

## July Report 2010

### Don't Panic.....

But we believe we are now at a greater risk of severe surge than at anytime since late July 2006. In that year only a very wet August slowed what was developing as a very major event. Its not inevitable and if your surge planning is well advanced then as Corporal Jones says "*don't panic*".

This month we again start with our alert forecast.

1. MORECS data at our key target site has passed 200mm earlier than in any of the modern comparable years. The journey from very low MORECS to very high occurring rapidly is a known key claims trigger.
2. The anomalous rainfall statistics for the UK remain and this is now officially the driest first half year since 1929.
3. The Atlantic and Jet remain inactive across Southern England.
4. Comparative analysis of MORECS data suggests that as we enter July the global synoptic pattern is far closer to 2003 / 2006 than to either 2007 or 2008
5. We believe that in late 2009 many properties will have barely missed damage as the pattern shifted from Wet Phase to Dry Phase and as we predicted last year.

Its not inevitable, however if July delivers lower than average rainfall across the English lowlands.....



However the precautionary principle suggests that surge planning teams should now be very focussed on the detail of their own and their supply chains surge planning programmes.

We have therefore decided to escalate our warning to amplify the work already underway across the sector.

**Page 2** is a couple of charts courtesy of the Met Office indicating the rainfall anomaly year to date and for comparison 2003—we are sure you get it!

Page 3 is a nice big MORECS Chart. **Page 4** looks at the weather year to date and looks for any developing trends. On **page 5** we give our latest Summer forecast of most likely assumptions for capacity planning.

Our intention is to produce a monthly report, which will build a record of the forecast assumptions against the gathered actual data, such as to build confidence in the most reliable forecasting techniques available. If you have any comments on this newsletter, on any of the content, assumptions or modelling techniques, then contact us as indicated below:

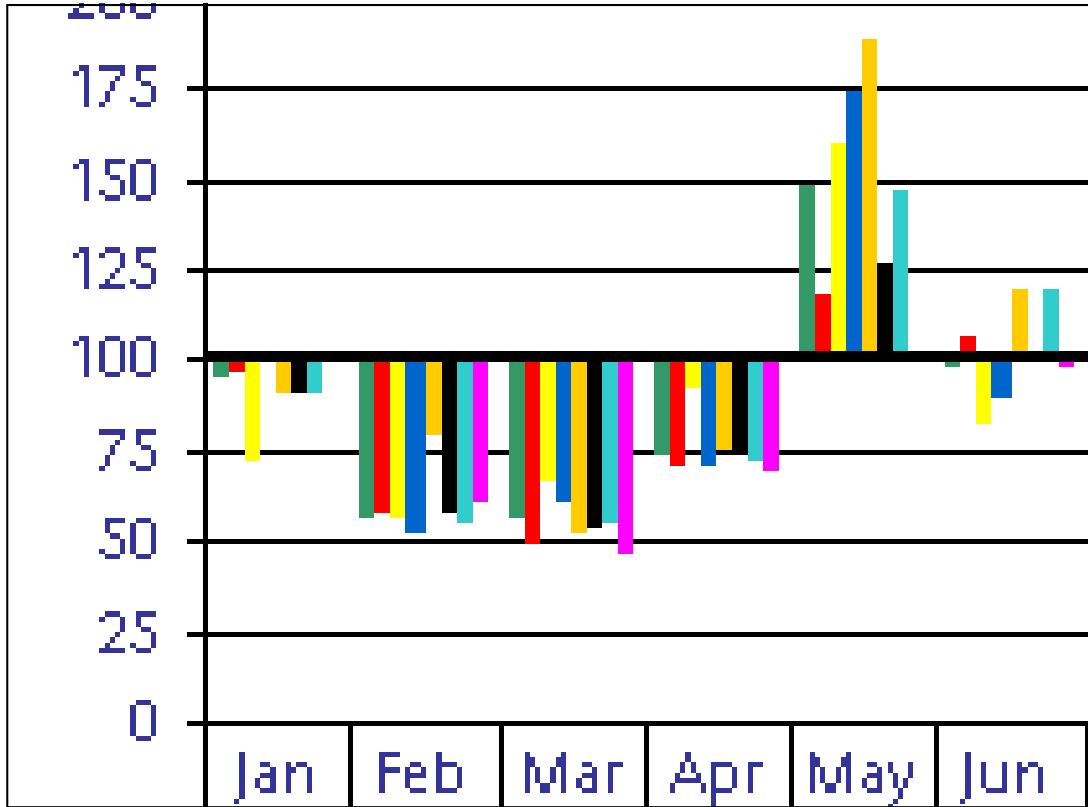
michael.lawson@landscapeplanning.co.uk

**Additional resources:**

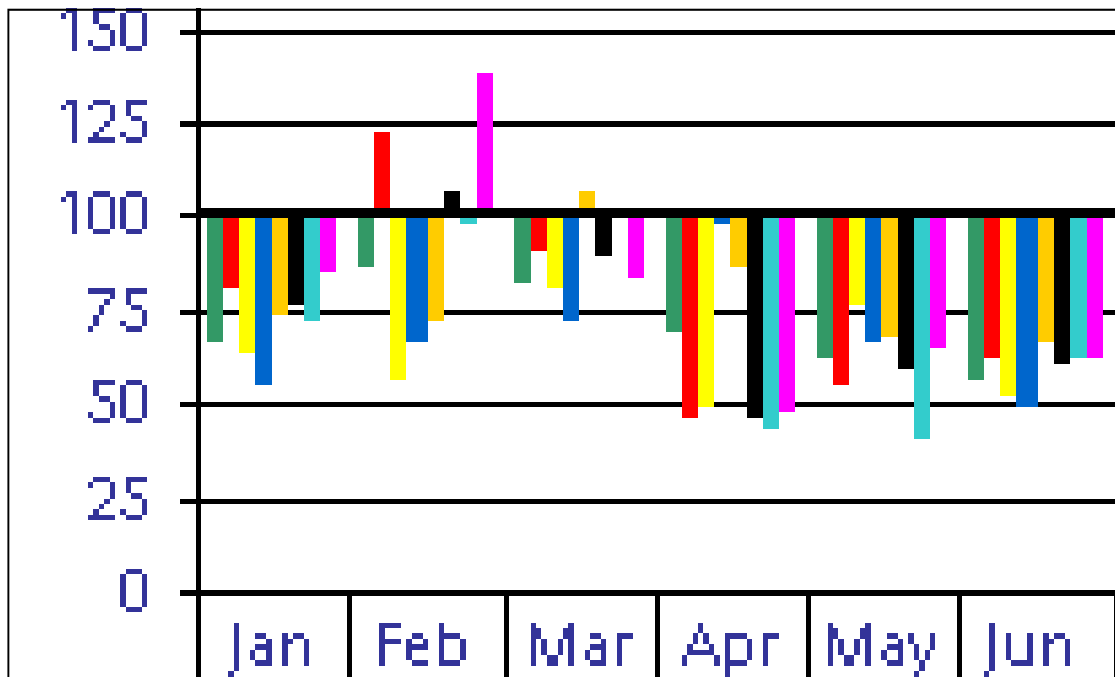
For more information on our research visit:

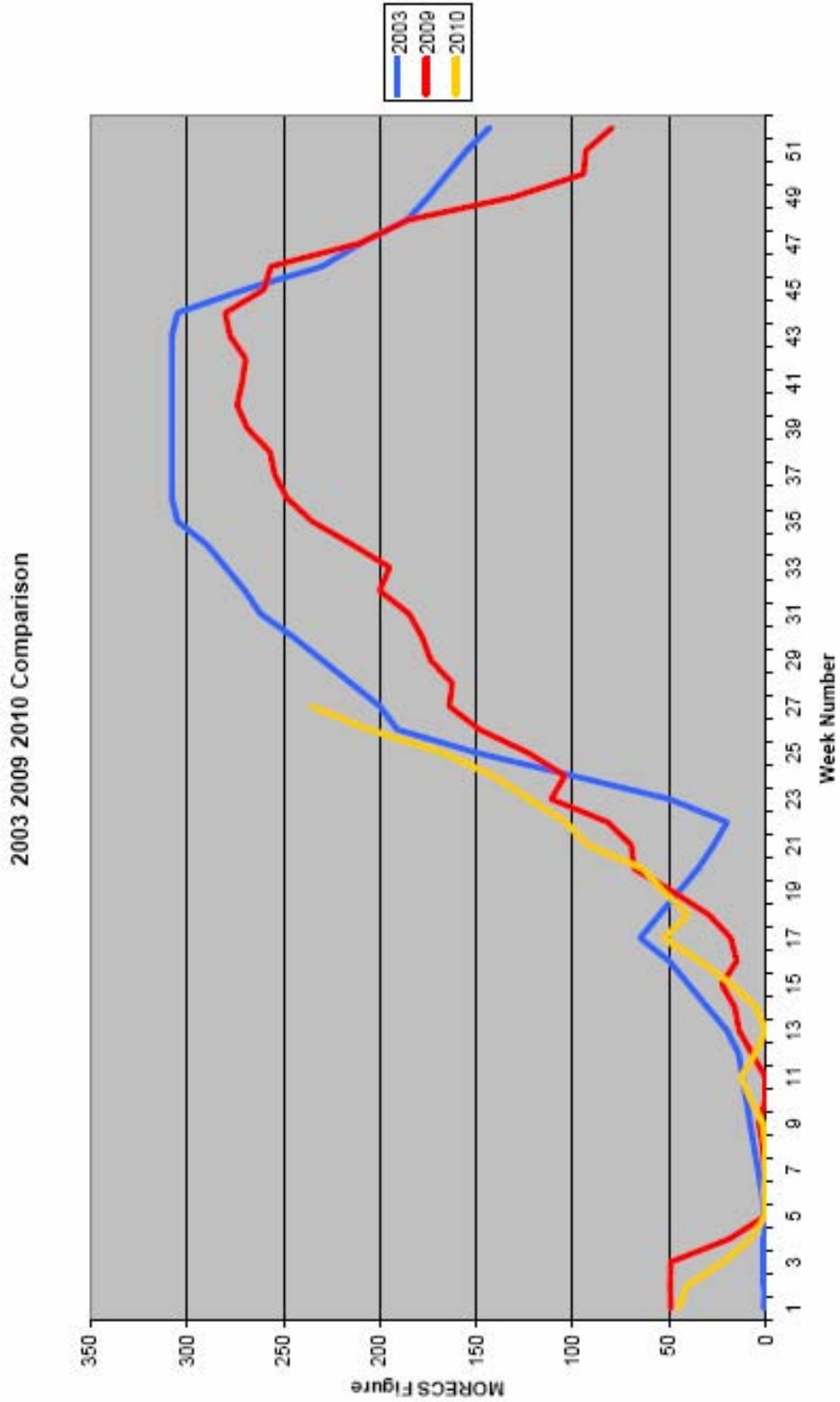
[http://www.oca-arb.co.uk/research\\_unit.htm](http://www.oca-arb.co.uk/research_unit.htm)

**Rainfall Anomaly 2003**



**Rainfall Anomaly 2010**





## June 2010 - Year to date

The late winter and early Spring 2010 produced an interesting set of UK meteorological figures:

### Rainfall anomalies

There were modest anomalies through January, February and March with the period being ordinary. However in April, some striking anomalies existed relative to rainfall.

Parts of the south east had exceptionally low levels with East Anglia having only a quarter of normal rainfall, for the midlands and south east it was a month in which only 40% of normal rainfall fell. This anomalous position continued strongly into May 2010 which saw a very dry month across the English lowlands. At the end of June this cumulative position has led to the driest first 6 months since 1929.

