

Memo

To: Shay McDonald

From: Steve McNerney, Damwatch Engineering Ltd

CC: D Randal, A Rodgers, J Macdonald

Date: 25 August 2026

Subject: **Matakinui Trust Funding Adequacy Review**

1 Executive Summary

This memorandum reviews the Applicant's response to RFI 11 Questions 12–16 relating to bonding, long-term environmental liabilities, and the proposed Matakinui Trust funding arrangements.

The review considers the Applicant's RFI response together with the accompanying funding model scenarios in order to respond to the questions posed in your email 14th August 2026, requesting:

- A clear statement of whether the \$50M starting money is likely to be adequate to enable the trust to carry out its functions, or not.
- An indication of how certain you are in this conclusion.
- If \$50M is not adequate, an indication as to the amount of money that, in your opinion, would be needed.
- Reasons for your conclusion as to adequacy of the funding, including:
 - Any assumptions you have made and why
 - Any assumptions the applicant has made, and whether these are reasonable (or at least identification of areas where it is not clear what the applicant has assumed in arriving at their costing of a particular function)
 - Whether there is any additional information that is needed to inform your assessment and a clear description of what this information is and why it is needed
 - Whether there are any functions / activities that you are unable to cost because they are outside of your area of expertise
 - Whether, based on your experience, there are any other necessary post-closure monitoring or maintenance requirements for closed mines that are not explicitly listed as a function of the trust, or that have not been costed (appropriately or at all) in the RFI response, and an indication of the likely cost of carrying out these functions

The Applicant proposes a framework consisting of:

- A Biodiversity and Heritage Enhancement Fund (BHEF) providing \$10 million over the production period.
- An annually reviewed resource consent bond.

- A Matakanui Trust funded through escrow contributions intended to provide for long-term and potentially perpetual post-closure obligations.

The principal question is whether the proposed Trust funding target of approximately \$50 million is sufficient to support obligations extending for at least 200 years after closure.

Based on the information provided, Damwatch reconstructed a simplified version of the Applicant's funding model to assess the reasonableness of the proposed Trust funding arrangements. The information supplied does not demonstrate that the proposed funding level is adequate to meet the identified long-term liabilities. Furthermore, the available evidence indicates that a \$50 million fund is unlikely to be sufficient. Scenario modelling suggests that funding in the order of \$100–110 million may be required to maintain long-term solvency under the Applicant's stated assumptions.

Damwatch has a moderate to high level of confidence that the proposed \$50 million Trust funding target is insufficient. While uncertainty remains regarding the ultimate scale of future liabilities, all reasonable funding scenarios assessed indicate that a material increase in funding would be required before long-term adequacy could be demonstrated.

2 Key Findings

The proposed funding framework is conceptually sound; however, the current information does not demonstrate that the proposed Trust funding level is adequate to meet long-term closure and post-closure obligations. Significant uncertainty remains regarding water treatment duration, build up of costs, investment performance, inflation, catastrophic risk exposure, and obligations extending beyond the current modelling horizon.

2.1 Long-Term Liability Profile

The proposed Trust would ultimately assume responsibility for a range of ongoing obligations including:

- Active and passive water treatment systems.
- Residual mine infrastructure and tailings facilities.
- Predator-proof sanctuaries.
- Pest management programmes.
- Ecological restoration areas.
- Public access infrastructure.
- Insurance.
- Monitoring, reporting and administration. Water treatment represents the dominant liability throughout the post-closure period.

The Applicant's estimates include:

- Active treatment at approximately [REDACTED] per annum for 50 years.
- Passive treatment at approximately [REDACTED] per annum for 10 years.

- Ongoing passive treatment at approximately [REDACTED] per annum through to Year 214.
- Additional capital expenditure is associated with treatment system installation and decommissioning.

These costs are assumed to escalate with inflation and extend over timeframes substantially longer than conventional infrastructure planning periods.

The review considers the uncertainty associated with forecasting treatment requirements, technology performance and operating costs over such extended periods to be significant.

