

After the AGM on Saturday 23rd July 2011 a meeting was arranged for 1600 hrs tabled by Jacky Evans - plot 26.

Much as we welcome the water 'harvesting' system installed March / April of this year, the feeling among many allotment holders is that this is inadequate for periods of limited rainfall. Many of the plot holders felt we should look at providing supplementary source of on site water for very dry spells.

There are two possible options as follows:

- a) Installing Mains water to the Allotment
- b) Sinking a Bore hole.

Jacky circulated information sheets to interested allotment members and the Committee. Jacky provided us with a very helpful breakdown as to water options and a guide to the cost.

Mains connection and laying of pipes about £1000.

Standing charge for each plot – 70 p

Eg. using a 25L container of water at 41/2pence x 20 in a week would cost 90p.

Background detail can be gained from the leaflet.

Sinking a Bore hole

Costings presented came at the £4000 mark excluding a Pump which would require a generator.

Water analysis cost £155.

Lorna (National Trust) suggested it may be possible to get a free Bore hole quote from N.T.

There followed a lively discussion:

1. Would introducing Mains water contravene our existing agreement with the Awards Grants panel re: sustainability using the 'water harvesting system'?
2. Some members did not feel the need for extra water during a dry period and felt forward management was important. In their experience plants survive with intermittent rainfall but might not be so prolific. This year the initial planting of seedlings which need daily watering to establish their root, was a problem due to a very unusually dry period in March / April.
3. Why was the water level so low in the newly installed dip troughs?

It was generally agreed that whilst investigations would be ongoing, since the water troughs and piping system had only been operational at the start of March / April, it was important to give the system in situ a chance to prove itself over the next six months but with the proviso of setting up the guttering to collect water off the poly tunnel as soon as possible.

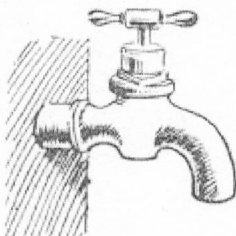
BRINGING WATER ONTO THE ALLOTMENT SITE

Much as we welcome the water 'harvesting' system installed at the beginning of the year, the feeling among many allotment holders is that this is inadequate for periods of limited rainfall. Many of the allotment holders feel that we should look at providing a supplementary source of on site water for very dry spells.

There are two possible options:

- 1) Connecting to the mains
 - 2) A bore hole
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CONNECTING TO THE MAINS



The mains water pipe cuts across the neighbouring field, going from the Cricket Hut down to Knighton Rd.

Cost of Connection to the Mains £460 + VAT

Laying Pipes to the Allotments

Once the connection site is provided, it will then be up to us to bring the water from the Mains to the Allotments. This would be done by:

- 1) Digging a trench from the mains connection to the allotment site.
- 2) The trench would need to be at least 2ft 6 in deep and preferably 1 metre deep. This is to protect against:
 - A) Water being frozen in winter with burst pipes
 - B) Tractors etc driving over and damaging piping.
- 3) A layer of sand at the bottom of the trench is recommended to stop damage by stones.
- 4) Blue water pipes are then laid down.
- 5) Some sort of outlet for the water will be needed. Options might include:
 - A) A tap
 - B) Connecting to one of the troughs which would automatically refill and therefore there would be no problems with the tap being left on or vandalism.

Mark Barnett feels that even with the hiring of a digging machine, the cost of laying the pipes etc would be less than £400.

Overall Cost of Connecting to Mains and Installing Pipes and Taps

Mains Connection = £480 + VAT
Laying Pipes etc = less than £400

Overall cost of providing mains water to the allotment site should thus be about £1,000.

Split between 50 allotments this would be approximately £20/allotment to bring mains water to the allotments.

Ongoing Costs of Paying for Mains Water

There would be a standing charge of £34 / year for the whole site i.e. about 70p / allotment/year.

The cost of the actual water is £1.81 /1000m³ ie a 25 litre container of water costs 4½ pence

Thus 20 containers a week would cost about £1.00 which is probably enough for most people in a dry spell.

Please note: The cost of the water to the allotments is in fact half the cost of the metered water you pay for in your homes, due to the fact that we would be charged an agriculture rate and not the domicile rate.

Advantages and Problems with Mains Water

1. The main advantage with the mains water is that the connection cost per allotment is quite low, only about £20 per allotment.
2. The major problem with mains water would be the ongoing cost of the water. £1.00 a week isn't very much for the back break that on-site water would save but if the water payment is only made once a year, this £1.00 a week would add up (in a very dry year) and it might come as a shock when people are presented with, say, a £26 bill at the end of the year.
3. Should it be possible for individual allotments to opt out of using/paying for water?
4. There may be concerns about some people using much more water than others.
5. Vandalism – but this shouldn't be a problem if the mains pipe is connected to an automatic refill trough instead of a tap.
6. **The National Trust.**
The National Trust has been cited as the main reason that we don't have mains water; the reason being given is because they want us to be sustainable. There are in fact other National Trust Allotment sites that are served by mains water and the desire for sustainability on the part of the National Trust is not so much environmental as practical (see email below). As you can see from the email below, there have been problems with mains water on their other sites with '**substantial increases in running costs & unforeseen bills due to mains supplies leaking or being vandalised**' and for this reason they want us at Wembury to be 'sustainable'.

Looking at each of these individually:

- A) Mains supplies leaking won't be a problem if we lay the pipes as the SW Water advises, burying the pipes deeply.
- B) Vandalism will not be a problem if we lay the pipes deeply and use an automatic refill trough and not a tap.
- C) Spiralling costs (due I am sure to the very dry springs) is covered above and obviously does need to be addressed but most of us are paying for the water we bring up to our allotments anyway and this is double the cost that mains allotment water would be.

