



SWITCH TO A RENEWABLE FUTURE

River Power around Frome

Anthony Battersby

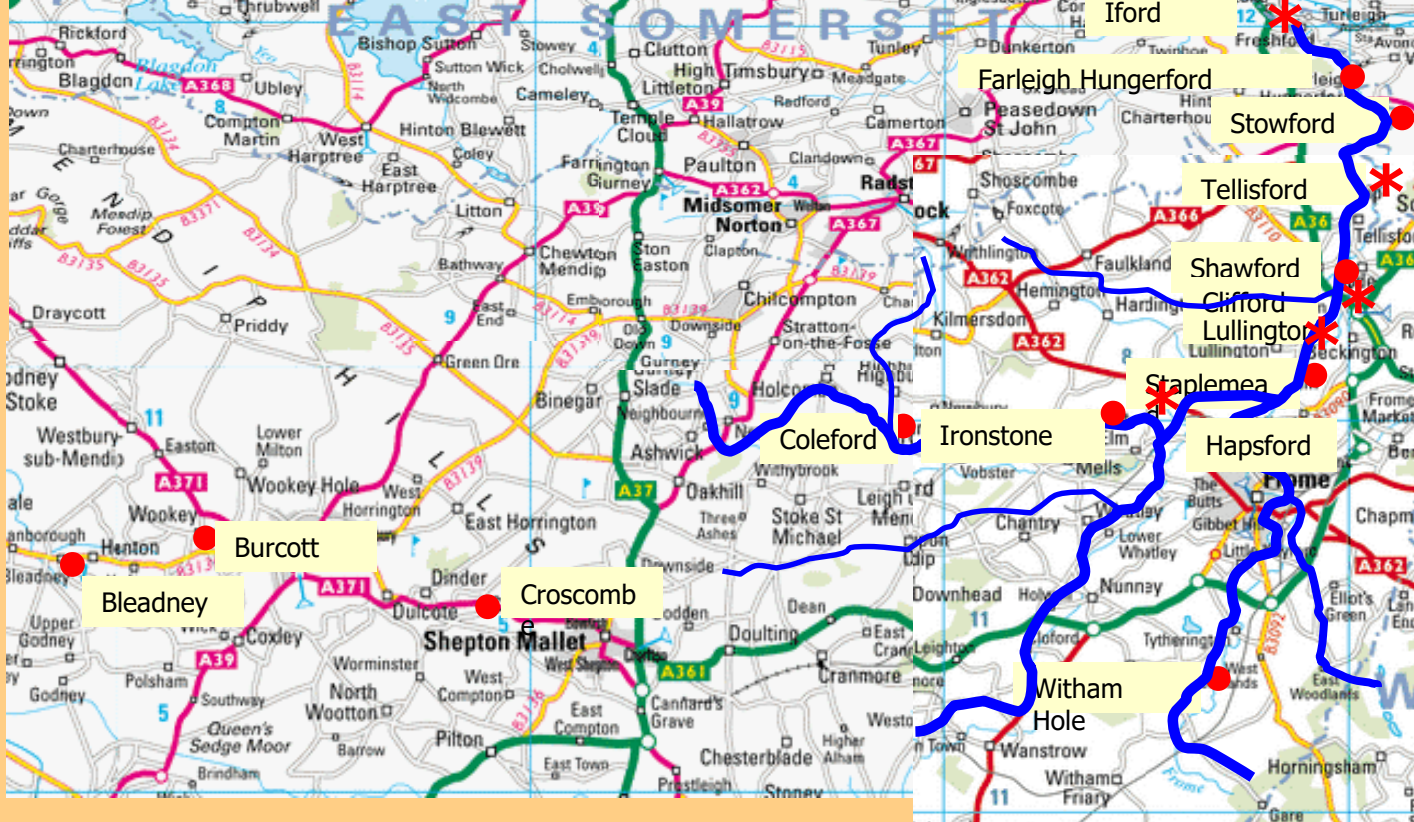
Chairman, Mendip Power Group

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Mendip Power Group



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Objectives of MPG

- To install effective renewable energy generating systems.
- To promote improved energy efficiency and increased development and use of renewable sources of power.
- To attract funding to meet these objectives.

