

Wastewater Treatment

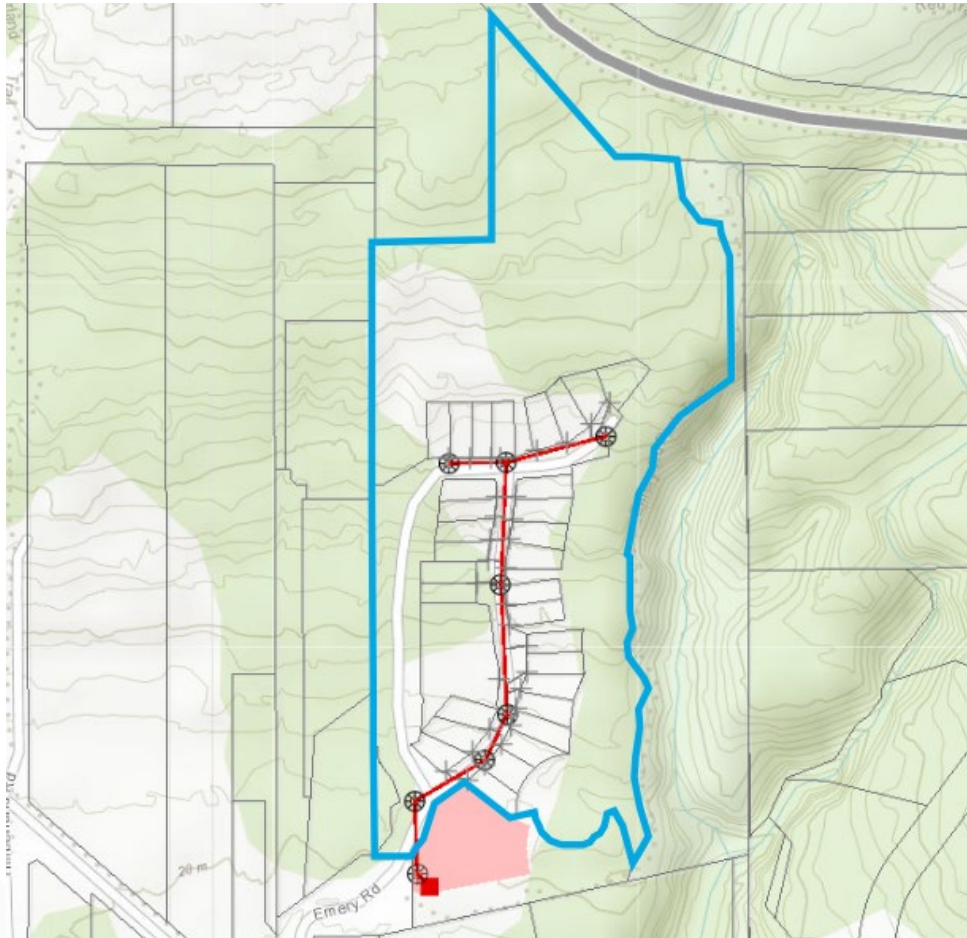
Summer 2020 Capital Funding Update

Area D – Roberts Creek Co-Housing

www.scrd.ca



Roberts Creek Co-Housing Wastewater Service Area



Topics

- Summary of previous review
- Capital Funding Update
- What's next?
- Questions



Summary of previous review

- **Wastewater Service Review:** High-level review of wastewater services within the SCRD www.scrd.ca/wastewater
- **Asset Management Plans:** Service-specific review. Summary of service establishment, relevant bylaws and asset inventory. Preliminary life-cycle and operational cost analysis.
- **Community Engagement:** SCRD hosted information sessions to share findings and gather feedback from residents.
- **Fact Sheets:** Created to provide residents with a quick glance of the preliminary service review findings.
- **Budget Revision:** Staff prepared revised budget models to reflect new datasets and to align with resident feedback.
- **Rate Adjustment:** Some User Rates and Frontage Fees were adjusted to reflect updated budget information.

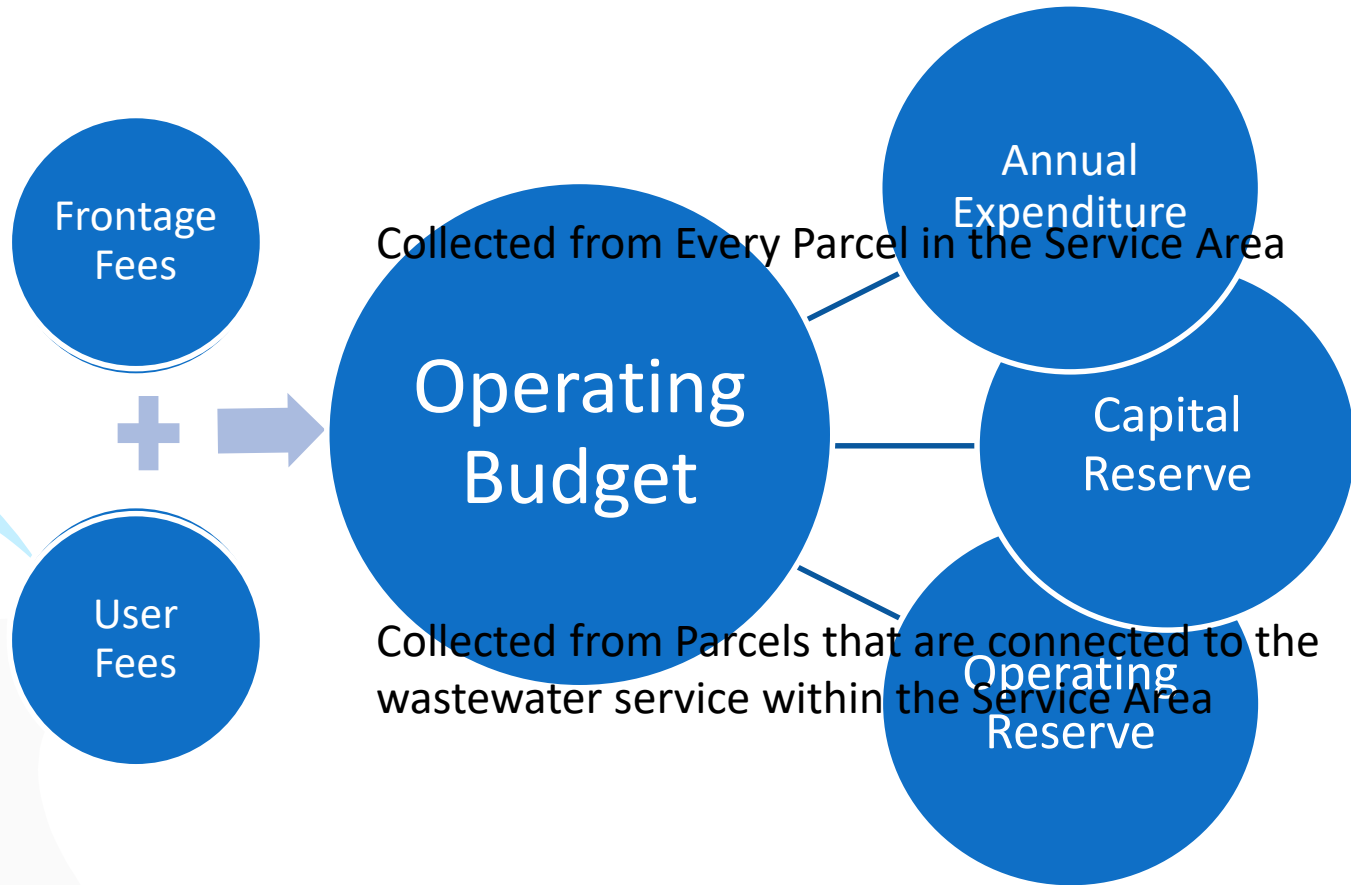


Summary of previous review

- **Key Findings – 2019 Wastewater Service Review**
 - Existing revenue is unsustainable
 - Operations Budget often greater than revenues generated from User Fees
 - Contributions to Reserve funds deferred frequently
 - Future capital expenditures not planned for
 - Ratio of Capital Reserves : Future Capital Expenses too low



