

Northern Ireland Water
PO Box 1026
Belfast
BT1 9DJ

Tel: 08457 440088



14th March 2014

Dear Alan,

Reservoirs Bill – Financial Information

Thank you for your letter dated 20 February 2014 in which the Committee for Agriculture and Rural Development asked that NI Water provide information on the scale of the costs associated with maintaining its impounding reservoirs.

The Committee has asked that this cost information:

- Be for a representative sample of the reservoirs owned by NI Water ownership
- That the sample contains reservoirs of differing structural make-up, size, capacity, age etc.
- That the costs cover a number of years, with a view to ensuring that the costs are as representative as possible.

The Committee has requested that expenditure be stated under the following items:

- Supervising panel engineer (i.e. time, reports, instructions, drawings etc.). Please insert staff costs if this function is undertaken internally;
- Inspecting panel engineer (i.e. time, reports, instructions, drawings etc.). Again, please insert staff costs if this function is undertaken internally;
- Construction panel engineer (i.e. time, reports, instructions, drawings etc.). The Committee acknowledges that you may not have commissioned a construction engineer in the time period to which your return relates. In this instance cells have been left blank.
- Routine maintenance works;
- Capital works resulting from an inspection report (including the cost of any specialist equipment).

The Committee also asked that the information include the volume of water that each reservoir is capable of holding and the provisional risk designation.

We have populated the table provided for 6 impounding reservoirs, and provided explanatory notes as below.

Please accept our apology that this response has been delayed. This was necessary as it came at the same time as we have been completing our 6 year PC15 Business Plan for submission to the Utility Regulator and DRD on 24 March 2014.

NI Water notes that:

- 1) In England & Wales a 'Supervising Panel Engineer' is required to carry out an annual check under the E&W Reservoirs Act. As this legislation does not apply in NI, the annual check and duties are currently performed by a number of experienced members of staff a part of their 'business as usual' duties. None of these staff are currently qualified as a 'Supervising Panel Engineer'. We estimate that this work costs NI Water from £3,000 for the largest dam (such as the Silent Valley) to £1,000 per year for the smaller more simple dams. The cost varies depending on the location, structure type, complexity and access to control apparatus.
- 2) In England & Wales an 'Inspecting Panel Engineer' is responsible for the 10 year inspection and report. NI Water, and its predecessor organisations, has always commissioned an external qualified 'Inspecting Panel Engineer' to carry out these inspections. We have inserted the figure of £2,000 (for each reservoir) in the table in 05/06, which was the last time these inspections were carried out. We estimate that the next round of surveys will cost in the region of £3,500 to £5,000 per dam. Furthermore we would comment that it may cost others more if their dam has not been surveyed regularly before, if records for it are not available, or if it is not in a well maintained condition. We suggest that DARD Rivers Agency and ICE may be able to provide estimates that could apply to dams not owned by NI Water.
- 3) The Construction Panel Engineer has not been commissioned by NI Water in the past 10 years as this is only required if significant changes are to be made to the structures. We estimate that they will charge £650 to £1,100 per day. The duration of their involvement will depend on the scale, risk, and nature of the works.
- 4) Maintenance Works – includes a wide range of routine work such as:
 - Grass cutting and control of other vegetation (important as short grass allows any depressions or seepage to be identified quickly)
 - Removing flotsam (such as rubbish and branches – which could otherwise interfere with the operation of control apparatus)
 - Lubricating and maintaining control apparatus
 - Repairing any facing (to prevent erosion due to wave action)
 - Repairing access roads and paths
 - Repairing safety measures such as signs and fences etc.

The cost varies depending on the location, structure type, complexity and access to control apparatus, and if it is accessible to the public. This costs up to £50,000 annually for the largest dam (for example the Silent Valley) to £2,000 for the smaller simple dams.

5) Capital Works figures have been inserted in the tables for 6 reservoirs which should give an indication of the typical costs. Some of the work included in these estimates may have related to the improvement of access to permit subsequent maintenance. These sums are mostly for a few years because whilst the reports were completed in 2007, both the funding and the contractual means to deliver them were only possible from 2011/12. Hence if an estimate of the average yearly expenditure rate is required these sums should be divided by 20.

Where NI Water has not incurred any capital costs in the time period to which this return relates the cell has been left as blank.

We hope that this is of assistance. If you have any queries please do not hesitate to contact me.

Yours sincerely

Paddy Cullen

CC
Paddy Brow
Bill Gowdy

Reservoir Name: Seagahan

Capacity: 2200 MI

Structure type (e.g. earth dam or concrete): Earth

Age: Constructed 1959

Provisional Risk Designation: Current FRS Categorisation 'A'

Financial year	Supervising Engineer (£)	Inspecting Engineer (£)	Construction Engineer (£)	Maintenance Works (£)	Capital Works (£)
05/06		2,000			
11/12					203,215
Annually	1,500			8,500	

Reservoir Name: Creightons Green

Capacity: 545 MI

Structure type (eg earth dam or concrete): Earth

Age: Constructed 1957

Provisional Risk Designation: Current FRS Categorisation 'A'

Financial year	Supervising Engineer (£)	Inspecting Engineer (£)	Construction Engineer (£)	Maintenance Works (£)	Capital Works (£)
05/06		2,000			
11/12					109,812
Annually	1,000			3,000	

Reservoir Name: Glenhordial

Capacity: 100 MI

Structure type (eg earth dam or concrete): Earth

Age: Constructed 1878

Provisional Risk Designation: Current FRS Categorisation 'A'

Financial year	Supervising Engineer (£)	Inspecting Engineer (£)	Construction Engineer (£)	Maintenance Works (£)	Capital Works (£)
05/06		2,000			
11/12					90,104
Annually	2,000			2,800	

Reservoir Name: Lower Conlig

Capacity: 77 MI

Structure type (eg earth dam or concrete): Earth

Age: Constructed 1884

Provisional Risk Designation: Current FRS Categorisation 'A'

Financial year	Supervising Engineer (£)	Inspecting Engineer (£)	Construction Engineer (£)	Maintenance Works (£)	Capital Works (£)
05/06		2,000			
13/14					72,000
Annually	1,000			2,000	

Reservoir Name: Lower Ballysallagh

Capacity: 568 MI

Structure type (eg earth dam or concrete): Earth

Age: Constructed 1909

Provisional Risk Designation: Current FRS Categorisation 'A'

Financial year	Supervising Engineer (£)	Inspecting Engineer (£)	Construction Engineer (£)	Maintenance Works (£)	Capital Works (£)
05/06		2,000			
13/14					106,000
Annually	1,500			4,500	

Reservoir Name: Knockbracken

Capacity: 445 MI

Structure type (eg earth dam or concrete): Earth

Age: Constructed 1893

Provisional Risk Designation: Current FRS Categorisation 'A'

Financial year	Supervising Engineer (£)	Inspecting Engineer (£)	Construction Engineer (£)	Maintenance Works (£)	Capital Works (£)
05/06		2,000			
11/12					9,984
13/14					192,000
Annually	1,500			3,500	