



Salt Spring Island Local Trust Committee

Regular Meeting Agenda

Date: Tuesday, September 6, 2022
Time: 9:30 a.m.
Location: Community Gospel Chapel
147 Vesuvius Bay Road, Salt Spring Island, BC

Pages

1. CALL TO ORDER 9:30 AM - 9:30 AM
2. APPROVAL OF AGENDA
3. PREVIOUS MEETINGS 9:30 AM - 9:35 AM
 - 3.1. Draft Minutes of the Salt Spring Island Local Trust Committee
 - 3.1.1. Draft Minutes of the August 9, 2022 SS LTC Regular Meeting 6
For Adoption
 - 3.2. Resolutions Without Meeting Report - None
 - 3.3. Advisory Planning Commission
 - 3.3.1. Advisory Planning Commission
 - 3.3.1.1. Draft Minutes of the July 28, 2022 Advisory Planning Commission Meeting 19
For Information
 - 3.3.2. Agricultural Advisory Planning Commission
 - 3.3.2.1. Notes from the July 28, 2022 Agricultural Advisory Planning Commission Meeting 22
For Information
 - 3.3.3. Ganges Village Planning Task Force - None
 - 3.3.4. Housing Action Program Task Force - None
 - 3.3.4.1. Draft Minutes of the August 4, 2022 Housing Action Program Meeting 23
For Information
 - 3.4. Local Trust Committee Public Hearing Record
 - 3.4.1. Proposed Bylaw No. 526 - Farmworker Housing 25
For Receipt

For Receipt

4.	BUSINESS ARISING FROM MINUTES	9:35 AM - 9:40 AM	
4.1.	Follow-Up Action List		38
	Report dated August 2022		
5.	COMMUNITY INFORMATION MEETING - None		
6.	PUBLIC HEARING - None		
7.	REPORTS	9:40 AM - 10:05 AM	
7.1.	Policy and Standing Resolutions List		60
	For Information		
7.2.	Work Program Top Priorities Report		71
	Report dated August 2022		
7.3.	Projects List		74
	Report dated August 2022		
7.4.	Applications with Status Report		77
	Report dated August 2022		
7.5.	Expense Report		94
	Report dated June 2022		
7.6.	Islands Trust Conservancy Board Report - None		
7.7.	Salt Spring Island Watershed Protection Alliance (SSIWPA) Coordinator's Report - None		
7.8.	Housing Action Program Task Force - Chair's Update	10:00 AM - 10:05 AM	
	Verbal Report		
8.	LOCAL TRUST COMMITTEE PROJECTS	10:05 AM - 11:05 AM	
8.1.	Proposed Bylaw No. 526 - Farmworker Housing		95
	For Consideration of 3rd Reading and forwarding to Executive Committee - Staff Report		
8.2.	Proposed Bylaw No. 530 - Accessory Dwelling Units		101

For Consideration of 3rd Reading to be put on hold - Staff Report

8.3. Lake Weston Water Availability and Climate Change Assessment

109

Staff Report

9. CLOSED MEETING - None

.....BREAK UNTIL 12:00 NOON.....

10. TRUSTEE REPORTS 12:00 PM - 12:10 PM

Verbal Report

11. CHAIR'S REPORT 12:10 PM - 12:15 PM

Verbal Report

12. CRD DIRECTOR'S REPORT 12:15 PM - 12:20 PM

Verbal Report

13. CORRESPONDENCE 12:20 PM - 12:25 PM

Please visit the Applications and Projects pages on the Islands Trust website for recent public submissions.

For Applications, go to: <http://www.islandstrust.bc.ca/SSIapplications>

For Projects, go to: <http://www.islandstrust.bc.ca/SSIprojects>

13.1. D. Bergholz to LTC - Dated July 4, 2022 - Concerning Walter Bay pollution 311

For Consideration

13.2. M. Reiss to LTC - Dated July 28, 2022 - Concerning News Release regarding Short-Term Vacation Rentals 312

For Consideration

13.3. K. Olsson to LTC - Dated August 4, 2022 - Concerning Speculation and Vacancy Tax 313

For Consideration

13.4. R. Schnurr to LTC - Dated August 5, 2022 - Concerning Piers Island Association support request for fibre optic internet service 314

