



June 21, 2023

Job Number: 124914
vFCBC Tracking Number: 100412062

Sunshine Coast Regional District
1975 FIELD ROAD
SECHELT BC V0N 3A1

Dear Sunshine Coast Regional District,

Change Approval - Changes In and About a Stream (File 2010355)

A Change Approval for the above application has been granted and a Water Sustainability Act Section 11(1) Changes In and About a Stream Approval document verifying this is attached.

The Change Approval does not authorize entry onto private or Crown Owned land. Permission of the affected landowner must be obtained and should be in writing for your protection.

This Approval does not constitute authority of any other agency. The holder of this approval shall have the necessary permits from other agencies concerned prior to the commencement of the works authorized herein. The permit holder is required to adhere to all other applicable Provincial and Federal Regulations.

A copy of this Approval (and associated plans/drawings listed on this Approval) must be available for inspection, upon request, at any location where the authorized changes in and about a stream are being undertaken.

This Approval does not authorize the alteration or removal of any works held under a water license.

The holder of this Approval shall take reasonable care to avoid damaging any land, works, trees, or other property and shall make full compensation to the owners for any damage or loss resulting from the exercise of rights granted hereunder.

Please ensure that machinery is free of invasive plant material that could potentially be transported throughout or between sites. In addition, ensure that invasive species removed from a site are disposed of appropriately.

This Approval requires the oversight of an appropriately Qualified Professional. For the purposes of this authorization, that professional must be registered with one of the five professional regulatory bodies named under the Professional Governance Act of British Columbia. They must be in good standing and acting under that professional regulatory body's code of ethics and subject to disciplinary action by that professional regulatory body.

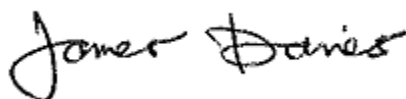
The holder of this Approval shall ensure that any proposed development and/or changes do not impact traditional or special sites in accordance with the Heritage Conservation Act or the ability of First Nation community members to participate in traditional activities on the land and water.

Archaeological sites (both recorded and unrecorded) are protected under the Heritage Conservation Act and must not be altered or damaged without a permit from the Archaeology Branch. The holder of this approval must advise everyone who will be involved in ground-disturbance and construction that if archaeological materials are encountered, activities must be halted, and the Archaeology Branch contacted at 250-953-3334 for direction.

Section 105 of the Water Sustainability Act gives the recipient of this notice the right to appeal my decision. You may file an appeal within 30 days of the date indicated on this letter. Information on filing an appeal can be found on the Environmental Appeal Board website at <http://www.eab.gov.bc.ca>

If you have any questions or concerns regarding the document issued or the content of this letter, please contact the South Coast Office at WaterActReferrals.LowerMainland@gov.bc.ca.

Sincerely,



James Davies
Assistant Water Manager

Pc: Shíshálh First Nation
Binod Acharya, Dam Safety Officer, binod.acharya@gov.bc.ca, Ministry of Forests –
Surrey

Enclosure(s)



Province of British Columbia

Water Sustainability Act

Approval

Section 11(1) and 11(2)– Changes In and About a Stream Approval

Job Number: 124914

File Number: 2010355

VFCBC Tracking Number: 100412062

SUNSHINE COAST REGIONAL DISTRICT

is hereby authorized to make changes in and about a stream as follows:

- (a) The name of the stream is Chapman Creek and the Reservoir is Chapman Lake, in Tetrahedron Provincial Park, herein referred to as “the stream”.
- (b) The following improvements are to be made to works authorized under water licence C050724.
- (c) The changes to be made in and about the stream are:
 - 1. Dam strengthening.
 - 2. Replacement of low-level outlet.
 - 3. Replacement/modifications to steel walkways.
 - 4. Installation of debris booms.
 - 5. Erosion protection measures.
 - 6. Implementation of a Vegetation control plan.
 - 7. Installation of signage and staff gauges; and,
 - 8. Dam breach analyses.
- (d) All works shall occur within Tetrahedron Provincial Park under Parks Use Permit #102714.
- (e) All works shall comply with the following documents and any minor changes hereafter. Any major changes to the design must be submitted to the Water Manager for written approval.
 - 1. “Environmental Impact Assessment (EIA) Upgrades to Chapman Lake and Edwards Lake Reinforced Concrete Lake Dams”, prepared by WSP Canada, Dated August 16, 2022.
 - 2. “Construction Environmental Management Plan McNeil, Chapman & Edwards Dam Improvements”, prepared by WSP Canada, Dated June 12, 2023.
 - 3. Drawing package - “Engineering Services for Upgrades to Chapman and Edwards Lake Reinforced Concrete Dam”, Work Order Number 211-09410-00, Prepared by WSP Canada, dated May 2, 2022.