Email from the National Trust

Dear Mrs Evans Re:Water supply at Wembury allotments

Thank you for your enquiry which has been forwarded onto me from our head office. We are aware of the water supply issue and are actively working with the Wembury Allotment Association to find a satisfactory solution to this issue.

You will be aware that the Allotment Association successfully applied for grant aid & have been installing a rainwater harvesting system (which will show over the coming months, whether it can provide the required capacity for the allotments). This option was chosen for reasons of partly for water conservation, but also to help manage costs for allotment holders. When the allotments were originally planned the Allotment Association & NT were advised to install an independent water supply as other allotment holders had suffered substantial increases in running costs & unforeseen bills due to mains supplies leaking or being vandalised. Often the costs of installing a mains supply are far less of a concern than long term running/management issues. If the newly installed system doesn't meet the needs of the Allotment Association, we will be able to actively support them in looking at other options, including your suggestion.

The next meeting of the Wembury allotment committee will be on Saturday 23rd July, 3pm at the allotment community shed and the chairperson / main contact is Claire Orrin (Claire.orrin@btinternet.com) 07976 346898. I would very much encourage you to make your views known to the committee, and even consider attending a meeting to make sure your views and those of other plot holders is understood.

Many Thanks, **Lorna Sherriff Ranger – South Devon Coast & Countryside**

SINKING A BORE HOLE

Another option for providing a constant source of water on the allotments is to have a bore hole sunk.

Cost of a Bore Hole

An estimate for a bore hole, based on our post code and thus geology of the area, has come back as £3,960 + VAT. (Registered charities do not pay VAT) (see email below)

A source of power would also need to be found eg solar panel, diesel, or electricity. The cost for the running of the pump is very small.

E-Mail from Geologic Boreholes

Dear Jacky

Further to our conversation earlier this week, please see information below:

Assume a drill depth of 35M based on the geology at site

Drill 35M @ £42.50 per/M = 1487.50*

Line, case and glass media screen 35M @ £21.50 per/M = £752.50*

Supply and install a poly sump well head £295.00

Supply and install a DAB CS4B16-M submersible pump, with connection for a generator = £975.00

Mobilise crew and equipment to site = £450.00

Total = £3,960.00 plus VAT

The pump system will require an electrical connection, i.e. a generator provided by others

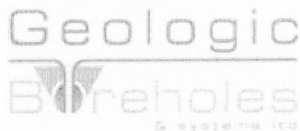
**In the event that the borehole is terminated/extended at a shallower/deeper depth (by agreement) lining and drilling charges would be reduced/increased by the price per metre.*

This quote excludes a water analysis, which can be undertaken at a cost of £155.00

Should the above costings be within your budgetary expectations, then we would conduct a site visit and issue a full written quotation thereafter. If you wish to book a site visit or have any further questions please do not hesitate to contact us.

Kind regards

Richard Lane
Managing Director



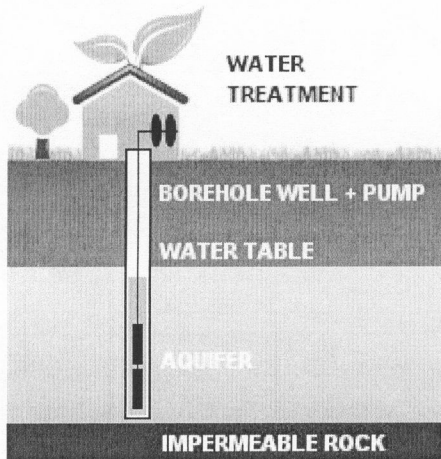
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Advantages and Potential Problems of Having a Bore Hole Sunk

1. Obviously, the cost of sinking a bore hole is quite high but we could possibly raised the money from grants and fund raising
2. We will need a very small source of power to operate the pump for the bore hole. Possibilities are electricity (only a small amount will be needed), Diesel or a solar panel.
3. The major advantage with the bore hole is that it will provide a constant on-going free source of water. Once the bore hole is sunk, it will provide a virtually free source of water for the future.
4. Thus no problems with some people using more water than others!

In the diagram, there should be a water holding tank in the place of the water treatment hut!



E-Mail from Marsh Lanes Allotments that have a bore hole. (Sad news about the vandalism and the solar panel but he is otherwise very positive about the bore hole)

Dear Jacky

Re: Marsh Lane Allotment Bore Hole

Sorry I forgot to look up the details. The bases are that the water table is about 30m down. The bore was drilled to c. 40m with a pump installed at the surface, as the subsurface water was non-artesian. We had the option of using a diesel pump to pump water into a holding tank as and when required, but this would need maintenance and fuel. A solar panel was installed to drive an electrical pump as and when water was need to keep the tank topped up.

As you can imagine the solar panel was expensive, but it is maintenance free. One problem is that we are limited by the water authority on the amount of water that can be brought to the surface. But the limit is well in excess of our needs.

Our main fear was for the solar panel to be stolen, as it is a bit difficult to bolt down.

However that was not the problem we faced: A free weeks ago kids broke into and damaged the whole of allotments site; burning tool sheds and smashing greenhouses etc. They also found the solar panel and smashed it.

In summary:

Once the bore hole was drilled and equipment installed for delivering the water to the on site tap; this is effectively free water with no water authority charges. If the well is non-artesian, use solar power to pump the water to the surface as it will be maintenance free, no fuel costs and very green.

All the best

Vaughan