For Consideration

13.5. T. Faurot to LTC - Dated August 5, 2022 - Concerning Rogers/CREST Cell Tower on Channel Ridge 315

For Consideration

13.6. T. Lowry to LTC - Dated August 5, 2022 - Concerning 5G 316

For Information

13.7. D. Wick to LTC - Dated August 8, 2022 - Concerning 154 Kings Lane, SSI 317

For Information

13.8. Capital Regional District to LTC - Dated August 8, 2022 - Concerning Information regarding the Rainbow Recreation Centre Site Master Plan 318

For Information

13.9. M. Krenz to LTC - Dated August 10, 2022 - Concerning Rogers/CREST Cell Tower on Channel Ridge 354

For Information

13.10. O. McQuat to ISED, LTC et al - Dated August 11, 2022 - Concerning Rogers/CREST Cell Tower on Channel Ridge 355

For Information

13.11. J. Clark to LTC - Dated August 20, 2022 - Concerning Rogers/CREST Cell Tower on Channel Ridge 365

For Consideration

13.12. C. Coe to LTC - Dated August 20, 2022 - Concerning Vortex Decision 368

For Information

14. DELEGATIONS 12:25 PM - 12:30 PM

14.1. Representative of the Summerside Townhomes (107 Atkins Road, SSI) - Concerning the new development within the townhouse strata 370

15. TOWN HALL AND QUESTIONS 12:30 PM - 12:45 PM

Reminder, the Public Hearing for:

- Proposed Bylaw No. 526 (Farmworker Housing) closed on August 18, 2022;
- Proposed Bylaw No. 530 (Accessory Dwelling Units) closed on August 18, 2022.

Per Meeting Procedure Bylaw No. 529, the Local Trust Committee must not permit a delegation to address a meeting of the Committee regarding a bylaw in respect of which a public hearing has been held.

16. APPLICATIONS AND REFERRALS 12:45 PM - 1:15 PM

16.1. SS-RZ-2021.3 - T. Chapman - 361 Sunset Drive, SSI 376

Application to amend Official Community Plan from Channel Ridge Residential

to Residential Neighbourhoods, and Land Use Bylaw from Residential 6 (a) to Residential 8 - Staff Report

17. OTHER BUSINESS 1:15 PM - 2:15 PM

17.1. New Business

- 17.1.1. North Pender Island Local Trust Committee Referral of Proposed Bylaw Nos. 223, 224 & 229 471
Staff Report

18. UPCOMING MEETINGS

The next regular meeting of the Salt Spring Island Local Trust Committee is scheduled for 9:30 a.m. on October 11, 2022 at the Community Gospel Chapel, 147 Vesuvius Bay Road, Salt Spring Island.

19. ADJOURNMENT



Salt Spring Island Local Trust Committee Minutes of Regular Meeting

Date: Tuesday, August 9, 2022

Location: Community Gospel Chapel
147 Vesuvius Bay Road, Salt Spring Island

Members Present: Peter Luckham, Chair
Peter Grove, Local Trustee
Laura Patrick, Local Trustee

Staff Present: David Marlor, Acting Director Local Planning Services – via Zoom
Louisa Garbo, Acting Regional Planning Manager (RPM)
Jason Youmans, Island Planner
Phil Testemale, Planner 2 – via Zoom
Rob Pingle, Recorder

Others Present: Gulf Islands Driftwood Reporter
Rhonan Heitzman, Housing Action Program Task Force Chair
Gary Holman, Capital Regional District (CRD) Salt Spring Island Electoral Area Director
Approximately 69 members of the public

These minutes follow the order of the agenda although the sequence may have varied.

1. CALL TO ORDER

Chair Luckham called the meeting to order at 9:31 a.m. and welcomed everyone to a meeting of the Salt Spring Island Local Trust Committee. He introduced himself, the Trustees and staff and humbly stated gratitude to live and work in Coast Salish First Nations treaty and traditional territory.

2. APPROVAL OF AGENDA

Proposed Bylaw No. 530 – Accessory Dwelling Units was requested for addition as item 8.3.

By general consent, the agenda was adopted as amended.

3. PREVIOUS MEETINGS

3.1. Draft Minutes of the Salt Spring Island Local Trust Committee

3.1.1. Draft Minutes of the July 12, 2022 SSI LTC Regular Meeting

By general consent, the minutes of July 12, 2022 Salt Spring Island Local Trust Committee Regular meeting were adopted.

3.1.2. Draft Minutes of the July 7, 2022 SSI LTC Special Meeting

By general consent, the minutes of July 7, 2022 Salt Spring Island Local Trust Committee Special meeting were adopted.

