



Michael Dyer

Pesticides Catchment Specialist

The Company statistics



- **Supplies 1.2 million customers with water**
- **Smallest of the 10 major water companies**
- **Deals with the waste from 2.7 million customers**
- **Supplies on average about 330 mega litres per day**
- **15 water supply sites have treatment for pesticides**

The Water Quality Challenge



- Parameter Compliance (pcv)
- Pesticide 0.1ug/l (Individual pesticide) and/or 0.5 ug/l (total pesticide)
- Metaldehyde and Clopyralid are particularly difficult to remove
- Peaks of other pesticides can cause 'bleed thru' of GAC filters

Pesticides of concern

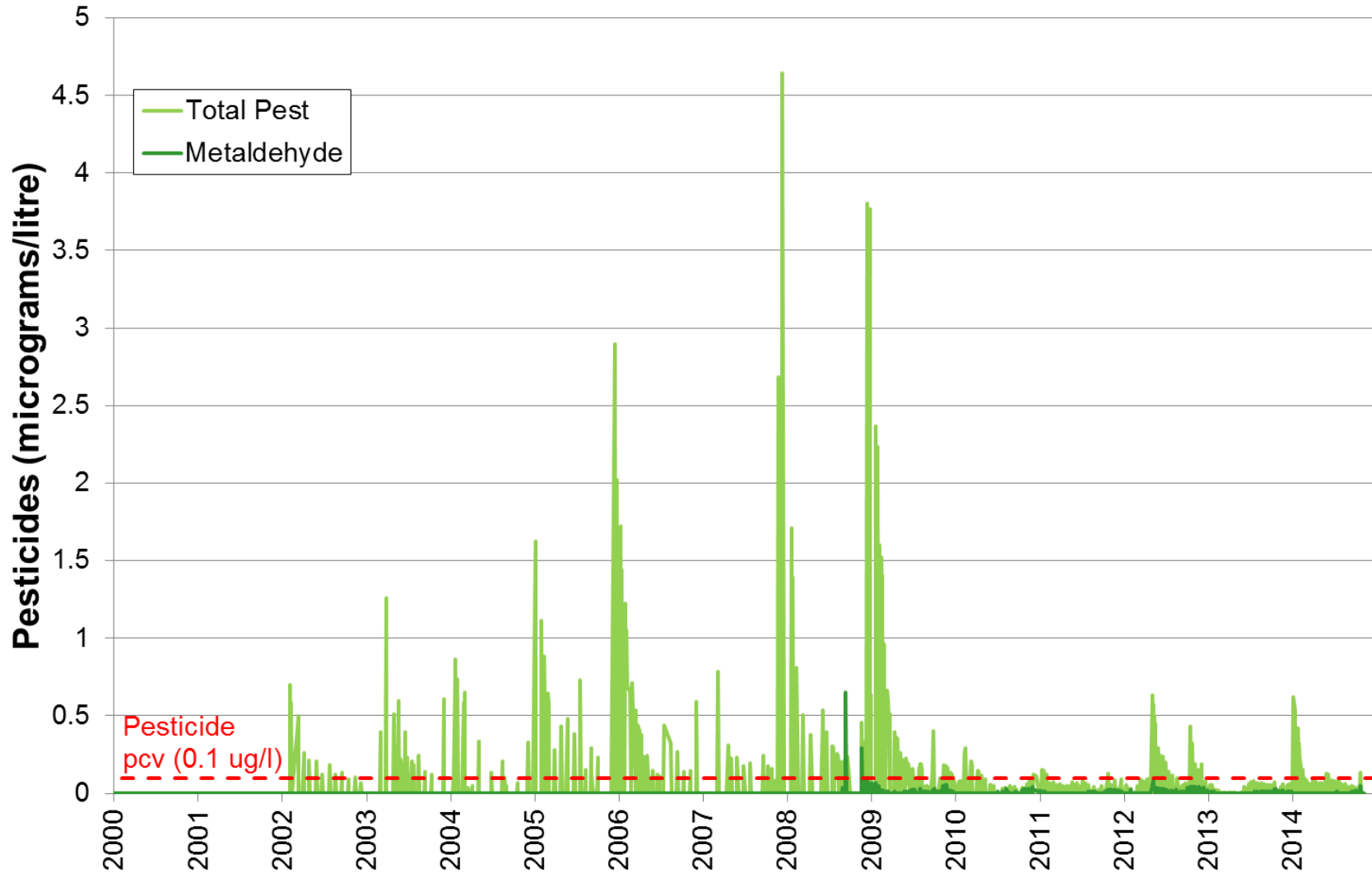


- **Bentazone**
- **Carbetamide & propyzamide**
- **Chlorotoluron**
- **Mecoprop - P**
- **Metazachlor**
- **Quinmerac**