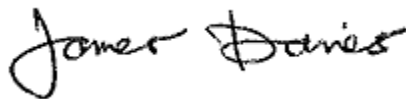
- (f) The dam upgrade works shall be carried out as specified in report “Upgrades to Chapman Lake, Edwards Lake & McNeil Lake Dams Design Report” April 05, 2023 prepared by WSP. Any significant departure from the submitted plans and specifications will be reported to the Dam Safety Officer prior to those alterations occurring. All changes will be noted on the as-built or record drawings;
1. The Dam Safety Officer shall be notified 10 business days prior to the beginning of construction and provided with a construction schedule.
 2. Within 30 days of completion of the project, the Project Engineer is required to submit a report on the work and the manner in which the work was performed including photographs of key construction elements and as-built plans; and,
 3. The Operation, Maintenance and Surveillance (OMS) Manual and Dam Emergency Plan (DEP) shall be revised and submitted to Dam Safety Officer within 30 days of completion of the project.
- (g) Work in the stream and stream channel shall occur only during the period of August 1st to August 31st, so that fisheries interests are protected.
- (h) All work shall be carried out in accordance with the Provincial “Requirements and Best Practices for Making Changes In and About a Stream in B.C.” (2022). The provincial guidance document can be found at the following link:
<https://www2.gov.bc.ca/assets/gov/environment/air-land-water/water/working-around-water/wsa-cias-requirements-bmps.pdf>.
- (i) The works shall be completed on or before August 31, 2024.
- (j) The holder of this Approval must hire an appropriately Qualified Professional to conduct Environmental Monitoring on all in-stream works authorized under this Approval. The Qualified Professional is responsible for observing the methods of construction and preparing information and reports on the compliance of the construction activities. The Qualified Professional shall:
1. Ensure all best management practices and mitigation measures are in place to avoid and minimize environmental impact on the land and on fish and fish habitat of the stream.
 2. Where applicable, assist in the isolation of the stream prior to the commencement of works.
 3. Implement and ensure erosion and sediment control measures are constructed, installed, and maintained appropriately for the full duration of instream works.
 4. Supervise all instream works authorized under this Approval.
 5. Be granted authority to stop the work authorized under this Approval if deemed necessary to address risks to the environment. The Qualified Professional or their designate (specified in writing) must be on site during all phases of construction in and around the stream to ensure this component is upheld.
 6. Report any spills including detailed information such as time of day, staff involved, nature, cause, and degree of spill, recovery process deployed, and agencies notified.

7. In the event of an environmental incident or non-compliance with any of the terms or conditions of this Approval, an appropriately Qualified Professional must immediately mitigate the situation. Within 48 hours, each incident must be reported to the Water Manager at SouthCoastWSAReporting@gov.bc.ca with the approval number in the subject line. The incident report shall describe mitigation measures employed and a rationale as to why works have resumed, or the next steps required before works may resume. The holder of this approval must follow the advice of the appropriately Qualified Professional.
 8. When the works involve temporary diversions to isolate the work site,
 - i. Monitor all diversion works daily to ensure pumps & flow bypasses are in proper working condition;
 - ii. Ensure diversion works that include pump intakes be screened for fish and aquatic species in accordance with the “Interim code of practice: End-of-pipe fish protection screens for small water intakes in freshwater” (Fisheries and Oceans Canada, 2020); and
 - iii. Ensure fish are prevented from entering the works.
 9. When the works involve dewatering or isolation of flow and the stream is known or suspected to contain fish and/or amphibians,
 - i. Attend the site prior to conducting any instream works to complete fish and wildlife search and salvage(s);
 - ii. Obtain any permits needed prior to undertaking the salvage(s); and
 - iii. Inspect the extraction area for fish stranding at least once after water levels have declined.
- (k) Upon commencement of the project, the work shall be pursued to completion as quickly as possible.
- (l) Work must be carried out during favourable weather and low flow.
- (m) All equipment and machinery used in or near the stream channel:
1. Must be in good operating condition and free of leaks, excess oil and grease;
 2. Must have a spill containment kit readily accessible on-site; All staff must be trained in handling and applying a spill kit appropriately to any spills/incidents;
 3. Refueling must occur a minimum of 30 metres away from all streams; and
 4. Any spill of a substance that is toxic, polluting, or deleterious to aquatic life of reportable quantities must be reported to the Dangerous Goods Incident Report 24-hour phone line at 1-800-663-3456. This Approval does not authorize the alteration or removal of any works held under a water licence.
 5. Any spill of a substance that is toxic, polluting, or deleterious to aquatic life of reportable quantities must be reported to the Dangerous Goods Incident Report 24-hour phone line at 1-800-663-3456.
- (n) All temporary works (including a ford, stream crossing, flow bypass, and erosion and sediment control measures) shall be removed on completion of the project, and the stream channel restored to its natural condition.