3.2. Resolutions Without Meeting Report - None

3.3. Draft Minutes of the Advisory Planning Commissions

3.3.1. Advisory Planning Commission - None

3.3.2. Agricultural Advisory Planning Commission - None

3.3.3. Ganges Village Area Planning Task Force - None

3.3.4. Housing Action Program Task Force

3.3.4.1. Draft Minutes of the July 7, 2022 Housing Action Program Task Force Meeting

The minutes were received.

3.4. Salt Spring Island Local Trust Committee Public Hearing Record - None

4. BUSINESS ARISING FROM MINUTES

4.1. Follow Up Action List dated July 2022

The report was received.

The issue of public signage for rezoning and major developments was discussed.

5. COMMUNITY INFORMATION MEETING – None

6. PUBLIC HEARING – None

7. REPORTS

7.1. Policy and Standing Resolutions List

The report was received.

7.2. Work Program Top Priorities Report dated July 2022

The report was received.

7.3. Projects List dated July 2022

The report was received.

7.4. Applications with Status Report dated July 2022

The report was received.

There was discussion regarding an ALR application and the progress on an issued Development Permit.

7.5. Expense Report - None

7.6. Islands Trust Conservancy Board Report - None

7.7. Salt Spring Island Watershed Protection Alliance (SSIWPA) Coordinator's Report – None

The meeting recessed at 9:50 a.m.

Housing Action Program Task Force Chair Heitzman arrived at 9:55 a.m.

Acting RPM Garbo arrived at 10:00 a.m.

The meeting reconvened at 10:00 a.m.

7.8. Housing Action Program Task Force - Chair's Update

Chair Heitzman provided an update regarding the Task Force meeting schedule which will pause during the election period. He spoke to the update of the matrix and the report that is being planned by the Task Force. There was a request to hold one last meeting before the pause to allow for discussion and hopefully adopt the matrix report. He spoke to the challenge of sharing the work the Task Force has done due to the design of the Island Trust website. There was a request to remove the specific restriction of tiny homes from Proposed Bylaw No. 530.

Housing Action Program Task Force Chair Heitzman left the meeting at 10:16 a.m.

8. LOCAL TRUST COMMITTEE PROJECTS

8.1. Budget Business Case for Salt Spring LTC Projects

Acting RPM Garbo presented the staff report dated August 9, 2022 concerning the Budget Business Cases for Salt Spring LTC Projects.

There was discussion regarding inclusion of a review of the Land Use Bylaw, the assurance that First Nations are included in these processes, and the small size of the budget requested.

SS-2022-119

It was MOVED and SECONDED,

That the Salt Spring Island Local Trust Committee amend the Business Case for the major amendment to the Salt Spring Island Local Trust Committee Official Community Plan shown in Appendix 1 of the staff report dated August 9, 2022 by increasing the projected budget by \$100,000 to include technical analysis and collaboration, and include the review of the Salt Spring Island Local Trust Committee Land Use Bylaw in the title of the project.

CARRIED

SS-2022-120

It was MOVED and SECONDED,

That the Salt Spring Island Local Trust Committee endorse the Business Case for the major amendment to the Salt Spring Island Local Trust Committee Official Community Plan and Land Use Bylaw shown in Appendix 1 of the staff report dated August 9, 2022 as amended and forward it to the Islands Trust Financial Planning Committee for consideration of inclusion in the 2023-2024 Islands Trust budget.

CARRIED

SS-2022-121

It was MOVED and SECONDED,

That the Salt Spring Island Local Trust Committee endorse the Business Case for the Ganges (Shiya'hwt/SYOW T) Village Area Plan shown in Appendix 2 of the staff report dated August 9, 2022 and forward it to the Islands Trust Financial Planning Committee for consideration of inclusion in the 2023-2024 Islands Trust budget.

CARRIED

SS-2022-122

It was MOVED and SECONDED,

That the Salt Spring Island Local Trust Committee request the Executive Committee follow up with the Minister of Municipal Affairs on his expressed interests for the Ganges (Shiya'hwt/SYOW T) Village Area Plan as a pilot for cooperative planning with First Nations.

CARRIED

SS-2022-123

It was MOVED and SECONDED,

That the Salt Spring Island Local Trust Committee request staff to report back on options to facilitate the development of a new protocol agreement or a memo of understanding between the Local Trust Committee and the Capital Regional District to facilitate improved cooperation on local and regional planning issues.