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Operational Hydropower Sites in Mendip

Site	Capacity (kW)	Type
Dunkirk	3	crossflow
Farthingham	55	Archimedes screw
Hapsford	58	crossflow
Iford Manor	44	Archimedes screw
Lullington	66	Archimedes screw
Tellisford	60	Kaplan
Wallbridge	12	Francis
Burcott Mill	10	water wheel
Alhampton	10	Archimedes screw
Wookey Hole	30	Kaplan
Iwood Manor	11	crossflow
Littleton Mill	28	Francis
Total	387	

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Hydropower sites under development in Mendip

Site	Capacity (kW)	Proposed Type
Clifford Hydro	50	propeller
Iron Mill	75	Kaplan
Stowford	70	Kaplan
Wadbury	70	Kaplan
West Lydford	55	Kaplan
Weavers Mill	90	Kaplan
Kingston Mill	50	Kaplan
Job's Mill	10	Kaplan
Total	470	

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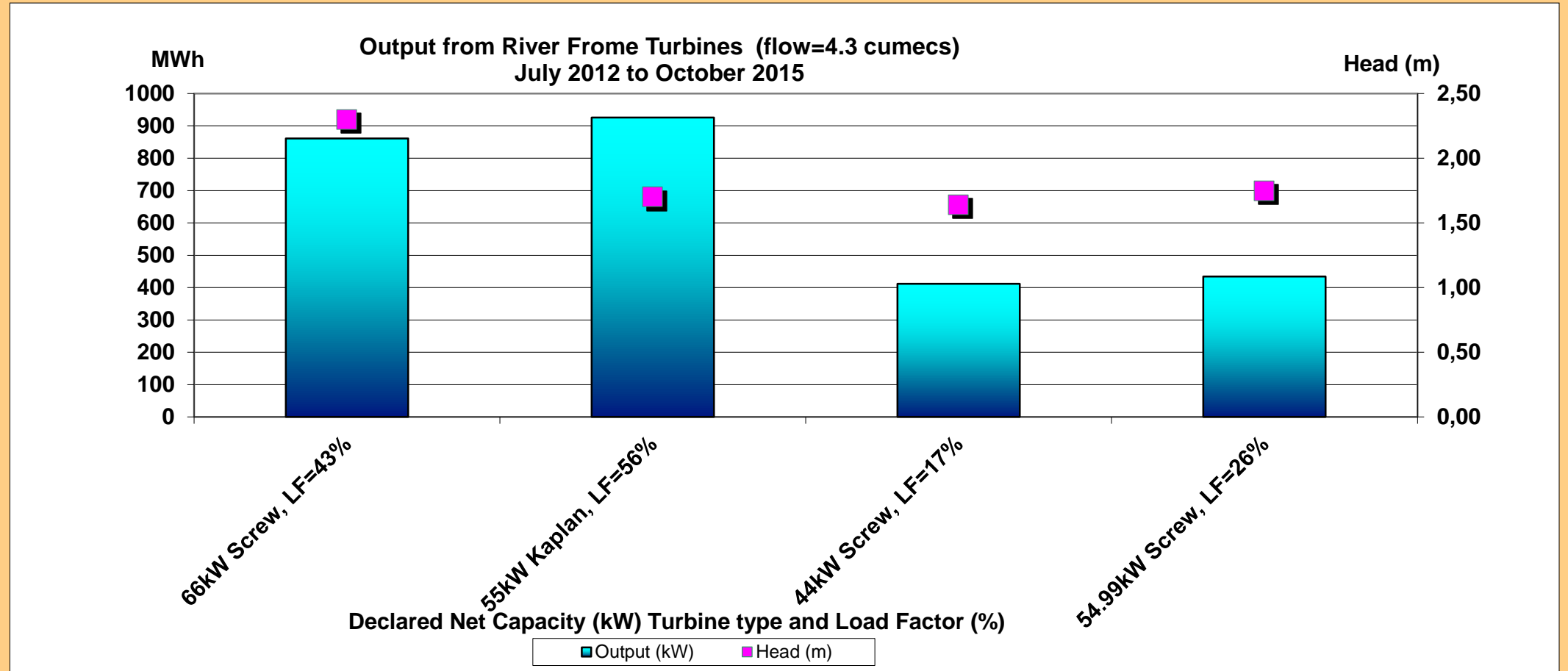
Hydropower sites existing but undeveloped

