

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS.

(The figures in the margin refer to the paragraphs, in the body of the Report, from which these conclusions and recommendations are taken.)

257. We may now give a summary of the conclusions we have arrived at on the whole inquiry, and of the recommendations founded thereon.

AS TO THE PLANS FOR OBTAINING WATER FROM THE MOUNTAINOUS DISTRICTS OF ENGLAND AND WALES.

§§ 31, 58-64.

258. We are of opinion:—

That Mr. Bateman's scheme is, in an engineering point of view, feasible and practicable, and that by it a large supply of water might be obtained for the metropolis; but that experience warrants great caution in judging of the sufficiency of a gravitation scheme of such magnitude.

§ 36.

That the quality of the water would be satisfactory as regards its purity; but that there are points dependent on its softness and colour, which might render it less suitable for the supply of the metropolis than the harder water at present used.

§§ 25, 32.

That the outlay for the scheme would be very large, amounting, according to the evidence laid before us, to about 11,000,000*l.*; but in the absence of detailed surveys, and in a project involving works of such great magnitude and novelty, and subject to such large contingencies and elements of uncertainty, we do not consider that it is possible to arrive at any trustworthy estimate of the cost.

§§ 33, 34, 35.

That, even assuming the work could be carried out for the estimated amount, the cost of the metropolis of obtaining water by this scheme would be much greater than is incurred by the present plan, and would continue to be so up to any quantity likely to be required within a reasonable lapse of time.

§ 38.

That the scheme, if ever brought before Parliament, would probably be strongly opposed by interests connected with the River Severn.

§ 39.

That grave doubts may be entertained whether it is desirable that the metropolis should be dependent on one source of supply so far removed, and which might be liable to accidental interruption.

That great anxiety would be felt as to the formation of immense artificial reservoirs at the head of the Severn Valley.

That as to Messrs. Hemans and Hassard's scheme for supplying the metropolis from the Lake district, the same general remarks apply; the distance is greater, the estimate higher, and the gathering ground more likely to be claimed for nearer supplies.

AS TO THE QUANTITY OF WATER AVAILABLE FROM THE THAMES BASIN.

§ 148.

259. We are of opinion:—

That the River Thames, supplemented, if necessary, by works for storing the flood waters, together with the River Lee, and the water obtainable from the Chalk to the south and south-east of London, as well probably as from the Lower Greensand, will furnish a supply sufficient for any probable increase of the metropolitan population.

§§ 82-94.

That the abundance, permanence, and regularity of supply, so important to a large metropolis, are secured much more efficiently by the great extent and varied geological character of a large hydrographical basin such as that of the Thames, than by the necessarily very much more limited collecting areas that can be made available on the gravitation system. In the former case also the supply streams are self-maintaining, while in the latter the channel must be subject to the accidents incident to its artificial construction.

AS TO THE QUALITY OF THE WATER FROM THE THAMES BASIN.

§§ 213-215.

260. We are of opinion:—

That there is no evidence to lead us to believe that the water now supplied by the companies is not generally good and wholesome.

That for drinking purposes the hardness of the Thames water is quite unobjectionable, and in no way prejudicial to health. The weight of evidence seems in favour of hard water, as more free from certain dangers inherent in soft waters on account of their greater solvent power. §§ 165, 174, 213.

That for cooking no important objection to the Thames water has been clearly proved, except as regards the deposit in kitchen boilers, which deposit is easily removed. § 169

That for washing, and for manufacturing purposes generally, soft water is preferable as more efficient and more economical, but there appears no means of expressing the amount of saving in a money estimate. Looking, however, to the fact that the hardness of the Thames water is moderate in degree, and is still further reduced by boiling, and considering also that the proportion of the whole metropolitan supply used for manufacturing purposes is exceedingly small, we cannot see that this advantage is of sufficient importance to render it necessary to go to a great distance for soft water. § 173.

That the artificial softening process does not appear to be applicable to the Thames waters on a large scale. § 176.

That perfect filtration is highly essential to the good quality of the water supplied; that this process is at present in many cases very imperfectly performed; and that more efficient means of enforcing the provisions of the law in this respect are required. §§ 209-212.

That when efficient measures are adopted for excluding the sewage and other pollutions from the Thames and the Lee, and their tributaries, and for ensuring perfect filtration, water taken from the present sources will be perfectly wholesome, and of suitable quality for the supply of the metropolis. §§ 216, 217.

AS TO THE QUANTITY OF WATER LIKELY TO BE HEREAFTER REQUIRED FOR THE SUPPLY OF THE METROPOLIS.

261. We are of opinion:—

That a probable increase of population to 4,500,000 or 5,000,000 may have to be provided for, though we believe that the time for such an extended provision will be very remote. § 223.

That 200,000,000 gallons per day is the highest demand that need be reasonably looked forward to for the metropolitan supply. § 229.

That the various companies are prepared, with only moderate additions to their present engineering means, to supply a quantity little short of this amount. § 232.

AS TO THE SYSTEM OF CONSTANT SERVICE.

262. We are of opinion:—

That the constant service system ought to be promptly introduced, to the farthest extent possible, in the supply of the metropolis. § 241.

That it cannot be effectually introduced in London so long as the supply remains in the hands of private companies, to whom it would be inexpedient to confide the great powers necessary for the purpose. §§ 242, 243.

AS TO THE GENERAL CONTROL OF THE WATER SUPPLY.

263. We are of opinion:—

That it is a matter of vital importance that an abundant supply of water should be provided for all classes of the population, as well as for general public purposes, street watering and cleansing, public fountains, and extinguishing fires. §§ 245-250.

That for these purposes, there should be a power of levying, as at Manchester, Glasgow, and elsewhere, two rates, one a special or domestic rate on all dwelling houses, the other a public or general rate upon all rateable property.

That no trading company could be permitted to levy or expend such compulsory rates, and that therefore the future control of the water supply should be entrusted to a responsible public body, with powers conferred on them for the purchase and extension of existing works, and for levying the rates referred to.

That this plan offers the only feasible means of introducing efficiently the system of constant supply, and for securing a compulsory supply to the poor; we believe that it would tend to economy, to the improvement of the quality of the water, and to ensure the proper provision for public objects and for extinguishing fires; and that it would increase the probability of beneficial results from the purification of the Thames. § 248.

AS TO THE SUPPLY OF PROVINCIAL TOWNS.

264. We are of opinion:—

§ 255. That no town or district should be allowed to appropriate a source of supply which naturally and geographically belongs to a town or district nearer to such source, unless under special circumstances which justify the appropriation.

§ 256. That when any town or district is supplied by a line or conduit from a distance, provision ought to be made for the supply of all places along such line.

That on the introduction of any provincial water bill into Parliament, attention should be drawn to the practicability of making the measure applicable to as extensive a district as possible, and not merely to the particular town.

All which we humbly submit to Your Majesty's gracious consideration.

RICHMOND.

J. THWAITES.

H. D. HARNESS.

B. S. PHILLIPS.

THOS. E. HARRISON.

JOSH. PRESTWICH.

WILLIAM POLE,
Secretary.

9th June 1869.





