken on repurposing the site (eg as a planter). The fountain could still be re-used at a later state though with a re-commissioning cost of approx. £15k.

The decision is to decide the future of the fountain from one of three options

- Repair and restart the fountain for year round use which would cost a one off £1432 plus an annual running cost of £17.4k
- Repair and restart the fountain for non-winter use (8 months on the year) which would cost a one off £1432 plus £11.6k

- Mothball for now and consider possible temporary uses and possibly re-commission at a later stage which would cost circa £15k to re-start and then circa £15k annual running costs.

Background

Boyles cross fountain was originally established in 1871 by the Reverend Boyle to provide drinking water for all in the town centre.

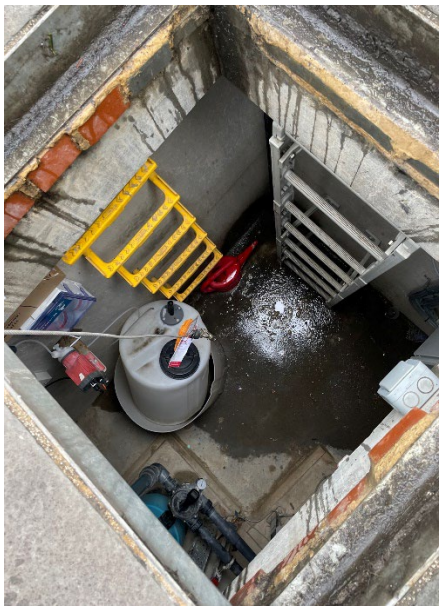
The fountain fell into disuse and for a time and in the 1980s was used for planting (during which time the cross itself suffered a vandalism attack and was repaired). In 2017-18, as part of the phase 1 works to refresh the Market Place when ownership was transferred from Mendip District Council to Frome Town Council, the decision was taken to re-instate as a functioning fountain what had been a well known landmark of Frome. The works, including design, cost approximately £100k.

The fountain works by circulating and cleaning water from an underground operations room. There is some complexity to the plant machinery and which takes some time and expense to maintain and service (costings below). The plant room itself adds some further complexity as it is defined as a confined space (measuring approximately 2.5m x 3.5m wide and 2.5m high) and requires specific health and safety practices, training and PPE to enter.

(The plant room includes an electrical control board, sump pumps for emptying the site itself of water, flow pumps for circulating the fountain water, chemical store (bromine) and dosing system for purifying the water, a bunded store for used chemicals, a valve system with piping for normal water flow and periodic reversing of water to clean filers, pipes to direct water to outside drains when flushing, a heater to prevent pipes from freezing.)

The ongoing maintenance regime consist of weekly checks by FTC rangers into the control room (see Ranger time below for further details) and monthly maintenance and inspection visits by contractors.

Photos of access to, and interior of, the underground plant room



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The latest development is that the Boyles Cross area has just been improved with large planters and benches making the area more of a focal point of the town centre and which will increase dwell time around the fountain area.

Cost of switching the fountain back on

Currently some repairs are needed before the fountain can be switched on (new acid tank, UV lamp and pressure valve). The costs of these repairs is £1,432. As there have been significant savings because the fountain has not been running for much of this year, it would be possible to fund these repairs from the current operational budget.

Full-year running costs

Once the fountain is running the annual maintenance costs would be as follows:

Ongoing Running Costs - Full year	
see emails Ed Harwood, Waterscapes, 21/11/22	
WSL Maintenance Costs	£7,660
Dosing System Probes, Membrane Caps & Calibration Solutions **	**£2,184**
UV Lamps & Quartz, Seals	£836
Chemicals for water feature	£3,000
Monthly water quality testing	£2,100
PPE and training	£250
Electricity	*£1,400*
TOTAL	**£17,430**

** Note: the cost of dosing probes is based on replacing 2 yearly. The manufacturing guidance is annually so the cost could be higher, but life expectancy is anticipated to be 2 years with our monthly maintenance inspection regime.