- (o) Sediment and Erosion Control measures to prevent the release of silt, sediment or sediment-laden water must be in place before starting works that may result in sediment mobilization, where possible. Care shall be exercised during all phases of the work to prevent the release of silt, sediment, sediment-laden water, raw concrete, concrete leachate or any deleterious substances. All control measures must meet or surpass the Requirements and Best Management Practices for Making Changes In and About a Stream in British Columbia (2022). and the "Land Development Guidelines for the Protection of Aquatic Habitat" (Fisheries and Oceans Canada and the British Columbia, 1993).
- (p) Discharge and runoff water from the site into any watercourse(s) must comply with the BC Approved Water Quality Guidelines for the protection of Aquatic Life (<https://www2.gov.bc.ca/gov/content/environment/air-land-water/water/water-quality/water-quality-guidelines/approved-water-quality-guidelines>) and/or the applicable Local Government Bylaw(s).
- (q) Water quality monitoring must be conducted by an appropriately Qualified Professional or a designate (in writing) Environmental Monitor on every day in which instream works are being conducted. Measurements must be taken upstream of any works taking place and within the extent of the sedimentation downstream of where instream work is actively occurring. Measurements are to be taken immediately prior to works beginning, and then at regular intervals until the works are completed and may require additional frequency during wet weather conditions. Wet weather conditions will be defined as being equal to or greater than 25 millimetres of rainfall within a 24-hour period.
- (r) Vegetation along the banks of the stream shall be disturbed as little as possible. All disturbed areas must be restored using native vegetation that is suitable for the site conditions.
- (s) All excavated material and debris shall be removed from the site or placed in a stable area above the high-water mark of the stream. Mitigative measures must be applied to protect the excavated material and debris from erosion and reintroduction into the watercourse. These measures may include covering the material with erosion blankets, seeding and planting with native vegetation, or as otherwise directed by a Qualified Professional.
- (t) The bypass flow rate at the dam must be measured and recorded before works commence. If water is being released past the dam, this bypass flow rate must be maintained during maintenance. If the proposed works would create a bypass flow rate less than the flow rate recorded before works commenced, the lower bypass flow rate must be approved in writing by the Water Manager. If no flow is being released past the dam (other than seepage), this is to be recorded.
 - i. A Section 10 Use Approval is independently operated from the dam. The works authorized under the Use Approval may be used to provide bypass flow during the dam upgrades.

- (u) The holder of this Approval must provide a detailed post-construction report within 60 days of completion of the works. The report must be labelled with this Approval file number and labelled in the subject line of the email and submitted to SouthCoastWSAReporting@gov.bc.ca.

That report shall include a signed statement from the Qualified Professional summarizing: the in-stream works undertaken, the timing of those works, the total in-stream area directly affected, the frequency of monitoring; the turbidity reporting and accompanying data along with a description of any levels higher than the authorization and what immediate steps were taken (if applicable), representative site photographs; whether or not they observed or were otherwise aware of any non-compliance with the terms and conditions of this Approval; and a description of any environmental incidents, non-compliance or other difficulties, and how these were addressed and reported.

A handwritten signature in black ink that reads "James Davies". The signature is written in a cursive, flowing style.

James Davies
Assistant Water Manager
June 21, 2023



June 21, 2023

Job Number: 124920
vFCBC Tracking Number: 100412036

Sunshine Coast Regional District
1975 FIELD ROAD
SECHELT BC V0N 3A1

Dear Sunshine Coast Regional District,

Change Approval - Changes In and About a Stream (File 2010356)

A Change Approval for the above application has been granted and a *Water Sustainability Act* Section 11(1) Changes In and About a Stream Approval document verifying this is attached.

The Change Approval does not authorize entry onto private or Crown Owned land. Permission of the affected landowner must be obtained and should be in writing for your protection.

This Approval does not constitute authority of any other agency. The holder of this approval shall have the necessary permits from other agencies concerned prior to the commencement of the works authorized herein. The permit holder is required to adhere to all other applicable Provincial and Federal Regulations.

A copy of this Approval (and associated plans/drawings listed on this Approval) must be available for inspection, upon request, at any location where the authorized changes in and about a stream are being undertaken.

This Approval does not authorize the alteration or removal of any works held under a water license.

The holder of this Approval shall take reasonable care to avoid damaging any land, works, trees, or other property and shall make full compensation to the owners for any damage or loss resulting from the exercise of rights granted hereunder.

Please ensure that machinery is free of invasive plant material that could potentially be transported throughout or between sites. In addition, ensure that invasive species removed from a site are disposed of appropriately.

This Approval requires the oversight of an appropriately Qualified Professional. For the purposes of this authorization, that professional must be registered with one of the five professional regulatory bodies named under the Professional Governance Act of British Columbia. They must be in good standing and acting under that professional regulatory body's code of ethics and subject to disciplinary action by that professional regulatory body.