Previous Funding Model - Recap



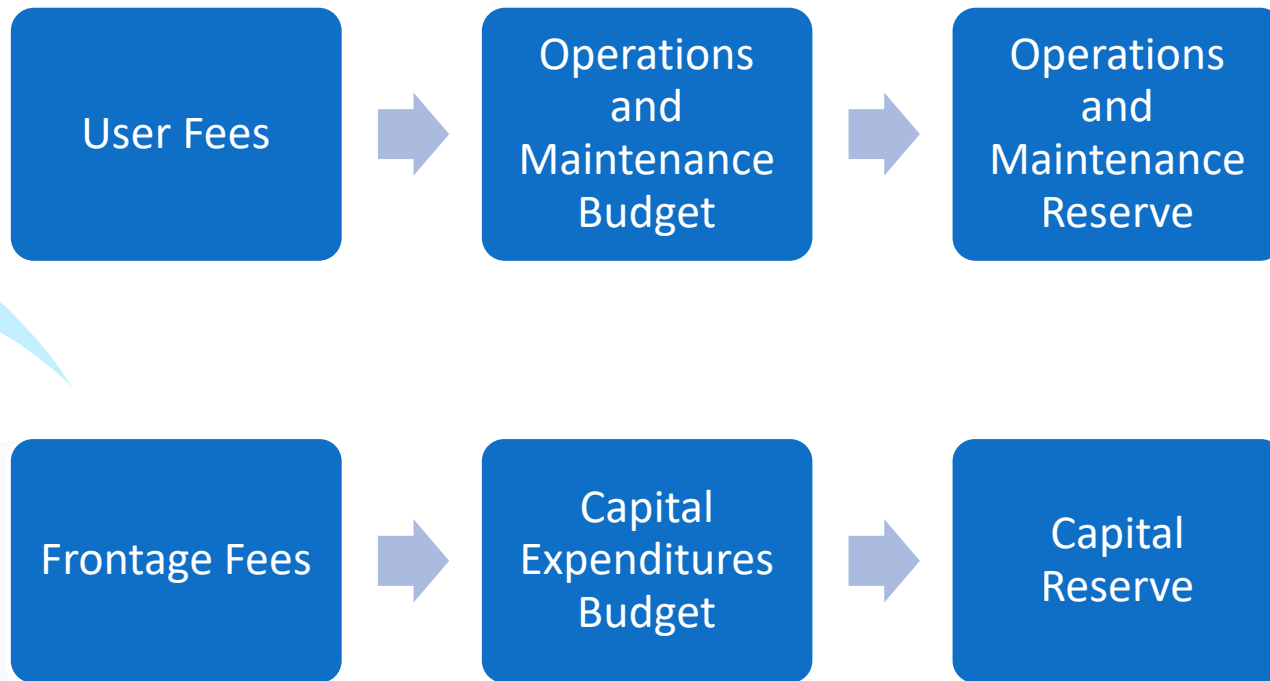
Summary of previous review

- **Key Outcomes**

- Decoupled User Fee and Frontage Fees
 - User Fee revenue only fund Operation and Maintenance
 - Frontage Fees only fund Capital Expenses
- Extensive Review of Operation & Maintenance requirements
 - Audited Operation and Maintenance activities
 - Revised O&M Budget to ensure adequate funding
 - Established O&M Reserve minimum targets
 - **Continue to be reviewed annually**
- Developed Capital Funding Models to plan for future capital expenses.



Sustainable Long-Term Funding Model



Summary of previous review

“Why Do We Need an Operating Reserve?”

- Unforeseen repairs can exceed annual operating budget
- Unable to borrow for Operational Expenses

Operating Reserves are withdrawn **only** for your service area.



Summary of previous review

- **Impact on wastewater rates:**

- Roberts Creek Co-Housing Wastewater O&M Budget Increase ~ 48%

| Roberts Creek Co-Housing Wastewater Rate Changes 2019-2020 | | | |
|--|-----------------|---------------------|--------------|
| <i>Year</i> | <i>User Fee</i> | <i>Frontage Fee</i> | <i>Total</i> |
| 2019 | \$562.50 | \$204.00 | \$766.50 |
| 2020 | \$687.97 | \$204.00 | \$891.97 |
| Increase | \$125.47 | \$0 | \$125.47 |



New Developments

- We Listened to Resident Feedback:
 - Analyzed historical SCRD contract data to refine long-term Capital Model
 - Reduced Engineering Allowance Estimates ~3%
 - Reduction of contingency ~15%
 - Tolerance for Debt
 - Considered financing larger portions of projects
 - Creation of 5-year rate structure proposal
 - Revised Annually
 - Provides residents advance notice of rate structure



New Developments

- Updated Savings/Borrowing Rates to match current rates
 - Variable borrowing rates based on term of loan
- Applied variable Construction Cost Index to better reflect construction inflation rate over time

Construction Inflation

| Period | Rate |
|-------------|-------|
| (1-10 Yrs) | 1.90% |
| (11-20 Yrs) | 3.24% |
| (21-30 Yrs) | 2.95% |
| (31-40 Yrs) | 3.51% |
| (41-50 Yrs) | 4.64% |
| (51-60 Yrs) | 4.42% |



Let's Talk Infrastructure Funding

- Provincial Legislation – Local Government Act
 - Local Service Areas in Regional Districts can be funded ONLY by participants
 - Costs are shared by a small number of people
- All infrastructure degrades over time
 - Reduced performance
 - Higher maintenance costs
- Infrastructure costs inflate over time



Capital Funding Plan – Method

Expenditures:

- Developed timeline of anticipated replacement using Estimated Useful Life of infrastructure
- Used most recent replacement cost estimates
- Inflated to future value using Construction Cost Indexes built from historical data
 - Variable rates based on replacement date
- Included Debt Financing Costs

Revenue:

- Applied annual interest accrual



Capital Funding Plan – Method

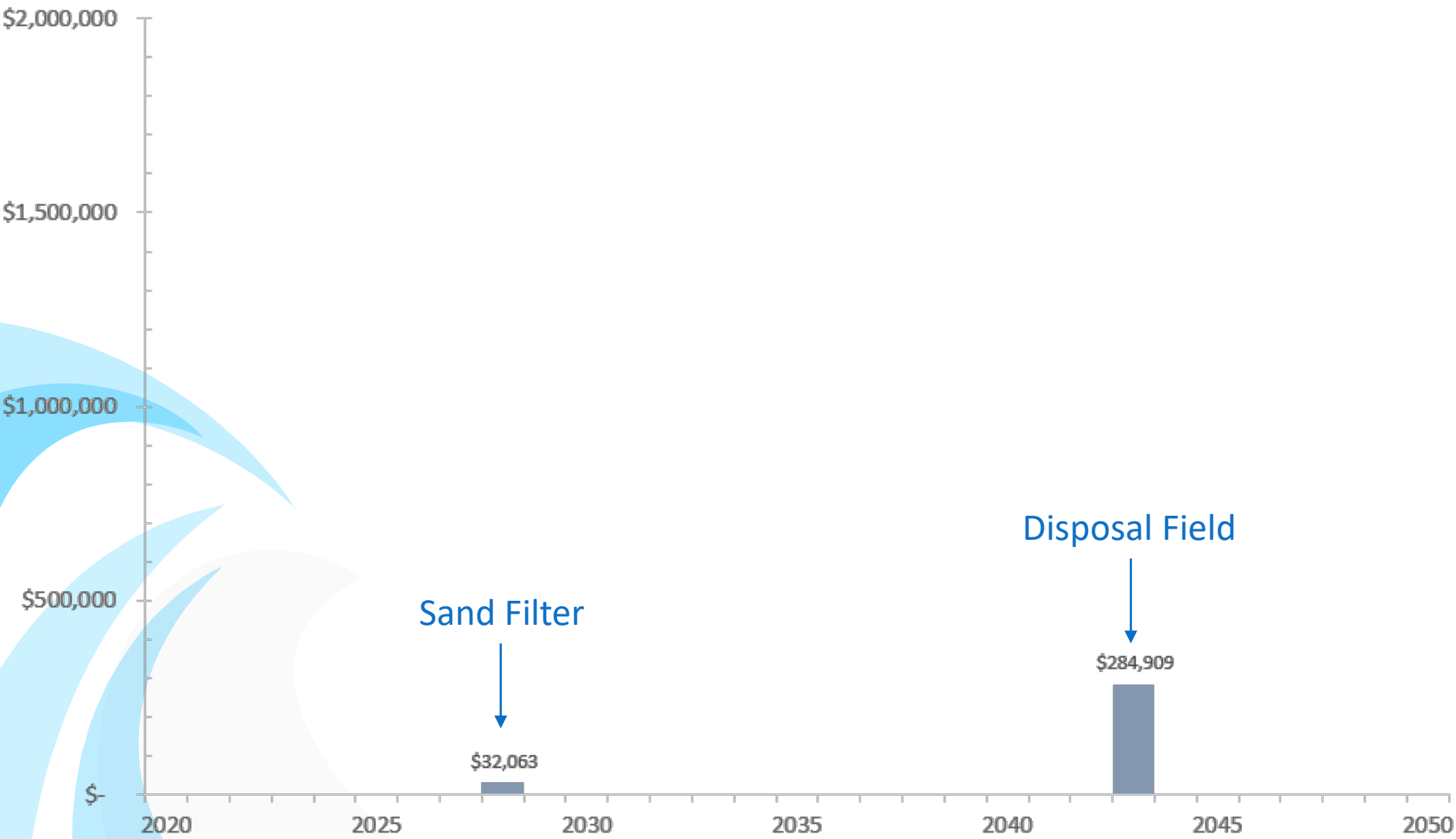
Expenditures:

- Developed timeline of anticipated replacement using Estimated Useful Life of infrastructure
- Wastewater services have 3 main components:
 - Treatment Plant – 50 Year Life
(Some have minor components with shorter lifespan eg. Filters)
 - Disposal System – 40 Year Life
 - Collection System - ~80 Year Life



Roberts Creek Co-Housing

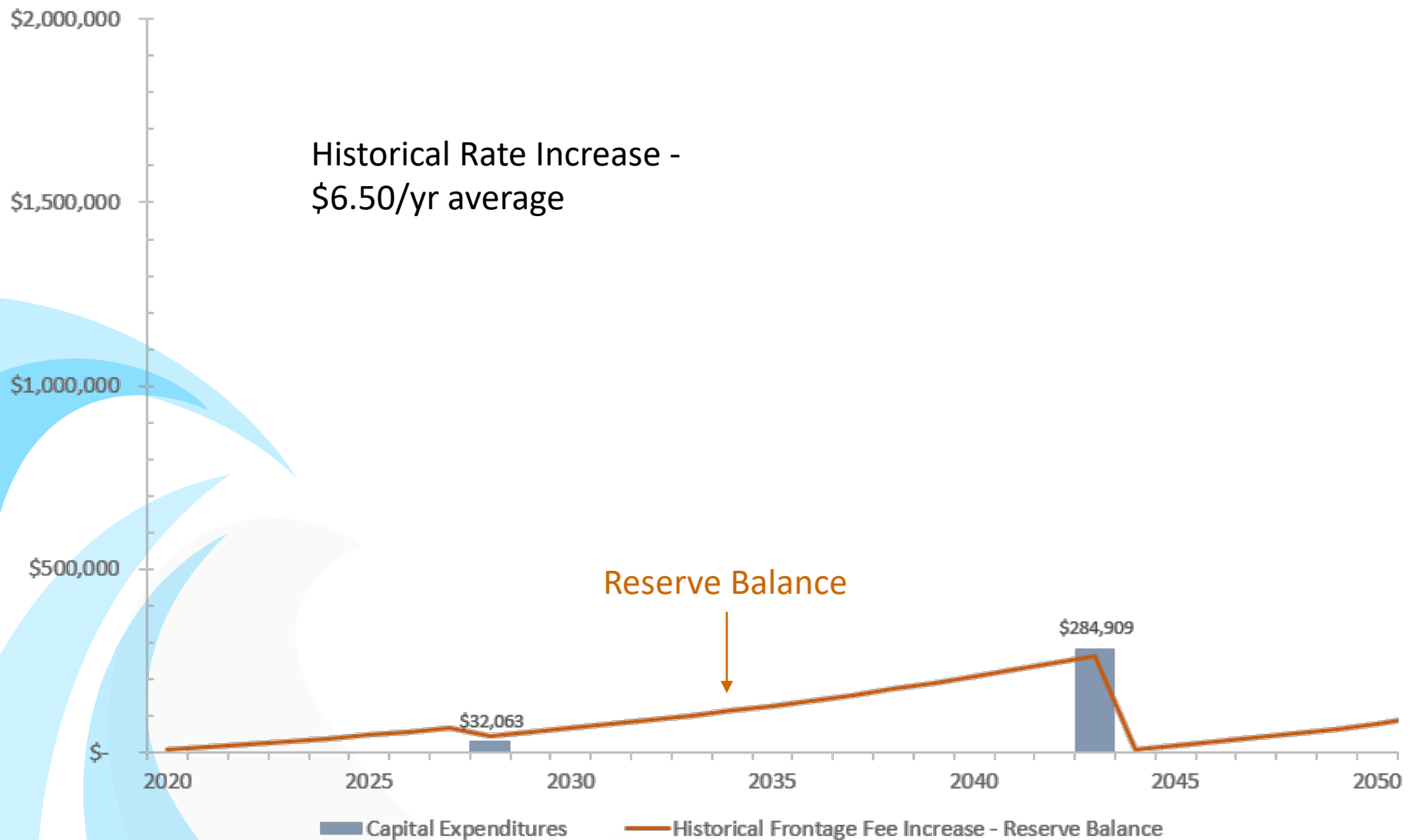
30-Year Anticipated Capital Expenditures