2.2 Assessment of Funding Adequacy

The Applicant's funding proposal assumes:

- Annual escrow contributions of \$5 million.
- Total funding of approximately \$50 million.
- Long-term investment returns of 5.26% per annum.
- CPI escalation broadly consistent with Treasury assumptions.
- Tax-exempt Trust status.

The Applicant concludes that these assumptions allow the Trust to meet obligations through to approximately Year 200.

However, the supporting modelling necessary to independently verify that conclusion has not been provided. The information supplied does not include:

- Full annual cashflow projections.
- Fund balance trajectories.
- Net present value estimates for future investment.
- Investment strategy assumptions.
- Sensitivity testing.
- Independent verification of funding adequacy.

Accordingly, funding adequacy cannot presently be confirmed.

This review indicates that the scale and duration of liabilities are more consistent with a starting fund substantially greater than \$50 million.

3 Spreadsheet Scenario Results

The scenario modelling provides useful insight into the likely funding requirements associated with the proposed Trust arrangements, based on the reconstructed base funding model. All scenarios assume that Trust capital is utilised to meet expenditure obligations, as projected investment earnings do not exceed annual expenditure requirements over the model period.

Key outcomes are summarised below:

Scenario	Applicant funding from Yr 6 to Yr 15	Available fund at Yr 15 (\$m)	Overall Cost Expense Estimate to Yr 214	Year budget exceeded	Minimum balance year
Applicant return + CPI escalation Proposed Scenario: invest \$5 M pa investment	\$50,000,000	\$63,657,945	██████████	32	214
Applicant return + CPI escalation (Scenario 1 - invest \$9 M pa)	\$90,000,000	\$100,308,095	██████████	64	214
Applicant return + CPI escalation (Scenario 2 - invest \$10.35M pa))	\$103,500,000	\$115,354,310	██████████	Not exceeded	214
Applicant return + CPI escalation (Scenario 2a - invest \$10.35 M pa includes Dam Safety and Risk Event))	\$103,500,000	\$115,354,310	██████████	84	214
Applicant return + CPI escalation (Scenario 3 - invest \$10.6 M pa includes Dam Safety and Risk Event))	\$106,000,000	\$118,140,646	██████████	Not exceeded	214

3.1 Baseline Scenario

- Total funding approximately \$50 million.
- Trust balance at Year 15 approximately \$63.7 million.
- Funding becomes inadequate by approximately Year 32.
- Long-term balances become materially negative.

3.2 Scenario 1

- Total funding approximately \$90 million.
- Trust balance at Year 15 approximately \$100 million.
- Funding becomes inadequate by approximately Year 64.

3.3 Scenario 2

- Total funding approximately \$103.5 million.
- Excludes dam safety and risk allowance.
- Fund remains positive throughout the model period.
- Minimum balance remains positive to Year 214.

3.4 Scenario 2A

- Same funding level as Scenario 2.
- Includes dam safety and risk-event costs.
- Funding becomes inadequate by approximately Year 84.

3.5 Scenario 3

- Total funding is approximately \$106 million.
- Includes dam safety and risk-event costs.
- Fund remains positive throughout the model period.

These results indicate that the funding requirement may be approximately double the currently proposed Trust funding level once risk allowances are incorporated.

The modelling suggests a practical funding requirement of approximately \$100–110 million, depending on final assumptions and contingency allowances.

4 Key Risks

Several significant risks remain unresolved.

4.1 Investment Returns

The funding model relies heavily on achieving sustained nominal investment returns of approximately 5.26% over very long periods. Small reductions in returns materially affect fund performance and may result in funding shortfalls.

4.2 Water Treatment Uncertainty

Water treatment costs dominate the liability profile. Any increase in treatment duration, treatment intensity, or operating costs would materially increase required funding.

4.3 Inflation Risk

The model assumes relatively stable long-term inflation. No evidence has been provided demonstrating performance under sustained higher inflation scenarios.