CARRIED

8.2. SSIWPA Special Property Tax Requisition Business Case

Planner Youmans presented the staff report dated August 9, 2022 regarding the SSIWPA special property tax requisition business case.

There was discussion regarding the strategic planning that SSIWPA is engaged in.

SS-2022-124

It was MOVED and SECONDED,

That the Salt Spring Island Local Trust Committee endorse the SSIWPA special property tax requisition business case attached to the staff report of July 27, 2022 and forward it to Islands Trust Financial Planning Committee for inclusion in the draft 2023/24 Islands Trust budget.

CARRIED

8.3. Proposed Bylaw No. 530 – Accessory Dwelling Units

There was discussion regarding the ability to cap the number of units created per year.

Acting Director Local Planning Services Marlor joined the meeting at 11:14 a.m.

It was noted that including a cap could impact the bylaw adoption process as it would be considered a significant change.

9. CLOSED MEETING

9.1. Motion to Close the Meeting

SS-2022-125

At 11:17 a.m., **it was MOVED and SECONDED**, that the Salt Spring Island Local Trust Committee close this meeting to the public subject to Community Charter Section 90 (1)

- (i) the receipt of advice that is subject to solicitor-client privilege, including communications necessary for that purpose; and that staff be invited to remain.

9.2. Motion to Open the Meeting

SS-2022-126

At 11:36 a.m., **it was MOVED and SECONDED**, that the Salt Spring Island Local Trust Committee re-open this meeting to the public subject to Section 89 of the Community Charter.

The meeting recessed for a lunch break at 11:37 a.m.

CRD Director Holman joined the meeting at 11:55 a.m.

The meeting reconvened at 12:00 p.m.

9.3. Rise and Report

That the Salt Spring Island Local Trust Committee request the Executive Committee to create an open letter for public distribution in relation to Mr. Clark's request regarding the Innovation, Science and Economic Development Canada decision on the Channel Ridge radio communication tower application.

10. TRUSTEE REPORTS

Trustee Patrick presented the following report:

- Spoke to the last update of the Salt Spring Island Official Community Plan and the links between the natural and human environments.
- Spoke to the discussion of doughnut economics.
- Spoke to the previous reports that support the Proposed Bylaw No. 530.
- Spoke to the other regions that are using similar tools as included in the Proposed Bylaw No. 530.

Trustee Grove presented the following report:

- Spoke to his discussions with the public regarding Proposed Bylaw No. 530 – Accessory Dwelling Units, The Vortex applications, as well as the Channel Ridge communication tower.

11. CHAIR'S REPORT

Chair Luckham presented the following report:

- Spoke to the next phase of the Policy Statement amendment work he is participating in with a new draft to be presented.
- Spoke to preparations for the 2023 budget, the next Trust Council meeting in September and the upcoming election.
- Spoke to the hiring of the new Director of Local Planning Services Stefan Cermak.

12. CRD DIRECTOR'S REPORT

Director Holman presented the following report:

- Spoke to the Bylaw for the Local Community Commission for Salt Spring Island.
- Spoke to the Capital Regional Hospital District's further funding of the Lady Minto Emergency Room expansion.
- Spoke to the grant received from CleanBC for support of the composting facility being established at the Farmland Trust property in Burgoyne.
- Spoke to the number of electric vehicles owned by Salt Spring Island residents and the work to have Level 2 charging stations within the CRD and especially on the island.
- Spoke to the consideration of the Fulford Water District for the inclusion of The Vortex development.
- Spoke to the Dragonfly Affordable Housing project's work with the CRD to create a water district to supply water to the project.
- Spoke to the Speculation and Vacancy Tax and the lack of inclusion of Salt Spring Island within it.
- Spoke to the Short-Term Vacation Rental licence issue and the need for it to be aligned with the Salt Spring Official Community Plan as well as the need for the Province to decide who has the authority to issue them.

13. CORRESPONDENCE

13.1. P. Faurot to LTC - Dated July 4, 2022 - Concerning Rogers/CREST Cell Tower on Channel Ridge

The correspondence item was received.

13.2. L. Steiner et al to LTC - Dated July 6, 2022 - Concerning ISED Letter to SS LTC dated May 17, 2022

The correspondence item was received.

13.3. O. McOuat to LTC - Dated July 8, 2022 - Concerning Rogers Cell Tower in Channel Ridge

The correspondence item was received.

13.4. J. and Dr. D. Schuldhaus to LTC - Dated July 14, 2022 - Concerning Rogers Cell Tower in Channel Ridge

The correspondence item was received.

