



Mogden Sewage Treatment Works

Residents Liaison Meeting

7 September 2011

Agenda



- Review of previous minutes
- Operations and communications
- Mosquito survey results
- Sewage Treatment Work Upgrade Project – an update
- AOB



Operations and communications

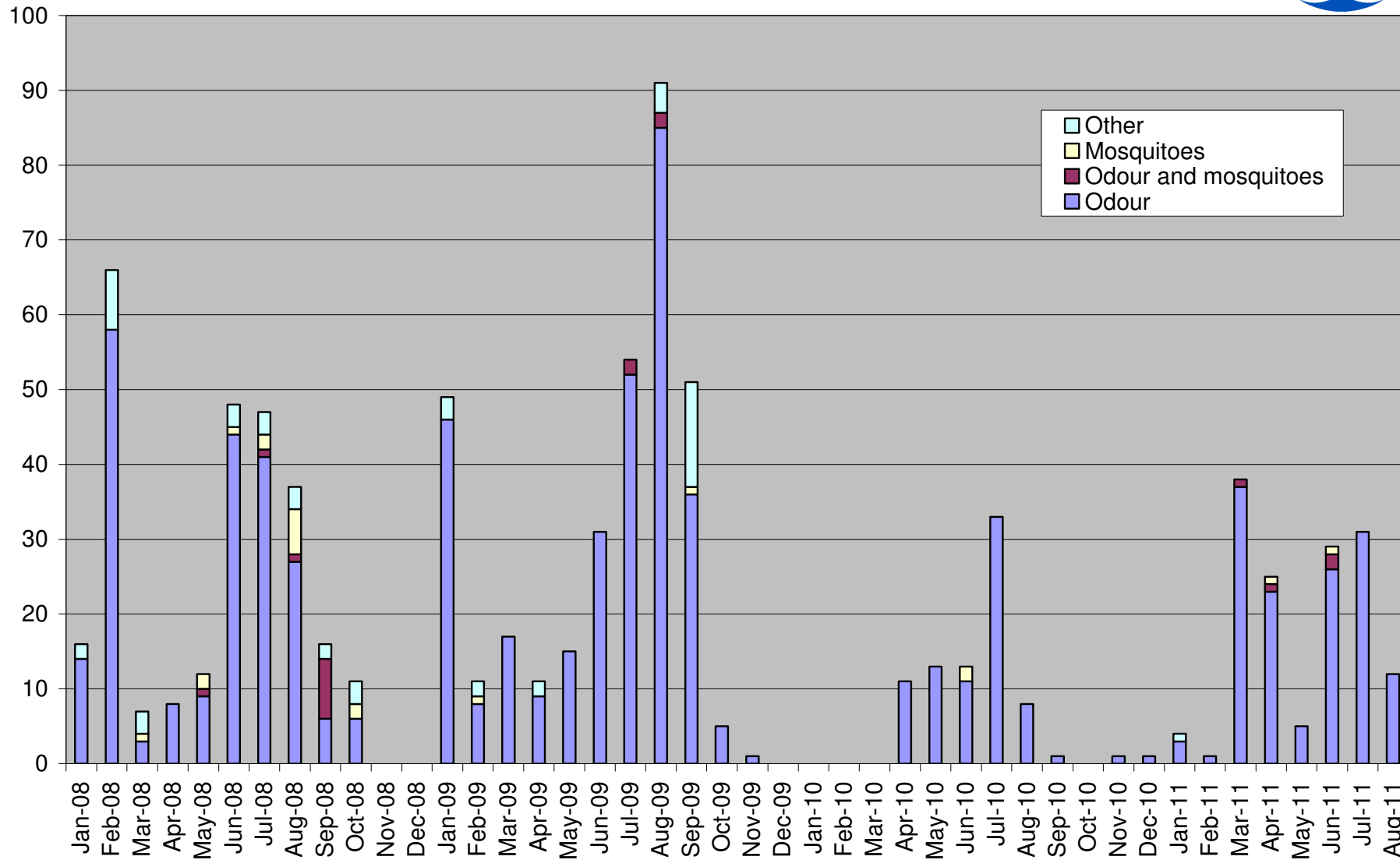
Operations update



- The memorial garden dedicated to the five men at Mogden and Perry Oaks, who lost their lives during the Second World War, is to be refurbished and rededicated in November 2011.
- We also intend to bury a time capsule at the same time, celebrating Mogden's 75th birthday to be unearthed in 2036 on its 100th birthday.



