

Romney Weir Hydro Scheme

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RWE Innogy

Hydro Developers



RWE Innogy

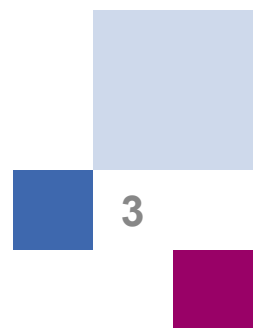


- Electricity supplier through npower
- Conventional electricity generator e.g. Didcot Power Stations
- Developer and operator of wind farms
- Operator of 10 small hydro schemes in the UK

RWE Involvement at Romney Weir



- Original project identified by the Royal Household at Windsor Castle
- Concept developed by IT Power and Olly Paish
- EU funding assisted the project
- Innogy invited in as a developer



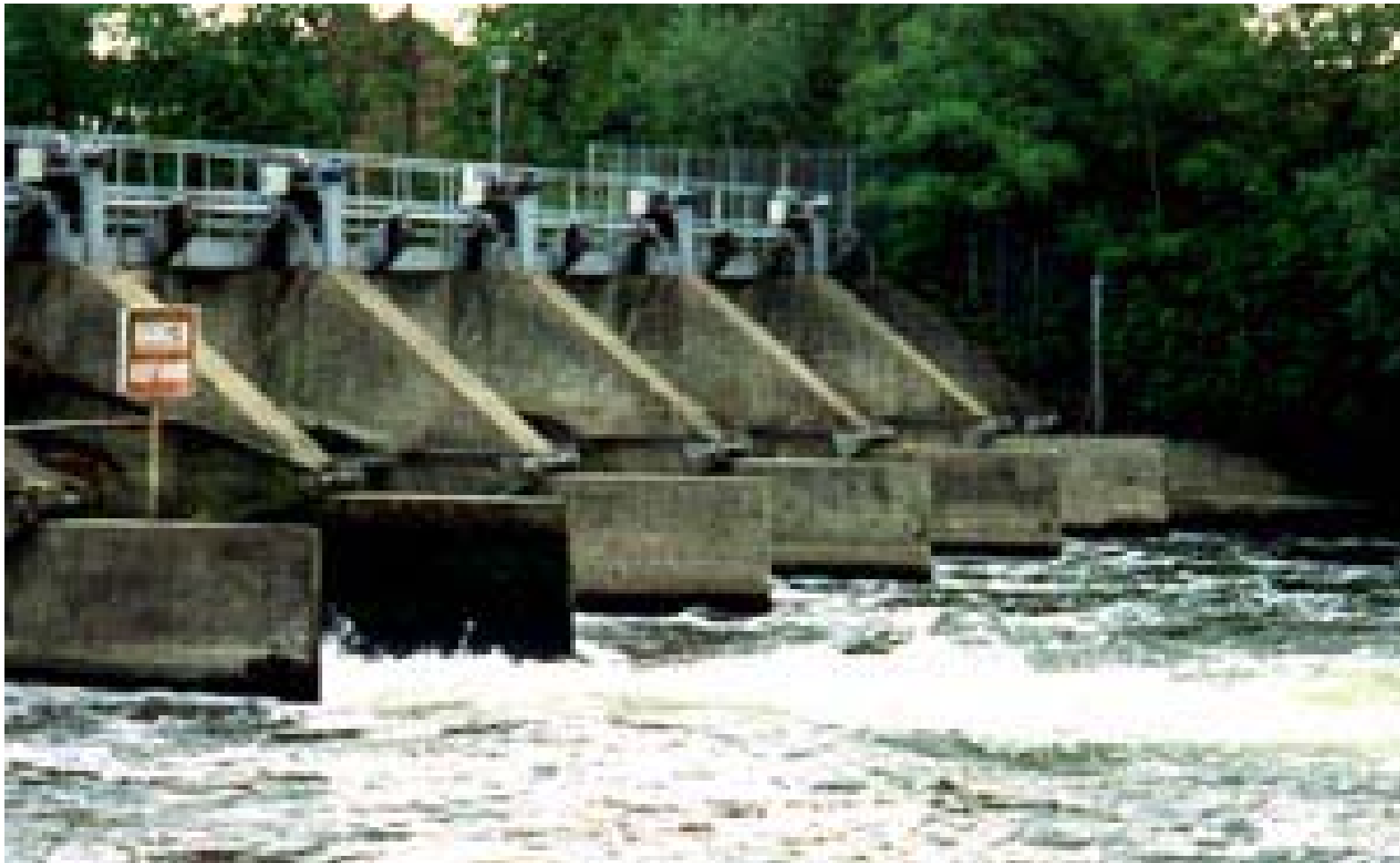
Facts and Figures

- 200kW of electrical power
- 1.3 million kilowatt hours per year
- Intended consumer Windsor Castle