These figures are from local specialist contractor Waterscapes Limited (WSL) based in Wincanton. Only the £7.6k element of the cost is relates to contractor fees. There are limited alternative options and the previous company proved unsatisfactory. WSL have the experience and high level of technical knowledge needed to undertake the works together with a local connection.

In 2022/23 the annual maintenance budget for running the fountain was set at £15,000. The new running cost shown above would be £2,430 (16%) higher than the existing budget. Possible options could be explored for reducing the cost to FTC e.g. from a town centre business sponsoring the fountain, although this should not be assumed.

Part-year running costs

One option if looking to keep the fountain in operation but to reduce running costs to lower than the existing £15k operating budget, would be to turn the fountain off for the winter months - from November to the end of February. Most of the running costs would then be reduced by a third. In this case the annual costs would be as follows:

Ongoing Running Costs - Mar-Oct	8 Months
see emails Ed Harwood, Waterscapes, 21/11/22	
WSL Maintenance Costs	£5,107
Dosing System Probes, Membrane Caps & Calibration Solutions	**£2,184**
UV Lamps & Quartz, Seals	£836
Chemicals for water feature	£2,000
Monthly water quality testing	£1,400
PPE and training	£250
Electricity	*£1,050*
TOTAL	**£12,827**

Note on differences between these figures and ealier estimates

In the process of reviewing possible options there have been several iterations of possible costs. The figures shown here are lower than initial estimates due to:

Reducations from earlier estimates		
What	**Saving**	**Notes**
Disposal of filter sand	£450	Cost not within latest repair quote
Inflated costs for 2023/24	£1,521	Quoted rather than estimated future maintenace costs
FTC consumables	£500	Not needed
FTC training	£500	Less than earlier estimate
Ranger time	£1,700	Not included as already paid for
Contingency	£1,000	Updated quotes so not now needed
Total reduction	**£5,671**	

Ranger Time

Ranger time is needed to undertake weekly inspections to confirm the plant is functioning correctly and to top up the chemicals needed by the dosing system to ensure the water is safe. To undertake these inspections requires some time as it involves opening up and descending into the plant room which is a confined space under the fountain. Barriers are erected around the manhole, which is lifted off and a gas meter is used to confirm air quality.

A tripod and harness are used to ensure safe access and the ranger's have accredited training for accessing a confined space.

The rangers also test the water quality with litmus paper once a week which is very quick and above ground. On a monthly basis the rangers also assist contractors when they undertake their monthly maintenance by providing the confined space apparatus and qualified personnel.

In total this amounts to approximately 1.5-2 ranger days/month. The costs for this have not been included as the ranger time is already a funded expense.

Mothballing the fountain

One option is for the fountain to be switched off and a new function found for the basin such as a floral display. (A future decision would need to be taken about the repurposing plan).

Assuming the plant room underground is mothballed there would be a very small operating cost if the drainage pumps are kept running to prevent a build up of water that gradually leaks in from above ground.

If the fountain were mothballed could it be re-used at a later date?

If the fountain and its pumps were unused and not maintained for a number of years, many of these items would degrade and need replacing. A probable cost for taking the fountain out of a multi-year mothballing by replacing the equipment that is likely to have failed would be £15,000.

Start up costs when taking the fontain out of a multi-year mothballing: replace the 1x display pump, 1x filter pump, 2x sump pumps, the filter media, tank clean, UV lamp and quartz and dosing probes

Note - this assumes that the costs for replacing electrical items would be minimal as the control panel is viewed as a relatively inert system.

Recommendation

The recommendation is to decide on one of the following three options:

1. Turn on the fountain for year round operation with an initial repair cost of £1.4k and an annual operating budget of approx. £17.4k
2. Turn on the fountain on for 8 months of the year with an initial repair cost of £1.4k and an annual operating budget of approx. £12.8k
3. Mothball the fountain with minimal ongoing electrical costs and a possible future cost if re-starting the fountain of approx. £15k.