■ Capital Expenditures

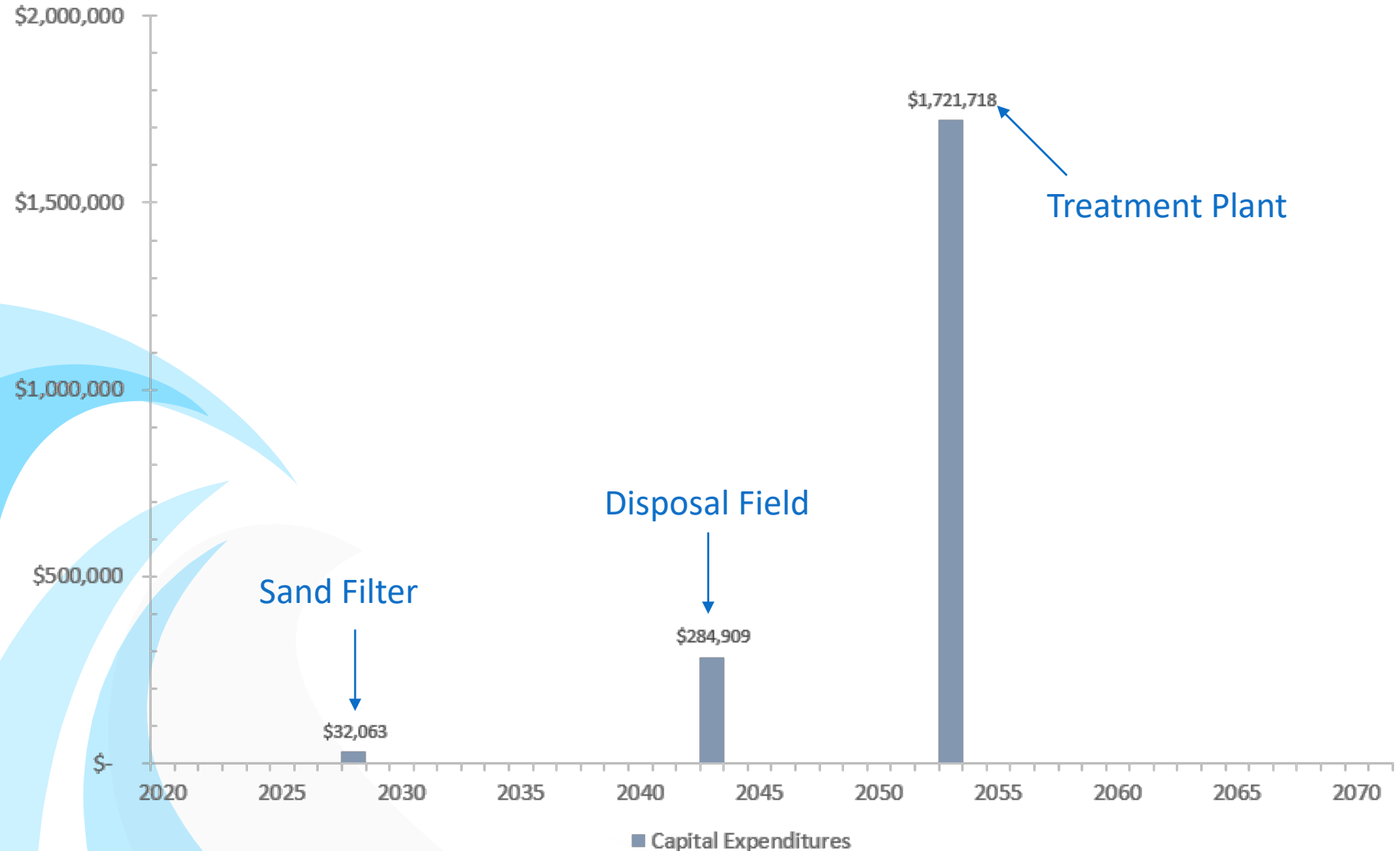
Roberts Creek Co-Housing

30-Year Anticipated Capital Expenditures

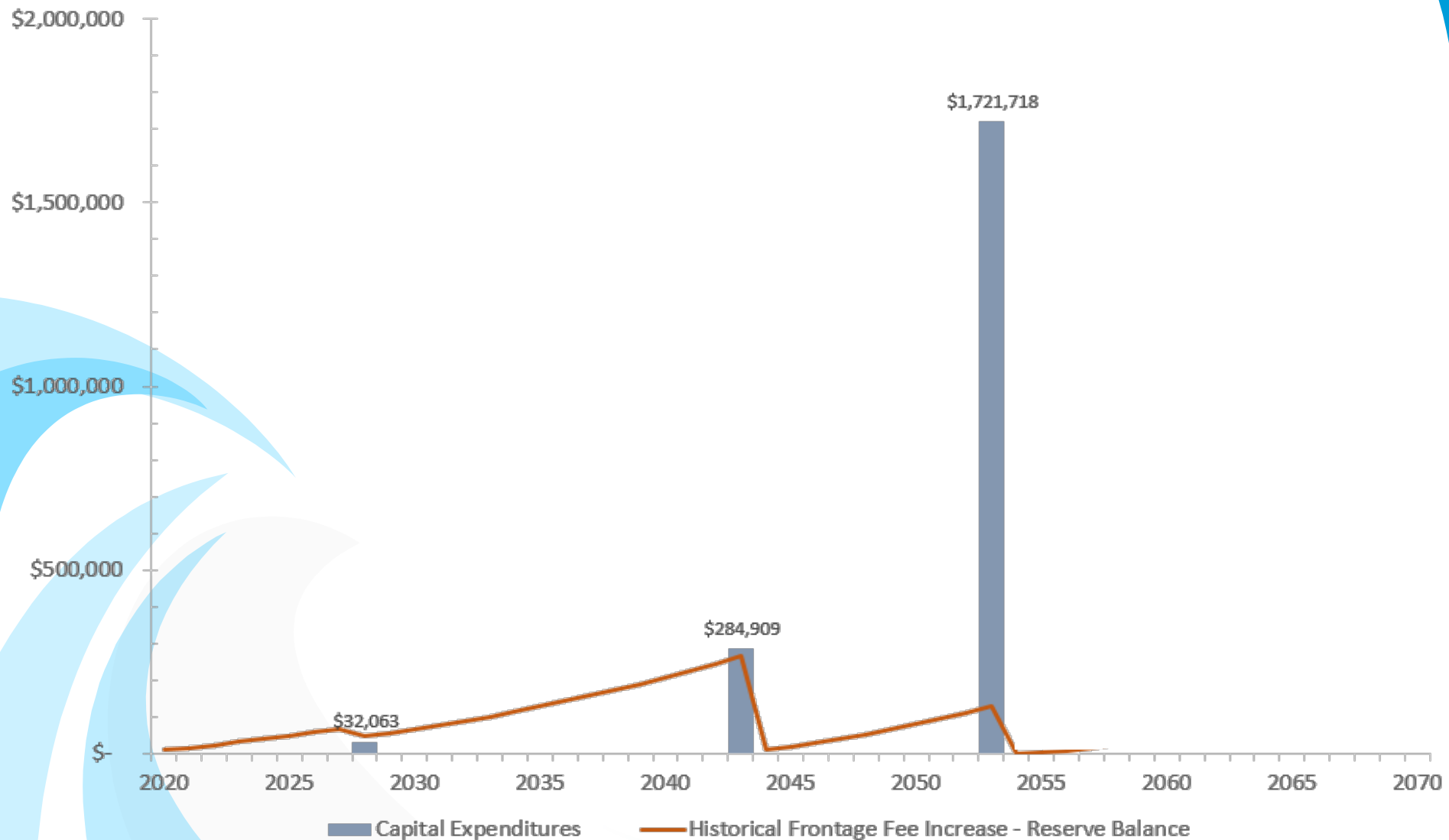


Roberts Creek Co-Housing

50-Year Anticipated Capital Expenditures

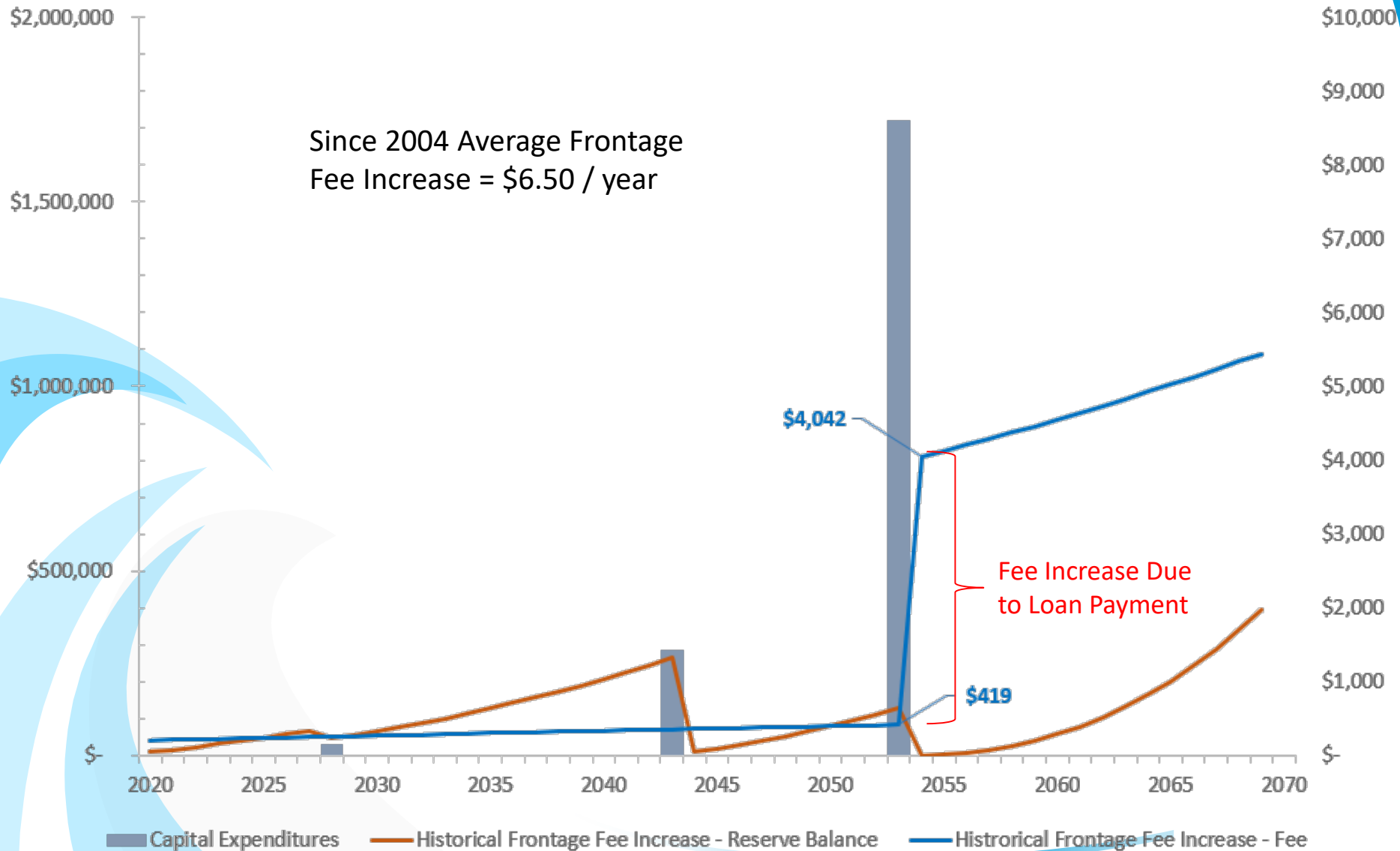