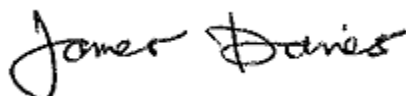
The holder of this Approval shall ensure that any proposed development and/or changes do not impact traditional or special sites in accordance with the *Heritage Conservation Act* or the ability of First Nation community members to participate in traditional activities on the land and water.

Archaeological sites (both recorded and unrecorded) are protected under the *Heritage Conservation Act* and must not be altered or damaged without a permit from the Archaeology Branch. The holder of this approval must advise everyone who will be involved in ground-disturbance and construction that if archaeological materials are encountered, activities must be halted, and the Archaeology Branch contacted at 250-953-3334 for direction.

Section 105 of the Water Sustainability Act gives the recipient of this notice the right to appeal my decision. You may file an appeal within 30 days of the date indicated on this letter. Information on filing an appeal can be found on the Environmental Appeal Board website at <http://www.eab.gov.bc.ca>

If you have any questions or concerns regarding the document issued or the content of this letter, please contact the South Coast Office at WaterActReferrals.LowerMainland@gov.bc.ca.

Sincerely,



James Davies
Assistant Water Manager

Pc: Binod Acharya, Dam Safety Officer, Ministry of Forests – Surrey,
Binod.Acharya@gov.bc.ca
Shíshálh First Nation

Enclosure(s)



Province of British Columbia

Water Sustainability Act

Approval

Section 11(1) and 11(2)– Changes In and About a Stream Approval

Job Number: 124920

File Number: 2010356

VFCBC Tracking Number: 100412036

SUNSHINE COAST REGIONAL DISTRICT

is hereby authorized to make changes in and about a stream as follows:

- (a) The name of the stream is Unnamed Tributary, and the Reservoir is Edwards Lake, North of Sechelt, herein referred to as “the stream”.
- (b) The following improvements are to be made to authorized works under water licence C069966.
- (c) The changes to be made in and about the stream are:
 - 1. Replacement/modifications to steel walkways.
 - 2. Installation of debris booms.
 - 3. Replacement/modifications to stoplog lifters and low-level outlets.
 - 4. Installation of signage and staff gauges; and,
 - 5. Dam breach analyses.
- (d) All works shall occur within Tetrahedron Provincial Park under Parks Use Permit #102714.
- (e) All works shall comply with the following documents and any minor changes hereafter. Any major changes to the design must be submitted to the Water Manager for written approval.
 - 1. “Environmental Impact Assessment (EIA) Upgrades to Chapman Lake and Edwards Lake Reinforced Concrete Lake Dams”, prepared by WSP Canada, Dated August 16, 2022.
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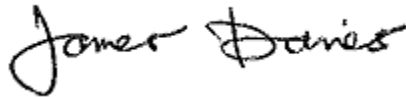
- (f) The dam upgrade works shall be carried out as specified in report “Upgrades to Chapman Lake, Edwards Lake & McNeil Lake Dams Design Report” April 05, 2023 prepared by WSP. Any significant departure from the submitted plans and specifications will be reported to the Dam Safety Officer prior to those alterations occurring. All changes will be noted on the as-built or record drawings;
1. The Dam Safety Officer shall be notified 10 business days prior to the beginning of construction and provided with a construction schedule.
 2. Within 30 days of completion of the project, the Project Engineer is required to submit a report on the work and the manner in which the work was performed including photographs of key construction elements and as-built plans; and,
 3. The Operation, Maintenance and Surveillance (OMS) Manual and Dam Emergency Plan (DEP) shall be revised and submitted to Dam Safety Officer within 30 days of completion of the project.
- (g) Work in the stream and stream channel shall occur only during the period of August 1st to October 31st, so that fisheries interests are protected.
- (h) All work shall be carried out in accordance with the Provincial “Requirements and Best Practices for Making Changes In and About a Stream in B.C.” (2022). The provincial guidance document can be found at the following link:
<https://www2.gov.bc.ca/assets/gov/environment/air-land-water/water/working-around-water/wsa-cias-requirements-bmps.pdf>.
- (i) The works shall be completed on or before October 31, 2024.
- (j) The holder of this Approval must hire an appropriately Qualified Professional to conduct Environmental Monitoring on all in-stream works authorized under this Approval. The Qualified Professional is responsible for observing the methods of construction and preparing information and reports on the compliance of the construction activities. The Qualified Professional shall:
1. Ensure all best management practices and mitigation measures are in place to avoid and minimize environmental impact on the land and on fish and fish habitat of the stream.
 2. Where applicable, assist in the isolation of the stream prior to the commencement of works.
 3. Implement and ensure erosion and sediment control measures are constructed, installed, and maintained appropriately for the full duration of instream works.
 4. Supervise all instream works authorized under this Approval.
 5. Be granted authority to stop the work authorized under this Approval if deemed necessary to address risks to the environment. The Qualified Professional or their designate (specified in writing) must be on site during all phases of construction in and around the stream to ensure this component is upheld.
 6. Report any spills including detailed information such as time of day, staff involved, nature, cause, and degree of spill, recovery process deployed, and agencies notified.

