



INFRASTRUCTURE SERVICES COMMITTEE

Thursday, January 13, 2022
Held Electronically
and Transmitted via the SCRD Boardroom,
1975 Field Road, Sechelt, B.C.

AGENDA

CALL TO ORDER 9:30 a.m.

AGENDA

1. Adoption of Agenda

PRESENTATIONS AND DELEGATIONS

REPORTS

2. Invitation to Tender (ITT) 2137017 Contract Award for Church Road Phase 4B – Construction
Capital Projects Senior Coordinator
Regional Water (Voting – A, B, D, E, F, Sechelt)
Annex A
Pages 1 - 8
3. Disaster Recovery Plan-Regional Flooding Events
Senior Leadership Team
(Voting – All)
Annex B
pp 9 - 22
4. Design, Permitting and Engineering Services for Upgrades to McNeil, Chapman, and Edwards Lake Dams – Contract Amendment No.1
Capital Projects Senior Coordinator
Regional Water (Voting – A, B, D, E, F, Sechelt)
Annex C
pp 23 - 26
5. Request for Proposal (RFP) 2137016 Contract Award Chapman Creek Water Treatment Plant (WTP) UV Upgrade – Design, Construction and Engineering Services
Manager, Utility Services
Regional Water (Voting – A, B, D, E, F, Sechelt)
Annex D
pp 27 - 29
6. Supply and Delivery of Brass Water Service Fittings Contract Term Extension
Manager, Utility Services
Regional Water (Voting – A, B, D, E, F, Sechelt)
Annex E
pp 30 - 33

- | | | |
|----|---|-----------------------|
| 7. | Langdale WWTP Remediation Project - Grant Application
Manager, Utility Services
Langdale WWTP (Voting – All) | Annex F
pp 34 - 35 |
| 8. | Solid Waste Management Plan Monitoring Advisory Committee
Meeting Minutes of December 21, 2021
Regional Solid Waste (Voting – All) | Annex G
pp 36 - 38 |

COMMUNICATIONS

- | | | |
|----|---|-----------------------|
| 9. | <u>Raquel Kolof, The Sunshine Coast Farmers Institute Board dated
December 12, 2021</u>
Regarding Request for Stage 4 Water Restriction Exemption
for Commercial Farmers
(Voting – All) | Annex H
pp 39 - 42 |
|----|---|-----------------------|

NEW BUSINESS

IN CAMERA

ADJOURNMENT

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Infrastructure Services Committee – January 13, 2022

AUTHOR: Trevor Rutley, Capital Projects Senior Coordinator

SUBJECT: INVITATION TO TENDER (ITT) 2137017 CONTRACT AWARD FOR CHURCH ROAD
PHASE 4B – CONSTRUCTION

RECOMMENDATION(S)

THAT the report titled Invitation to Tender (ITT) 2137017 Contract Award for Church Road Phase 4B - Construction be received;

AND THAT a contract for construction of the Church Road Phase 4B be awarded to Maycon Construction Ltd. in the amount up to \$7,585,265 (excluding GST);

AND THAT a contract for Church Road Phase 4B – Construction Management Services be awarded to Associated Environmental in the amount up to \$990,686 (excluding GST);

AND THAT the delegated authorities be authorized to execute both contracts;

AND THAT the Church Road Phase 4 budget be increased from \$8,270,000 to \$8,788,959, funded from the long-term loan for this project;

AND THAT a Temporary Borrowing Bylaw be prepared Church Road Well Field Project as part of the Loan Authorization Bylaw No. 725, 2020 of up to \$9 million;

AND THAT the Reed Road and Elphinstone Avenue watermain budget be increased from \$750,000 to \$1,178,070, funded from [370] Regional Water Capital Reserves;

AND THAT the draft 2022-2026 Financial Plan be amended accordingly;

AND FURTHER THAT these recommendations be forwarded to the January 13, 2022 Board Meeting.

BACKGROUND

In 2017, the SCRD initiated Phase 1 of the Groundwater Investigation which consisted of a desktop study to identify suitable aquifers to explore for the potential of groundwater development. Eleven sites in total were evaluated and ranked with the aquifer in the Soames/Granthams area (aquifer 560) ranking near the top.

In 2018, the top four ranked locations were selected for test well drilling, including what became known as Church Road Well No. 1. The four wells were drilled, tested, analyzed, and evaluated on a multi-criteria assessment under Phase 2 of the Groundwater Investigation. Based on this assessment, the Church Road Well Field location was recommended for further development.

A production sized well (Church Road Well No. 2) was drilled and tested at the Church Road Well Field in 2019 under Phase 3. Following the testing and analysis of Well No. 2 a Water License Application was submitted to the BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD) in October 2019.

As part of the 2020 Budget Process, the Board made the following resolutions related to the Church Road Well Field project:

February 27, 2020
Round 2 Budget
065/20 (in part)

Recommendation No. 33 Groundwater Investigation Phase 4 –
Church Road Budget Proposal

THAT the report titled Groundwater Investigation Phase 4 – Church Road Budget Proposal be received;

AND THAT staff prepare an Alternate Approval Process (AAP) to authorize long term borrowing of up to \$9,000,000 over a 30 year term to fund the Groundwater Investigation Phase 4 – Church Road well field project.

Recommendation No. 34 Regional Water Service [370] – 2020 R2
Budget Proposals

THAT the report titled 2020 R2 Budget Proposal for [370] Regional Water Service be received;

AND THAT the following budget proposals be approved and incorporated into the 2020 Budget:

- Budget Proposal 22 – Groundwater Investigation Phase 4 – Church Road, \$8,270,000 funded \$270,000 from Capital Reserves and \$8,000,000 Long Term Loan.

January 9, 2020
Round 1 Budget
004/20 (in part)

Recommendation No. 29 Regional Water Service [370] – 2020 R1
Budget Proposals

THAT the report titled 2020 R1 Budget Proposals for [370] Regional Water Service be received;

AND THAT the following budget proposals be approved and incorporated into the 2020 Round 2 Budget:

- Budget Proposal 8 – Reed Road and Elphinstone Road Watermain Replacement, \$750,000 funded from Capital Reserves;

Phase 4A was completed over the course of 2020 and 2021, and included drilling and testing the second production sized well (Church Road Well No. 3) completing various technical and environmental analysis, and preparing a full set of engineering design and tender ready plans and specifications.

Phase 4A concluded with the posting of the Church Road Construction Invitation to Tender (ITT 2137017) on November 1, 2021. Six addenda were issued to the ITT before it closed on December 16, 2021. The ITT requested qualified contractors to complete the construction and commissioning of the Church Road Well Field, water treatment plant/pump station, a new water transmission main, two new water distribution mains, and civil infrastructure.

On December 17, 2021, the SCRD received a conditional Water License from FLNRORD to extract a maximum of 1,250,000 m³ of water annually from the Church Road Well Field. This will reduce the water supply deficit in the Chapman Water System by approximately 50%.

The purpose of this report is to seek approval of budget amendments and the execution of contracts to complete the construction phase of the Church Road Well Field project.

DISCUSSION

Construction Tender Bids

Three compliant bids were received in response to the ITT. The evaluation team, led by Purchasing and including SCRD Capital Project Staff and engineering team leads from Associated Environmental (AE), reviewed the bids for completeness and to ensure all requirements of the ITT were satisfied. A summary of the bidders and prices is provided in the table below.

Proponent	Bid Price
Drake Excavating Ltd.	\$8,473,260
Jakes Construction Ltd.	\$9,575,000
Maycon Construction Ltd.	\$7,235,265

Staff recommend that the Church Road Well Field construction contract be awarded to Maycon Construction Ltd. in the amount of \$7,235,265 (excluding taxes). Their submission satisfied the requirements stipulated in the ITT and provides the best value for the project. This bid was within 3% of the engineer's estimate for this project calculated to be \$7,025,250.

The above contract value does not include contingency. Staff recommend that a contingency of \$350,000 (~5%) be approved to be used in the event of unforeseen circumstances that may arise during the course of construction and result in additional costs.

Construction Management

It is estimated that construction activities for this project will take up to eight months, with work at times taking place seven days a week. Given the intensiveness of the construction schedule and the criticality of the project, full time inspection and onsite contract administration is required. With a deficit of one Capital Project Technician/Coordinator and one Utility Engineering Technician, and given the overall workload of the Capital Projects and Utility Services Divisions, Infrastructure Staff are not able to provide the level of construction management required for this project.

AE has been the hydrogeological, environmental, and engineering consultant throughout the well field development, permitting, and design phases of this project. Given their involvement in the project development and the multi-discipline engineering design, AE is best suited to take on the construction management services for the construction phase of the Church Road project.

Staff posted a Notice of Intent (NOI) on BC Bid in late October 2021, indicating the intention to directly negotiate with AE on the scope and fee of the construction management services contract. The NOI closed on November 10, 2021, with no objections being received by the SCRD.

AE's proposal for construction management services is in the amount not to exceed \$930,686. The scope of this contract includes full time construction inspection and contract administration; multi-engineering discipline inspection and construction review; commissioning oversight; project closeout, and additional environmental services as required to satisfy the conditions of the Water License.

Archaeological Services

The Church Road project is located within the territory of the Skwxwú7mesh Úxwumixw (Squamish Nation). During the Water License approval process, staff met with representatives from Skwxwú7mesh to discuss the Church Road project. In those discussions, Skwxwú7mesh indicated they will require archaeological monitoring during construction activities. It is standard practice for staff to engage with archaeological consultants for all utility construction projects.