4.4 Dam Safety and Catastrophic Events

The proposed Trust Fund does not include ongoing dam safety management and significant dam safety related risk-events. We have included allowance for these items in Scenarios 2a and 3; these costs materially alters funding outcomes. Additional information is required to demonstrate that catastrophic or uninsurable events are adequately covered through the combined bond, insurance and Trust arrangements.

4.5 Perpetual Obligations

The modelling generally extends to Year 214, while several obligations are described elsewhere as perpetual. Further clarification is required regarding obligations beyond the current modelling horizon.

5 Principal Preservation Case

An alternative approach would be to treat the initial \$50 million contribution as an enduring capital reserve and fund routine Trust activities only from investment income generated on that principal. This approach would better align with a perpetual-fund structure because the principal would be preserved as a buffer against future uncertainty, while annual expenditure would be constrained to the sustainable real return achieved by the Trust after inflation, fees and any tax effects.

However, this would materially reduce the amount available for annual post-closure expenditure unless investment returns are consistently strong. On the Applicant's assumed nominal return of 5.26%, the gross annual return on \$50 million would be approximately \$2.63 million before inflation, fees and any other deductions. This is less than the estimated active water treatment cost of approximately [REDACTED] per annum during the first 50 years, before allowing for other Trust obligations. This indicates that a principal-preservation model based on a \$50 million fund

would not be sufficient to meet the currently identified annual expenditure profile unless additional funding sources, reduced liabilities, or staged top-up contributions are provided.

6 Conclusions and Recommendations

The Applicant has proposed a logical framework combining a bond, a long-term Trust and a biodiversity and heritage fund. However, the current information does not demonstrate that the proposed \$50 million Trust funding target is adequate.

This review concludes that:

- Funding adequacy remains unproven.
- The proposed \$50 million funding level appears insufficient.
- Long-term liabilities are dominated by water treatment obligations extending for at least 200 years.
- Scenario modelling indicates funding requirements in the order of \$100 to \$110 million may be necessary under current assumptions.

It is recommended that:

- The Applicant provide the complete financial model supporting its adequacy assessment.
- Independent financial assurance and closure funding review be undertaken.
- Comprehensive sensitivity analyses be completed.
- The Trust Deed and investment strategy be reviewed before transfer of liabilities.
- Obligations extending beyond Year 214 be clearly defined and incorporated into future funding assessments.
- The Applicant should explicitly model a principal-preservation case in which the initial \$50 million remains intact and Trust activities are funded only from sustainable net investment income. This scenario should include inflation-adjusted returns, investment management costs, timing of expenditure and clear trigger points for additional funding or bond drawdown if income is insufficient.

Overall, the current evidence does not provide sufficient confidence that the proposed Trust funding level will meet the full extent of long-term closure and post-closure obligations without material risk of future funding shortfall.

7 About the Author

Steve McNerney is a Technical Director and Executive Manager of Damwatch Engineering Ltd and a civil and dam engineering professional with more than 38 years' experience in dam safety, engineering condition assessment, construction planning and management, and related technical matters.

Since 2012, he has undertaken detailed reviews of the annual bond estimates prepared for the Macraes Gold Project on behalf of regulatory authorities. These reviews have included

assessments of rehabilitation costs, risk contingencies, post-closure obligations, environmental liabilities and overall bond adequacy.

His work has included the independent review of annual closure bond estimates exceeding NZ\$80 million and consideration of the funding required to enable regulators to meet closure and rehabilitation obligations in the event of premature mine closure.

This extensive experience in assessing mine-closure liabilities and financial assurance requirements is directly relevant to the assessment of financial assurance for the Santana Gold Mine.

Document history and status

Issue no.	Issue date	Description	Prepared by	Reviewed by	Approved by
1	2026-08-24	Draft issue for client review	SMI	JE	SMI
2	2026-08-25	Memo Issue to client	SMI		SMI

Note: In terms of the NDA, I had some assistance from a colleague at Damwatch who reviewed the recreated excel model in terms of formulas and links in a way that did not divulge any confidential information from the unredacted document.

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Matakinui Trust Funding Model

Purpose Detailed year-by-year funding model using the information available in the RFI 11 Bonding and Economics attachments.

