#### BASINGSTOKE CANAL JOINT MANAGEMENT COMMITEE Date: 16 October 2014

# Water Strategy Group Report

Lead Officer: John How (Inland Waterways Association / Basingstoke Canal Society)

# Two major topics progressed;-

- Abstraction Licenses Renewal for next 10 years.
- Telemetry for Canal

## **Abstraction Licence**

The existing (10 year) abstraction licence for both Woodham and St John's pumping stations are due to end by March 2015. The JMC is reminded that in 2011/12 the EA agreed to double the existing abstraction licence at Woodham from 1.7Ml/day to 3.4Ml/day as a temporary permit, until a new 10 year licence was requested in 2015.

Work had already commenced on the justification for continuing with the current abstraction volumes, but with the ever increasing problems of water stress in the South of England, we had expected some difficulty in convincing EA to grant the higher abstraction rate for the future.

We are delighted to report that the EA have written confirming that they will look favourably at granting new 10 year abstraction licenses for the present (increased) volumes, without any additional justification.

James Taylor has now made the application based on previous data (SCC are the holders of these licenses), so as to initiate the EA approval process now, before any changes to EA approach or personnel.

## Telemetry

A contract has been awarded to Aquamatix Ltd for 'Telemetry', following the single tender action approval, thanks to the instructions/help from Keith Chapman and Andy Smith.

Project design, installation and commissioning are to be completed before Easter 2015 (start of the boating season). This will be followed by a 5 year 'User Agreement' for designated people to view particular data on a hosted website, plus some areas on the hosted website to be available to the public.

The Project will be the first in UK (and probably the world), for Canal operations to provide and integrate;-

• Live data of Water levels at nine specific locations throughout the canal, to be viewed through a

secure website from a tablet; any smart phone or pc. This will provide the duty Ranger with live water level statues and where potential problems might be developing.

- Full automated control of the two back pumping stations (Woodham and St John's), plus monitoring of the third area drainage pumping station at Frimley. This ensures minimal energy/costs and enhances our ability to demonstrate enhanced water management/reduction.
- Use the Water Balance Model (WBM) produced by Southampton University, on the website to view the whole water situation for the canal, lapsed by 24 hrs, based on rainfall data gathered from the EA systems. This will provide greater opportunities to manage water resources on a day to day basis. In addition with trend data (2016 onwards) we expect to provide a 3 month look ahead for any water problems, particularly if the canal is expected to close due to water shortages.
- Innovative concepts for this project include;-
  - The whole project using todays emerging technology of the 'Internet of Things' (IOT).
  - The specialist equipment for water level sensors; logic units and SIM cards to transmit to the hosted website all disguised as normal Canal structures to prevent vandalism
  - The SIM cards are 'data only' transmitting units, that only require 2G connectivity (can search for the strongest network signals) and will cost nominally 70p/month to run, not the normal £10/month for most 'voice' SIMs.

Work continues to investigate additional water sources and/or water storage facilities.