Staff engaged with In-Situ Consulting Inc. to provide a scope and fee proposal for this work. The SCRD currently holds a Multi-Assessment permit with the Heritage Branch of BC to allow In-Situ to conduct archaeological monitoring for SCRD utility construction projects within Skwxwú7mesh territory.

In-Situ's fee proposal is in the amount of \$84,673 (plus GST). This fee proposal is based on the assumption that the concentration of artifacts is consistent with what has been observed in the area to date. If a substantial amount of archaeologically significant materials are encountered during construction their fee would likely increase. Inversely, if no significant materials are encountered then their fees may be reduced.

Financial Implications

In 2020, the Board gave direction to staff to undergo an Alternative Approval Process (AAP) to seek electoral approval of up to a \$9,000,000 long-term-loan to fund Phase 4 of the Church Road Well Field development project. The AAP process closed on July 20, 2020 with approval from the electorate to proceed with the loan. Subsequently, the Board approved a budget of \$8,270,000 for Phase 4 of the Church Road project with \$8,000,000 being funded from the AAP approved long-term loan and the remainder funded from [370] Regional Water Capital Reserves.

In addition to the \$8,270,000 Church Road project budget, there is an approved budget of \$750,000 for the construction of new distribution watermain on Elphinstone Avenue and Reed Road between North Road and the Reed Road pump station. These new water distribution mains are funded from Capital Reserves.

Table 1 below summarizes the approved budgets for the Church Road project and water distribution mains.

Table 1

Church Road Phase 4 Project Budget	
Church Road Phase 4	\$8,270,000
Water Distribution Mains – Reed Road and Elphinstone Avenue	\$750,000

The expenses for the Church Road project Phase 4 and water distribution mains are outlined in Table 2. Approximately \$1,006,134 has been spent to date, predominantly on consulting fees to complete the design drawings, technical specifications, and permitting assistance in support of the Water License Application.

Pending expenses include the construction contract, construction management and archaeological monitoring.

There will also be an expense to have BC Hydro complete the power line upgrades required to provide adequate electrical service to the new water treatment plant/pump station at 850 Fisher Road. The estimated expense is \$150,000 but the final cost will not be known until BC Hydro completes their design in Q1 2022. Staff have been communicating with BC hydro on the anticipated construction schedule and have indicated the requirement to have their electrical work completed in the early summer of 2022 so that this project can be ready to enter the commissioning stage. Based on that communication, staff are confident that the electrical work will be complete in time for commissioning.

Table 2

Expenses	Church Road Phase 4	Water Distribution Mains
Incurred to Date	\$1,006,134	\$270.83
Construction (Maycon Construction Ltd.)	\$6,167,466	\$1,067,799
Construction Management Services (Associated Environmental)	\$930,686	
Archaeological Monitoring Services (In-Situ)	\$84,673	
BC Hydro Construction Costs (estimate)	\$150,000	
Staff time and miscellaneous expenditures	\$50,000	\$10,000
Contingency Allowance Maycon	\$350,000	\$100,000

Contingency Allowance AE	\$50,000	
Total Costs	\$8,788,959	\$1,178,070

Approval of currently unforeseen expenses would be funded from the contingency allowances and would follow the standard project management process and purchasing policy and would result in the execution of amended contracts.

Table 3 provides the current financial balance for the two budget projects consisting of the available approved budgets and all project expenses. As indicated, there is currently a shortfall of \$518,959 for Church Road Phase 4 and a shortfall of \$388,070 for the water distribution mains.

Table 3

Current Balance	Church Road Phase 4	Water Distribution Mains
Total Available Budget	\$8,270,000	\$750,000
Total Project Costs	\$8,788,959	\$1,178,070
Balance	(\$518,959)	(\$428,070)

The financial shortfall for the Church Road Phase 4 project is within the remaining financing approved through the AAP process but not yet committed to the Church Road project budget. Staff therefore recommend the Board approve the use of an additional \$518,959 from the long-term loan approved through the AAP.

The water distribution main project is currently funded through capital reserves, and staff recommend that an additional \$428,070 from capital reserves be approved for this project.

The recommended Church Road Phase 4 and water distribution mains project budgets, including the additional recommended funds and contingency is provided in Table 4.

Table 4

	Church Road Phase 4	Water Distribution Mains
Current Available Budget	\$8,270,000	\$750,000
Recommended Additional Funding	\$518,959	\$428,070
Revised Available Budget	\$8,788,959	\$1,178,070
Total Project Costs	\$8,788,959	\$1,178,070
Balance	\$0	\$0

The changes in Budget require a change to the existing carry-forward projects and require the 2022-2026 draft Financial Plan to be amended.

Timeline for next steps or estimated completion date

Pending Board approval, the contract will be prepared by staff and submitted to the contractor for signature. Following the contractor's submission of the required bonds and insurances the District will issue the formal Notice to Proceed. As the Water License and all required permits have been issued, construction can begin as soon as the contractor is able to mobilize their equipment to the project site.

The Invitation to Tender specified a Substantial Completion date no later than September 2, 2022, or eight months following the Notice to Proceed. Included in the ITT is an early completion bonus which would incentivize the contractor to achieve substantial completion as early as July 14, 2022. This incentive is based on a disbursement of \$2,500 per day should the contractor complete the substantial completion in advance of 30 calendar days or more prior to September 2, 2022, with a maximum incentive payout of no more than \$50,000.

Based on the schedule provided in Maycon's bid package it is expected that the system will be commissioned and in operation by early September 2022.

The 2022-2026 Financial Plan Bylaw is scheduled for adoption on February 24, 2022. The changes to these projects and associated funding will be included.

As the project expenditures are ramping up for the construction phase of the Church Road Well, a temporary borrowing Bylaw will need to be issued to supplement the SCRD's cash flow over the course of the project from the Municipal Finance Authority of BC (MFA). The Bylaw will proceed to the following Board meeting in late January or February 2022. The final security issuing Bylaw for the long-term debt will be issued once the project has been finalized.

Communications Strategy

In January 2022, staff will distribute a project update flyer to residents in the Granthams and Soames community outlining the project schedule and impacts and outcomes of the project. Included in that flyer will be an opportunity for residents to join a mailing list for ongoing project updates throughout construction.

Prior to the start of construction, Capital Projects intend to set up a booth at the Church Road Well Field to provide residents with an opportunity to have communication with staff to address any questions or concerns they may have with the project. This will be subject to Provincial and SCRD policy and guidelines regarding pandemic restrictions. Staff will remain engaged with residents throughout the project and further information booth opportunities will be contemplated as the project continues.

In addition to the distribution list, broader communication will include regular updates on the SCRD website, through local media, social media and the Let's Talk Church Road Project page.

STRATEGIC PLAN AND RELATED POLICIES

This project is in alignment with Strategic Focus Area 2 of the 2019-2023 Strategic Plan – Asset Stewardship. Specifically, the Church Road project is consistent with the strategy to 'plan for and ensure year-round water availability now and in the future'.

This project is also consistent with the goals of other Strategic Focus Areas including:

- Community Resilience and Climate Change Adaptation; by reducing dependency on surface water supply in the Chapman Water System thereby reducing vulnerability to seasonal drought.
- Engagement and Communications; by proactively providing updates to the immediately affected residents and using a variety of methods to ensure the community is kept informed of the project.

CONCLUSION

In accordance with the SCRD's Procurement Policy, Invitation to Tender (ITT) 2137107 was issued for construction of the Church Road Project Phase 4B. Staff recommend that the construction contract be awarded to Maycon Construction Ltd. in the amount of \$7,235,265 (plus taxes). This includes the construction of new water distribution mains on Reed Road and Elphinstone Avenue which are covered under a separate budget item. Staff also recommend to award a construction services contract for construction management and environmental services to Associated Environmental in the amount of up to \$930,686.

The total project expenses for Church Road Phase 4 and the Reed Road and Elphinstone Avenue water distribution mains are \$8,738,959 and \$1,178,070 respectively. Included in these costs are contingencies of \$350,000 for Church Road Phase 4 and \$100,000 for the water distribution mains. There is currently a funding shortfall of \$518,959 for Church Road Phase 4 and staff recommend to increase the available project budget from \$8,270,000 to \$8,788,959 with the additional funds coming from the long-term loan approved through the AAP. The funding shortfall for the water distribution mains is \$428,070 and staff recommend to increase the available project budget from \$750,000 to \$1,178,070 with the additional funds coming from [370] Regional Water Capital Reserves. Staff also recommend to amend the draft 2022-2026 Financial Plan to reflect the change in project budgets.

Pending Board approval of the construction contract award, a formal Notice to Proceed will be issued to Maycon Construction Ltd. It is expected that construction will begin in February 2022, with a completion date in early September 2022. Staff from Communications and Capital Projects have developed a communications strategy for the Church Road project which will be implemented and updated throughout construction. This will include a targeted mailout to immediately effected residents, an information booth set up prior to construction to give residents the opportunity for in person communication with staff, regular project updates through a targeted mailing list and broader communications including regular updates on the SCRD website, through local media, social media and the Let's Talk Church Road Project Page.

