

An aerial photograph of the Anchorage Regional Landfill. The landfill is a large, irregularly shaped area with various sections of land, some of which are covered in vegetation and others in bare earth or gravel. A road runs along the top edge of the landfill. In the bottom left corner, there is a small cluster of buildings and a parking lot. A label "Anchorage Regional Landfill" is visible in the bottom left corner of the image.

Municipality of Anchorage

Anchorage Regional Landfill Closure & Post- Closure Care Investment Fund

**Infrastructure Enterprise and Utility
Oversight Committee**

January 15, 2026

A yellow CAT bulldozer is shown in the middle ground, pushing a large pile of garbage. The foreground is dominated by a massive pile of waste, including plastic bags, cardboard boxes, and tires. In the background, there are dark, hazy mountains under a grey, overcast sky. The scene is a stark representation of waste management.

Purpose of Presentation

- Overview of Fund and Board
- Investment Performance Update
- Five Year Update of SWS Long-Term Financial Forecasting Model

A photograph of a landfill site. A large red truck is dumping a massive pile of garbage, including plastic bags, cardboard boxes, and other debris, onto a large pile of trash. In the background, there are snow-capped mountains under a cloudy sky. A yellow excavator is visible on the left side of the image.

ARL Closure & Post-Closure Care Investment Fund

Board Members:

- Angela Astle, Chair
- Jeffrey Sinz, Vice Chair
- Ross Risvold, Secretary
- Kelli Toth, Member
- Chris Richardson, Member

ARL Closure and Post-Closure Care Investment Fund - Overview

- ARL Managed and Operated by SWS
- Under accounting (GAAP) and regulatory (FCR's) rules, landfill operators are required to accrue liabilities and fully fund the present value of future closure and post-closure care costs during the useful life of the facility.
- The full cost of operating the ARL, including future closure and post-closure care costs, funded through user fees collected during the landfill's useful life.
- In 2016, the Assembly amended AMC 26.80.060 and enacted a new AMC 26.80.065 to create and fund the ARL Closure and Post-Closure Care Restricted Cash and Investment Fund, and establish an Investment Board with responsibility and authority to manage Fund assets.
- The purpose of the Fund is to accumulate sufficient assets (funds) during the useful life of the landfill to pay the post-operational cost of the ARL's closure and post-closure care.
- The Board is responsible for ensuring that sufficient funds are set aside to pay future closure and post-closure care costs and for managing the assets of the Fund consistent with the provisions of the AMC and the Board approved Investment Policy.
- In 2020, the Assembly further amended AMC 26.80.060 and 26.80.065 clarifying the responsibility of all users of the ARL (past and future) to proportionately contribute to future ARL closure and post-closure costs and modifying the methodology utilized to determine the funding amount needed from past and future users of the ARL.
- In 2021, the Assembly authorized transfer of more than \$25 million in excess funding from the ARL Closure & Post-Closure Care Fund back to SWS to support its Capital Improvement Program.



AMC 26.80.060 (Highlights)

- Title 40. CFR, Parts 257 and 258 EPA Rules require that Landfill Operators accumulate sufficient funds to pay the liability associated with future final closure of the landfill, and monitoring and maintenance costs for 30 years thereafter.
- SWS shall include in its annual budget the liability associated with future ARL closing and post-closing care costs based on utilization of expected landfill capacity.
- Each user of the ARL shall pay a proportionate share of the closure and post closure care costs through tipping fees charged during the useful life of the ARL.
- SWS shall set aside annual deposit amounts as specified in AMC 26.80.065.E.2.
- Deposits into the closure and post-closure care restricted cash and investments account can only be used for the specified purpose.
- Withdrawals from the Fund for purposes other than to pay ARL closure and post-closure care costs require Assembly approval.