7. In the event of an environmental incident or non-compliance with any of the terms or conditions of this Approval, an appropriately Qualified Professional must immediately mitigate the situation. Within 48 hours, each incident must be reported to the Water Manager at SouthCoastWSAReporting@gov.bc.ca with the approval number in the subject line. The incident report shall describe mitigation measures employed and a rationale as to why works have resumed, or the next steps required before works may resume. The holder of this approval must follow the advice of the appropriately Qualified Professional.
 8. When the works involve temporary diversions to isolate the work site,
 - i. Monitor all diversion works daily to ensure pumps & flow bypasses are in proper working condition;
 - ii. Ensure diversion works that include pump intakes be screened for fish and aquatic species in accordance with the “Interim code of practice: End-of-pipe fish protection screens for small water intakes in freshwater” (Fisheries and Oceans Canada, 2020); and
 - iii. Ensure fish are prevented from entering the works.
 9. When the works involve dewatering or isolation of flow and the stream is known or suspected to contain fish and/or amphibians,
 - i. Attend the site prior to conducting any instream works to complete fish and wildlife search and salvage(s);
 - ii. Obtain any permits needed prior to undertaking the salvage(s); and
 - iii. Inspect the extraction area for fish stranding at least once after water levels have declined.
- (k) Upon commencement of the project, the work shall be pursued to completion as quickly as possible.
- (l) Work must be carried out during favourable weather and low flow.
- (m) All equipment and machinery used in or near the stream channel:
1. Must be in good operating condition and free of leaks, excess oil and grease;
 2. Must have a spill containment kit readily accessible on-site; All staff must be trained in handling and applying a spill kit appropriately to any spills/incidents;
 3. Refueling must occur a minimum of 30 metres away from all streams; and
 4. Any spill of a substance that is toxic, polluting, or deleterious to aquatic life of reportable quantities must be reported to the Dangerous Goods Incident Report 24-hour phone line at 1-800-663-3456. This Approval does not authorize the alteration or removal of any works held under a water licence.
 5. Any spill of a substance that is toxic, polluting, or deleterious to aquatic life of reportable quantities must be reported to the Dangerous Goods Incident Report 24-hour phone line at 1-800-663-3456.
- (n) All temporary works (including a ford, stream crossing, flow bypass, and erosion and sediment control measures) shall be removed on completion of the project, and the stream channel restored to its natural condition.

- (o) Sediment and Erosion Control measures to prevent the release of silt, sediment or sediment-laden water must be in place before starting works that may result in sediment mobilization, where possible. Care shall be exercised during all phases of the work to prevent the release of silt, sediment, sediment-laden water, raw concrete, concrete leachate or any deleterious substances. All control measures must meet or surpass the Requirements and Best Management Practices for Making Changes In and About a Stream in British Columbia (2022). and the "Land Development Guidelines for the Protection of Aquatic Habitat" (Fisheries and Oceans Canada and the British Columbia, 1993).
- (p) Discharge and runoff water from the site into any watercourse(s) must comply with the BC Approved Water Quality Guidelines for the protection of Aquatic Life (<https://www2.gov.bc.ca/gov/content/environment/air-land-water/water/water-quality/water-quality-guidelines/approved-water-quality-guidelines>) and/or the applicable Local Government Bylaw(s).
- (q) Water quality monitoring must be conducted by an appropriately Qualified Professional or a designate (in writing) Environmental Monitor on every day in which instream works are being conducted. Measurements must be taken upstream of any works taking place and within the extent of the sedimentation downstream of where instream work is actively occurring. Measurements are to be taken immediately prior to works beginning, and then at regular intervals until the works are completed and may require additional frequency during wet weather conditions. Wet weather conditions will be defined as being equal to or greater than 25 millimetres of rainfall within a 24-hour period.
- (r) Vegetation along the banks of the stream shall be disturbed as little as possible. All disturbed areas must be restored using native vegetation that is suitable for the site conditions.
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- (t) The bypass flow rate at the dam must be measured and recorded before works commence. If water is being released past the dam, this bypass flow rate must be maintained during maintenance. If the proposed works would create a bypass flow rate less than the flow rate recorded before works commenced, the lower bypass flow rate must be approved in writing by the Water Manager. If no flow is being released past the dam (other than seepage), this is to be recorded.
 - i. A Section 10 Use Approval is independently operated from the dam. The works authorized under the Use Approval may be used to provide bypass flow during the dam upgrades.

- (u) The holder of this Approval must provide a detailed post-construction report within 60 days of completion of the works. The report must be labelled with this Approval file number and labelled in the subject line of the email and submitted to SouthCoastWSAReporting@gov.bc.ca.