Regions 1st-30th	Temp Anom	Rain %age	Sun %age
N Scot	+1.1	37	80
E Scot	+1.4	50	107
W Scot	+1.8	49	139
CentScot	+1.8	52	133
NE Eng	+1.6	64	147
EAnglia	+1.4	84	150
Midlands	+1.7	84	153
SE Eng	+1.5	71	158
NW Eng	+1.8	44	142
Wales	+1.3	48	156
SW Eng	+1.5	43	165
N Ireland	+1.5	60	135
Irish Rep	+1.8	70	137

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## 2010 - Looking Forward

We already have the driest first half since 1929 and rapidly rising MORECS count at key locations. Although long range weather forecasts are incredibly difficult the established Long Range Weather Forecasters seem increasingly aligned to a drier than wetter summer period:

### Met Office

UK Outlook for Tuesday 20 Jul 2010 to Tuesday 3 Aug 2010: There are indications that there may be a good deal of dry and warm weather during the second half of July and into the start of August, with many places seeing temperatures above normal for much of the period. Some areas will be drier than normal with average or below average rainfall, although more unsettled conditions may well persist for longer in western Scotland and Northern Ireland. Sunshine amounts look to be around normal for this time of year across Northern Ireland and Scotland but are likely to be somewhat above average in England and Wales.

### Positive Weather Solutions

July generally starts unsettled for Scotland and Northern Ireland, but considerably better for England and Wales, and in particular, south east England and east England.

So expect some unsettled conditions to the north, with showers very much in evidence, coupled with moderate but not impressive temperatures. To the south, high pressure persists, so more in the way of drier weather, with some decent temperatures, pushing into the mid 20's at times.

For the latter part of July, chiefly dry again for a good many areas, the best again, to the south. July also ends on a chiefly dry and warm to very warm note, and this in turn will spark off thunderstorm activity. 30c may well be surpassed quite easily.

Over all, I anticipate another drier than average month, with temperature values above normal.

## Forecasting assumption 2010

### Factor 1

#### The previous year

The year 2009 was dominated by a significant **April, May** and to end of **June** low rainfall anomaly and with an extraordinarily wet July followed by an ordinary August, then followed by a late dry September / October and second extraordinarily wet month in November. The MORECS data for the main site rose steadily to figures not seen since 2006 / 2003. Soils did come under drying pressure from plants with the July anomaly breaking the pressure on soils which picked up as a second spike through the months August, Sept and October.

### Factor 2

The current model MORECS has jumped forward in response to the dry May / June and earlier modest anomalies. MORECS is now at more than 200mm at our key data location.

### Factor 3

#### The current plant health status

Since the last significant plant stress event during 2003, there has been a succession of warm and wet summers and a mix of ordinary and wet winters.

Plant health as a macro vegetation factor is driven by water availability and ease of access to water in the soil. With few stress periods of intense heat and prolonged dryness for the last four years and particularly after 2007-2008, plant health as a broad indicator is high and the plant community will respond quickly to any dry period in good health.

### Factor 4

#### Societal issues

There is a high appreciation of subsidence as a factor of modern property ownership. Given the credit crunch of 2007—2009 and the low level of sales, of first time buyers and of mobility generally, there may be a dampening in identified subsidence cases from this source. However, with property owners concerned about equity values in their homes and with concerns associated with falling average sale prices, pressure from suspected building subsidence may cause greater sensitivity to cracking in buildings. It is noted that the property market is recovering through Spring 2010.



### CURRENT FORECAST

Based on all of the data available and the current forecast for the remainder of 2010 the risk of a full blown event year is rated as very high **amber**.

The impact of an elevated claims experience in 2009, the partial pressure on plants with dry spells in early and late 2009, the very dry Spring during 2010 and driest half year since 1929, the current El Nino phase in the tropical Pacific Ocean, as well as the statistical likelihood of a return event year all indicate caution that an event during 2010 is an increasing possibility. This forecast position will now remain until August 2010.