Roberts Creek Co-Housing 50-Year Anticipated Capital Expenditures

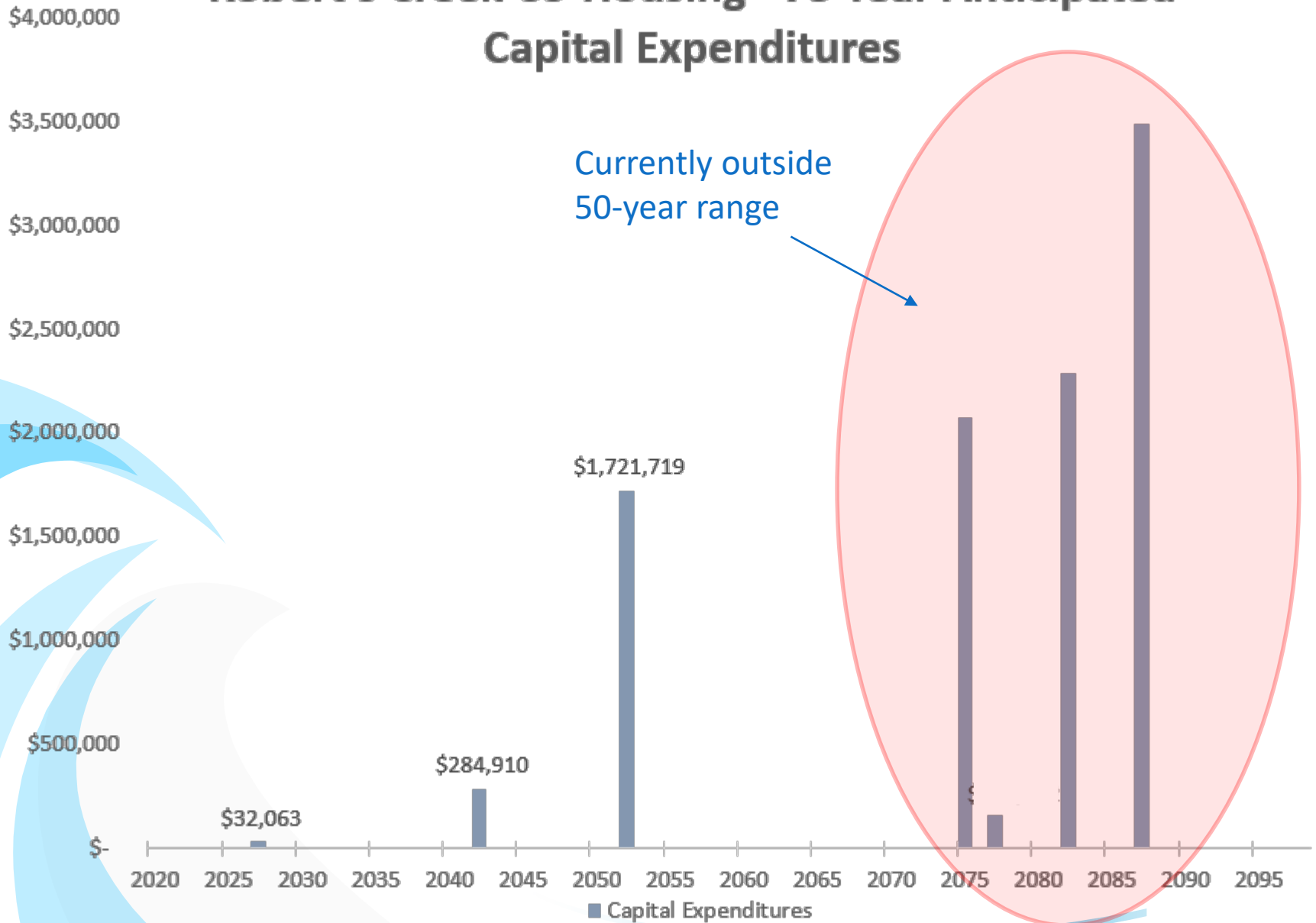


Roberts Creek Co-Housing

50-Year Anticipated Capital Expenditures



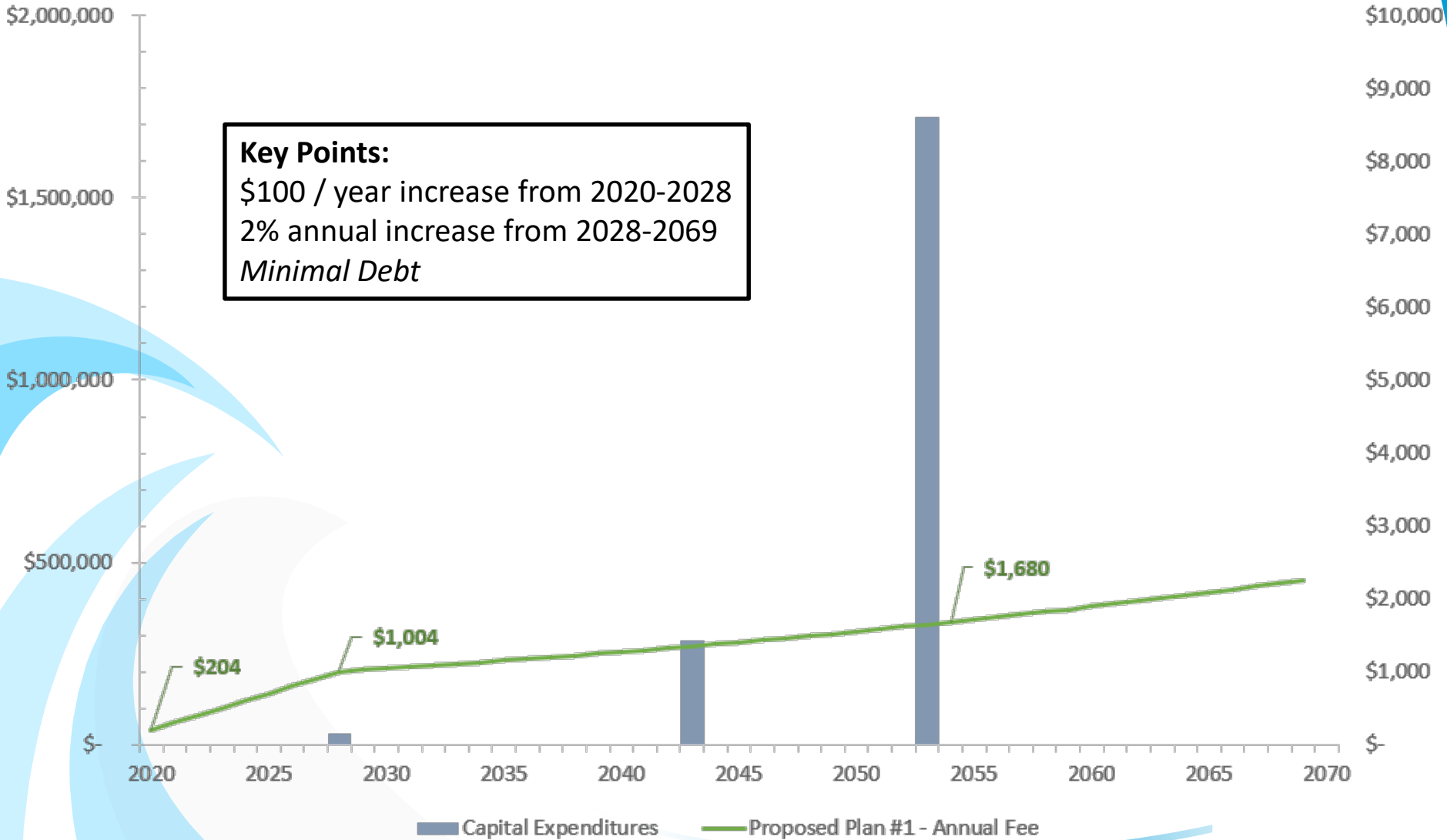
Robert's Creek Co-Housing - 75 Year Anticipated Capital Expenditures