AMC 26.80.065 (Highlights)

- Establishes “ARL Closure and Post-Closure Care Investment Fund”
- Purpose of Fund is to accumulate, manage and safeguard Fund assets.
- Establishes Board to manage all investment activities of the Fund
 - Five Members (1+ SWS, 1+ PF&I, 2+ public)
 - Appointed by Mayor confirmed by Assembly
 - Staggered three-year terms
- Board shall manage all investment activities of the Fund.
- Board shall develop and adopt written investment policies.
- Investment objective of Fund is to achieve a long-term return on investment of Fund assets which in conjunction with annual deposits from SWD will be sufficient to satisfy the ARL closure and post-closure care liability.
- Board may engage services of financial/investment advisors, trustees, custodians, money managers, and others services deemed necessary to perform its duties.
- Administrative support provided by PF&I.

AMC 26.80.065 (Highlights continued)

- Board shall monitor and ensure timely deposit of monies from SWD.
- Annual deposits from SWS determined prospectively for five-year periods based on projections derived from the SWS long-term financial forecasting model (Raftelis Model).
- Annual deposit amounts derived from the Model are subject to review by the Board.
- Annual deposit amounts for the initial five-year period will be effective January 1, 2021 and will be updated each five years thereafter.
- SWD customer deposits occur annually no later than June 30.
- Board shall engage an independent analyst or company to perform an estimate of the closure and post-closure care liability at least every ten years starting in 2020.
- The Board shall submit an annual report to the Assembly by June 30 each year.

ARL Closure & Post-Closure Care Investment Fund

Annual Investment Returns As of December 31, 2025 (Net of Fees)

	<u>Actual</u>	<u>Benchmark</u>	<u>Diff</u>
1-Year (2025)	16.9%	16.8%	0.1%
5-Year (2021-2025)	6.3%	6.1%	0.2%
Since Inception (2017)	6.9%	7.0%	-0.1%

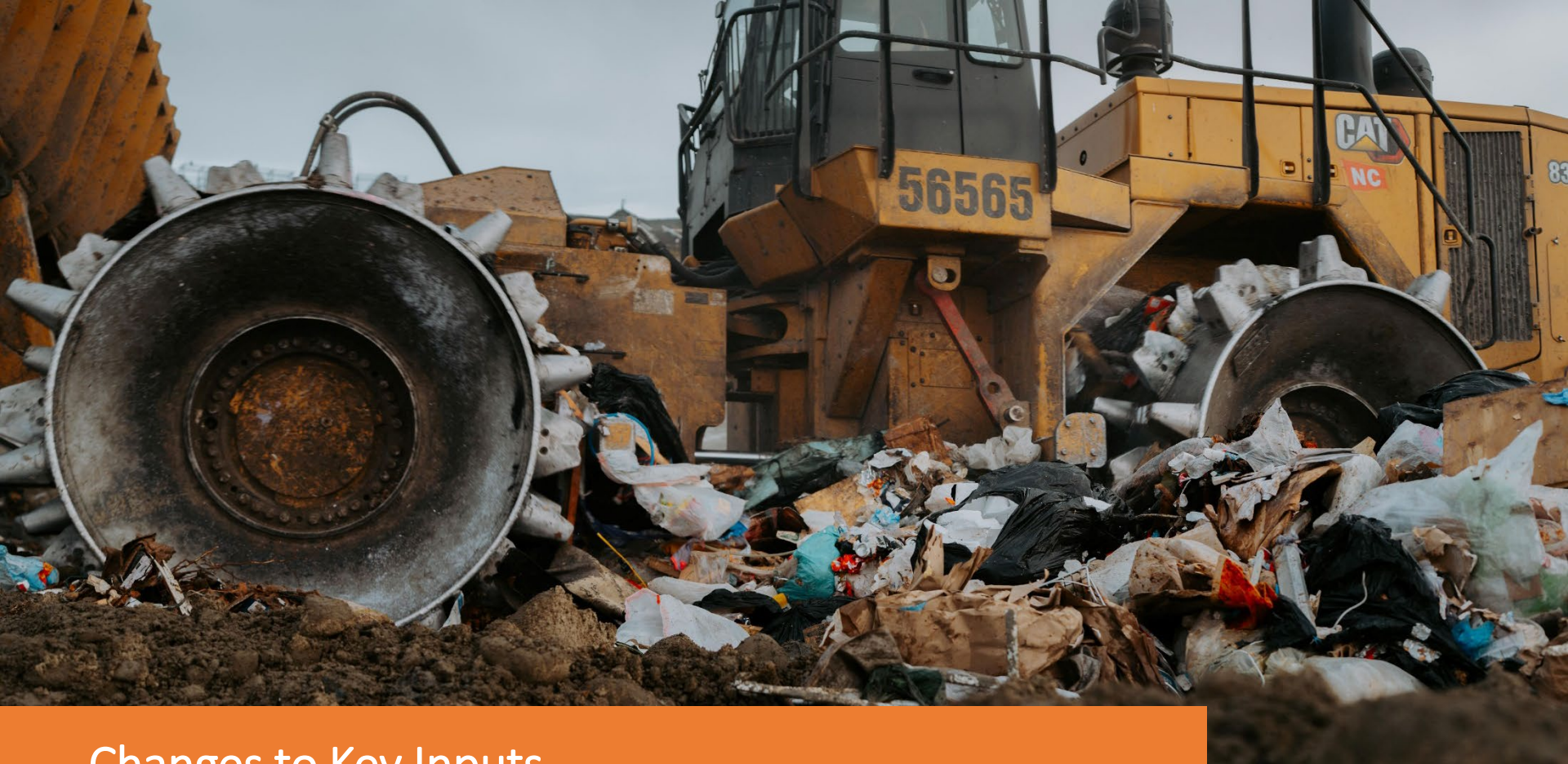
5-Year (2026-2030) projection based on current asset allocation and Callan's Capital Market Forecast is: 6.7%