13.5. P. Luckham, Chair of the Salt Spring Island Local Trust Committee to M. Krenz, Rogers Communications Inc., Dated July 20, 2022 – Concerning Wireless Telecommunication Site at Channel Ridge

The correspondence item was received.

13.6. K. Baillie, Development Manager, BC Housing, Dated July 25, 2022 - Concerning Temporary Housing at 154 Kings Lane

The correspondence item was received.

14. DELEGATIONS

14.1. M. Leichter on behalf of F. Atorp - Concerning Water Pollution

Spoke to the presentation submitted and that the changes proposed by the applicant for the meeting today does not reduce the issues raised.

14.2. A. Parkinson - "The Vortex"

Spoke to her credentials and the presentation submitted.

14.3. K. Maser on behalf of Nature SaltSpring - "The Vortex"

Spoke to the presentation submitted by Nature SaltSpring member Peter B. McAllister.

14.4. B. Gooch on behalf of E. Poole - "The Vortex"

Spoke to the presentation submitted.

15. TOWN HALL AND QUESTIONS

Chair Luckham opened the Town Hall at 12:58 p.m.

A member of the public expressed concern about The Vortex proposal on behalf of Transition Salt Spring noting the misalignment of the Land Use Bylaw with the Official Community Plan and the lack of reflection of the Islands Trust climate emergency declaration within these documents.

A member of the public expressed concern about the Rogers Tower at Channel Ridge.

A member of the public expressed concern about The Vortex proposal.

A member of the public encouraged local governments to advocate for changes to the Residential Tenancy Act to improve protections for landlords as a way to address the affordable housing issue.

Nine members of the public expressed concern about The Vortex proposal.

A member of the public expressed their concerns about The Vortex proposal and concerns shared with them from two other members of the public.

Two members of the public expressed concern about the Rogers Tower development at Channel Ridge.

A member of the public expressed concern about The Vortex proposal.

CRD Director Holman left the meeting at 1:40 p.m.

Planner Testemale joined the meeting at 1:40 p.m.

The meeting recessed at 1:54 p.m. and reconvened at 1:59 p.m.

16. APPLICATIONS AND REFERRALS

16.1. SS-DVP-2021.24 - J. Verville, Kirsten Reite Architecture - 2661 and 2621 Fulford-Ganges Road, SSI (The Vortex)

This item was addressed under item 16.2.1.

16.2. SS-DP-2018.14 - J. Verville, Kirsten Reite Architecture - 2661 and 2621 Fulford-Ganges Road, SSI (The Vortex)

This item was addressed under item 16.2.1.

16.2.1. SS-DP-2018.14 & SS-DVP-2021.24 - J. Verville, Kirsten Reite Architecture - 2661 and 2621 Fulford-Ganges Road, SSI (The Vortex)

Planner Youmans presented the staff reports dated August 9, 2022.

SS-2022-129

It was MOVED and SECONDED,

That the Salt Spring Island Local Trust Committee amend proposed Development Variance Permit SS-DVP-2021.24 to remove clause 3.3, clause 4, Schedule No. 3 and Schedule No. 4, make consequential numbering alterations to affect this change, and issue the permit as amended (2661 and 2621 Fulford-Ganges Road).

CARRIED

Planner Youmans continued the presentation of the staff reports dated August 9, 2022.

Applicant D. Fullbrook provided a presentation on the proposed development.

The item was deferred to later in the meeting to allow Planner Youmans to craft amendments to the Development Permit.

The meeting recessed at 3:56 p.m. and reconvened at 4:42 p.m.

Director Marlor informed Trustees and staff that the Development Permit can be set by the Salt Spring Island Local Trust Committee for longer than two years.

There was discussion about the applicant providing an irrevocable letter of credit to address the security deposits requested in the permit. There was discussion about how to delay the receipt of the security deposit.

SS-2022-131

It was MOVED and SECONDED,

That the Salt Spring Island Local Trust Committee replace Section 3.4.2.1 of proposed Development Permit SS-DP-2018.14 as follows:

- Before issuance of any building permits pursuant to this project the applicant must provide an irrevocable letter of credit or a security deposit to the Islands Trust in the amount of \$442,500 (2661 and 2621 Fulford-Ganges Road).