Undeveloped sites	Capacity (kW)
23	670
Grand Total	1,527

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Experience with Turbine Types



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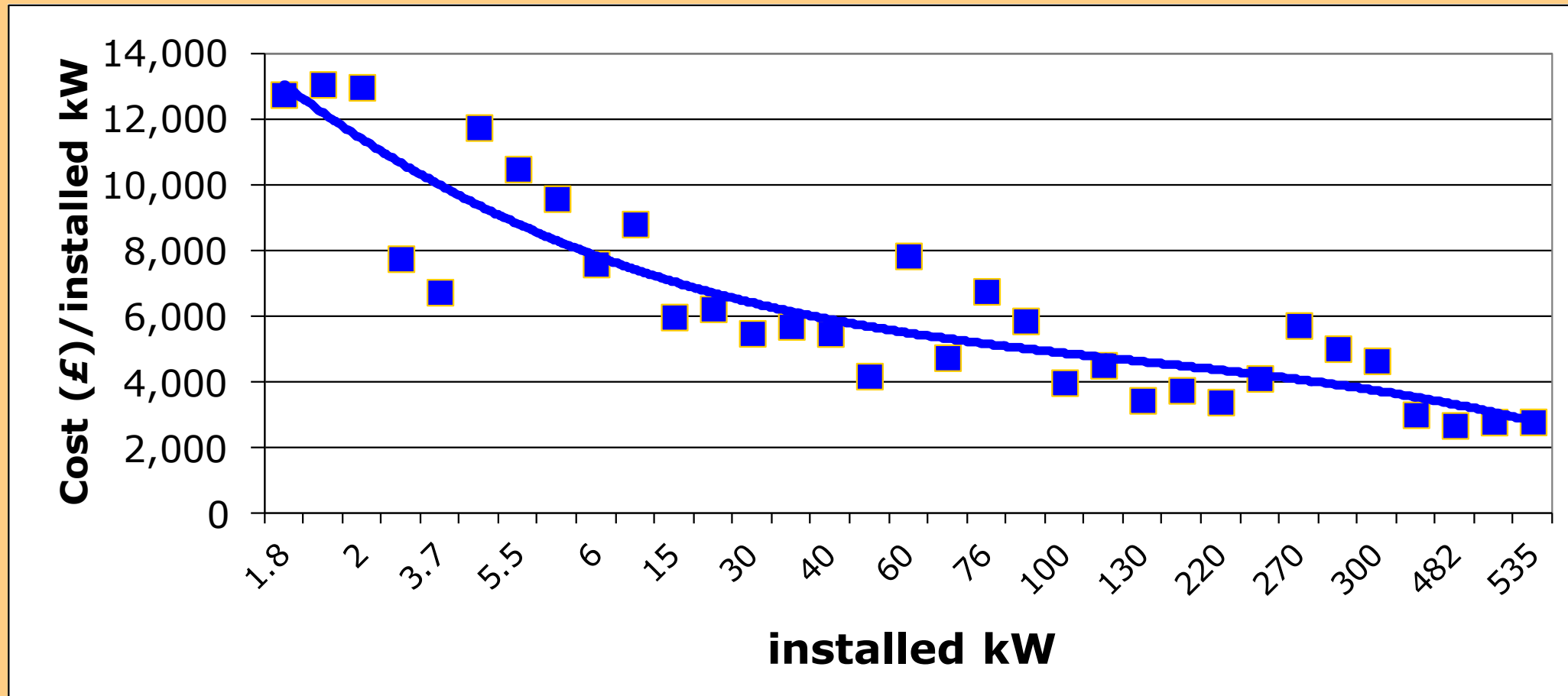


Constraints

- 1 Environment Agency Licensing
 - Flood risk assessment
 - Geomorphology study
 - River corridor study
 - Ecology report
 - Topographical survey
 - Provision of fish pass (**may cost £100,000**)
 - Screening for eels (**proposed gauge 2mm, which will kill most hydro**)
 - Flow split at best 1.3 x mean flow, but may be less
- 2 Feed in Tariff
 - Now one third of original (8.54p/kWh plus price of electricity exported 4.8p)
 - Great uncertainty due to frequent changes
- 3 Cost
 - Small scale hydro sites are expensive (£7,000-£10,000 per installed kW)



Cost of installing Hydropower



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Further Information

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