Operational Correspondence 2008 – 2011



Notifications June – Present



June 2011

- Mogden Upgrade – construction update
- Primary tank drain down – precautionary notice

July 2011

- Mogden Upgrade – digester cleaning odour notification

August 2011

- Mogden Upgrade – pre-aeration tank precautionary notice
- Mogden Upgrade – pre-aeration tank further notice
- Mogden Upgrade – digester cleaning odour notification
- Mogden newsletter – general notification
- Mogden Upgrade – construction update

September 2011

- Notification of unplanned maintenance work on process tank

Communications update (1)



- The next issue of our newsletter was sent out to residents this month (August 2011).
- This was accompanied by an email notification to the Mogden notification mailing list.



Improvement work marks first anniversary

Around this time last year, construction began on the £170m upgrade of Mogden A year on, and changes of the estuary are turning into reality.

Thames Water is well on track to complete work to increase the site's capacity by 30 per cent by March 2013.

Matt Wilkinson, Delivery Manager, said: "What a massive difference a year can make. I vividly remember scaling ladders and dump trucks parking on site last year to start shifting the 450,000 tonnes of soil when it has been removed for the additional treatment tanks.

"Now three quarters of the foundations for these tanks are complete, and we're nearly half way through building the concrete structures. This has enabled us to start installing the new lining that will make these tanks work.

"With a 200 strong workforce on site, we're near the peak of construction activity, and it's really encouraging to see the progress made so far."

The upgrade consists of wetting five key treatment areas. On completion, these will significantly reduce the amount of partially

digested sewage also being sent into the River Thames, where it stays raw.

Inlet area
This is where sewage entering the works is screened to remove grit and other items which should not be flushed down the tanks, like rags.

Aeration lanes
At this stage of the treatment process, sewage passes through "lanes" in a large circular tank. Bubbles of air flow through the liquid, feeding the bacteria which decompose the organic matter.

With the supporting foundations for the five new lanes complete, work to build the eight-mile-long aeration network is under way.

Final settlement tanks
The remaining solid matter is removed here before the treated effluent is safely returned to the River Thames.

This is the last area that requires foundation work for the ten new circular tanks. Work is under way and will continue into the autumn, with steel reinforcement laid. As the concrete makes its way into the ground, it can penetrate several metres, which we are monitoring closely and will work hard to keep it to an absolute minimum.



Black & Veatch engineer Fiona Durr discusses the upgrade with Contracts Manager Adrian Cook.



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The new tunnel that will transport sewage from the incoming sewer to the new inlet, and all of the associated concrete structures, are now built.

Primary tanks
The flow of sewage is slowed down here so the heavy particles can settle to the bottom and be removed.

The solid matter that accumulates here is known as sludge, and is removed using mechanical equipment so it can be treated elsewhere on the site.

Over the past 12 months, the site has been transformed from a large hole in the ground into five circular tanks, using more than 7,000 tonnes of concrete and 500 tonnes of reinforcing steel.

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Communications update (2)



- In June, we held a Network Challenge event at Kew Bridge Steam Museum in collaboration with the Hounslow Education Business Partnership.
- Seven teams of local secondary school students competed to be the first to design, plan, build and test an imaginary water distribution network within a set budget.
- The students were aided by volunteers from Thames Water and Mogden contractors, Black and Veatch.