Model period Year 1 to Year 214

Post-closure start used in model Year 15 (based on 14-year operating life and post-closure expenditure beginning after Year 14).

Applicant committed funding \$5M p.a. from Year 6 to Year 15, total nominal contributions of \$50M.

Applicant stated return 5.26% p.a. from Year 6 onwards.

Cost escalation used in nominal scenario 2.7% p.a. to Year 50 and 2.0% p.a. thereafter, as stated by the applicant.

Key model limitation The underlying applicant cashflow model was not provided, so this workbook makes explicit timing assumptions from the PDF text.

Summary

Scenario	Applicant funding from Yr 6 to Yr 15	Available fund at Yr 15 (\$m)	Overall Cost Expense Estimate to Yr 214	Year budget exceeded	Minimum balance year	Minimum balance (\$m)	Comment
Applicant return + CPI escalation Proposed Scenario: invest \$5 M pa investment	\$50,000,000	\$63,657,945	████████	32	214	(\$1,455,989,502,681)	Uses 5.26% annual return with CPI escalation as described.
Applicant return + CPI escalation (Scenario 1 - invest \$9 M pa)	\$90,000,000	\$100,308,095	████████	64	214	(\$417,616,726,220)	Uses 5.26% annual return with CPI escalation as described.
Applicant return + CPI escalation (Scenario 2 - invest \$10.35M pa)	\$103,500,000	\$115,354,310	████████	Not exceeded	214	\$9,061,400,640	Uses 5.26% annual return with CPI escalation as described.
Applicant return + CPI escalation (Scenario 2a - invest \$10.35 M pa includes Dam Safety and Risk Event)	\$103,500,000	\$115,354,310	████████	84	214	(\$70,924,671,812)	Uses 5.26% annual return with CPI escalation as described.
Applicant return + CPI escalation (Scenario 3 - invest \$10.6 M pa includes Dam Safety and Risk Event)	\$106,000,000	\$118,140,646	████████	Not exceeded	214	\$8,089,796,125	Uses 5.26% annual return with CPI escalation as described.

Immediate interpretation

On the nominal CPI-escalated scenario using the applicant-stated 5.26% return, this model indicates an indicative Year 15 funding requirement materially above \$50M. A funding model circa \$100+ M would meet identified cost model.

Source caution

RFI 11 Q12-Q16 Bonding states that the modelling is preliminary and will be updated through Mine Closure Plan certification and annual bond review. This workbook is a reconstruction based on RFI 11 statements, not an independent verified closure cost estimate.

Assumptions and source inputs			
Assumption	Value	Type	Source / comment
Model start year	1	Static	Model setup
Model end year	214	Input	Source: RFI 11 Q12-Q16 Bonding.pdf, Q12-Q13, pages 8-13
Operational life / closure year	14	Input	RFI 11 Q23-Q30 Economics states operational life is approximately 14 years; Years 15-16 negative due closure expenditure.
Post-closure start year	15	Model assumption	Assumed as Year 15 because operational life is approximately 14 years.
Annual Trust / escrow contribution	\$5,000,000	Input	Source: RFI 11 Q12-Q16 Bonding.pdf, Q12-Q13, pages 8-13
Contribution start year	6	Input	Source: RFI 11 Q12-Q16 Bonding.pdf, Q12-Q13, pages 8-14
Contribution end year used	15	Model assumption	Uses 10 contributions of \$5M p.a. to reach total \$50M; from Year 6 up to maximum \$50M.
Applicant return p.a.	5.26%	Input	Source: RFI 11 Q12-Q16 Bonding.pdf, Q12-Q13, pages 8-13
CPI escalation to Year 50	2.70%	Input	Source: RFI 11 Q12-Q16 Bonding.pdf, Q12-Q13, pages 8-14
CPI escalation after Year 50	2.00%	Input	Source: RFI 11 Q12-Q16 Bonding.pdf, Q12-Q13, pages 8-15
Tax rate on Trust income	0.00%	Input	Applicant assumes charitable/not-for-profit status and exempt income.
Cost multiplier	100.00%	Scenario input	Use to test cost contingency / uncertainty.