Reviewed by:			
Manager	X – S. Misiurak	CFO/Finance	X- T.Perreault
GM	X.- R. Rosenboom	Legislative	
CAO	X – D. McKinley	Purchasing/Risk	X-V.Cropp

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Infrastructure Service Committee- January 13, 2022

AUTHOR: SCRD Senior Leadership Team

SUBJECT: DISASTER RECOVERY PLAN-REGIONAL FLOODING EVENTS

RECOMMENDATION(S)

THAT the report titled Disaster Recovery Plan-Regional Flooding Events be received;

AND THAT the project Debris Removal Chapman Water Treatment Plant Intake is funded from [370] Regional Water Operating Reserves with a budget of \$15,000;

AND THAT the project Emergency Repair Watermain Sechelt Airport is funded from [370] Regional Water Capital Reserves with a budget of \$250,000;

AND THAT a contract for the Emergency Repair Watermain Sechelt Airport project be awarded to Arya Engineering Inc. in the amount up to \$240,000;

AND THAT the delegated authorities be authorized to execute this contract;

AND THAT the following parks projects be funded as follows:

- **Mahan Trail repair: up to \$16,250 funded through [650] Community Parks Operating Reserves**
- **Suncoaster Trail sign repair: up to \$5,250 funded through [650] Community Parks Operating Reserves**
- **Katherine Lake Campground repairs: up to \$35,300 funded through [650] Community Parks Operating Reserves**
- **Cliff Gilker Planning (Consultant Fees): up to \$38,000 funded through [650] Community Parks Operating Reserves**
- **And that funded through each individual project, a 0.09 FTE for project management oversight be approved (one-time funding)**

AND THAT the following items be included in the 2022-2026 Draft Financial Plan;

AND FURTHER THAT these recommendations be forwarded to the January 13, 2022 Board meeting.

BACKGROUND

On November 15, 2021, the Sunshine Coast Regional District (SCRD) activated an Emergency Operations Centre (EOC) in response to localized flooding events experienced in the Region. The flooding events caused extensive damage throughout the Sunshine Coast and a staff report was provided at the December 9, 2021 Board meeting (Attachment A) outlining the response efforts and the known financial implications to date. A subsequent report was to be provided in January 2022 on total actual response costs and options on recovery plans for SCRD services.

The focus of this report is SCRD services and infrastructure. Staff continue to provide Disaster Financial Assistance information to private property owners impacted by the regional flooding event. Building Inspection and Planning Staff are supporting customers with recovery project process information, permits and authorizations. The purpose of this report is to:

1. Provide a status update on the response activities to date; and,
2. Request decisions on next steps for recovery. It is anticipated that decisions on the implementation of recovery plans will be phased / iterative; there will likely be a series of reports brought forward as more information is gathered (such as condition reports and cost estimates).

DISCUSSION

Update on Response Activities

The exposed water main at the Sechelt Airport remains a work in progress with Emergency Management BC (EMBC) approval in place to expend up to \$100,000 in response to the event. Follow-up is occurring in order to ensure all other documentation is completed and submitted to EMBC in a timely manner. One Expense Authorization Form (EAF) remains outstanding for response efforts to Waste Water Treatment Plants and approval is anticipated. All other eligible EAF's for this event have been approved.

Response efforts in Parks focused on public safety and risk mitigation. Two EAFs were submitted and reimbursement is anticipated; one related to the road repairs at Seaview Cemetery, and the other related to the road repair up to Dakota Ridge (importantly, the road access route to Chapman Lake), totaling approximately \$11,000. As per the December 2021 report, various areas of Mahan Trail, Cliff Gilker Park and Katherine Lake campground along with Chaster House and Chaster Pedestrian Bridge remain closed until decisions are made as part of recovery planning.

Status of Recovery Planning

Scope of Recovery Activities

- Flooding, mud and debris causing damage to numerous parks, parks infrastructure, foot bridges, pathways and trails.
- Flooding, mud and debris causing damage to a Community Hall; further assessments required.
- Flooding and debris causing damage to campground roads, sites and infrastructure.

- While the response activities did stabilize the currently exposed primary watermain at the Sechelt Airport, additional work is required to ensure the long-term stability of the site. This work will include an aerial assessment on the entire reach of watermain for other areas of concern.
- The basin at the intake for the Chapman Water Treatment Plant intake has filled up with debris increasing the risk for future blockages of the intake during future storm events.

Recovery Planning Process and Eligibility for Cost-Recovery

- Under the BC Emergency Program Act and Compensation and Disaster Financial Assistance Regulation, local government bodies can apply for financial assistance for damages associated with the repair or restoration of essential materials, structures and public works.
- Local government bodies and First Nations may qualify for up to 80 percent of eligible costs that exceed \$1,000.
- Incremental costs related to community recovery that are eligible for financial assistance include:
 - Overtime costs for local government staff devoted to recovery efforts
 - Backfilling positions to temporarily cover full-time staff engaged in conducting disaster assistance surveys and assessments
- SCRD has been assigned an EMBC Recovery Officer who will guide and support recovery planning. SCRD's Manager of Protective Services and Emergency Management Coordinator have been assigned to the EOC Recovery Unit (a standard EOC role) and will be coordinating planning.
- A formal recovery plan indicating scope of activities and cost estimates will be prepared and submitted to EMBC.
- Eligibility for cost-recovery is governed by EMBC through the **Interim Provincial Disaster Recovery Framework**. Generally, a maximum of 80% of costs are recoverable. Local governments must fund recovery actions "out-of-pocket" and then claim for recovery afterwards. This is different from private property owners who can access recovery funding support "up front".
- Recent work on climate change adaptation and resilience is informing recovery planning. Staff are analyzing how infrastructure can be future-proofed. For accounting and cost-recovery purposes this necessitates being very transparent about like-for-like repair/replacement costs versus incremental costs associated with building to a 'higher standard'. While in some cases initial repair/reconstruction costs could be higher, this approach aims to reduce total costs of ownership by maximizing lifespan. While this approach aligns with SCRD's Strategic Plan / strategic priorities, there may be service level decisions / Board direction required if incremental costs are material.

Options and Analysis

Water infrastructure

Addressing both the listed projects related to water infrastructure are critical for the long-term operations of the Chapman Water System. Not addressing any of these items could result in significant disruptions to the provision of treated drinking water to a significant number of users on this water system. The remaining work on the exposed watermain site at the Sechelt Airport is expected to cost up to \$250,000, while the cleaning of the water treatment plant intake could cost up to \$15,000. Given the criticality of both projects for the operations of the Chapman Water System, staff are recommending to fund them both thru the use of reserve funds from the Regional Water System and seek the reimbursement of 80% of the actual costs under the Compensation and Disaster Financial Assistance Regulation.

Immediately after the exposed watermain was identified the support from the local geotechnical engineering firm Arya Engineering Inc. (Arya) was secured. Staff is confirming the final scope of work with Arya for the full remediation of the site in a manner that would significantly limit the risk of future slope failures at this site. Staff are recommended to award a contract for this remediation work to Arya for up to \$240,000. To minimize the impact of this project on the progress of other projects of the Capital Projects Division, the scope of work currently discussed with Arya would be the vast majority of the construction management for this project.

Parks Infrastructure

Initial recovery deliberations included some considerations for enhancements that could mitigate damage from a future event. Additional planning and conversations with the EMBC Recovery Officer will continue to contemplate considerations to restore infrastructure in a way that provides greater resiliency to future climate driven events.

The following chart outlines the scope of recovery work required, along with projected costs, to return to pre-storm service levels.

Service / Function - Asset	Recovery Planning Details	Projected recovery costs:	Resources required:	Source of Funding:
Community Parks (650) – Mahan Trail	<ul style="list-style-type: none"> - Approximately 150m of trail damage - Restore trail including considerations for swales and crowning to deter water flow 	\$16,100 (includes \$1,600 for Parks Project Mgmt)	<ul style="list-style-type: none"> - Will contract out the project - Impacts to procurement and Parks Project Management 	<ul style="list-style-type: none"> - Parks Operating Reserve - Will seek disaster recovery funding
Community Parks (650) – Suncoaster	<ul style="list-style-type: none"> - Entrance archway sign base damaged and two supporting beams require replacement 	\$5,250 (includes \$520 for Parks	<ul style="list-style-type: none"> - Will contract out the project 	<ul style="list-style-type: none"> - Parks Operating Reserve

Trail Head Signage		Project Mgmt)	- Impacts to procurement and Parks Project Management	- Will seek disaster recovery funding
Community Parks (650) – Katherine Park Campground	<ul style="list-style-type: none"> - Flooding caused excessive erosion of major access road surface and lower campsite area (base of 19 sites) - Recovery planning includes excavation of drainage channel to promote natural waterflow and diverts from campsites 	\$35,300 (includes \$3,500 for Parks Project Mgmt)	<ul style="list-style-type: none"> - Will contract out the project - Impacts to procurement and Parks Project Management 	<ul style="list-style-type: none"> - Parks Operating Reserve - Will seek disaster recovery funding
Community Parks (650) – Cliff Gilker Park	<ul style="list-style-type: none"> - Damage to 3 of the 9 bridges; 1 bridge replacement and significant repairs to 2 bridges - Erosion damage to ~450m of trail - Replacement of up to 7 signs - Drainage damage to upper back parking area, and playground surface - Initial course of action includes procurement of a consultant to develop the plans and detailed cost estimates - Would return to the Board once project has been designed and cost estimates completed 	Estimated total cost \$155,300 Consultant \$38,000 (includes \$3,800 for Parks Project Mgmt)	<ul style="list-style-type: none"> - Will contract out the project - Impacts to procurement and Parks Project Management 	<ul style="list-style-type: none"> - Parks Operating Reserve - Will seek disaster recovery funding
Community Parks (650) –	<ul style="list-style-type: none"> - Chaster House basement flooded; 	To be determined		

Chaster House	<p>degree of damage unknown</p> <ul style="list-style-type: none"> - In the process of conducting a Structural Assessment to assess. Would return to the Board with additional information and recommendations - Facility will remain closed 			
Community Parks (650) – Chaster Pedestrian Bridge	<ul style="list-style-type: none"> - Fast flowing water and large debris flooded right over the top of the bridge causing visible extensive damage to the bridge abutments, attachments and fasteners. Complete replacement will be required. - The bridge exists to provide access to the Chaster House/park. - Staff recommend that while the Chaster House remains closed, so does the bridge. Once the future of the house has been determined, planning for the bridge will follow. - Would return to the Board with additional information and recommendations. 	To be determined		

As noted above, Staff is recommending that the recovery work is completed through contracted services for a couple of reasons. Firstly, and most importantly, this work is not contemplated in the 2022 Parks priorities and work planning, and therefore Parks does not have the resources or capacity to do this work without significantly compromising current service levels and other priorities. Secondly, any work completed by current staffing is not eligible for any financial

reimbursement through EMBC. That being said, some parks resources will be required to support the procurement process and project oversight. These costs have been factored into each individual project, totaling \$9,420 which will fund an additional (one time only) 0.09 FTE. Staff will explore reimbursement for these staffing costs with the Recovery Officer.