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James Davies
Assistant Water Manager
June 21, 2023



June 21, 2023

Job Number: 124893
vFCBC Tracking Number: 100392433

Sunshine Coast Regional District
1975 FIELD ROAD
SECHELT BC V0N 3A1

Dear Sunshine Coast Regional District,

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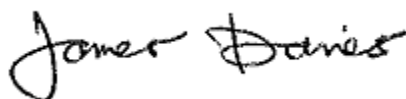
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Sincerely,



James Davies
Assistant Water Manager

pc: Shishálh First Nation
Binod Acharya, Dam Safety Officer, Ministry of Forests – Surrey, binod.acharya@gov.bc.ca

Enclosure(s)



Province of British Columbia

Water Sustainability Act

Approval

Section 11(1) and 11(2)– Changes In and About a Stream Approval

Job Number: 124893

File Number: 2010352

VFCBC Tracking Number: 100392433

SUNSHINE COAST REGIONAL DISTRICT

is hereby authorized to make changes in and about a stream as follows:

- (a) The name of the stream is Haslam Creek and the Reservoir is McNeil Lake, South of Pender Harbour, herein referred to as “the stream”.
- (b) The following improvements are to be made to works authorized under water licence C044939.
- (c) The changes to be made in and about the stream are:
 - 1. Raising the steel walkway and platform above Inflow Design Flood (IDF) level with appropriate freeboard. The existing platform will be removed, with a new platform installed on concrete columns.
 - 2. Revised access down to left bank of dam to suit new raised platform.–Replacement of handrail along right wing wall.
 - 3. Replacement of existing stoplogs with new stoplogs and associated stoplog hoist rack.
 - 4. Removal of existing low level outlet valve and replacement with new low level outlet gate, complete with beaver screen.
 - 5. Erosion protection measures at the left abutment.
 - 6. Implementation of Vegetation Control Plan to remove and control excess vegetation.
 - 7. Security gate and fencing provide at and right and left ends of platform to restrict access onto the steel walkway and platform.
 - 8. Installation of Standard Vertical Staff Gauge.
 - 9. Provide signage in accordance with BC Dam Safety Regulations.
 - 10. Undertake site investigations to confirm depth of bedrock at right abutment.
- (d) All works shall occur within PIN 7449380 District Lot 3431, Group 1, New Westminster District and PIN 7539420 District Lot 3432, Group 1, New Westminster District.

- (e) All works shall comply with the following documents and any minor changes hereafter. Any major changes to the design must be submitted to the Water Manager for written approval.
1. “Environmental Impact Assessment (EIA) McNeil Lake Dam Improvements”, prepared by WSP Canada, Dated April 19, 2022.
 2. “Construction Environmental Management Plan McNeil, Chapman & Edwards Dam Improvements”, prepared by WSP Canada, Dated June 12, 2023.
 3. Drawing package - “Engineering Services for Upgrades to McNeil Lake Reinforced Concrete Dam”, Work Order Number 211-09410-00, Prepared by WSP Canada, dated May 2, 2022.
- (f) The dam upgrade works shall be carried out as specified in report “Upgrades to Chapman Lake, Edwards Lake & McNeil Lake Dams Design Report” April 05, 2023 prepared by WSP. Any significant departure from the submitted plans and specifications will be reported to the Dam Safety Officer prior to those alterations occurring. All changes will be noted on the as-built or record drawings;
1. The Dam Safety Officer shall be notified 10 business days prior to the beginning of construction and provided with a construction schedule.
 2. Within 30 days of completion of the project, the Project Engineer is required to submit a report on the work and the manner in which the work was performed including photographs of key construction elements and as-built plans; and,
 3. The Operation, Maintenance and Surveillance (OMS) Manual and Dam Emergency Plan (DEP) shall be revised and submitted to Dam Safety Officer within 30 days of completion of the project.
- (g) Work in the stream and stream channel shall occur only during the period of August 1st to October 31st, so that fisheries interests are protected.
- (h) All work shall be carried out in accordance with the Provincial “Requirements and Best Practices for Making Changes In and About a Stream in B.C.” (2022). The provincial guidance document can be found at the following link:
<https://www2.gov.bc.ca/assets/gov/environment/air-land-water/water/working-around-water/wsa-cias-requirements-bmps.pdf>.
- (i) The works shall be completed on or before October 31, 2024.
- (j) The holder of this Approval must hire an appropriately Qualified Professional to conduct Environmental Monitoring on all in-stream works authorized under this Approval. The Qualified Professional is responsible for observing the methods of construction and preparing information and reports on the compliance of the construction activities. The Qualified Professional shall:

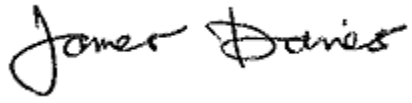
1. Ensure all best management practices and mitigation measures are in place to avoid and minimize environmental impact on the land and on fish and fish habitat of the stream.
 2. Where applicable, assist in the isolation of the stream prior to the commencement of works.
 3. Implement and ensure erosion and sediment control measures are constructed, installed, and maintained appropriately for the full duration of instream works.
 4. Supervise all instream works authorized under this Approval.
 5. Be granted authority to stop the work authorized under this Approval if deemed necessary to address risks to the environment. The Qualified Professional or their designate (specified in writing) must be on site during all phases of construction in and around the stream to ensure this component is upheld.
 6. Report any spills including detailed information such as time of day, staff involved, nature, cause, and degree of spill, recovery process deployed, and agencies notified.
 7. In the event of an environmental incident or non-compliance with any of the terms or conditions of this Approval, an appropriately Qualified Professional must immediately mitigate the situation. Within 48 hours, each incident must be reported to the Water Manager at SouthCoastWSAReporting@gov.bc.ca with the approval number in the subject line. The incident report shall describe mitigation measures employed and a rationale as to why works have resumed, or the next steps required before works may resume. The holder of this approval must follow the advice of the appropriately Qualified Professional.
 8. When the works involve temporary diversions to isolate the work site,
 - i. Monitor all diversion works daily to ensure pumps & flow bypasses are in proper working condition;
 - ii. Ensure diversion works that include pump intakes be screened for fish and aquatic species in accordance with the “Interim code of practice: End-of-pipe fish protection screens for small water intakes in freshwater” (Fisheries and Oceans Canada, 2020); and
 - iii. Ensure fish are prevented from entering the works.
 9. When the works involve dewatering or isolation of flow and the stream is known or suspected to contain fish and/or amphibians,
 - i. Attend the site prior to conducting any instream works to complete fish and wildlife search and salvage(s);
 - ii. Obtain any permits needed prior to undertaking the salvage(s); and
 - iii. Inspect the extraction area for fish stranding at least once after water levels have declined.
- (k) Upon commencement of the project, the work shall be pursued to completion as quickly as possible.
- (l) Work must be carried out during favourable weather and low flow.

- (m) All equipment and machinery used in or near the stream channel:
1. Must be in good operating condition and free of leaks, excess oil and grease;
 2. Must have a spill containment kit readily accessible on-site; All staff must be trained in handling and applying a spill kit appropriately to any spills/incidents;
 3. Refueling must occur a minimum of 30 metres away from all streams; and
 4. Any spill of a substance that is toxic, polluting, or deleterious to aquatic life of reportable quantities must be reported to the Dangerous Goods Incident Report 24-hour phone line at 1-800-663-3456. This Approval does not authorize the alteration or removal of any works held under a water licence.
 5. Any spill of a substance that is toxic, polluting, or deleterious to aquatic life of reportable quantities must be reported to the Dangerous Goods Incident Report 24-hour phone line at 1-800-663-3456.
- (n) All temporary works (including a ford, stream crossing, flow bypass, and erosion and sediment control measures) shall be removed on completion of the project, and the stream channel restored to its natural condition.
- (o) Sediment and Erosion Control measures to prevent the release of silt, sediment or sediment-laden water must be in place before starting works that may result in sediment mobilization, where possible. Care shall be exercised during all phases of the work to prevent the release of silt, sediment, sediment-laden water, raw concrete, concrete leachate or any deleterious substances. All control measures must meet or surpass the Requirements and Best Management Practices for Making Changes In and About a Stream in British Columbia (2022). and the "Land Development Guidelines for the Protection of Aquatic Habitat" (Fisheries and Oceans Canada and the British Columbia, 1993).
- (p) Discharge and runoff water from the site into any watercourse(s) must comply with the BC Approved Water Quality Guidelines for the protection of Aquatic Life (<https://www2.gov.bc.ca/gov/content/environment/air-land-water/water/water-quality/water-quality-guidelines/approved-water-quality-guidelines>) and/or the applicable Local Government Bylaw(s).
- (q) Water quality monitoring must be conducted by an appropriately Qualified Professional or a designate (in writing) Environmental Monitor on every day in which instream works are being conducted. Measurements must be taken upstream of any works taking place and within the extent of the sedimentation downstream of where instream work is actively occurring. Measurements are to be taken immediately prior to works beginning, and then at regular intervals until the works are completed and may require additional frequency during wet

weather conditions. Wet weather conditions will be defined as being equal to or greater than 25 millimetres of rainfall within a 24-hour period.