CARRIED

SS-2022-132**It was MOVED and SECONDED,**

That the Salt Spring Island Local Trust Committee amend Section 3.9 of proposed Development Permit SS-DP-2018.14 as follows:

- By amending clause 3.9.1 to replace “on pages 3 and 5 of Schedule No. 8” with “in Schedule No. 8.”; and
- By inserting new clause 3.9.2:

A qualified professional must develop, and provide to Islands Trust staff, prior to system operation commencing, a metering and monitoring plan that enables on-going evaluation of the sewage disposal system performance and receiving environment condition. It should address:

 - A baseline assessment of the receiving environment undertaken prior to development commencing;
 - Daily discharge flow from the system;
 - Treatment system performance measuring effluent quality objectives;
 - Environmental performance of its receiving environment in accordance with performance standards in Schedule No. 8; and
- By inserting new clause 3.9.3:

A qualified professional must meter and monitor the sewage disposal system in accordance with the plan approved in 3.9.2 above, and provide Islands Trust with a report on system performance relative to the objectives identified in Schedule No. 8. This report must be provided annually for the first five years once the system is brought into service, and be available in perpetuity at Islands Trust’s request throughout the lifetime of the development. Monitoring requirements may be adjusted to reflect the results of the on-going evaluation. Adjustments in the monitoring program must be described in the annual report; and
- By renumbering existing clause 3.9.2 to become 3.9.4; and
- By inserting new clause 3.9.5:

Upon completion of detailed sewage system design as described in Schedule No. 8, the owner will submit to Islands Trust, at the owner’s cost; and
- By inserting new clause 3.9.5.1:

Confirmation from a qualified hydrogeologist that upon system operation, including any relief and interception drainage, pre- and post-development groundwater flows to Fulford and Soule Creeks will remain constant (2661 and 2621 Fulford-Ganges Road).

CARRIED

SS-2022-133**It was MOVED and SECONDED,**

That the Salt Spring Island Local Trust Committee amend proposed Development Permit SS-DP-2018.14 as follows:

- by adding clause 3.13 Development Permit Term:

If the development described in this development permit is not commenced within three years of the issuance of the permit this permit automatically lapses (2661 and 2621 Fulford-Ganges Road).

CARRIED

SS-2022-134

It was MOVED and SECONDED,

That the Salt Spring Island Local Trust Committee amend proposed Development Permit SS-DP-2018.14 as follows:

- by adding new clause 3.11.5.1
Before issuance of any building permits pursuant to this project the applicant must provide an irrevocable letter of credit or a security deposit in the amount of \$5,000 to undertake emergency stream protection works in the vicinity of Soule Creek to be held and deployed in accordance with permit clause 3.11.5; and
- by adding new clause 3.10.4.1
Before issuance of any building permits pursuant to this project the applicant must provide an irrevocable letter of credit or a security deposit in the amount of \$5,000 to undertake emergency stream protection works in the vicinity of Fulford Creek to be held and deployed in accordance with permit clause 3.10.4; and
- by renumbering so accordingly (2661 and 2621 Fulford-Ganges Road).

CARRIED

SS-2022-135

It was MOVED and SECONDED,

That the Salt Spring Island Local Trust Committee issue Development Permit SS-DP-2018.14 as amended upon satisfaction of the following conditions:

- 1) That the sewage disposal system site plan in Schedule No. 8 be replaced with the sewage system disposal system site plan shown in Appendix No. 1 of the staff report dated August 8, 2022;
- 2) That despite all references otherwise within the schedules to Development Permit SS-DP-2018.14, the sewage disposal field at 2661 Fulford Ganges Road will be sited in accordance with Appendix 1 of the staff report dated August 8, 2022;
- 3) That prior to permit issuance, and within 60 days of this resolution, the applicant must submit for Salt Spring Local Trust Committee approval, a revised landscaping plan consistent with Sections E.2.4 and E.2.8 of Development Permit Area 2 to replace Schedule No. 4 in Development Permit SS-DP-2018.14 and reflecting the relocated sewage disposal field (2661 and 2621 Fulford-Ganges Road).

CARRIED

SS-2022-136

It was MOVED and SECONDED,

That the Salt Spring Island Local Trust Committee encourages the proponent to consider establishing a local advisory group to provide local knowledge on environmental issues related to the design, construction and operation of the project (2661 and 2621 Fulford-Ganges Road).

CARRIED

SS-2022-137

It was MOVED and SECONDED,

That the Salt Spring Island Local Trust Committee recognizes the proponent's commitment to maintaining an ongoing working relationship with the Tsawout First Nation in regard to further development related approvals, design, construction and operation (reference to the July 27, 2022 letter from Casey Dick-Wyatt, Lands Manager, Tsawout First Nation) (2661 and 2621 Fulford-Ganges Road).