Staff recommend that service levels be restored for the Mahon Trail, Suncoaster Trail signage and Katherine Lake Campground. Work on Katherine Lake Campground needs to begin as soon as possible so as not to impact the opening of the campground in the spring.

Further, Staff recommend that a consultant be retained to develop detailed plans and cost estimates to restore service levels at Cliff Gilker Park.

As planning progresses with Cliff Gilker Park, Chaster House and Chaster Pedestrian Bridge, Staff will return to the Board with further information and recommendations.

Staff will continue to work with EMBC to explore Disaster Recovery Funding options for the above-mentioned recovery projects.

Organizational and Intergovernmental Implications

The project management required to address the exposed watermain at the airport is having some immediate impacts on the progress of less urgent projects led by the Capital Project Division.

Parks projects will involve collaboration with the shíshálh Nation, and in some cases further approval by the Ministry of Transportation and Infrastructure.

Financial Implications

The water infrastructure projects are proposed to be funded as follows:

- Debris removal Chapman Water Treatment Plant Intake: up to \$15,000 thru [370] Regional Water Operating Reserves;
- Emergency Repair watermain Sechelt Airport: up to \$250,000 funded thru [370] Regional Water Capital Reserves; and,
- Total Uncommitted Operating and Capital Reserves for [370] are \$2,001,161 and \$5,093,052 respectively. This doesn't account for items included in the subsequent ISC agenda such as for the Reed Rd mains replacements.

The Parks projects are proposed to be funded as follows:

- Mahan Trail repair: up to \$16,250 funded through [650] Community Parks Operating Reserves
- Suncoaster Trail sign repair: up to \$5,250 funded through [650] Community Parks Operating Reserves
- Katherine Lake Campground repairs: up to \$35,300 funded through [650] Community Parks Operating Reserves;

- Cliff Gilker Planning (Consultant Fees): up to \$38,000 funded through [650] Community Parks Operating Reserves; and,
- Total Uncommitted Operating for [650] is \$184,287.

Timeline for next steps or estimated completion date

Following Board approval of the funding of the various projects, Staff will immediately proceed with their implementation.

As further recovery planning is completed, Staff will return to the Board with additional information and recommendations.

Communications Strategy

Standard public communications related to service interruptions, temporary closures, re-openings, etc. will proceed as recovery work progresses.

STRATEGIC PLAN AND RELATED POLICIES

n/a

CONCLUSION

Flooding events on the Sunshine Coast caused significant damage to SCRD infrastructure requiring remediation and repairs to restore items to existing service levels. Some work is more immediate in nature and others require further assessment to help build resiliency to future climate events. Ongoing information and items for decision will be provided to the Board as the recovery work continues.

The SCRD is working with the Province to seek funding from Disaster Recovery, however, due to timing and Budget process Staff are seeking approval for some items at this time.

At this time, funding is required for the Regional Water System and Community Parks. As other sources of funding are unknown at this time it is proposed these be 100% funded from the existing services. It is reasonably expected that portions of these cost will be recoverable, therefore, funds will be returned to the reserves. These items will be included in the draft 2022-2026 Financial Plan.

Attachment A - December 9, 2021 - Financial Update-Emergency Response to Regional Flooding Events

Reviewed by:			
Manager		Finance	X – T. Perreault
GM	X – G. Gagnon X – R. Rosenboom	Legislative	
CAO	X – D. McKinley	Other	

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: SCRD Regular Board Meeting, December 9, 2021

AUTHOR: Tina Perreault, Chief Financial Officer

SUBJECT: FINANCIAL UPDATE-EMERGENCY RESPONSE TO REGIONAL FLOODING EVENTS

RECOMMENDATION(S)

THAT the report titled Financial Update-Emergency Response to Regional Flooding Events be received;

AND THAT the SCRD continue to work with Emergency Management BC on reimbursements toward response costs;

AND FURTHER THAT a subsequent report be provided in January 2022 on total actual response costs and options on recovery plans for SCRD related services.

BACKGROUND

On November 15, 2021, the Sunshine Coast Regional District (SCRD) activated an Emergency Operations Centre (EOC) and received a thorough status report as to localized flooding events experienced in the Region.

The damage caused by these flooding events spanned the entire Sunshine Coast, took out complete sections of roads, compromised normal operation of water and wastewater treatment facilities, exposed both low pressure and high-pressure natural gas lines, flooded numerous private properties, roads, campgrounds and Provincial and SCRD park lands. This resulted in a number of actions by several provincial, health and local authorities as well as utility services such as BC Hydro and Fortis.

For the SCRD, several services were impacted causing service delivery, human resource and financial implications. The focus has been to address critical or emergency response activities and recovery options are being developed for future consideration by the Board.

The purpose of this report is to provide a status update on the financial implications related to the response activities to date and next steps for future recovery.

DISCUSSION

Emergency operation response activities generally involved the coordination of the various jurisdictional authorities, focusing on public safety and protection of critical public infrastructure. EOC related activities for the regional flooding events included some of the following:

- Declaration of a State of Local Emergency
- Evacuation alerts for 14 properties

- Evacuation orders for two properties
- Procurement and provision of sand and burlap sand bags.

Additionally, the following SCRD water and wastewater infrastructure was damaged by the flooding, requiring immediate repairs:

- Damage assessments on multiple SCRD assets including pump stations and water infrastructure
- Emergency operations of Chapman Water Treatment Plant, including round the clock staff attention to removing debris from the intake at Chapman Creek.
- Emergency operations of six wastewater treatment facilities
- Emergency works in Soames creek to prevent further damage to Granthams pump station due to erosion.
- Two watermain repairs due to road washouts and subsequent boil water advisories, affecting hundreds of properties, signs, deliveries and associated radio ads
- Chartering a helicopter and contracted professional to assess the condition of the three local dams used for community water supply

Finally, the following park areas and infrastructure were damaged by the flooding:

- Mahan trail – a section of trail experienced severe erosion due to overland flooding.
- Chaster House – the park land around the house and the house basement was flooded. House is surrounded by ~6-8 inches” of mud and debris.
- Chaster Pedestrian Bridge – extreme high water and floating debris flooded over the bridge. There is visible damage to bridge abutments, footings, attachments, fasteners and an initial assessment anticipates a new bridge will most likely be required.
- Cliff Gilker Park – high water levels throughout the park severely damaged at least 3 of the 9 bridges as well as several sections of trail.
- Katherine Lake Campground and park area – overflow of the creek inside the park caused excessive erosion of the roads and damage to several of the campsites.
- Seaview Cemetery road – overflowing ditches caused pooling of water and erosion of the road surfacing.
- Suncoaster Trail head signage – high water caused damage to the base of the main entrance archway sign at the trailhead.
- Forest Service Road to Dakota Ridge – overflow from ditches and side roads caused excessive erosion of more than 250m of the road along a 9km stretch.

The SCRD Transit service was also interrupted by road closures and many routes had to be re-routed.

Organizational and Intergovernmental Implications

At the onset of the emergency, the SCRD's EOC had participation from the shíshálh Nation, Fortis BC, Ministry of Transportation and Infrastructure Services (MOTI), Capilano Highways, Sunshine Coast RCMP, TELUS, Vancouver Coastal Health, BC Hydro, Search and Rescue, BC Ambulance Service and BC Parks.

On December 2nd, with improved weather conditions, the SCRD cancelled the State of Local Emergency and lifted the evacuation alerts and orders. The EOC remains active at Level 1 at this time and we are shifting from response to recovery.

