



INFRASTRUCTURE SERVICES COMMITTEE

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

AMENDED 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)
⇒REPLACE
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
- 7a. Curbside Collection Services Update
Manager, Solid Waste Services
Regional Solid Waste (Voting – All) ⇒ADD
Verbal
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. Raquel Kolof, The Sunshine Coast Farmers Institute Board dated
December 12, 2021 Annex H
pp 39 - 42
Regarding Request for Stage 4 Water Restriction
Exemption for Commercial Farmers
(Voting – All)

NEW BUSINESS

IN CAMERA

ADJOURNMENT

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. Any incremental staff time and expenditures related to the response efforts to Waste Water Treatment Plants have also been approved for up to \$30,000. Follow-up is occurring in order to ensure all other documentation is completed and submitted to EMBC in a timely manner. There are no Expense Authorization Forms (EAF) awaiting approval by EMBC.

Response efforts in Parks focused on public safety and risk mitigation. Two EAFs were submitted; one related to the road repairs at Seaview Cemetery, and the other related to the road repair up to Dakota Ridge. Seaview Cemetery road was repaired but was declined as response and will need to be addressed as part of recovery, approximately \$3,000. The Dakota Ridge road repair was approved as response, totaling approximately \$8,000. 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
Seaview Cemetery	- Approximately 20m of road damage	\$3,000 (includes \$1,600 for Parks Project Mgmt)	- Work completed using existing operations budget.	- Will seek disaster recovery funding
Community Parks (650) – Mahan Trail	- 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)	- Will contract out the project - Impacts to procurement and Parks Project Management	- Parks Operating Reserve - Will seek disaster recovery funding

<p>Community Parks (650) – Chaster House</p>	<ul style="list-style-type: none"> - Chaster House basement flooded; degree of damage unknown - In the process of conducting a Structural Assessment to assess. Would return to the Board with additional information and recommendations - Facility will remain closed 	<p>To be determined</p>		
<p>Community Parks (650) – Chaster Pedestrian Bridge</p>	<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. 	<p>To be determined</p>		

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 – S. Gagnon X – R. Rosenboom	Legislative	
CAO	X – D. McKinley	Other	X- G. Parker

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