CARRIED

SS-2022-138

It was MOVED and SECONDED,

That the Salt Spring Island Local Trust Committee request staff work with Capital Regional District staff and the Fulford Water Service Commission to identify community planning opportunities that could be linked to any potential future expansion of the Fulford Water Local Service Area and report back to the Salt Spring Local Trust Committee (2661 and 2621 Fulford-Ganges Road).

CARRIED

16.3. SS-DP-2022.4 - M. Sawchuk - 234 Tripp Road, SSI

This item was advanced for discussion before items 16.1 and 16.2

Planner Testemale presented a staff report dated August 9, 2022.

Applicant M. Sawchuk spoke in concurrence with the recommendation by staff.

SS-2022-127

It was MOVED and SECONDED,

That the Salt Spring Island Local Trust Committee approves issuance of Development Permit SS-DP-2022.4 (234 Tripp Road).

CARRIED

SS-2022-128

It was MOVED and SECONDED,

That the Salt Spring Island Local Trust Committee add a review of impacts of future lake levels of St Mary's lake to the Land Use Bylaw projects list (234 Tripp Road).

CARRIED

Planner Testemale left the meeting at 1:54 p.m.

16.4. SS-RZ-2021.3 - T. Chapman - 361 Sunset Drive, SSI

This item was deferred by the Salt Spring Island Local Trust Committee to a future date at the request of the applicant before the start of the meeting.

16.5. SS-TUP-2022.2 - Islands Trust - 1 - 500 Lower Ganges Road, SSI

Acting RPM Garbo presented a staff report dated August 9, 2022.

SS-2022-130

It was MOVED and SECONDED,

That the Salt Spring Island Local Trust Committee approve issuance of Temporary Use Permit (TUP) SS-TUP-2022.2 (1 – 500 Lower Ganges Road).

CARRIED

17. OTHER BUSINESS – None

18. UPCOMING MEETINGS

The next regular meeting of the Salt Spring Island Local Trust Committee is scheduled for 9:30 a.m. on Tuesday, September 6, 2022 at the Community Gospel Chapel, 147 Vesuvius Bay Road, Salt Spring Island.

The public hearing for Proposed Bylaw No. 526 (Farmworker Housing) is scheduled for 11 a.m. on Thursday, August 18, 2022 at the Harbour House Hotel (Crofton Room), 121 Upper Ganges Road, Salt Spring Island.

The public hearing for Proposed Bylaw No. 530 (Accessory Dwelling Units) is scheduled for 4 p.m. on Thursday, August 18, 2022 at the Harbour House Hotel (Crofton Room), 121 Upper Ganges Road, Salt Spring Island.

Please see the meeting calendar on the Islands Trust website at www.islandstrust.bc.ca for current meeting information and location.

19. ADJOURNMENT

By general consent the meeting adjourned at 5:31 p.m.

Peter Luckham, Chair

CERTIFIED CORRECT:

Rob Pingle, Recorder



Salt Spring Island Advisory Planning Commission Minutes of a Regular Meeting

Date of Meeting: Thursday, July 28, 2022

Location: Baptist Church, Lower Level Meeting Room
520 Lower Ganges Road, Salt Spring Island

Members Present: Jeff Thompson, Commissioner
Jean Brouard, Commissioner
Ron Cooke, Commissioner
Leigh Large, Commissioner
Donald Carlson, Commissioner
Anne Gunn, Commissioner

Regrets: Neil Morie, Commissioner
Stanley Shapiro, Commissioner
Gordon Brent Brochu-Ingram, AAPC Commissioner

Absent: None

Staff Present: Louisa Garbo, Acting Regional Planning Manager (Acting RPM)
Rob Pingle, Recorder

Others Present: None

These minutes follow the order of the agenda although the sequence may have varied.

Staff Pingle called the meeting to order at 1:01 p.m.

1. ELECTION OF THE CHAIR AND VICE-CHAIR

Staff Pingle announced the election procedures.

Staff Pingle called for nominations for Chair.

Commissioner Cooke was nominated and declined the nomination.

Commissioner Gunn was nominated and declined the nomination.

Commissioner Large was nominated and accepted the nomination.

Staff Pingle called three times for further nominations. Hearing none, he declared the nominations closed. Commissioner Large was elected Chair by acclamation.