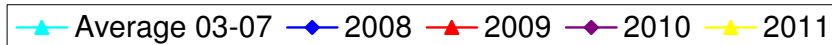
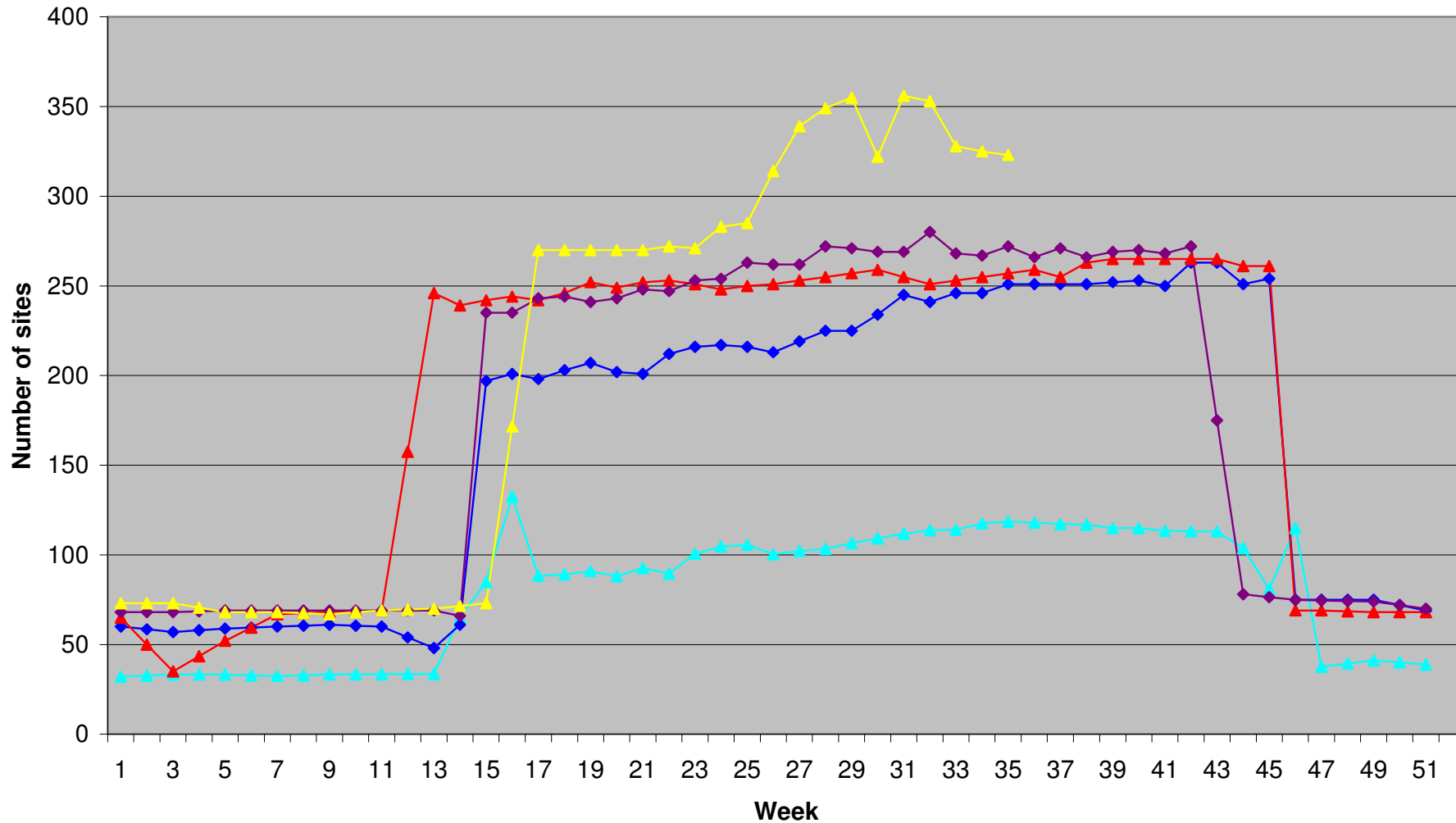