Financial Implications

Up to the time of this report, the following response related activities and estimated expenditures have occurred to date:

Service/function	Response expenses incurred to date:	Estimated 'up-to' costs to be incurred:	Source of Funding:	EMBC Reimbursement Approval:
Emergency Operations Centre [222]:	Regular and incremental staff time:	\$20-30,000	Possible 2022 Taxation & EMBC	Typically, incremental costs are covered and amounts are yet to be to be determined.
Regional Water [370]	Incremental staff time, parts and contracted services	\$147,500	Base operating budget	TBD
WoodCreek Wastewater Plant [330]	Incremental staff time	No additional incremental costs.	Base operating budget	TBD
Lee Bay Wastewater Plant [386]	Incremental staff time	No additional incremental costs.	Base operating budget	TBD
Square Bay Wastewater Plant [387]	Incremental staff time and contracted services	\$11,204	Base operating budget	TBD

Canoe Wastewater Plant [389]	Incremental staff time	No additional incremental costs.	Base operating budget	TBD
Merrill Crescent Wastewater Plant [390]	Incremental staff time and contracted services	\$1,890	Base operating budget	TBD
Curran Wastewater Plant [391]	Incremental staff time and contracted services	\$10,305	Base operating budget	TBD
Cemetery [400]	Incremental staff time and contracted services to repair road - \$2,430	No additional costs anticipated.	Base operating budget	TBD
Rural Planning [504]	Expedited service to property owners whose property was threatened by the emergency – approximately 50 hours of staff time	No additional incremental costs.	Base operating budget	Not reimbursable
Building Inspection [520]	Expedited service to property owners whose property was threatened by the emergency; rapid damage assessments (4) – approximately 50 hours of staff time, mileage	No incremental costs; supported by base operating budget	Base operating budget	Not reimbursable
Community Parks [650]	Incremental staff time required to assess damage and close off park areas and infrastructure damaged by the storm – staff time and mileage ~\$2,775	No additional response expenses anticipated – recovery costs TBD	Base Operating budget	Not reimbursable (not an essential service)
	Chaster House – incremental staff time to assess damage and close off area as well as fans/dehumidifier/heater to dry out the basement	No additional response expenses anticipated – recovery costs TBD	Base Operating budget	Not reimbursable (not an essential service)

	and avoid further deterioration ~\$3,000. A structural assessment will be conducted to determine integrity of the building to inform recovery planning – incremental staff time plus engineering costs of ~\$7,300.			
Dakota Ridge [680]	Incremental staff time and contracted services to repair road ~\$9,500.	No additional costs anticipated.	Base Operating budget	Staff time not reimbursable, but contracted services has been approved for reimbursement (~\$9100).

At this time, there are no requests for Financial Plan Amendments. Most response efforts and costs have been covered through existing operations or capital budgets for unanticipated emergency repairs. Once final costs and year-end process has been completed, any service that may incur a deficit will be presented with options for how funding. Every effort will be made to recover recovery expenses through EMBC. The only service of concern is the Merrill Crescent Wastewater Plant [390] which has limited reserve balances to cover cost over-runs.

Timeline for next steps or estimated completion date

At this time, response activities have all but ended with the outstanding need to have all documentation completed and submitted to PREOC / EMBC still in need of attention. The focus now shifts from response, wherein EMBC approved activities cover 100% of all incremental costs, to that of recovery, wherein approved recovery activities may qualify for 80% reimbursement.

Some activities are able to commence immediately but a full return to pre-event conditions is likely to extend through the first Quarter of 2022, if not longer.

Recovery plans and projected costs for non-essential services such as parks will be brought forward to the Board for further deliberation in Q1 2022. Until such time, various areas of Mahan Trail, Cliff Gilker Park, and Katherine Lake campground along with Chaster House and Chaster Pedestrian Bridge will remain closed. Staff will continue to explore possible reimbursement options for recovery costs (e.g. disaster relief funding). Decisions on the implementation of recovery plans that have a financial impact on the organization will be required by the Board.

Communications Strategy

The SCRD also provided 26 formal news release updates to the public and utilized social media, radio and signage to ensure the public were aware of issues such as boil water advisories and evacuation alerts.

The SCRD has provided consistent communication throughout this emergency with the public. This communication has been delivered on a number of platforms. Future work and expense as a result of the localized flooding event will be communicated with the public once the extent of this work is known.

STRATEGIC PLAN AND RELATED POLICIES

n/a

CONCLUSION

On November 15, 2021, the SCRD activated an Emergency Operations Centre to respond to the localized flooding events experienced in the Region.

For the SCRD, several services were impacted causing service delivery and resource implications. The immediate emergency response activities have been addressed and recovery options are being developed for future consideration by the Board in January/February 2022.

Reviewed by:			
Manager		Finance	
GM	X - R. Rosenboom X - S. Gagnon X - I. Hall	Legislative	
CAO	X - D. McKinley	Other - HR	X - G. Parker

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Infrastructure Services Committee – January 13, 2022

AUTHOR: Trevor Rutley, Capital Projects Senior Coordinator

SUBJECT: DESIGN, PERMITTING AND ENGINEERING SERVICES FOR UPGRADES TO McNEIL, CHAPMAN, AND EDWARDS LAKE DAMS - CONTRACT AMENDMENT NO. 1

RECOMMENDATION(S)

THAT the report titled Design, Permitting and Engineering Services for Upgrades to McNeil, Chapman, and Edwards Lake Dams - Contract Amendment No. 1 be received for information;

AND THAT the project contract for the Design, Permitting, and Engineering Services for Upgrades to McNeil Lake Dam be increased from \$106,183 to \$126,026 (plus GST);

AND THAT the project contract for the Design, Permitting, and Engineering Services for Upgrades to Chapman Lake and Edwards Lake Dams be increased from \$193,187 to \$222,745 (plus GST);

AND FURTHER THAT the delegated authorities be authorized to execute the contracts.

BACKGROUND

On February 25, 2021, the Board approved budgets in the amount of \$149,500 and \$240,500 for engineering services upgrades to McNeil Lake Dam and Chapman and Edwards Lake Dams respectively (res 046/21). The upgrades to the dams are required to ensure their safe operation in accordance with the Provincial Dam Safety Regulation.

The SCRD Board adopted the following resolution at the regular meeting held on July 8, 2021:

190/21 (in part) **Recommendation No. 3** *Request for Proposal (RFP) 2137005 Contract Award – Design, Permitting and Engineering Services for Upgrades to McNeil, Chapman, and Edwards Lake Dams*

THAT the report titled Request for Proposal (RFP) 2137005 Contract Award – Design, Permitting and Engineering Services for Upgrades to McNeil, Chapman, and Edwards Lake Dams be received for information;

AND THAT the contract for Design, Permitting and Engineering Services for Upgrades to McNeil Lake Dam be awarded to WSP Canada Inc. in the amount of \$106,183 (plus GST);

AND THAT the contract for Design, Permitting and Engineering Services for Upgrades to Chapman and Edwards Lake Dams be awarded to WSP Canada Inc. in the amount of \$193,817 (plus GST);

AND FURTHER THAT the delegated authorities be authorized to execute the contracts.

In February 2021, staff, under direction from the Board, submitted a grant application to the Community Emergency Preparedness Fund (CEPF), a grant program funded by the Province of BC and administered by the Union of BC Municipalities (UBCM). The 2021 CEPF grant program focused on Flood Risk Assessment, Flood Mapping and Flood Mitigation Planning.

In August 2021, the SCRD was notified that the grant application, in the requested amount of \$143,000 was successful and the CEPF would contribute the full amount requested. During the preliminary engineering design, WSP Canada Inc. (WSP), identified two upgrades – one at McNeil Lake Dam and one at Chapman Lake Dam – Although part of the tender scope, this was not included in the original contract scope of work and are recommended to be included in the overall upgrades.

The purpose of this report is to request amendments to the contracts with WSP to allow additional work to be completed.

DISCUSSION

Additional Scope of Work Requests

McNeil Lake Dam

As part of their scope of work, WSP was tasked with analyzing the existing low-level outlet (LLO) at McNeil Lake to assess its functionality. The purpose of the LLO is to allow the lake to be drained to the bottom of the dam within a reasonable period in order to relieve pressure on the dam in the event of a dam safety emergency. The McNeil Lake Dam LLO is not intended to be used to release water from the dam to supply the South Pender Harbour Water System.

The results of WSP's analysis is that the existing LLO is inadequately sized to functionally lower the lake level in a dam safety event. As in the original contract the replacement of the LLO was not identified as one of the items that should be redesigned, WSP requires additional funds in order to complete the design and include specifications for the new LLO in the construction tender package.

Chapman Lake Dam

During the preliminary design of the improvements to the Chapman Lake Dam, WSP assessed that there is a need for minor improvements to the LLO. As in the original contract these improvements of the LLO were not identified as items that should be redesigned, staff is recommending these to be included in the final design of the dam safety improvements and the required additional funds to be added to the exiting contract.

Contingency

In addition to the requested change over amounts, staff recommend that the Board approve additional funds to be committed as contingency for this project. This will enable staff to address

any future minor contract amendments administratively, without requiring further Board approval. This would avoid any potential delays in completing the design phase on schedule.

The recommended contingency amounts are \$15,000 for McNeil Lake Dam, and \$25,000 for Chapman and Edwards Lake Dams.

Financial Implications

The currently approved funding for each of the dams are as shown in Table 1 below. Also depicted in Table 1 is the approved contracts and the proposed Change Orders for each of the dams. These amounts shown also include the requested project contingencies for each of these dams, which was not included in the original Board approved contracts.

Table 1

	McNeil Lake Dam (excludes GST)	Chapman and Edwards Lake Dams (excludes GST)
Approved Budget	\$149,500	\$240,500
Awarded Grant Funding	\$56,000	\$86,000
Original Contract Value	(\$106,183)	(\$193,187)
Contract Amendments (proposed)	(\$4,843)	(\$4,558)
Contingency (proposed)	(\$15,000)	(\$25,000)
Amended Contract Value	\$126,026	\$222,745
Remaining Budget	\$79,474	\$104,755

The recommended contract amendments are within the approved budgets so there will be no need for additional budget and no need to amend the 2022-2026 Financial Plan.