Post-closure cost inputs, present-day terms				
Cost item	Present-day amount (\$)	Timing / description	Model treatment	Source
Maintaining water treatment - active	██████	Until Year 64, 50 years post-closure	Annual Years 15-64	Source: RFI 11 Q12-Q16 Bonding.pdf, Q12-Q13, pages 8-13
Maintaining water treatment - passive initial	██████	10 years until Year 74	Annual Years 65-74	Source: RFI 11 Q12-Q16 Bonding.pdf, Q12-Q13, pages 8-14
Maintaining water treatment - passive long-term	██████	Until Year 214, 200 years after closure	Annual Years 75-214	Source: RFI 11 Q12-Q16 Bonding.pdf, Q12-Q13, pages 8-15
Decommissioning active WTP	██████	Year 64	One-off Year 64	Source: RFI 11 Q12-Q16 Bonding.pdf, Q12-Q13, pages 8-16
Establishment of passive WTP	██████	Year 64	One-off Year 64	Source: RFI 11 Q12-Q16 Bonding.pdf, Q12-Q13, pages 8-17
Decommissioning passive WTP	██████	Year 200	One-off Year 200	Source: RFI 11 Q12-Q16 Bonding.pdf, Q12-Q13, pages 8-18
Predator-proof eco-sanctuaries	██████	Year 17 onwards to Year 200	Annual Years 17-200	Source: RFI 11 Q12-Q16 Bonding.pdf, Q12-Q13, pages 8-19
Wide-scale pest control aerial baiting	██████	Every three years from Year 17 onwards	Every third year from Year 17 to Year 214	Source: RFI 11 Q12-Q16 Bonding.pdf, Q12-Q13, pages 8-20
Wide-scale pest control follow-up	██	██████ follow up	Annual Years 17-214	Source: RFI 11 Q12-Q16 Bonding.pdf, Q12-Q13, pages 8-21
Ecological uplift plans	██████	Over Years 19, 20 and 21	Spread evenly over Years 19-21	Source: RFI 11 Q12-Q16 Bonding.pdf, Q12-Q13, pages 8-22
Nominal annual replanting	██████	Every year thereafter	Annual from Year 22	Source: RFI 11 Q12-Q16 Bonding.pdf, Q12-Q13, pages 8-23
Public access ways	██████	p.a.	Annual from Year 17	Source: RFI 11 Q12-Q16 Bonding.pdf, Q12-Q13, pages 8-24
Insurance	██████	██████ p.a. used	Annual from Year 17	Source: RFI 11 Q12-Q16 Bonding.pdf, Q12-Q13, pages 8-25
Administration	██████	p.a.	Annual from Year 17	Source: RFI 11 Q12-Q16 Bonding.pdf, Q12-Q13, pages 8-26

This sheet shows the nominal CPI-escalated case using the applicant-stated 5.26% p.a. return and \$5M p.a. contributions from Year 6 to Year 15.