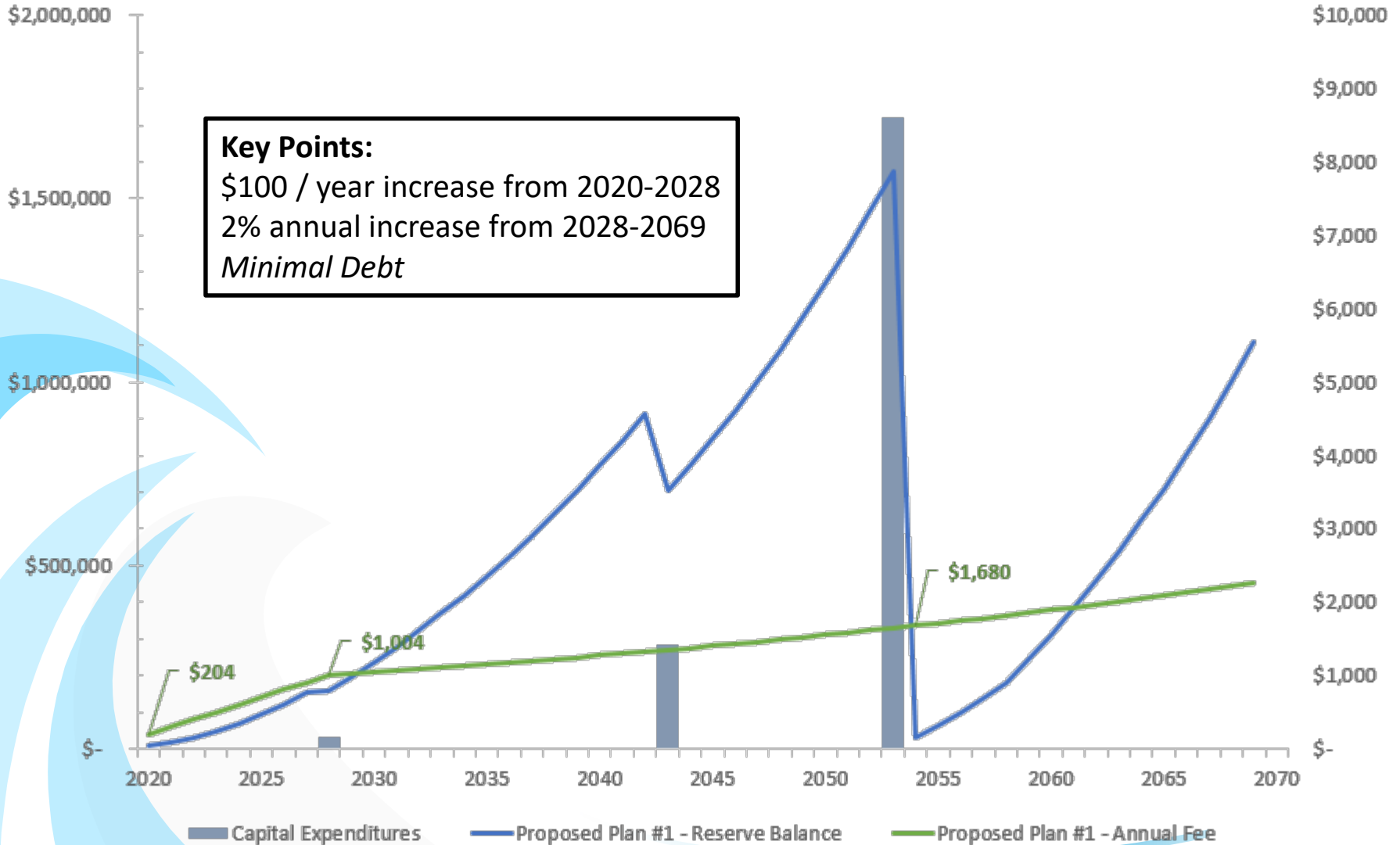
Roberts Creek Co-Housing

50-Year Anticipated Capital Expenditures

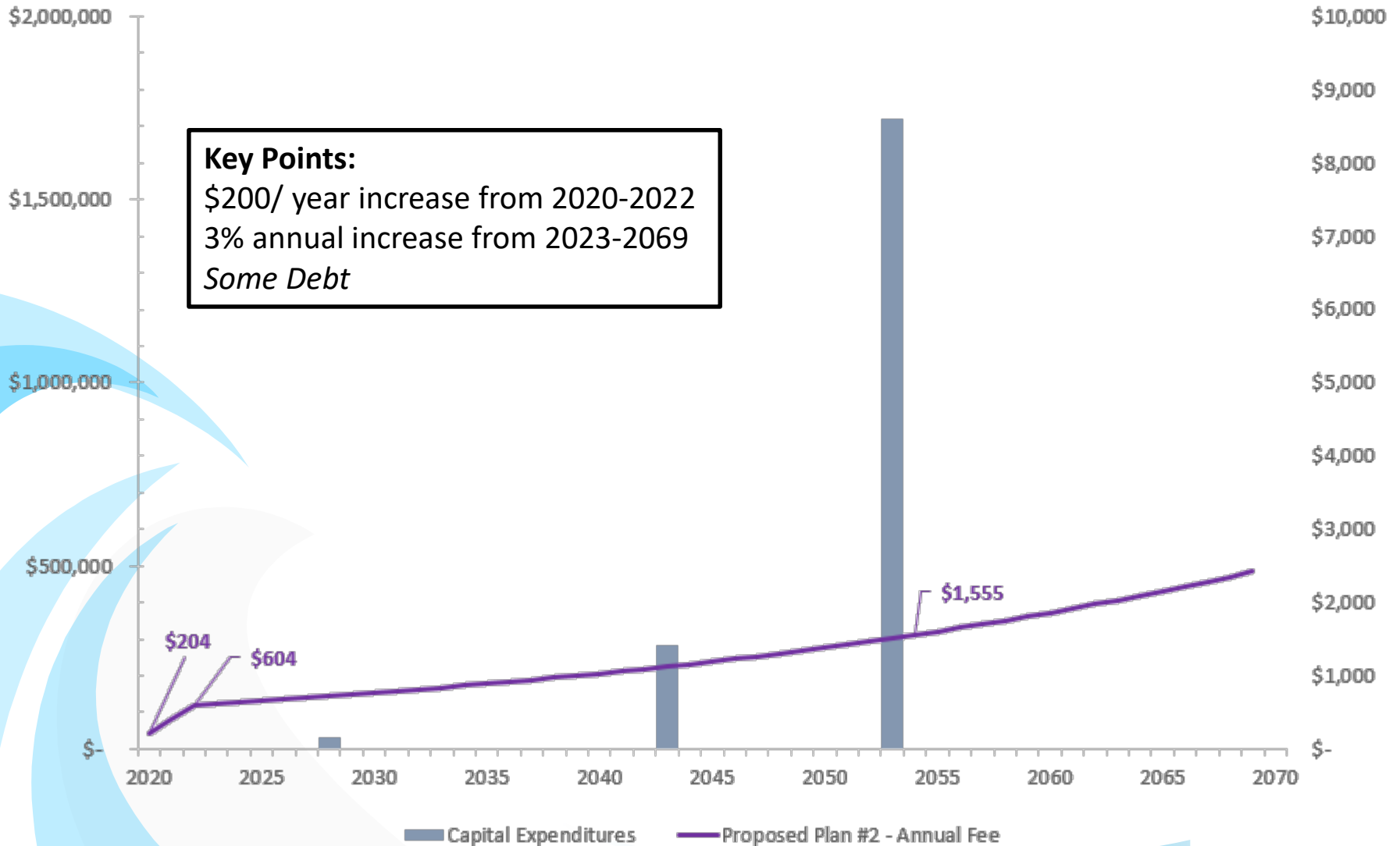
Key Points:
 \$100 / year increase from 2020-2028
 2% annual increase from 2028-2069
Minimal Debt