- Average flow through the turbines 10 cubic metres per second
- 20% of the average flow of the Thames
- Head 2m approx.

The site









Consenting Process

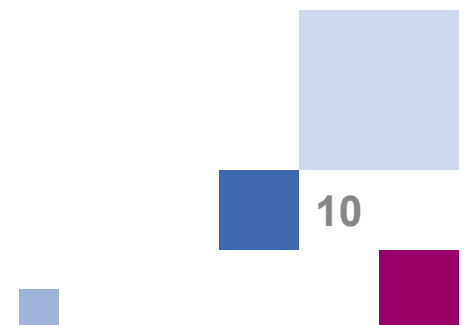


- Outline planning received from Windsor and Maidenhead Borough Council
- Weir is owned by the Environment Agency
- Draft abstraction and impoundment licences
- Draft Operating Agreement

Main planning/consent issues



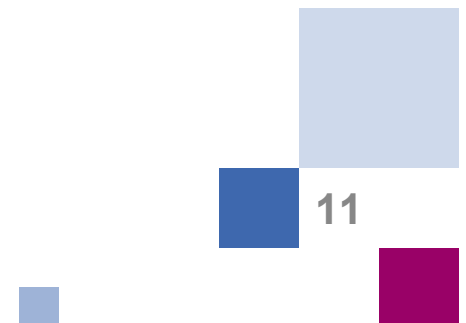
- Fish
- Noise
- Visual impact
- Flooding
- Other river users



Fish



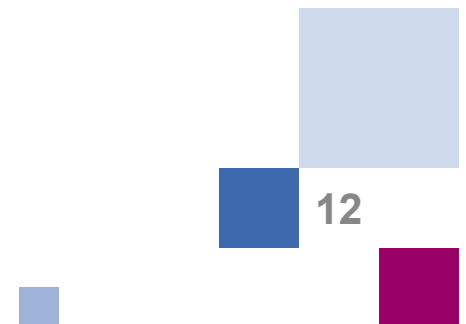
- Screening
- Existing fish pass unaffected
- Eel Pipe
- Overwashed screens



Noise



- Existing background levels 50 dB
- Projected noise level at closest residential area 38 dB
- No noise impact expected