Date		Time		Location		Weather		Wind		Temperature		Humidity		Pressure		Visibility		Clouds		Notes	
1	2023-10-27	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00	10:15	10:30	10:45	11:00	11:15	11:30	11:45	12:00	12:15	12:30	12:45
2	2023-10-28	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00	10:15	10:30	10:45	11:00	11:15	11:30	11:45	12:00	12:15	12:30	12:45
3	2023-10-29	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00	10:15	10:30	10:45	11:00	11:15	11:30	11:45	12:00	12:15	12:30	12:45
4	2023-10-30	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00	10:15	10:30	10:45	11:00	11:15	11:30	11:45	12:00	12:15	12:30	12:45
5	2023-10-31	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00	10:15	10:30	10:45	11:00	11:15	11:30	11:45	12:00	12:15	12:30	12:45
6	2023-11-01	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00	10:15	10:30	10:45	11:00	11:15	11:30	11:45	12:00	12:15	12:30	12:45
7	2023-11-02	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00	10:15	10:30	10:45	11:00	11:15	11:30	11:45	12:00	12:15	12:30	12:45
8	2023-11-03	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00	10:15	10:30	10:45	11:00	11:15	11:30	11:45	12:00	12:15	12:30	12:45
9	2023-11-04	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00	10:15	10:30	10:45	11:00	11:15	11:30	11:45	12:00	12:15	12:30	12:45
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11	2023-11-06	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00	10:15	10:30	10:45	11:00	11:15	11:30	11:45	12:00	12:15	12:30	12:45
12	2023-11-07	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00	10:15	10:30	10:45	11:00	11:15	11:30	11:45	12:00	12:15	12:30	12:45
13	2023-11-08	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00	10:15	10:30	10:45	11:00	11:15	11:30	11:45	12:00	12:15	12:30	12:45
14	2023-11-09	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00	10:15	10:30	10:45	11:00	11:15	11:30	11:45	12:00	12:15	12:30	12:45
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17	2023-11-12	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00	10:15	10:30	10:45	11:00	11:15	11:30	11:45	12:00	12:15	12:30	12:45
18	2023-11-13	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00	10:15	10:30	10:45	11:00	11:15	11:30	11:45	12:00	12:15	12:30	12:45

[REDACTED]

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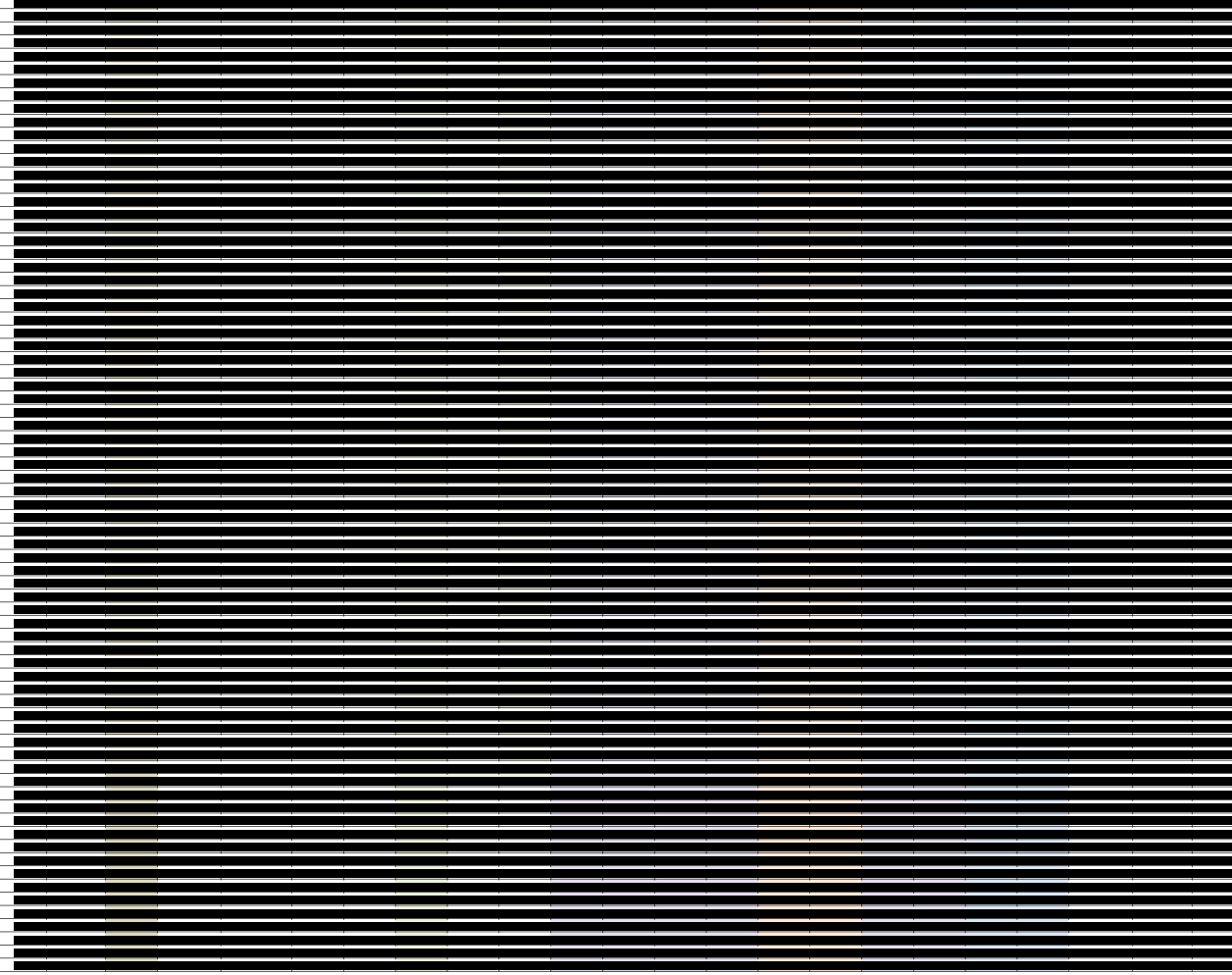
[illegible]