Roberts Creek Co-Housing 50-Year Anticipated Capital Expenditures

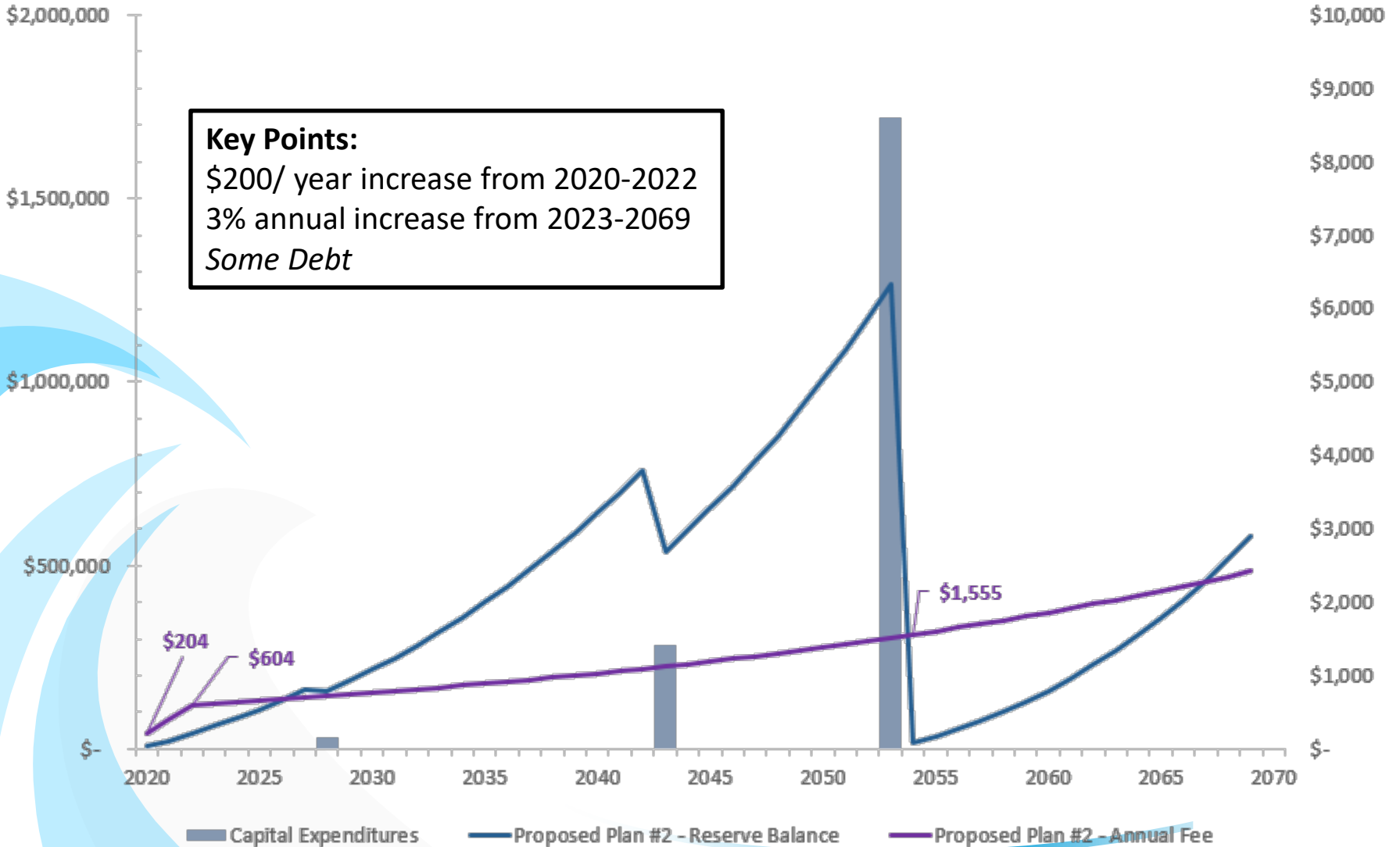


Roberts Creek Co-Housing 50-Year Anticipated Capital Expenditures

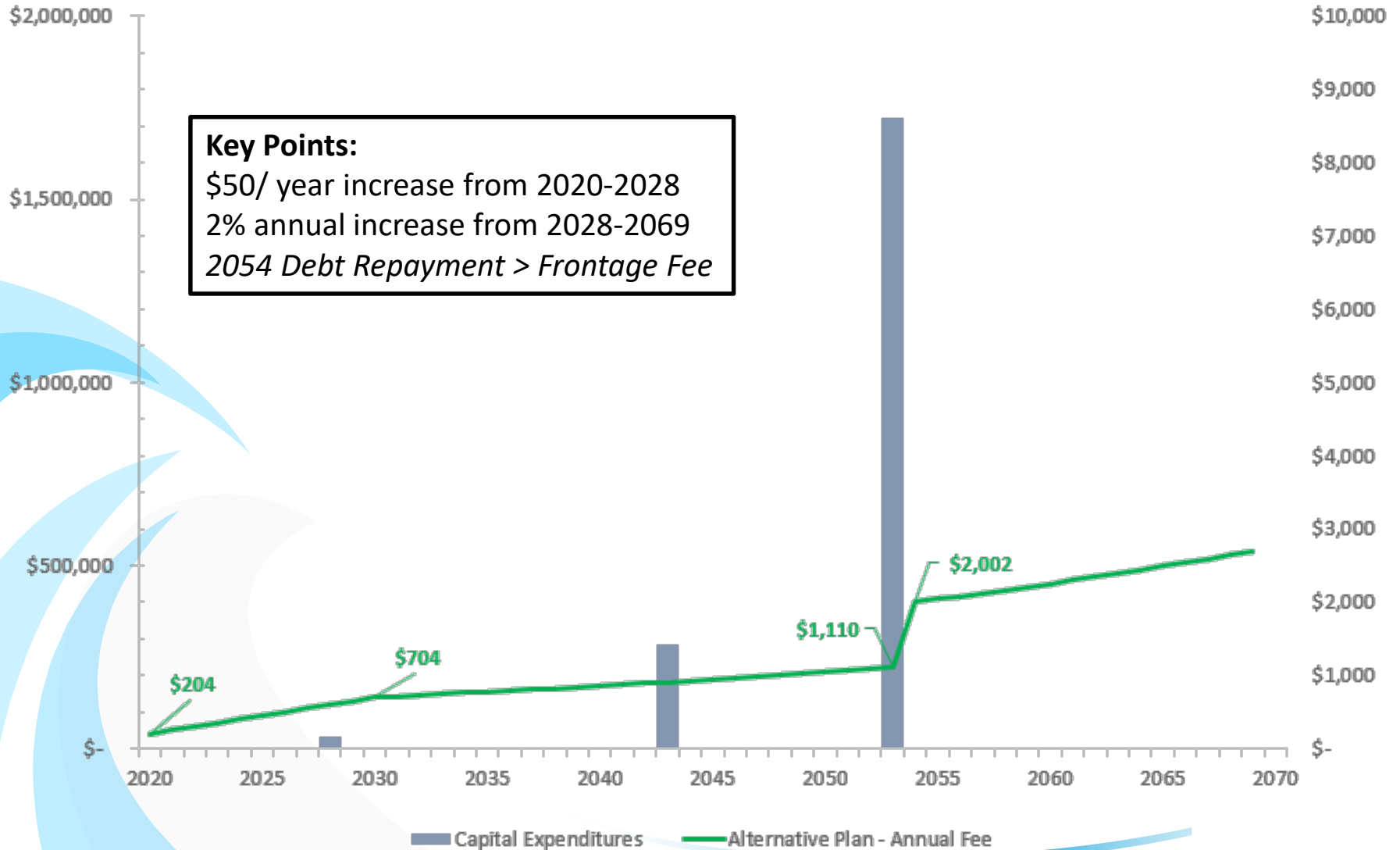


Roberts Creek Co-Housing

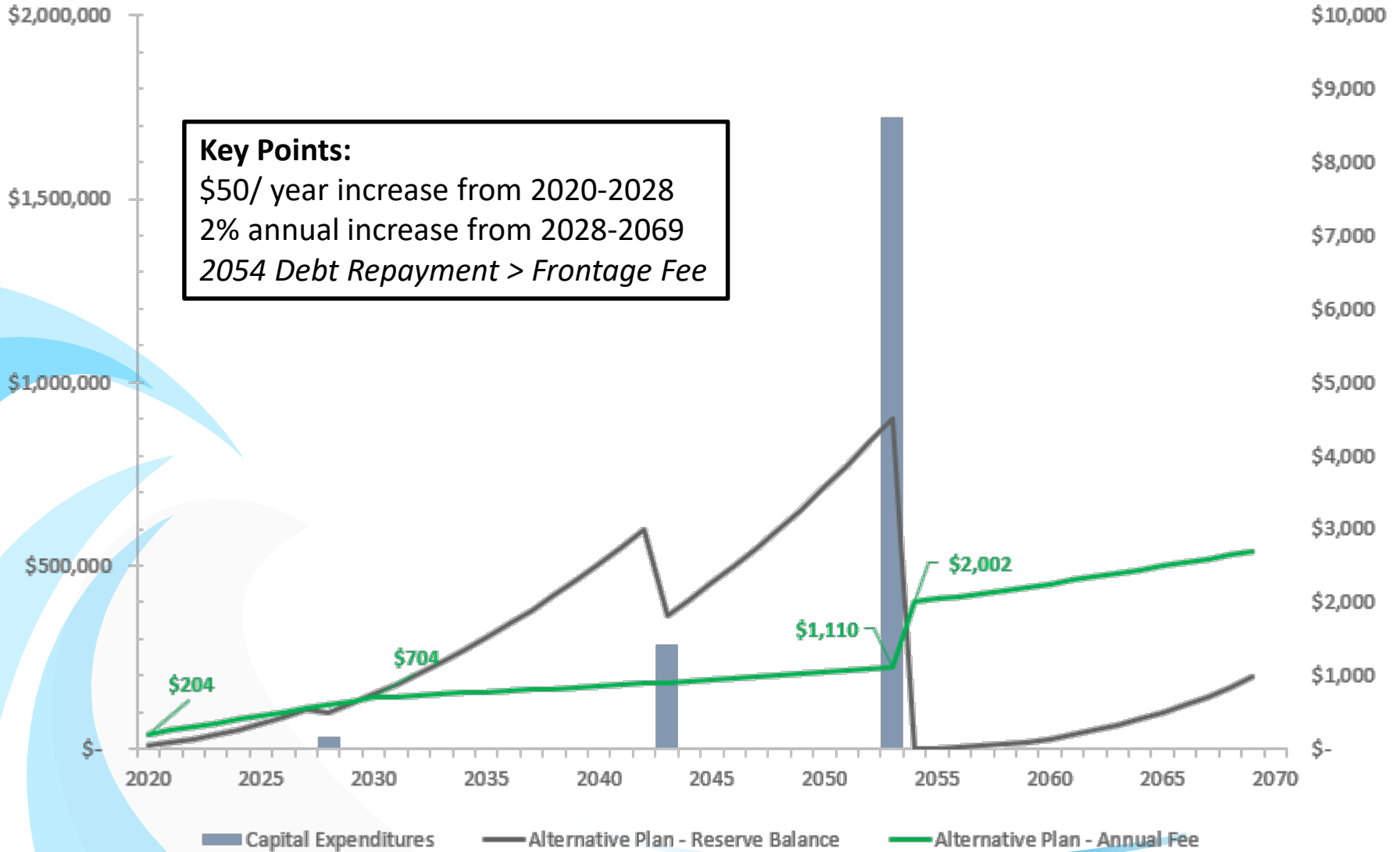
50-Year Anticipated Capital Expenditures



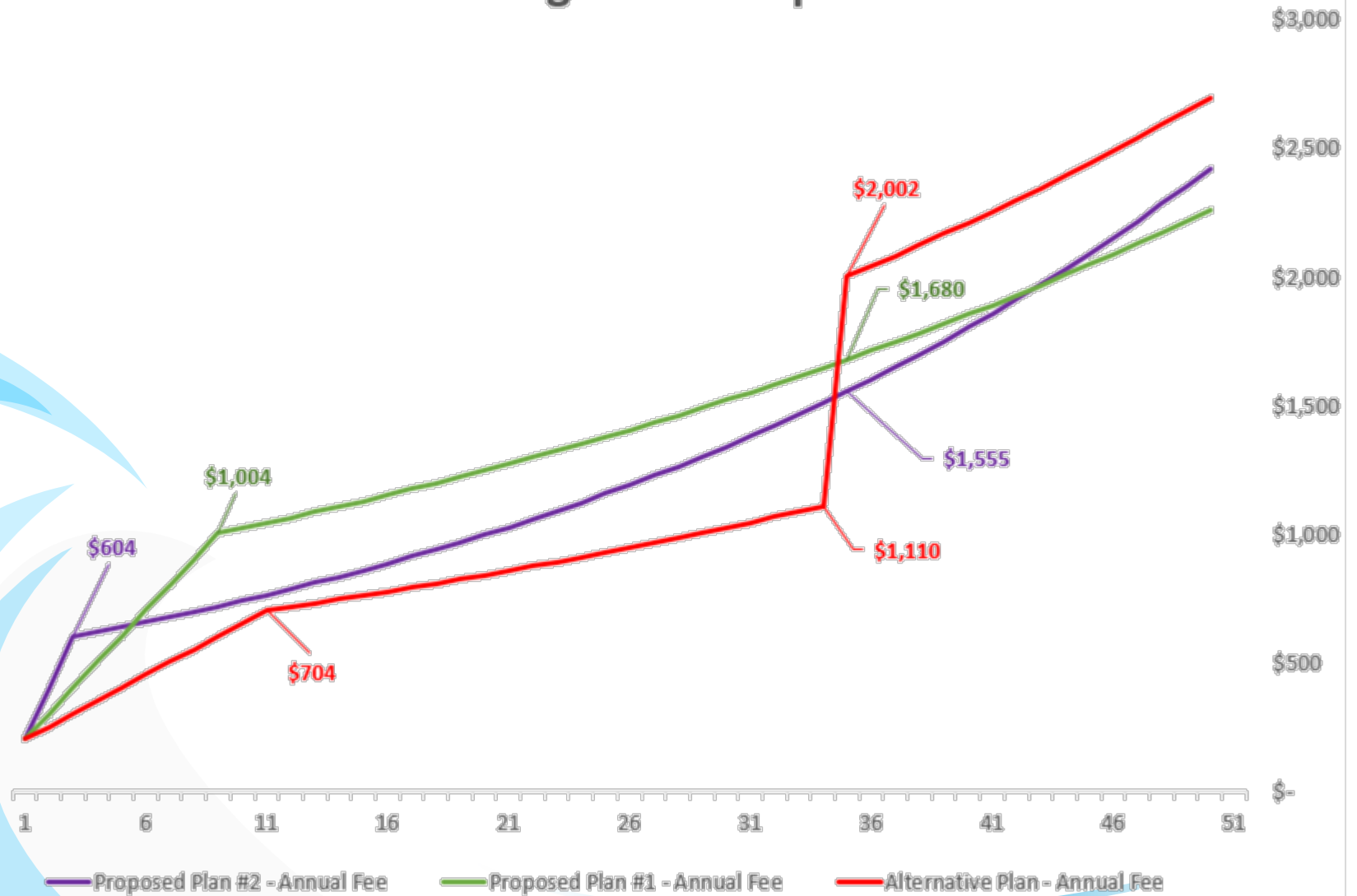
Roberts Creek Co-Housing 50-Year Anticipated Capital Expenditures



Roberts Creek Co-Housing 50-Year Anticipated Capital Expenditures



Roberts Creek Co-Housing 50-Year Frontage Fee Comparison



Five Year Rate Structure

- Proposing to introduce a Five Year Rate structure to create cost certainty
- Future rate adjustments will be introduced five years in advance



Five Year Rates

Robert's Creek Co-Housing Frontage Fees (2020-2025)

| | User Fee* | Plan 1 | Total | Plan 2 | Total | Alternative | Total |
|------|-----------|--------|-----------|--------|-----------|-------------|-----------|