SWS Long-Term Financial Forecasting Model

- The Model uses historical data and projections from internal and external landfill engineering, operational and financial sources to project the present and future value of ARL closure and post-closure care costs, and the proportionate amount of those costs attributable to past and future users of the ARL.
- Its primary purpose is to project the amount to be collected from future users of the ARL and deposited annually into the ARL Closure and Post-Closure Care Fund.
- It can also be used to analyze the present value of future closure and post-closure care costs relative to the present value of assets previously set aside and for this purpose.

Five Year Update of SWS Long-Term Financial Forecasting Model

- During the second half of 2025, SWS Management and Board worked collaboratively with external consultants (Raftelis and Callan) to complete the Model update process as required by AMC 26.80.065.
- The Board reviewed and approved the updated version of the Model during a Special Board meeting for this purpose on October 24, 2025.
- Board Resolution 2026-01 approved on January 12, 2026 documenting completion of the Model update and the Board's findings relative to updated inputs and outputs.



Changes to Key Inputs

<u>Description</u>	<u>Prior</u>	<u>Updated</u>
Investment Earnings Rate	5.5%	6.5%
Landfill Inflation Rate	3.5%	4.5%
Landfill Compaction Rate	1,200 lbs.	1,700 lbs.

Changes to Key Inputs

Investment Earnings Rate – 1% increase driven by change in fixed income investment strategy (passive core to active core plus) and increase in equity allocation from 50% to 60%. Both changes expected to increase portfolio returns by 0.5%.

Landfill Inflation Rate – 1% increase based on additional years of historical information regarding actual increases in landfill closure and post-closure costs.

Landfill Compaction Rate – Change driven by a number of factors including regulatory guidance regarding allowable composition of cover material and increased operational efficiencies. This change extends the projected ARL closure date from 2064 to 2105, and the end of the post-closure period from 2094 to 2135. This represents a material change in a core assumption and significantly reduces the required amount of required funding from past and future users of the ARL.