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Annual funding model - applicant inputs - CPI escalation
This sheet shows the nominal CPI-escalated case using the applicant-stated 5.26% p.a. return and **59.5 M** p.a. contributions from Year 6 to Year 15.
Includes Dam Safety Monitoring Year 15 to Year 214 and includes a Significant Risk Event

	Year	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433	2434	2435	2436	2437	2438	2439	2440	2441	2442	2443	2444	2445	2446	2447	2448	2449	2450	2451	2452	2453	2454	2455	2456	2457	2458	2459	2460	2461	2462	2463	2464	2465	2466	2467	2468	2469	2470	2471	2472	2473	2474	2475	2476	2477	2478	2479	2480	2481	2482	2483	2484	2485	2486	2487	2488	2489	2490	2491	2492	2493	2494	2495	2496	2497	2498	2499	2500	2501	2502	2503	2504	2505	2506	2507	2508	2509	2510	2511	2512	2513	2514	2515	2516	2517	2518	2519	2520	2521	2522	2523	2524	2525	2526	2527	2528	2529	2530	2531	2532	2533	2534	2535	2536	2537	2538	2539	2540	2541	2542	2543	2544	2545	2546	2547	2548	2549	2550	2551	2552	2553	2554	2555	2556	2557	2558	2559	2560	2561	2562	2563	2564	2565	2566	2567	2568	2569	2570	2571	2572	2573	2574	2575	2576	2577	2578	2579	2580	2581	2582	2583	2584	2585	2586	2587	2588	2589	2590	2591	2592	2593	2594	2595	2596	2597	2598	2599	2600	2601	2602	2603	2604	2605	2606	2607	2608	2609	2610	2611	2612	2613	2614	2615	2616	2617	2618	2619	2620	2621	2622	2623	2624	2625	2626	2627	2628	2629	2630	2631	2632	2633	2634	2635	2636	2637	2638	2639	2640	2641	2642	2643	2644	2645	2646	2647	2648	2649	2650	2651	2652	2653	2654	2655	2656	2657	2658	2659	2660	2661	2662	2663	2664	2665	2666	2667	2668	2669	2670	2671	2672	2673	2674	2675	2676	2677	2678	2679	2680	2681	2682	2683	2684	2685	2686	2687	2688	2689	2690	2691	2692	2693	2694	2695	2696	2697	2698	2699	2700	2701	2702	2703	2704	2705	2706	2707	2708	2709	2710	2711	2712	2713	2714	2715	2716	2717	2718	2719	2720	2721	2722	2723	2724	2725	2726	2727	2728	2729	2730	2731	2732	2733	2734	2735	2736	2737	2738	2739	2740	2741	2742	2743	2744	2745	2746	2747	2748	2749	2750	2751	2752	2753	2754	2755	2756	2757	2758	2759	2760	2761	2762	2763	2764	2765	2766	2767	2768	2769	2770	2771	2772	2773	2774	2775	2776	2777	2778	2779	2780	2781	2782	2783	2784	2785	2786	2787	2788	2789	2790	2791	2792	2793	2794	2795	2796	2797	2798	2799	2800	2801	2802	2803	2804	2805	2806	2807	2808	2809	2810	2811	2812	2813	2814	2815	2816	2817	2818	2819	2820	2821	2822	2823	2824	2825	2826	2827	2828	2829	2830	2831	2832	2833	2834	2835	2836	2837	2838	2839	2840	2841	2842	2843	2844	2845	2846	2847	2848	2849	2850	2851	2852	2853	2854	2855	2856	2857	2858	2859	2860	2861	2862	2863	2864	2865	2866	2867	2868	2869	2870	2871	2872	2873	2874	2875	2876	2877	2878	2879	2880	2881	2882	2883	2884	2885	2886	2887	2888	2889	2890	2891	2892	2893	2894	2895	2896	2897	2898	2899	2900	2901	2902	2903	2904	2905	2906	2907	2908	2909	2910	2911	2912	2913	2914	2915	2916	2917	2918	2919	2920	2921	2922	2923	2924	2925	2926	2927	2928	2929	2930	2931	2932	2933	2934	2935	2936	2937	2938	2939	2940	2941	2942	2943	2944	2945	2946	2947	2948	2949	2950	2951	2952	2953	2954	2955	2956	2957	2958	2959	2960	2961	2962	2963	2964	2965	2966	2967	2968	2969	2970	2971	2972	2973	2974	2975	2976	2977	2978	2979	2980	2981	2982	2983	2984	2985	2986	2987	2988	2989	2990	2991	2992	2993	2994	2995	2996	2997	2998	2999	3000	3001	3002	3003	3004	3005	3006	3007	3008	3009	3010	3011	3012	3013	3014	3015	3016	3017	3018	3019	3020	3021	3022	3023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[illegible]