Timeline for next steps or estimated completion date

Pending Board approval, the listed contracts will be executed to allow for the final design to be completed along with the preparation of tender ready documents in Q1 2022. A separate contract for construction services during construction will be secured in the coming months with anticipated Board construction award occurring in mid-April, provided that permits are procured in the meantime.

A budget proposal for the construction phase of the dam upgrades will be brought forward as part of the 2022 budget process. If approved, the construction services tender would be posted following completion of the ongoing engineering design phase.

Depending on the permitting process through BC Parks, the physical upgrades to the dams will be complete by Fall 2022 or Summer 2023.

STRATEGIC PLAN AND RELATED POLICIES

The dam upgrades design projects reflect the objectives identified in the Strategic Plan, including the Strategic Focus Area of *Asset Stewardship*.

CONCLUSION

During preliminary analysis and design of the upgrades to McNeil and Chapman Lake Dams, WSP noted deficiencies with the LLOs at both dams. In order to address these deficiencies in the design plans and specifications, WSP requires additional funds for design and reporting services. The additional costs for this work are \$4,843 and \$4,558 for McNeil Lake Dam and Chapman and Edwards Lake Dams respectively.

Staff also recommended to include contingencies of \$15,000 and \$25,000 for McNeil Lake Dam and Chapman and Edwards Lake Dams respectively. The amended contract values would be \$126,026 and \$222,745.

Staff therefore recommend that the delegated authorities be authorized to execute this contract amendment.

Reviewed by:			
Manager	X – S. Misiurak	CFO/Finance	X-T.Perreault
GM	X - R. Rosenboom	Legislative	
CAO	X- D. McKinley	Purchasing/Risk	X-V. Cropp

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Infrastructure Services Committee – January 13, 2022

AUTHOR: Shane Walkey, Manager, Utility Services

SUBJECT: REQUEST FOR PROPOSAL (RFP) 2137016 CONTRACT AWARD CHAPMAN CREEK WATER TREATMENT PLANT (WTP) UV UPGRADE – DESIGN, CONSTRUCTION AND ENGINEERING SERVICES

RECOMMENDATION(S)

THAT the report titled Request for Proposal (RFP) 2137016 Contract Award Chapman Creek Water Treatment Plant (WTP) UV Upgrade- Design, Construction and Engineering Services be received;

AND THAT a contract for Engineering Consulting Services for Chapman Creek WTP UV Upgrade be awarded to Stantec Consulting Ltd. in the amount of \$131,282 (plus GST);

AND FURTHER THAT the delegated authorities be authorized to execute the contract.

BACKGROUND

The SCRD Board adopted the following resolution at the regular meeting held on January 9, 2020:

004/20 (in part) **Recommendation No. 29** Regional Water Service [370] – 2020 R1 Budget Proposals

AND THAT the following budget proposals be approved and incorporated into the 2020 Round 2 Budget:

- Budget Proposal 10 – Chapman Creek Water Treatment UV Upgrade, \$250,000 funded from Capital Reserves;

DISCUSSION

The Chapman Creek Water Treatment Plant (WTP) utilizes ultraviolet (UV) radiation as one of the many treatment processes at the facility. UV treatment is extremely efficient and effective at targeting and destroying illness-causing microorganisms and is a key component of the disinfection system at the WTP.

The current UV system is over 15 years old, has increasingly costly maintenance issues, has reached the end of its operational life and needs to be replaced.

While the current UV system only employs a single UV module, the new UV system will be designed for redundancy as the current regulatory requirements is to have multiple UV systems in case of failure of a single unit.

As such, in accordance with the Sunshine Coast Regional District's (SCRD) Procurement Policy, a Request for Proposal (RFP) 2137016 was issued on October 26, 2021, and closed on November 23, 2021. One addendum was issued. The RFP sought qualified companies to complete the construction, integration, and commissioning of the Chapman Creek WTP UV upgrade.

The purpose of this report is to seek approval of the execution of contracts for Engineering Consulting Services for this project.

Analysis

The Purchasing and Risk Management Division received three compliant proposals. Led by Purchasing, the Evaluation Committee consisted of four members. The Evaluation Committee reviewed and scored the proposals against the criteria set out in the RFP.

Proponent	Bid Price
HDR Corporation	\$ 91,362
MPE Engineering Ltd	\$ 68,300
Stantec Consulting Ltd	\$105,026

Staff recommend that a contract be awarded to Stantec Consulting Ltd. Their proposal met the specifications as outlined in the RFP and are the best value for the above-mentioned project.

The listed contract value does not include a contingency allowance, a 25% contingency is recommended to be added to the contract amount for a total contract upset value not to exceed \$131,282. The contingency will help address any unforeseen circumstances that may arise.

Financial Implications

The approved budget is \$250,000, of which \$131,282 will be allocated to the Engineering Consulting Services with the remainder to be used for construction.

Due to unexpected delays in tendering this project, it's costs and increased costs for goods and services, it is anticipated that further funds will be required to complete the construction phase of this project. A future report will be presented to Committee with updated budget implications.

Timeline for next steps

Pending Board approval, the contract will be executed to allow for the actual project initiation to commence shortly after. The anticipated project duration (from initiation to commissioning) is expected to take up to one year to complete.

STRATEGIC PLAN AND RELATED POLICIES

The purchasing process followed for this service is aligned with the SCRD Procurement Policy.

CONCLUSION

In accordance with the SCRD's Procurement Policy, Request for Proposal (RFP) 2137016 Contract Award Chapman Creek WTP UV Upgrade was issued for Engineering Consulting Services.

The Evaluation Committee reviewed and scored the proposals against the criteria set out in the RFP.

Staff recommend that RFP 2137016 Contract Award Chapman Creek WTP – UV Upgrade be awarded to Stantec Consulting Ltd. with an upset value up to \$131,282 (plus GST), which includes a project contingency of \$26,256.

Reviewed by:			
Manager	X - S. Walkey	CFO/Finance	X-T.Perreault
GM	X - R. Rosenboom	Legislative	
CAO	X – D. McKinley	Purchasing/Risk	X- V. Cropp

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Infrastructure Services Committee – January 13, 2022

AUTHOR: Shane Walkey, Manager, Utility Services

SUBJECT: **SUPPLY AND DELIVERY OF BRASS WATER SERVICE FITTINGS CONTRACT TERM EXTENSION**

RECOMMENDATION(S)

THAT the report titled Supply and Delivery of Brass Water Service Fittings Contract Term Extension be received;

AND THAT the SCRD exercises the right to extend the existing contract with Flocor Inc. for the Supply and Delivery of Brass Water Service Fittings for an additional one (1) year period in the amount up to \$71,058 (plus GST), which will result in an amended contract value of \$183,798;

AND THAT the delegated authorities be authorized to execute the contract.

BACKGROUND

The Utilities Services Division purchases and maintains an inventory of brass water service fittings on an ongoing basis to ensure the water and wastewater systems are suitably maintained, repairs can be affected in a timely manner and supplies are available for new servicing and system renewal.

In 2018/2019, the SCRD requested offers from qualified companies to supply and deliver a variety of brass water service fittings, such as couplings, valves and bushings on a per piece “as and when required basis” and signed a three (3) year contract with Flocor Inc.

The term of the current contract with Flocor Inc. is March 15, 2019 to March 14, 2022 with options to extend for two (2) additional one (1) year periods, at the sole discretion of the Regional District.

The purpose of this report is to review the option to extend the original term of the contract with Flocor Inc. for an additional one (1) year term extending the contract to March 14, 2023.

DISCUSSION

Flocor Inc. has provided the SCRD with waterworks materials since 2015 and has consistently met the needs of the Utility Services Division in terms of material quality, availability of supply, and competitive pricing, and staff have remained satisfied with the level of service they have provided. The existing contract with Flocor Inc. has expedited the procurement process which has led to better efficiency within the Utility Services Division. Table 1 (below) outlines the existing contract term and values.

Table 1: 2019-2022 Flocor Inc. Contract

	2019-2020	2020-2021	2021-2022	Total
Value	\$37,580.04	\$37,580.04	\$37,580.04	\$112,740

Options and Analysis

Staff have remained contented with the level of service and quality of material supply from Flocor Inc. since the contract initiation in 2019. The existing contract with Flocor Inc. had static pricing for the three (3) contract years between 2019 and 2022 with a 0% increase in any material types over the last three (3) years.

Flocor Inc. has provided the SCRD with updated pricing for material supply for an additional one (1) year term between March 15, 2022 and March 14, 2023. This pricing submission was evaluated and compared to the current 2019-2022 contract pricing from Flocor Inc. and current market pricing. Table 1 outlines the average annual increase between 2019 and 2022, and the proposed percentage increases for 2022-2023.

Table 2: Flocor Inc. Contract Pricing Comparison (%)

	Average Annual Increases (2019 - 2022)	Proposed Annual Increases (2022 - 2023)
Tees and Flares	0.00%	8.67%
Adapters and Corp Stops	0.00%	8.67%
Elbows and Bends	0.00%	8.67%
Compression Couplings	0.00%	8.67%
Bushings and Nipples	0.00%	15.78%
Misc.	0.00%	8.67%

The material composition of the above-mentioned brass service fittings includes over 60% copper tube; a commodity that has increased in market value by over 75% in the last 12 months alone. In addition, shipping costs; both incoming into Flocor's Delta distribution warehouse and outgoing from Delta to the SCRD have, according to Flocor, more than doubled since the time of the original tender. (Note: None of these internal cost increases experienced by Flocor have been offloaded to the SCRD to-date)

Staff have found Flocor Inc.'s pricing to be acceptable and competitive, and recommend that an additional one (1) year term be signed with Flocor Inc. for the supply and delivery of brass water service fittings identified in the updated item listing provided.