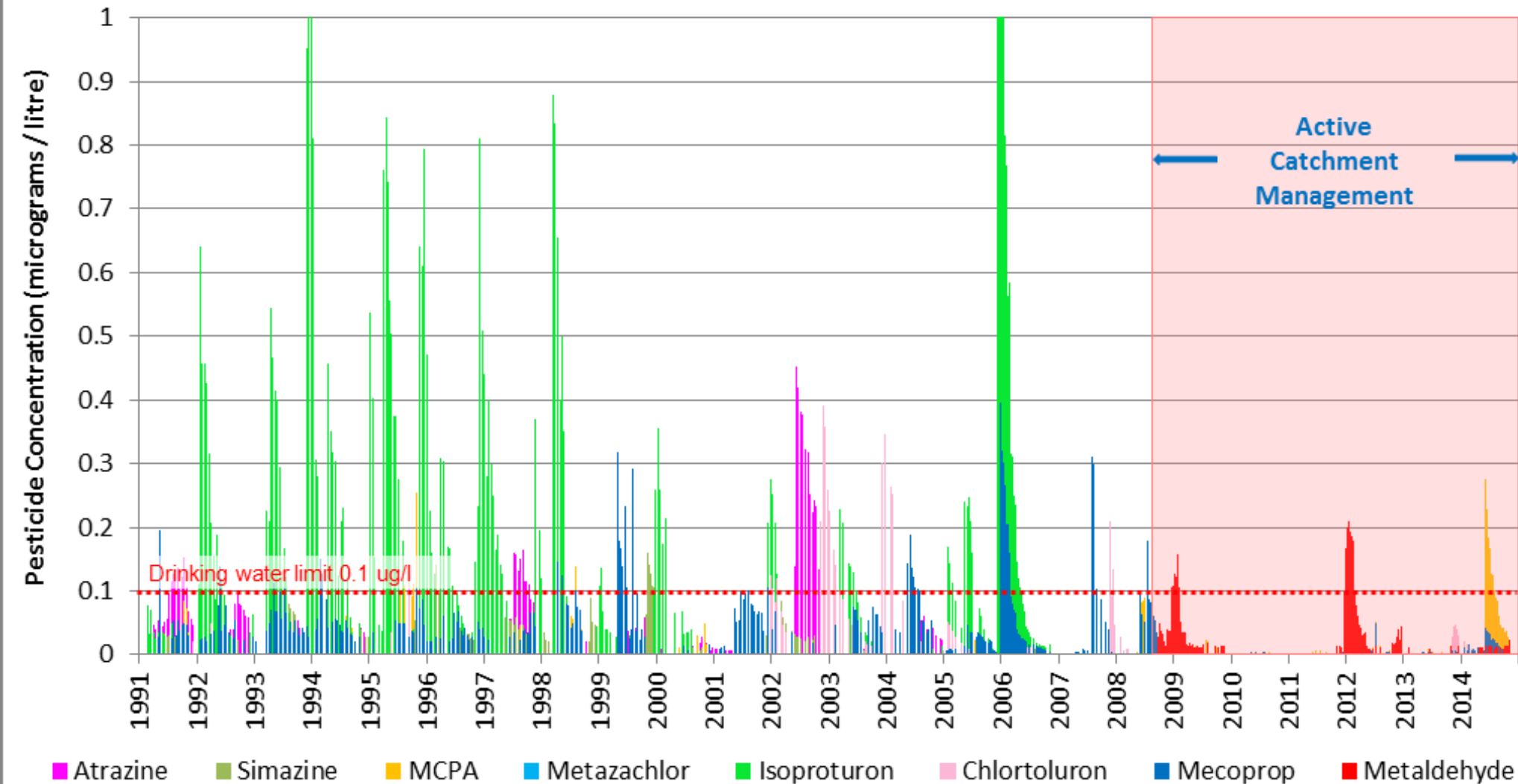
GAC filters