Required Annual Deposits

Year	Prior Updated
2026	\$653,870 \$210,033
2027	\$698,920 \$223,875
2028	\$747,043 \$238,628
2029	\$798,543 \$254,354
2030	\$853.560 \$272,115

Funding Variances

Temporary Variances – Expected normally occurring variances which occur when Model's key inputs (based long-term assumptions) are measured for short-term periods (five years updates). Such variances are generally expected to net themselves out over time.

Permanent Variances – Unexpected or material variance resulting from a change in funding methodology, a change in applicable regulations, a change in technology or a change in operating methods that significantly impact operating efficiency. Such variances are not expected to net themselves out over time and may result in a funding level in excess of the needs of the Fund and an opportunity for the Assembly to consider redirecting the excess funding amount to other purposes.

Funding Variance

- Model update process calculated surplus funding of \$8.6 million.
- Attribution Analysis of surplus conducted by Raftelis (SWS external financial consultant) with input from Callan (Board Investment Consultant), Board and SWS Management.
- \$3.4 million determined to be a temporary variance associated with normally occurring short-term volatility of long-term assumptions. This amount needs to be retained by the Fund.
- \$5.2 million determined to be a permanent variance resulting from the change in the landfill compaction rate. The Board views this amount as excess to the projected needs of the Fund and available for transfer out.



QUESTIONS



ANCHORAGE, ALASKA
ARL CLOSURE & POST-CLOSURE CARE INVESTMENT FUND
Board Resolution No. 2026-01

A RESOLUTION OF THE ANCHORAGE REGIONAL LANDFILL (“ARL”) CLOSURE & POST-CLOSURE CARE INVESTMENT FUND BOARD REGARDING ITS REVIEW AND FINDINGS RELATIVE TO THE FIVE-YEAR UPDATE OF THE SOLID WASTE SERVICES LONG-TERM FINANCIAL FORECASTING MODEL TO BE EFFECTIVE JANUARY 1, 2026.

WHEREAS, Anchorage Municipal Code (the “AMC”) section 26.80.065(E.2.) provides that the amount of annual deposits of customer funds by Solid Waste Services (“SWS”) into the ARL Closure & Post-Closure Care Investment Fund (“Fund”) shall be determined prospectively for five year periods based on estimates produced by SWS using its long-term financial forecasting model (“Model”); and

WHEREAS, AMC section 26.80.065(E.2.) provides that annual deposits for the initial five-year period will be effective January 1, 2021 and updated each five years thereafter; and

WHEREAS, AMC section 26.80.065(E.2) provides that estimates produced by SWS using its long-term financial forecasting model are subject to review by the ARL Closure & Post Closure Care Investment Fund Board (“Board”); and

WHEREAS, SWS and the Board have worked collaboratively with the SWS financial consultant (Raftelis) and the Board’s investment consultant (Callan) to complete the update and review of the Model as required by the AMC; and

WHEREAS, the Board approved the updated version of the Model, including updates to the key inputs and outputs, during a special meeting of the Board for this purpose on October 24, 2025, now therefore,

THE ARL CLOSURE & POST-CLOSURE CARE INVESTMENT FUND BOARD RESOLVES THAT:

Section 1. The following adjustments to key inputs were used to update the Model. They are deemed by the Board to be reasonable, appropriate, and supported by actual historical data and/or projections from qualified experts:

<u>Key Inputs</u>	<u>Prior Version</u>	<u>Updated Version</u>
Investment Earnings Rate	5.5%	6.5%
Closure/Post-Cost Inflation Rate	3.5%	4.5%
Landfill Compaction Rate	1,200 lbs.	1,700 lbs.