Mosquito Survey Results

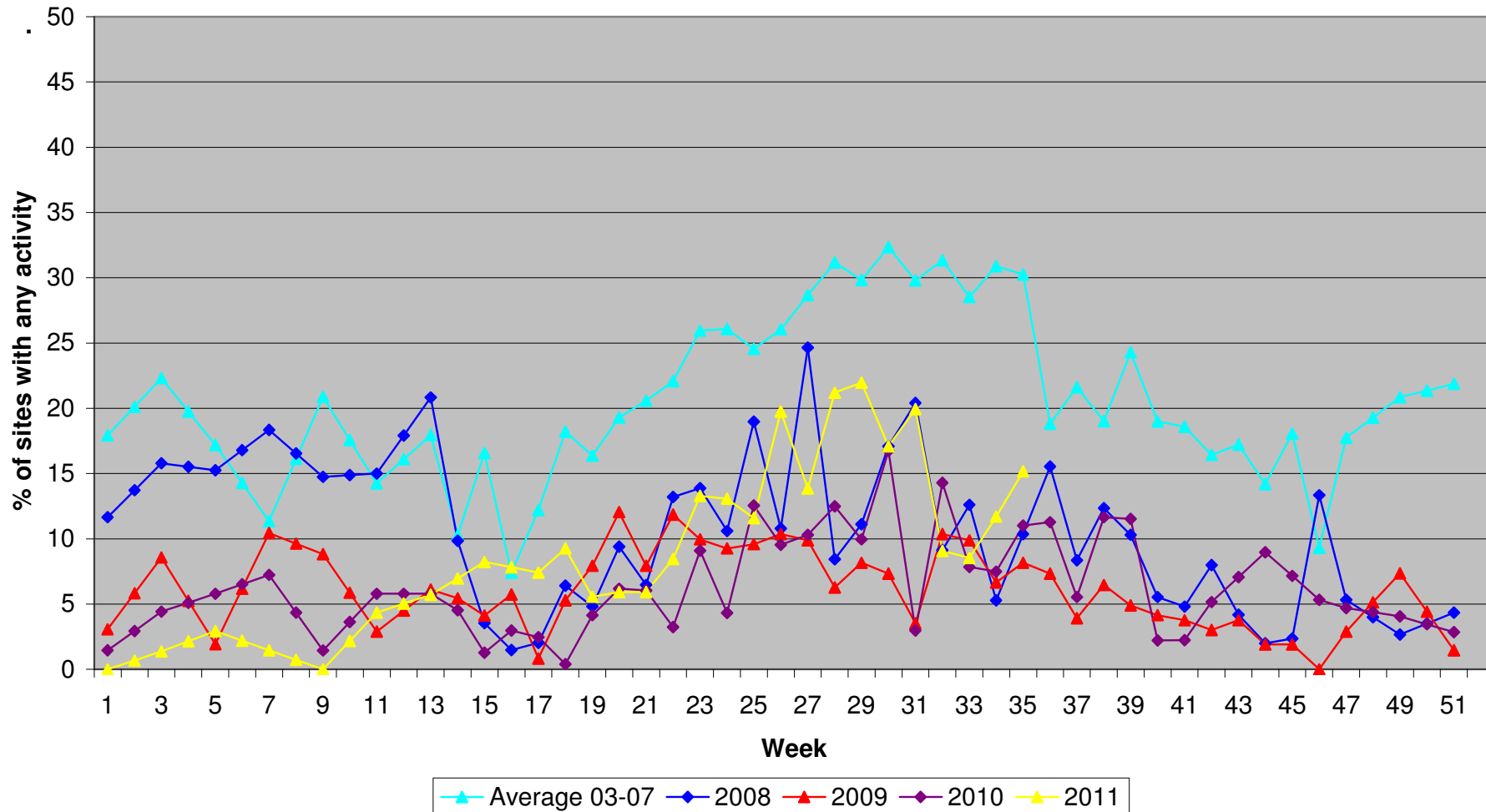
Mosquito data

- Number of sites inspected



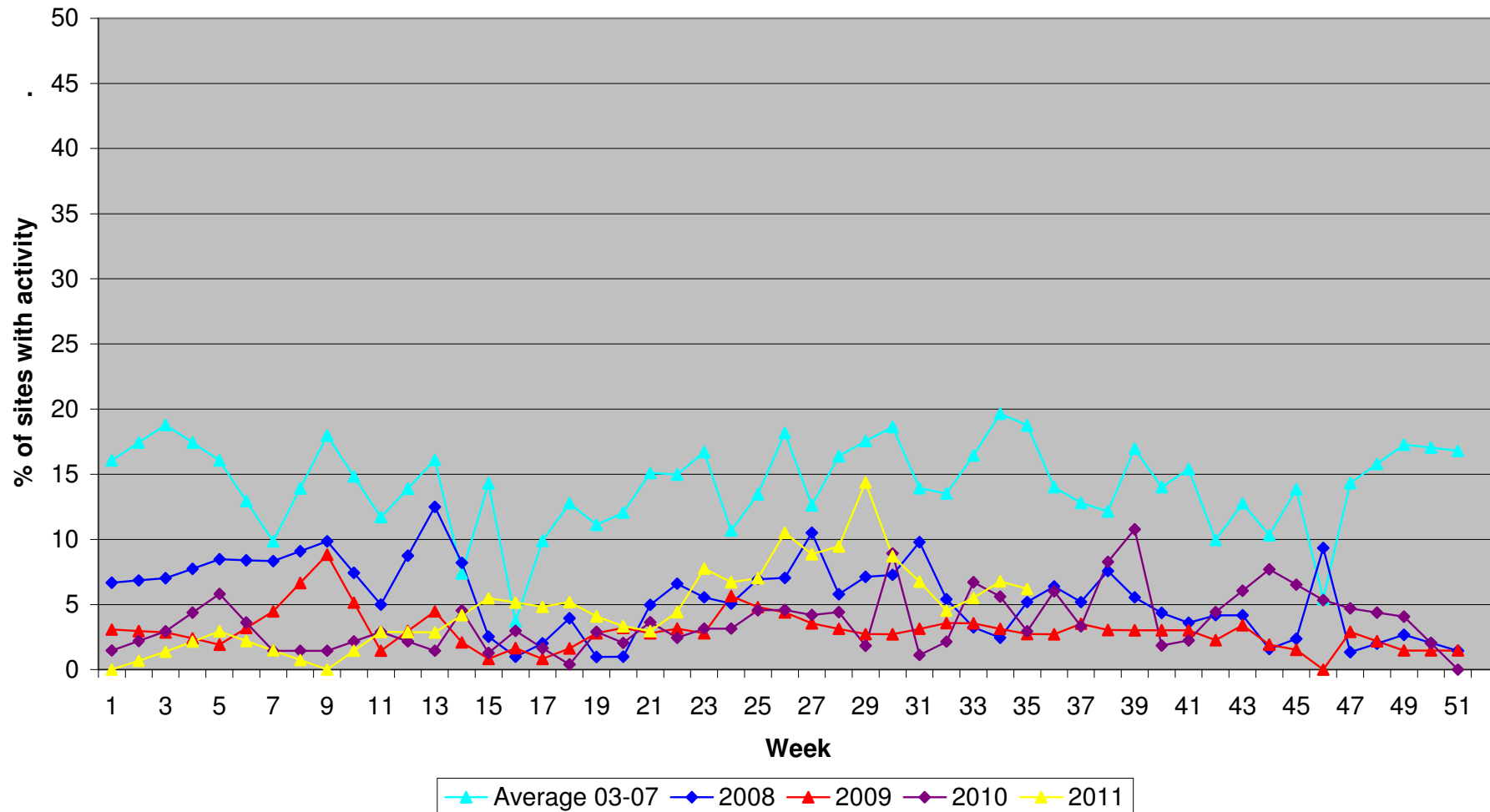
Mosquito data

- Percentage of sites showing any activity



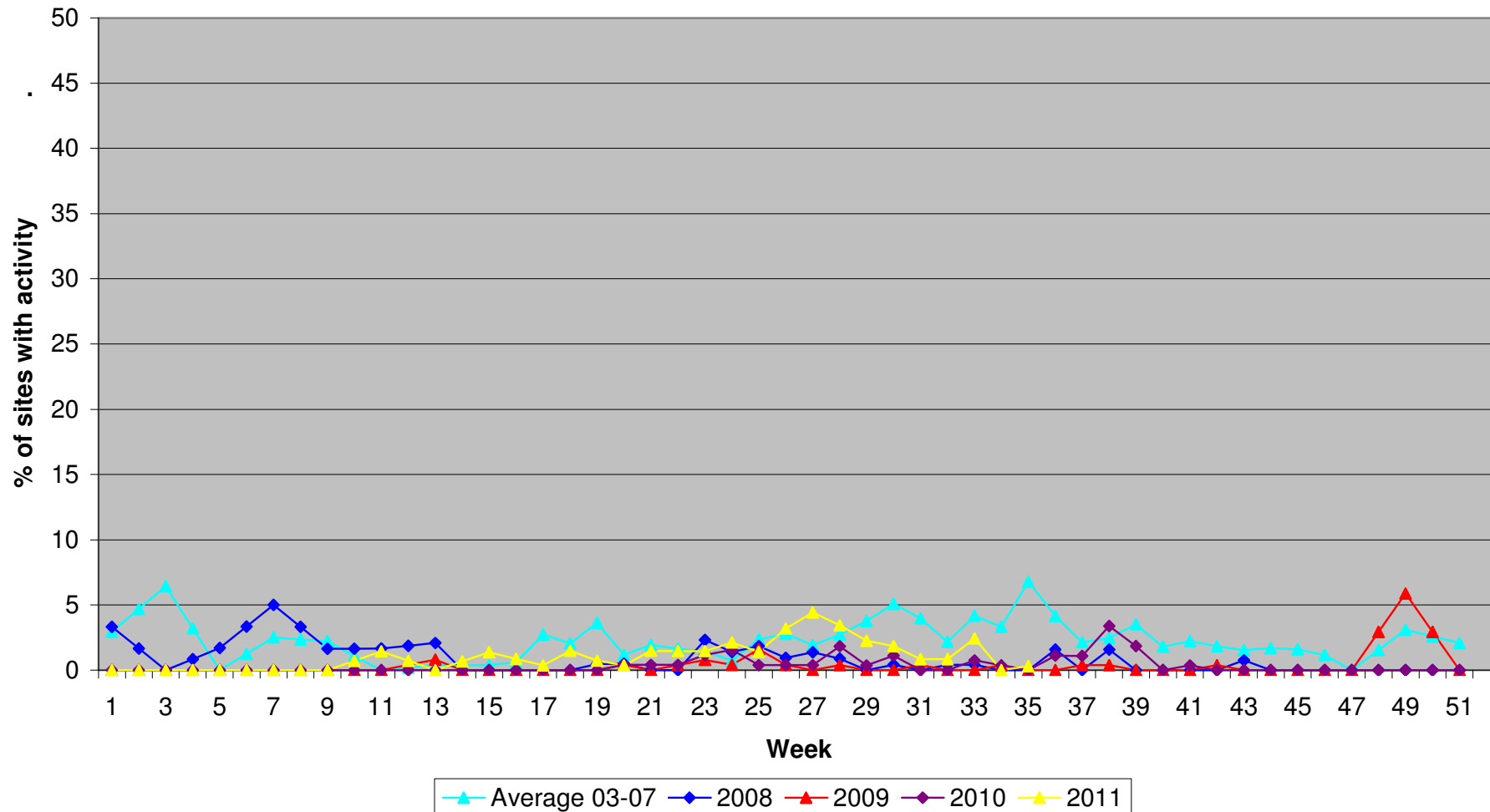
Mosquito data

- Percentage of sites showing any adults



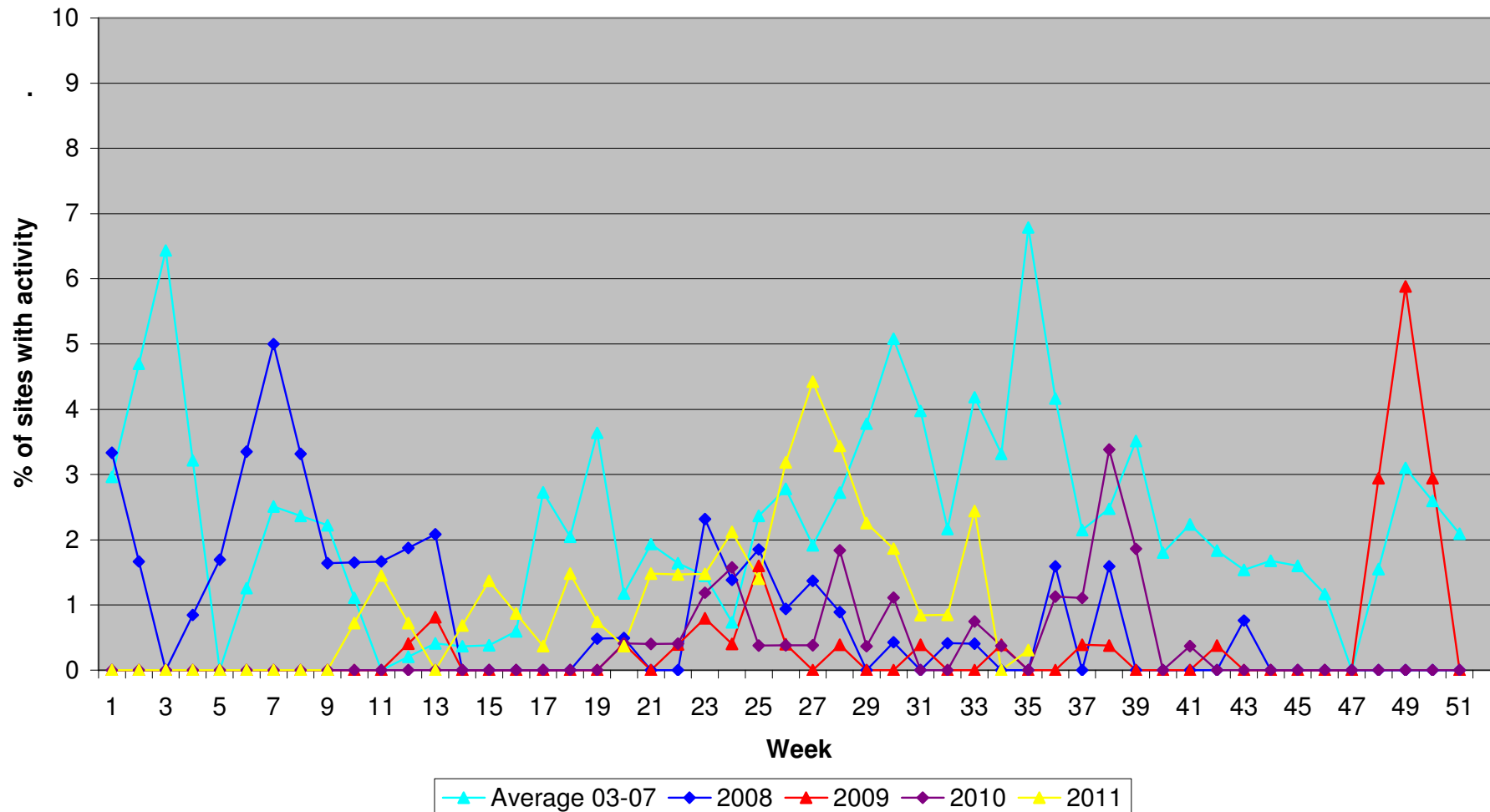
Mosquito data

- Percentage of sites with many adults



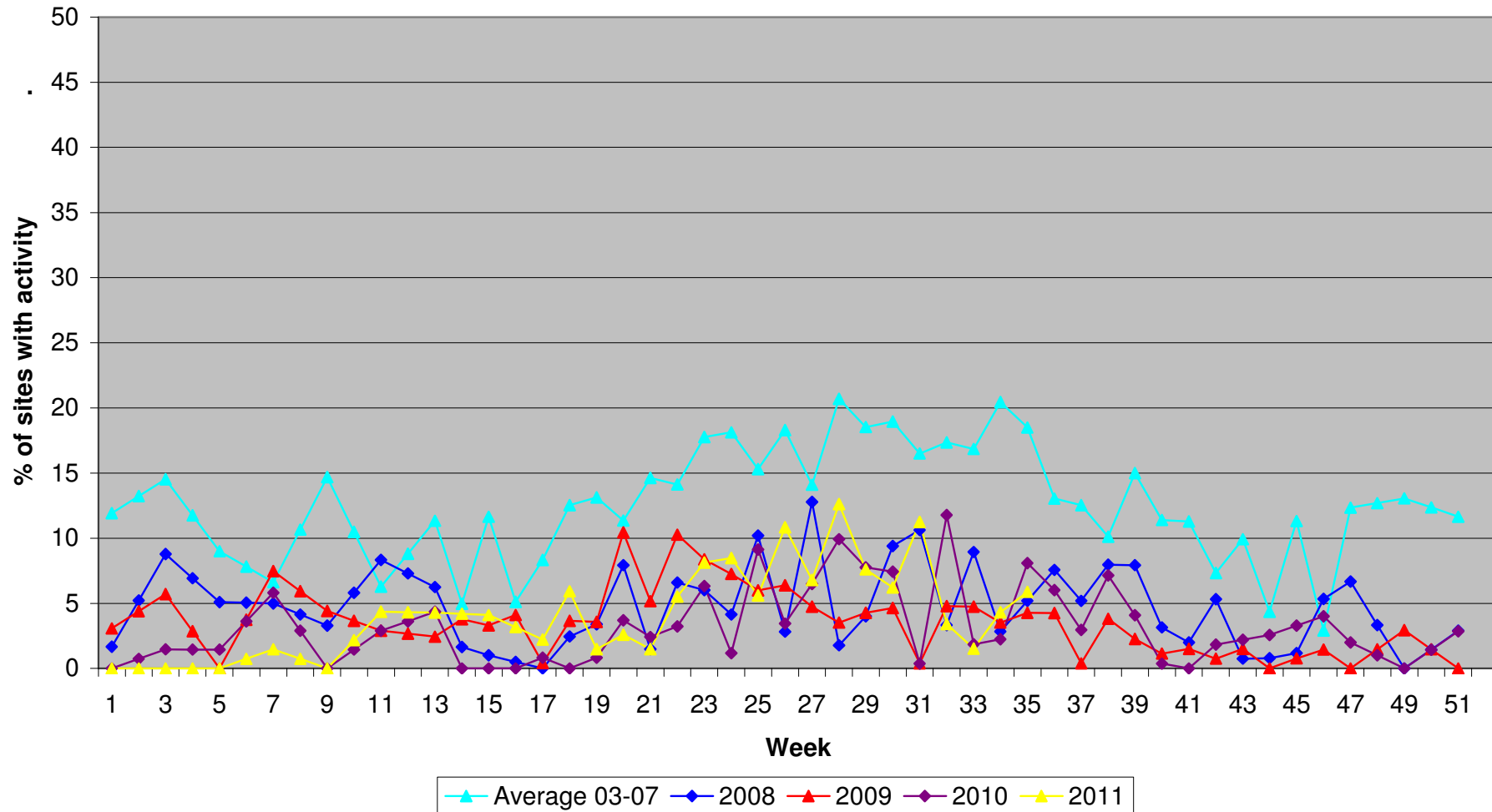
Mosquito data

- Percentage of sites with many adults (2)



Mosquito data