Financial Implications

Staff have reviewed historical and anticipated material quantities that will be required over the next one (1) year contract term and have estimated the figures in Table 3 (below).

Table 3: Contract Value Estimate

2021/2022 Contract Value Estimate	\$56,847
25% Contingency	\$14,211
One (1) Year Contract Upset Value	\$71,058 (plus GST)

The estimated annual quantities of material that were considered when calculating the 2022/2023 values were based on historical and anticipated material supply requirements. However, the total quantity of items purchased will be determined as and when required by the volume of work approved through the budget process, level of third-party servicing requirements, and planned and reactive maintenance.

In addition to the base costs, it is recommended that a 25% contingency be added into the final purchase order value to allow for variations in projects and/or scheduled and reactive maintenance during this next one (1) year contract term.

The total revised contract value, including the current 2019-2022 as well as the recommended 2022-2023 additional term, will total \$183,798.

The ongoing purchase of brass water service fittings will be funded through annual operations and capital budgets as approved through annual budgeting processes. Costs will be allocated to the service function that the work is being carried out within.

STRATEGIC PLAN AND RELATED POLICIES

The procurement of materials to support the improvement of capital infrastructure is consistent with Section 4.10, Capital Maintenance and Replacement, of the District's Financial Sustainability Policy.

Scheduled maintenance and capital asset repairs and betterments are consistent with organizational Asset Management principles.

CONCLUSION

The SCRD entered into a three-year contract in 2019 with Flocor Inc. for the supply of brass fittings and related waterworks materials which expires on March 14, 2022. The current contract includes the option to extend the original contract for up to two (2) one (1) year periods.

Staff have reviewed the submission of updated pricing from Flocor Inc. and recommend exercising the right to extend the contract for an additional one (1) year period for the supply and delivery of brass fittings with a maximum 2022/2023 annual upset value of \$71,058 (plus GST).

Staff Report to Infrastructure Services Committee – January 13, 2022
Supply and Delivery of Brass Water Service Fittings Contract Term Extension

Page 4 of 4

The total contract value, which will include the initial three (3) year term AND the one (1) year additional term, will total \$183,798.

Reviewed by:			
Manager	X-S. Walkey	CFO/Finance	X-T.Perreault
GM	X-R. Rosenboom	Legislative	
Interim CAO	X – D. McKinley	Purchasing/Risk	X-V. Cropp

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Infrastructure Services Committee – January 13, 2022

AUTHOR: Shane Walkey, Manager, Utility Services

SUBJECT: LANGDALE WWTP REMEDIATION PROJECT – GRANT APPLICATION

RECOMMENDATION(S)

THAT the report titled **Langdale WWTP Remediation Project – Grant Application** be received for information;

AND THAT a grant application be submitted to the Investing in Canada Infrastructure Program-British Columbia-Green Infrastructure-Environmental Quality Program for upgrades to the Langdale Wastewater Treatment Plant (Service area 388) up to \$1,025,498 (plus GST);

AND THAT the Board supports the project and commits to its share of up to \$272,167 (plus GST) of the project, as well as cost overruns.

BACKGROUND

The Langdale Wastewater Treatment Plant (WWTP) is inoperable and the system is currently operating in a bypass capacity, and residential sewage is being transferred to the Camp Elphinstone (YMCA) treatment facility adjacent to the Langdale WWTP site. Due to the failure of the Langdale WWTP and disposal field, the Langdale effluent discharge was connected to the YMCA plant. While this was implemented as a temporary measure this situation is ongoing.

At the December 14, 2021 2022 Budget Round 1 meeting the report *Langdale WWTP Remediation Project – Additional Information for Consideration* was presented. This report identified the opportunity to apply for a grant under the Investing in Canada Infrastructure Program (ICIP)-British Columbia-Green Infrastructure-Environmental Quality Program for the required upgrades to the Langdale WWTP. The purpose of this report is to seek support for the submission of an application for this project under this program.

DISCUSSION

The ICIP has announced a third intake with an application deadline of January 26, 2022. The Environmental Quality Program supports treatment and management improvements for wastewater. For applications to be considered they must be supported by asset management, long-term community planning, add value for a better planet and are based on the principle of sustainability.

Funding is available up to 73.33%, funded 40% by the Government of Canada, and 33.33% by the Province of BC. This intake is designed to target projects starting in 2023 and completed by 2026. Staff are considering this grant and need this work to be completed soon, but due to the steps required prior to construction such as a legal agreement and service area boundary adjustments, this construction project will most likely not commence until early 2023. Some improvements are required in 2022 as the existing infrastructure is in dire need of repairs such as building modifications for staff safety. This important upgrade cannot be delayed any later than

early 2023. Staff are still confirming which activities must be completed in 2022, and hence are not eligible for grant funding, and which activities could be completed in 2023 and are eligible for grant funding.

As suggested in the referenced December 14, 2021 staff report, staff are recommending that a grant application be submitted for an amount of \$1,025,498. The ultimate amount applied for might be somewhat less based on confirmation by staff of which activities would not be considered eligible for grant funding as the works need to be completed in 2022, as indicated above.

Financial Implications

As suggested in the referenced December 14, 2021 staff report, staff are recommending that a grant application be submitted for an amount of to \$1,025,498.

If the full amount of \$1,025,498 would be applied for and selected for grant funding the SCRD would need to commit to a contribution of \$272,167. This amount would be lower if the awarded grant amount is lower. The associated 2022 Budget proposal for this project is the first portion of the scope of work that this grant application would be applied for. So, if this budget proposal for \$261,000 would be included in the 2022-2026 Financial Plan, it could cover the vast majority of the cost ineligible for grant funding. Upon confirmation of the grant award staff will provide a report with recommendations on the funding options to fund the remaining ineligible costs of up to \$11,167. If the grant is awarded and the project is to have cost-overruns, staff will present associated funding options at that time.

STRATEGIC PLAN AND RELATED POLICIES

This project aligns with the SCRD's Strategic Plan with respect to Asset Stewardship and promotes ongoing sustainable service delivery by providing guidance of long-term capital planning.

CONCLUSION

Camp Elphinstone (YMCA) wastewater treatment plant was commissioned in the fall of 2014 and SCRD staff have operated the wastewater plant since that time. Approval and transfer of ownership and associated easements on the YMCA wastewater plant, ocean outfall, capacity review and connection of the Langdale subdivision to the YMCA wastewater system are still required. The Langdale WWTP is inoperable and the system is currently operating in a bypass capacity, and residential sewage is being transferred to the YMCA treatment facility adjacent to the WWTP site.

ICIP grant funding is available up to 73.33%, funded 40% by the Government of Canada, and 33.33% by the Province of BC. This intake is designed to target projects starting in 2023 and completing by 2026.

Staff are recommending that a grant application be generated that will fund any of the three options up to \$1,025,498 and commit to fund the costs ineligible for grant funding of up to \$272,167.

Reviewed by:			
Manager	X- S. Walkey	Finance	
GM	X - R. Rosenboom	Legislative	
CAO	X – D. McKinley	Other	

**SUNSHINE COAST REGIONAL DISTRICT
SOLID WASTE MANAGEMENT PLAN MONITORING ADVISORY COMMITTEE**

December 21, 2021

RECOMMENDATIONS FROM THE SOLID WASTE MANAGEMENT PLAN MONITORING ADVISORY COMMITTEE MEETING HELD IN THE CEDAR ROOM, 1975 FIELD ROAD, SECHELT, BC

PRESENT:

(Voting Members)

Chair
Members

I. Winn
J. Boyd
D. New-Small
M. Cambon

ALSO PRESENT:

(Non-Voting)

Director, Electoral Area E
Director, Electoral Area A
Manager, Solid Waste Services
Recorder

D. McMahon
L. Lee
R. Cooper
C. Cotton

CALL TO ORDER

11:01 a.m.

AGENDA

The agenda was adopted as presented.

MINUTES**Recommendation No. 1** *PMAC Meeting Minutes of September 21, 2021*

The Solid Waste Management Plan Monitoring Advisory Committee recommended that the Solid Waste Management Plan Monitoring Advisory Committee meeting minutes of September 21, 2021 be received for information.

BUSINESS ARISING FROM MINUTES AND UNFINISHED BUSINESS**Recommendation No. 2** *SCRD Board Resolutions Related to Solid Waste*

The Solid Waste Management Plan Monitoring Advisory Committee recommended that the report titled SCRD Board Resolutions Related to Solid Waste be received for information.

REPORTS

Chair Winn advised the Committee of the resignation of Silas White from the Solid Waste Management Plan Monitoring Advisory Committee.

The Manager, Solid Waste Services provided the Committee with an update on the transition from the Solid Waste Management Plan Monitoring Committee to Planning and Technical Advisory.

Discussion included the following:

- Rationale for in-person meetings for advisory committees' vs virtual.
- Terms of reference for Solid Waste Management Plan Technical Advisory Committee was discussed, timing of terms of reference to help determine when the Solid Waste Management Plan Monitoring Advisory Committee should dissolve.
- Process for Solid Waste Management Plan Monitoring Advisory Committee members to become members of the Planning and Technical Advisory Committee.

Recommendation No. 3 *Advisory Committee meeting format*

The Solid Waste Management Plan Monitoring Advisory Committee recommended that the SCRD pursue authorization to hold advisory committee meetings virtually.