Visual impact



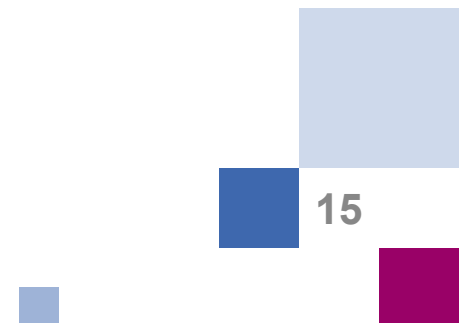
Flooding



Outstanding Issues

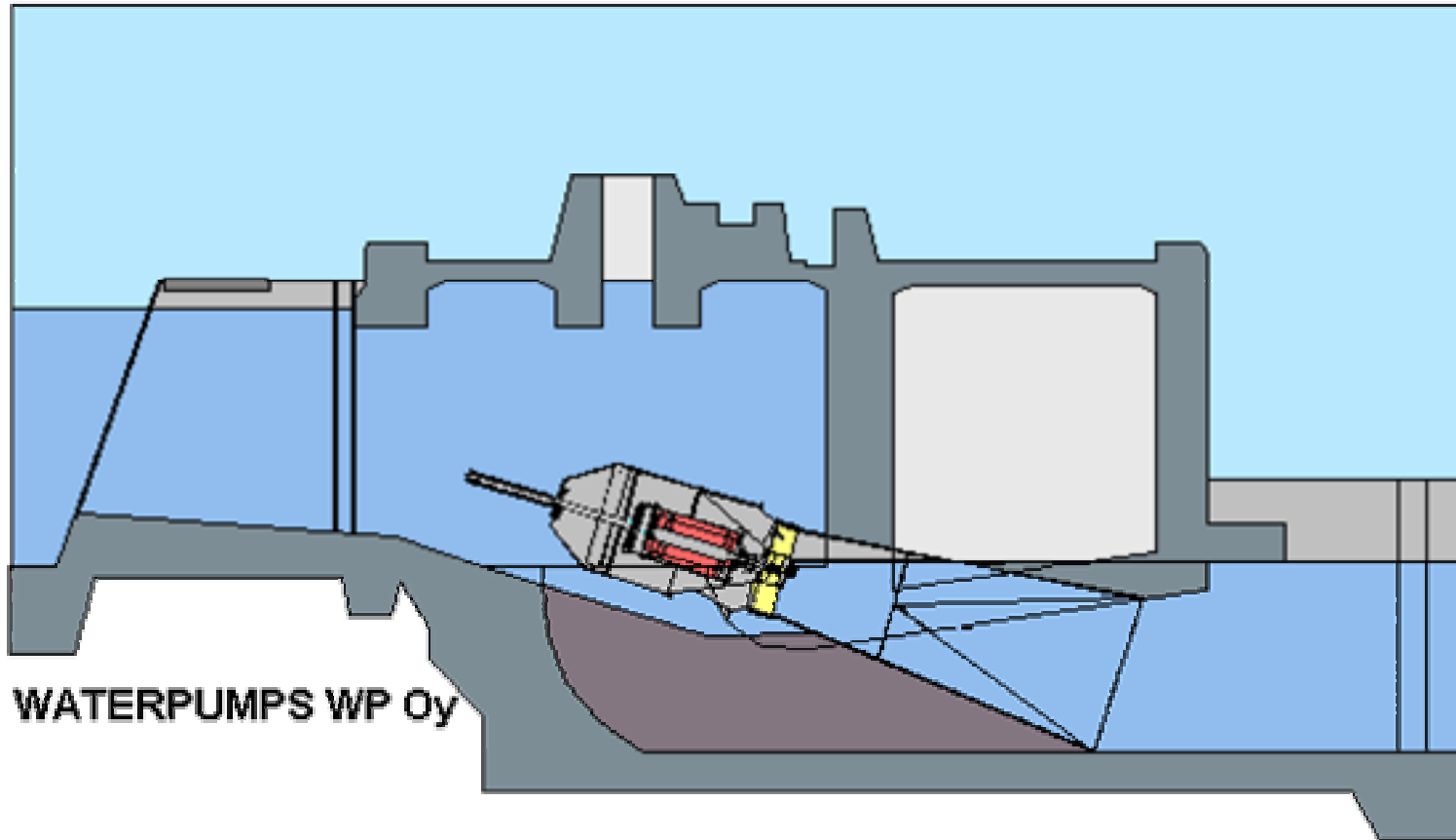


- Final detailed design of turbines and enclosure
- Planning approval for final design
- Finalised agreements with Environment Agency and other parties









WATERPUMPS WP 0y



Summary



- Development of low head sites is slow
- Lots of stakeholders
- Civil costs are high
- Select sites to keep these costs down
- Investigate innovative turbine options
- Third party supply can increase income