- Percentage of sites with larvae activity



Mogden STW Upgrade



Key progress to date



- We are into our second year of construction.
- We have built over half of the additional treatment tanks.



Inlet works



This is where we filter the sewage to remove grit and other large items

- We have built the new tunnel that will transport sewage from the incoming sewer to the new inlet, and have nearly finished the remaining building work.
- The six new screens are now in place.
- We are now installing the grit removal equipment.



Primary settlement tanks



This is where solids settle to the bottom and are then removed

- The building work is almost complete.
- We are now installing the sludge removal system and placing odour control covers on the tanks.



Aeration lanes

This is where we encourage bacteria to eat the organic matter

- We have built three of the five new lanes.
- The huge reinforced concrete base is complete.
- We will soon start installing the interconnecting pipework.



Final settlement tanks



This is where the remaining solids are removed before the effluent is returned to the River Thames

- We are about a third of the way through building the foundations. This is likely to finish in November and is the final stage of piling.



Sludge stream



This is where the remaining sludge is broken down and turned into energy

- Five new gas compressors have now been installed and will soon be operational.
- Seven of the 16 digesters have been refurbished, and three of the 13 digesters have been cleaned.
- We have built the first of the two new raw sludge holding tanks.
- On completion, the work here will mean we will be able to power up to 40 per cent of the site with renewable energy.





AOB

Proposed dates of meetings:



- Wednesday 7 December 2011
- Wednesday 7 March 2012
- Wednesday 6 June 2012



Need to contact us about Mogden?

Call the Mogden 24hr line (via the Thames Water Operations Contact Centre):

0845 641 0030

To subscribe to email notifications, email us at:

mogden@thameswater.co.uk

Visit our website:

www.thameswater.co.uk/mogden

Write to us:

Customer Feedback

PO Box 286

Swindon

SN38 2RA