Manager, Solid Waste Services provided the Committee with a Solid Waste Management Plan Amendment Engagement Update.

Discussion included the following:

- Results from engagement to be posted on <https://letstalk.scrd.ca/trash>; anticipated for Feb 2022.
- Timing of review by Ministry of Environment and Climate Change Strategy.
- Approval and timing of future waste disposal options.

Recommendation No. 4 *2016-2020 SCRD Illegal Dumping Summary*

The Solid Waste Management Plan Monitoring Advisory Committee recommended that the report titled 2016-2020 SCRD Illegal Dumping Summary be received for information.

Discussion included the following:

- Materials not accepted at the Sechelt landfill or Pender Harbour Transfer Station.
- Questions regarding tonnage for drywall material collected under Good Samaritan Program.
- Involvement of residents involved in the Good Samaritan Program in terms of amount of illegal dumping collected.
- Materials not accepted in the Good Samaritan Program.

Recommendation No. 5 *October, November and December 2021 Solid Waste Staff Reports to PMAC*

The Solid Waste Management Plan Monitoring Advisory Committee recommended that the report titled October, November and December 2021 Solid Waste Staff Reports to PMAC be received for information.

Discussion included the following:

- Contracting/subcontracting awards to Salish Soils.
- Sunshine Coast Regional District procurement policies reassured as giving equal opportunity to all companies who provide proposals.
- 2022 R1 budget process including Solid Waste budget proposals.
- Clarification of closure costs for Sechelt Landfill vs annual operational costs at Sechelt Landfill once closed.
- Challenges of having community support for new landfill.
- Sechelt Landfill and Pender Harbour Transfer Station Mattress recycling extended producer responsibility program (EPR) (anticipated in 4-5 years).
- The use of clear bags as a regulation tool for enforcing landfill disposal regulations.
- Waste composition study for curbside garbage, drop-off bins and commercial waste delivered to active face of the Sechelt Landfill to be completed in 2022.
- Residential packaging and printed paper recycling collection (depots and curbside) is aligned throughout British Columbia.
- Curbside collection for recycling decisions and status in the Sunshine Coast Regional District.

COMMUNICATIONS

NEW BUSINESS

NEXT MEETING February 15, 2022

ADJOURNMENT 12:21 p.m.

From: Raquel Kolof [REDACTED] >
Sent: Sunday, December 12, 2021 8:23 AM
To: Board Chair <board@scrd.ca>; Donna McMahon <Donna.McMahon@scrd.ca>; info <info@sscfi.ca>;
 Remko Rosenboom <Remko.Rosenboom@scrd.ca>
Cc: Weiler, Patrick <patrick.weiler@parl.gc.ca>; nicholas.simons.mla@leg.bc.ca
Subject: Re: Request for Stage 4 Water Restriction Exemption for Commercial Farmers

External Message

Dear SCRD Board of Directors and Staff,

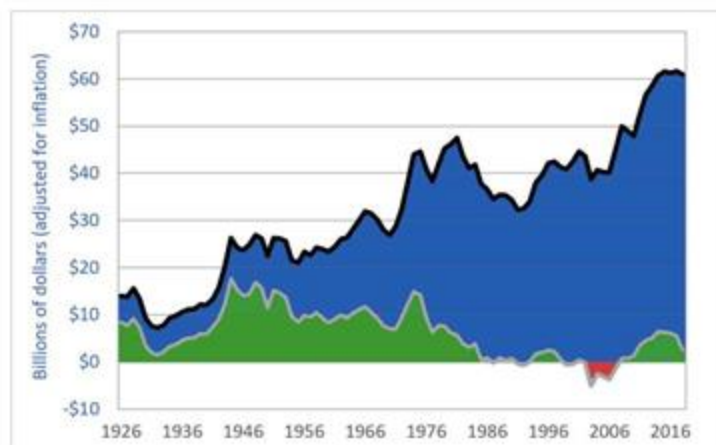
Firstly, We want to send a massive thank you for the 2 week exemption from stage 4 water restrictions for the 16 commercial farms on the SCRD municipal water supply. Farmers are grateful for your quick and bold action to amend the bylaws to allow farmers to continue to grow food in unprecedented times.

This meant the world to farmers who invest years preparing for harvest in the growing season. Our gratitude cannot be understated, for the exemption but also for the fact that local farmers are feeling heard and appreciated.

The Sunshine Coast Farmers Institute would like to work with you to prepare for the future of farming on the Sunshine Coast. We believe that supporting local food production is more vital than ever. As such, we are requesting a permanent exemption from all stages of water restrictions for all commercial food farmers on the Sunshine Coast. Food is as critical to human health as water. Our local food farms recharge the aquifer and are important to a functioning ecosystem.

We agree that heavy water users, regardless of indoor or outdoor water use, should endeavor to provide their own water and remove themselves from the municipal water supply. However, given the increasing cost of well drilling, upwards of \$75,000, this is not feasible for most local farmers. Unlike cannabis and alcohol, food production is not lucrative. Food farmers already invest significantly in costly farm infrastructure and grow food for little profit. The National Farmers Union of Canada study from 2019 illustrates how most farm profits are taken up by inputs. "In the 33-year period from 1985 to 2018, input costs consumed more than 95% of farm revenue and left farmers with just 5%."

Net farm income



<https://www.nfu.ca/wp-content/uploads/2019/12/Tackling-the-Farm-Crisis-and-the-Climate-Crisis-Final-with-covers.pdf>

We ask that the SCRD seek ways to remove regulatory burdens that prevent critical revenue and access to food in the summer when most farm income and produce is generated.

Farmers request permanent exemptions from stage 4 water restrictions and financial support in lowering commercial water rates, such as what the Comox Valley Regional District has done.

Cheers,
Raquel Kolof

On Wed, Aug 11, 2021 at 10:17 AM Raquel Kolof <[REDACTED]> wrote:
Dear SCRD Board of Directors,

The SSCFI requests that **soil-based commercial food farmers** be exempt from Stage 4 water restrictions. Water restrictions based on indoor vs outdoor water use are arbitrary, unfair and not in the best interest of our communities' need for food security, nor our aquifer's and ecosystem's long term health.

We urge the SCRD to permit Stage 4 exemptions to **soil-based commercial food farmers** based on the fact that, unlike other outdoor water uses, food is an essential requirement for human health. Locally grown food is a community asset.

We request this exemption for the following reasons:

1. Food is an essential human need and as such local food production needs to be protected. At a time when food scarcity looms large and our traditional food suppliers in BC, the Prairies and California are experiencing unprecedented wildfires and drought, the duty to protect and invest in local food farmers is even more urgent.

2. Farm water use is part of the hydrologic cycle and recharges the aquifer: Soil-based food farmers are an important part of the green water cycle as our outdoor watering recharges our aquifers with uncontaminated water. Unlike indoor businesses that produce grey water and operate on sewer systems, the outdoor watering of farmer's crops and orchards steward the water cycle.

3. Soil-based farming supports our ecosystem and reverses climate change: Soil-based farmers with healthy living crops and livestock-grazed pastures sequester carbon. This carbon drawdown into living roots, feeds our soil microbiome and cools our climate. Farmers' crops, orchards and pastures also support wildlife and feed pollinators, which are essential to our food supply.

4. Local farmers are already at a breaking point with unprecedented drought, heat domes, labour shortages, skyrocketing input costs, and low profit margins. Losing crops and income in one of the most productive summer months will push our farmers over the edge of viability and harm our local food security.

5. Commercial farmers need equitable access to our water infrastructure. Equality issues arise when other ALR land owners and heavy water users, such as industrial marijuana grow ops and breweries have no water restrictions simply because they are indoor users. This inequality is even more difficult to accept given that some marijuana grow ops' water use returns contaminated grey water that pollutes our aquifers. Farmers, whose profit margins are far lower than marijuana grow ops, pay the same property taxes and commercial water rates, and therefore have the right to equitable access to our municipal services.

In addition to being aligned with the [SCRD Ag Plan](#), several of the [SCRD's We Envision: A Regional Sustainability Plan](#) statements refer to the need to support a local, viable and resilient food system. Perhaps this statement sums it up best, "all people on the Sunshine Coast having access to high-quality drinking water, locally grown and produced food". Food and water are equally vital to human life.

The number of commercial farms and the land area they cover is not large. [Only 8% of ALR land is farmed](#). [The Regional Sustainability Plan](#) states "The actual land used for commercial food production may be as low as 12 hectares total. With recognized environmental stresses worldwide and the rising cost of fuel for transporting food, food security is a growing concern."

With rising costs and the dangerous effects of climate change, farmers need all the support they can get. By terminating water use at the height of the growing season, local governments are adversely affecting an already stressed essential sector. We ask our local government to take steps to protect the sector that feeds us, recharges our hydrologic cycle and reverses climate change.

[The UN climate change report sounds "code red for humanity"](#), we need to take bold action now to protect one of our most precious resources, our local food supply. Please permit soil-based commercial food farmers outdoor water use during stage 4 water restrictions.

Please invest in our community's biological bank account.
Thank you for your time and consideration.

Regards,

The Sunshine Coast Farmers Institute Board

www.sscfi.ca

"In the soil, the decomposition of living things forms the soil carbon sponge, which can resiliently sustain plant life, affect the earth's hydrology and heat balance, and may give humans the near-term leverage we need to avert catastrophic climate change, restore hydrologic function, maintain our economies and civilizations, and maintain and enhance human health." - [Peter Donovan](#)