In-perpetuity funding

D1. Paragraphs 5.9 - 5.10 explained the need to fund the key mitigation 'in-perpetuity' - defined in agreement with Natural England as 80 years beyond 2034 i.e. to the year 2114. In summary, a proportion of the money received each year from developer contributions will be transferred into an investment fund. That 'in-perpetuity fund' will grow each year through those annual cash transfers and the interest earned, such that by 2034 it will be sufficiently large to fund the mitigation measures every year thereafter. This Appendix provides more details of methodology and assumptions used in the in-perpetuity funding calculations.

Creating the in-perpetuity fund

D2. The amount of money which needs to be transferred into the in-perpetuity fund each year to 2034 is determined by the annual cost of the mitigation measures during the ensuing in-perpetuity period (£363,000 - see Appendix C) and predicted interest rates during that same period. Capita - a leading expert body which provides financial advice to many of the Solent local authorities - predicts that interest rates will rise from 0.25% in 2018/19 to 2.50% in 2024/25, and thereafter remain at 2.50%.

D3. As explained in paragraph 7.4, the amount of money received by the Partnership will only increase gradually over the next 2-3 years. Taking that into account, the £122,000 which was transferred into the in-perpetuity fund in 2016/17 needs to rise to £1,110,000 in 2020/21 and each year thereafter, in order that the value of the fund in 2034 is sufficiently large to fund the planned expenditure during the ensuing in-perpetuity period.

D4. The table below shows the situation in 2016/17 and 2017/18, and the predicted situation in the final year 2033/34. All the figures are at 2016 prices because the developer contribution is index linked and will rise with inflation. There is only space here to show three years, but full calculation for all 18 years is in an Excel spreadsheet which can be seen at: www.xxxxxxx *(new email account to be created)*

		2016/17	2017/18					2033/34
a	Fund value at year start	£0	£122,000					£18,790,302
b	Interest rate	0.25%	0.25%					2.50%
c	Interest generated	£0	£305					£469,758
d	Money transferred in	£122,000	£267,000					£1,111,000
e	Fund value at year end	£122,000	£389,305					£20,370,060

row (a) = (e) of previous year row (b) = forecast interest rate row (c) = row (a) x row (b)
row (d) = amount transferred into the fund in that year rom (e) = (a)+(c)+(d)

Funding the mitigation measures during the in-perpetuity period

D5. At the start of the in-perpetuity period in 2034/35, the fund is predicted to have a capital value of around £20million. Spending on mitigation measures during the 80 year in-perpetuity period will be funded partly by drawing on that capital and partly from the interest earned on the remaining balance. So at the end of the in-perpetuity period in 2113/14, the capital will have reduced to around zero.

D6. This calculation incorporates an assumed inflation rate of 2% per annum during the in-perpetuity period. (That 2% rate is based on the latest OECD forecast which looks to 2060.) Factoring in that 2% assumption over an 80 year period has a big impact on the calculations. The planned spending during the in-perpetuity period is
£363,000 at 2034 prices. Increasing that figure by 2% per annum means it becomes £1.74million by 2113/14.

D7. The table below shows the first and last years of the 2034-2114 in-perpetuity period. The full calculation for all 80 years is in an Excel spreadsheet which can be seen at: www.xxxxxxx *(new email account to be created)*

		2034/5					*2113/4*
a	Fund value at year start	£20,287,925					£1,888,146
b	Spent during year	£363,000					£1,735,083
c	Amount left in fund	£19,924,925					£153,064
d	Interest earned	£498,123					£4,592
e	Fund value at year end	£20,423,048					£157,656

row (a) = (e) of previous year
row (b) is the cost of the in-perpetuity mitigation measures, increased by 2% each year to allow for inflation
row (c) = (a) - (b)
row (d) = (c) x 2.5%
row (e) = (c) + (d)