The 1% increase in both the projected Investment Earnings Rate and the

Closure/Post-Closure Inflation Rate effectively net out each other and together have no material impact on the outputs calculated by the Model. The increase in the Landfill Compaction Rate has a material impact on the Model's outputs increasing both the remaining useful life of the ARL and the projected end of the post-closure care period by 41 years. The projected closing of the ARL changes from 2064 to 2105, while the projected end of the post-closure period changes from 2094 to 2135. The Board initially questioned the rationale for this change given the significant impact on Model outputs, but based on information provided by SWS management and the SWS financial consultant, the Board concludes the updated Landfill Compaction Rate and longer than previously projected useful life of the ARL is reasonable and sufficiently supported by landfill management practices and updated historical data.

Section 2. As provided by AMC section 26.80.065(E.2.), the annual deposits of customer funds by SWS into the Fund required for the next five years has been updated based on projections generated by the updated Model. They are :

Required SWS Deposits

<u>Year</u>	<u>Prior Version</u>	<u>Updated Version</u>
2026	\$653,870	\$210,033
2027	\$698,920	\$223,875
2028	\$747,043	\$238,628
2029	\$798,543	\$254,354
2030	\$853,560	\$272,115

The Board views the significant reduction in the annual contributions from SWS during the next five years as reasonable and expected given the increase in the useful life of the ARL as projected by the updated version of the Model.

Section 3. When a change in methodology for future funding the ARL Closure & Post-Closure Care Investment Fund was approved by amendment of AMC section 26.80.065 in 2020, it resulted in a major reset of the funding level effective in 2021. It was expected that future adjustments to funding levels would be accomplished through adjustments to the annual SWS contribution amounts as determined by the recurring five year update of the Model. Adjustment amounts were expected to be relatively minor and intended to maintain a proportionate and equitable distribution of closure and post-closure care costs to past, current and future users of the ARL. Variances in funding relative to levels projected by the Model were expected to occur during each five-year update, but they would be largely temporary in nature and the unavoidable result of normally occurring short-term volatility of the long-term assumptions utilized by the Model. They were expected to net themselves out over time and/or be managed through prospective adjustments to the annual SWS contributions deemed necessary by the recurring five-year update process.

However, the change in the Landfill Compaction Rate and the resulting increase of 41 years in the expected useful life of the ARL (more than twice the prior estimate)

1 is not a temporary adjustment that will net itself out over time. It is instead permanent
2 in nature and indicates past deposits by SWS were disproportionately large relative
3 to the closure and post-closure care cost projected to result from the actual disposal
4 activity of those ARL users. The Board therefore considers any surplus funding
5 attributable to this change to be excess to the needs of the Closure and Post-
6 Closure Care Fund and available for withdrawal subject to the provisions of AMC
7 26.80.060(D).
8

9 The updated version of the Model as approved by the Board projects surplus funding
10 as of December 31, 2025 of \$8.6 million. An attribution analysis of the projected
11 surplus was conducted by the SWS financial consultant. The analysis indicates \$5.2
12 million of the surplus is permanent in nature and attributable to the change in Landfill
13 Compaction Rate and resulting extension of the ARL useful life. This amount
14 indicates an excess level of past contributions to the Fund by SWS relative to the
15 amount of future closure and post-closure care costs caused by past users of the
16 ARL. The \$5.2 million could be withdrawn from the Fund following the provisions of
17 AMC 26.80.060(D) without causing harm to the financial sufficiency of the Fund.
18 The remaining \$3.4 million of the surplus is temporary in nature, attributable to
19 normally occurring short-term volatility of the Model's long-term assumptions and
20 should be retained by the Fund.
21

22 The Board believes the amount of surplus funding projected by the updated Model
23 as of December 31, 2025 and the associated attribution analysis reflect the best
24 information available as of October 24, 2025 and provide a reasonable basis for
25 further action by the Administration and Assembly should they deem such action
26 appropriate. The Board expects to support any near-term proposal to withdraw up
27 to \$5.2 million from the Fund.
28
29

30 PASSED AND APPROVED by the ARL Closure & Post-Closure Care Investment
31 Fund Board this 12th day of January, 2026.
32
33
34
35
36

37 
38
39 _____
40 Angela Astle, Board Chair
41