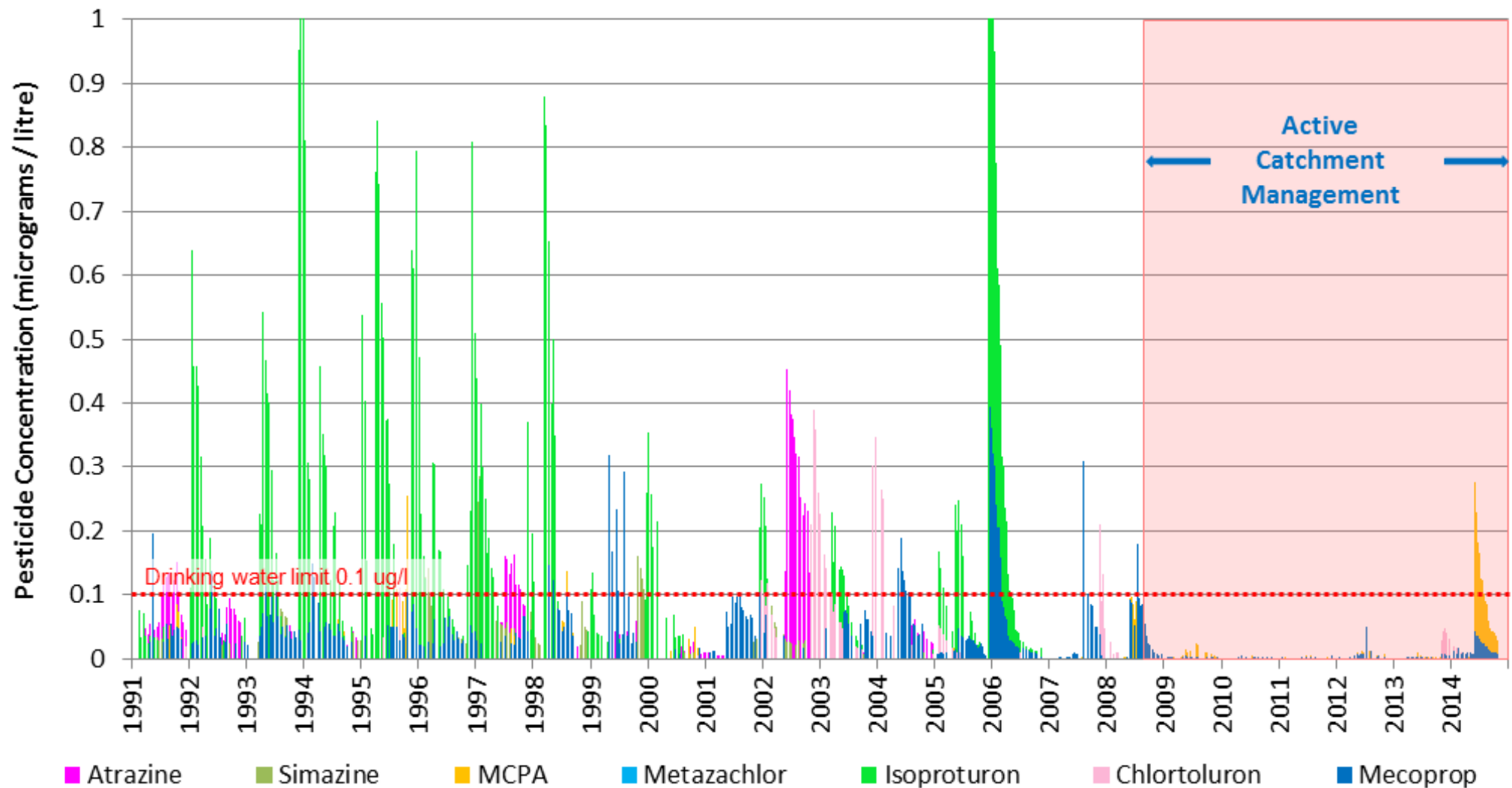
Durleigh – Total Pesticide and Metaldehyde