| 2020 | \$687.97 | \$204 | \$891.97 | \$204 | \$891.97 | \$204 | \$891.97 |
| 2021 | \$687.97 | \$304 | \$991.97 | \$404 | \$1091.97 | \$254 | \$941.97 |
| 2022 | \$687.97 | \$404 | \$1091.97 | \$604 | \$1291.97 | \$304 | \$991.97 |
| 2023 | \$687.97 | \$504 | \$1191.97 | \$622 | \$1309.97 | \$354 | \$1041.97 |
| 2024 | \$687.97 | \$604 | \$1291.97 | \$641 | \$1328.97 | \$404 | \$1091.97 |
| 2025 | \$687.97 | \$704 | \$1391.97 | \$660 | \$1347.97 | \$454 | \$1141.97 |

*operating budget subject to annual review



Upcoming work

- Finalize Capital Funding Model
 - Final review of work to date.
- Present 5-year Rate Structure for Board Consideration
 - Provide residents with near-term rate certainty.
- Review O&M Budget (Annual Process)
 - Refine annual projection of maintenance costs.
 - Ensure appropriate Operating Reserve



Conclusion

- Current rates are not financially sustainable.
- Multiple ways to finance 50-year Capital Expenditures.
- Annual Review will maintain up-to date information



Questions?

www.scrd.ca