Sources, assumptions and limitations

Type	Item	Description
Source	RFI 11 Q12-Q16 Bonding.pdf	Trust functions, contribution mechanism, cost estimates, escalation/return references, preliminary modelling statement.
Source	RFI 11 Q23-Q30 Economics.pdf	Economic context, operational life of approximately 14 years, Q26 cost categories included in Updated PFS.
Model assumption	Post-closure start	Year 15 is used based on the approximately 14-year operational life. The source also refers to active treatment for 50 years post-closure and to Year 64, which aligns with Years 15-64 inclusive.
Model assumption	Contribution timing	Ten deposits of \$5M are assumed for Years 6-15 to reach the stated maximum of \$50M. If payments occur at the start rather than end of each year, balances will differ slightly.
Model assumption	Pest follow-up	The source says [REDACTED] this workbook interprets that as [REDACTED]
Limitation	No applicant model provided	The model should be checked against the applicant annual cashflow model if provided.
Limitation	No detailed WTP performance/cost uncertainty	Costs provided appear illustrative only and do not replace specialist water treatment cost risk analysis.

Estimate of Dam Safety Requirements for a TSF

Assumptions	From	To			
Dam Safety Operations commence	Y15	Y214			
CDSR, DSMP, FMEA and PIC completed prior	Y10	Y11			
Annual DS activities			No	Amount	Total
Monthly Instrumentation data review	Y15	Y214	4	\$2,000	\$8,000
Monthly DS inspection			12	\$2,000	\$24,000
IDSR			1	\$7,500	\$7,500
Minor Maintenance Activity			1	\$5,000	\$5,000
DSAP review and sign off			1	\$5,000	\$5,000
					\$49,500
5-Yearly	Y15	Y214			
CDSR			1	\$42,000	\$42,000
					\$42,000
15-Yearly	Y15	Y214			
FMEA Update			1	\$45,000	\$45,000
PIC reassessment			1	\$7,000	\$7,000
					\$52,000
Dam Safety Incident					
Allow for significant risk event	Y100	Y101	1	\$20,000,000	\$20,000,000
					\$20,000,000