Sutton Bingham – Raw Reservoir Data



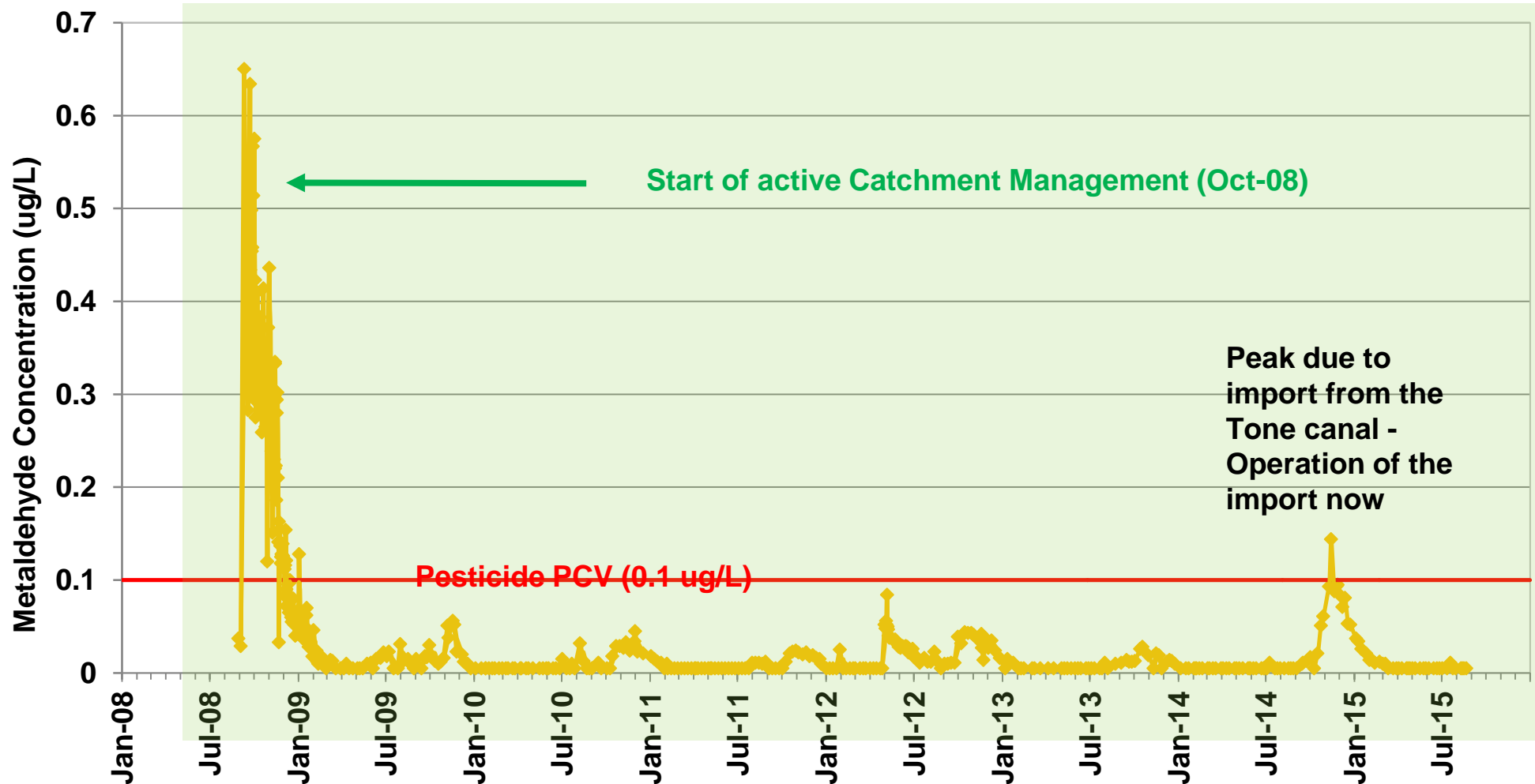
Sutton Bingham Raw Reservoir Data



Durleigh Raw v Canal Pumped Supply



Durleigh Reservoir Raw Water Metaldehyde Concentration



The costs of metaldehyde removal



- **Would require additional treatment at 3 surface water treatment works**
- **£16 million total capital investment (2009 prices)**
- **£0.5 million additional operating costs per treatment works**
- **Inability to fully utilise 4 pump storage schemes**
- **Abandonment of a major pump storage scheme**

The Wessex Water solution



- **Active catchment management**
- **£0.2 million cost over the current 5 year AMP period**
- **Farmer engagement**
- **Product substitution**

Farmer Engagement



- **One to one farmer contact**
- **Advice on best farming practices**
- **Advice on grant funding and environment stewardship opportunities**
- **Newsletters (joint with Environment Agency)**

Metaldehyde Continuation of the SLUXX Subsidy

- 98 % effective



Riparian Buffer Strips

- Farm sediment traps and buffer strips
- Removes sediment and phosphate
- Reduces field pesticide losses



Nutrient Planning Advice

- A prerequisite of any catchment management options
- Soil nutrient testing
- Organic manure testing



Sprayer testing and calibration farmyard point sources

- 5% reduction on total pesticides
- Free 'grandfather rights' training
- CSFI 'type' sprayer wash-down /bio bed grants



Fertiliser Spreader Calibration

- Reduction of 5% for phosphate
- Integrated with soil testing and nutrient planning advice
- Facilitates farmer engagement



- **UKWIR Pesticide risk mapping project**
- **Tool to target catchment management activities**
- **Phase 2 will develop tools to aid pesticide application decisions**

- **Working with FERA**
- **Identifying lower risk pesticides**
- **For use in a GW catchment that is reverting to conventional agriculture**