- (r) Vegetation along the banks of the stream shall be disturbed as little as possible. All disturbed areas must be restored using native vegetation that is suitable for the site conditions.
- (s) All excavated material and debris shall be removed from the site or placed in a stable area above the high-water mark of the stream. Mitigative measures must be applied to protect the excavated material and debris from erosion and reintroduction into the watercourse. These measures may include covering the material with erosion blankets, seeding and planting with native vegetation, or as otherwise directed by a Qualified Professional.
- (t) The bypass flow rate at the dam must be measured and recorded before works commence. If water is being released past the dam, this bypass flow rate must be maintained during maintenance. If the proposed works would create a bypass flow rate less than the flow rate recorded before works commenced, the lower bypass flow rate must be approved in writing by the Water Manager. If no flow is being released past the dam (other than seepage), this is to be recorded.
 - i. A minimum bypass flow rate of 0.08 cubic meters per second must be maintained in order to support downstream licences.
- (u) The holder of this Approval must notify downstream licencees (C121637, C105423, C020814) 5 days before works commence.
- (v) The holder of this Approval must provide a detailed post-construction report within 60 days of completion of the works. The report must be labelled with this Approval file number and labelled in the subject line of the email and submitted to SouthCoastWSAReporting@gov.bc.ca.

That report shall include a signed statement from the Qualified Professional summarizing: the in-stream works undertaken, the timing of those works, the total in-stream area directly affected, the frequency of monitoring; the turbidity reporting and accompanying data along with a description of any levels higher than the authorization and what immediate steps were taken (if applicable), representative site photographs; whether or not they observed or were otherwise aware of any non-compliance with the terms and conditions of this Approval; and a description of any environmental incidents, non-compliance or other difficulties, and how these were addressed and reported.

A handwritten signature in black ink that reads "James Davies". The signature is written in a cursive style with a large initial 'J' and a stylized 'D'.

James Davies
Assistant Water Manager
June 21, 2023



June 27, 2023

Approval File: 2010355

Kevin Clarkson
Sunshine Coast Regional District
1975 Field Road
Sechelt BC V0N 3A1

Sent via email: mark.visser@wsp.com

Dear Sunshine Coast Regional District

Re: Order for Change Approval 2010355

For reasons set out in an email received on June 23, 2025 from Mark Visser, WSP, the Ministry of Forests, Surface Water Authorizations, has deemed it appropriate to amend the Approval under Section 26(1) of the *Water Sustainability Act*.

This new documentation should be attached to your copy of Approval 2010355.
All other conditions of the original Approval dated June 21, 2023, still apply.

A right of appeal from my decision lies to the Environmental Appeal Board. Notice of any appeal must (1) be in writing, (2) include grounds for the appeal, (3) be directed by registered mail or personally delivered to the Chair, Environmental Appeal Board, 4th Floor, 747 Fort Street, Victoria BC V8W 9V1, (4) be delivered within 30 days from the date notice of the decision is given, and (5) be accompanied by a fee of \$ 25.00, payable to the Minister of Finance and Corporate Relations.

If you have any questions or concerns, please contact the Water Information Technician at 236 455-1638.

Yours truly,

James Davies P.Eng
Assistant Water Manager

Cc: Shíshálh First Nation
Binod Acharya, Dam Safety Officer, binod.acharya@gov.bc.ca, Ministry of Forests –
Surrey



Water Sustainability Act

O R D E R

WATER SUSTAINABILITY ACT Section 26 (1)

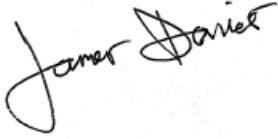
Approval File Number: 2010355

The Province of British Columbia *Water Sustainability Act* having received an amendment application for an extension of time on June 23, 2023 to allow the completion of works, and being satisfied that no person's rights will be injuriously affected, I hereby amend Clause (g) and (i) of the Approval to read as follows:

- (g) Work in the stream and stream channel shall occur only during the periods outlined below, so that the fisheries interests are protected:
1. Instream work during the reduced risk instream work window shall occur during the period of August 1 to August 31; or
 2. Based on project justification and risk, instream work outside of the reduced risk instream work window (as stated above), subject to the following:
 - i. The Environmental Monitor shall provide advice to the holder of this Approval on the timing of the work based on: the nature of the works, environmental values (including fish, amphibians, wildlife, any listed species present), water quality, channel stability, weather conditions, water levels, and any other relevant factors); and
 - ii. The Environmental Monitor shall also provide additional construction mitigation advice to the holder of this Approval, and daily or full-time supervision of all work in or near the stream; and
 - iii. Work must be timed and planned appropriately, the stream must be completely dry or have marginal flows for the duration of the construction activities; and
 - iv. The advice of the Environmental Monitor on construction timing (as per (i) above) and mitigation measures (as per (ii) above), as well as the timing of work and the presence of the Environmental Monitor, must be documented in writing. This documentation must be retained for at least 2 years following construction, and if requested by this office, provided for our review.

- (i) The works shall be completed on or before October 31, 2024.

Dated at Surrey, BC this 27th day of June, 2023.

A handwritten signature in black ink, appearing to read "James Davies". The signature is written in a cursive style with a large initial "J" and a stylized "D".

James Davies, P.Eng.
Assistant Water Manager