Commissioner Carlson arrived at 1:07 p.m.

Staff Pingle called for nominations for Vice-Chair.

Commissioner Brouard was nominated and accepted the nomination.

Staff Pingle called three times for further nominations.

Hearing none, he declared the nominations closed. Commissioner Brouard was elected Vice-Chair by acclamation.

2. APPROVAL OF AGENDA

By general consent the agenda was adopted.

3. MINUTES OF PREVIOUS MEETING

3.1 Draft Minutes of the March 3, 2022 APC Meeting

By general consent, the minutes of the March 3, 2022 Salt Spring Island Advisory Planning Commission meeting were adopted.

4. BUSINESS ITEMS

4.1 Proposed Bylaw No. 530 – Accessory Dwelling Units - Staff Report

Acting RPM Garbo presented the staff report on Proposed Bylaw No. 530.

In discussion the following points were raised:

- Tiny homes being on wheels are not included as they do not meet the building code.
- Short-Term Vacation Rentals and Bed and Breakfasts are not allowed in this type of building.
- The tracking of dwellings changing from temporary to long term rentals will be difficult for current dwellings but monitoring Short-Term Vacation Rentals will continue by Bylaw Enforcement.
- The expansion of the number of units on each property.
- The tracking of the properties created through this bylaw.
- The creation of handmade tiny homes being more in character with current island aesthetic.
- The requirement for at least 6 metres distance between the Accessory Dwelling Units and other buildings.
- The lack of reference to the climate emergency or Douglas-fir tree protection and the advancement of reconciliation through environmental protection.

It was MOVED and SECONDED,

That the Salt Spring Island Advisory Planning Commission recommend to the Salt Spring Island Local Trust Committee that Proposed Bylaw No. 530 proceed as proposed with all possible speed.

CARRIED

5. **OTHER BUSINESS**

6. **ADJOURNMENT**

By general consent the meeting adjourned at 2:20 p.m.

Leigh Large, Chair

CERTIFIED CORRECT:

Rob Pingle, Recorder

DRAFT



Salt Spring Island Agricultural Advisory Planning Commission

Meeting Notes

Date of Meeting: Thursday, July 28, 2022

Location: Baptist Church, Lower Level Meeting Room
520 Lower Ganges Road, Salt Spring Island

Members Available: Conrad Pilon, Commissioner
Ken Byron, Commissioner

Regrets: Bree Eagle, Commissioner
Gordon Brent Brochu-Ingram, Commissioner
Nathan Roberson, Commissioner

Quorum was not met prior to this meeting and therefore did not proceed.

The next meeting of the Commission is scheduled for Thursday, August 25, 2022 from 3:00 p.m. – 5:00 p.m. at the Baptist Church Lower Hall, 520 Lower Ganges Road.



Salt Spring Island Housing Action Program Task Force Minutes of a Regular Meeting

Date of Meeting: Thursday, August 4, 2022

Location: Baptist Church, Lower Level Meeting Room
520 Lower Ganges Road, Salt Spring Island

Members Present: Rhonan Heitzmann, Chair
Yvonne Saunders
Nejmah Guermoudi
Jessica Terezakis
Daniel Wood
Bryce Chapman

Regrets: Stanley Shapiro
Maïkan Bordeleau
Kerrie Proulx, Vice Chair

Absent: Frejya Skye

Staff Present: Rob Pingle, Recorder

Others Present: None

These minutes follow the order of the agenda although the sequence may have varied.

The meeting was called to order at 10:14 a.m. Chair Heitzmann welcomed the task force members and humbly stated gratitude to live and work in Coast Salish First Nations treaty and traditional territory.

1. AGENDA

By general consent, the agenda was adopted as presented.

2. MINUTES OF PREVIOUS MEETINGS

2.1 Draft Minutes of the July 7, 2022 Meeting

By general consent, the minutes of the July 7, 2022 Housing Action Program Task Force meeting were adopted.

3. ADMINISTRATIVE UPDATE

DRAFT

1

3.1 Task Force Resolutions

There was discussion about future meetings. There will be no meetings until November due to the local government election period.

4. OTHER BUSINESS

4.1 Strategic Action Matrix

There was discussion about how to present the work the Task Force has done on the matrix.

There was discussion about the Options for Affordable Housing report published by the Islands Trust in 2003 that reflects the work the Task Force is currently engaged in.

There was discussion about researching the best practices of the introduction of Tiny Homes in other jurisdictions and how they could be used for the Tiny Home Pilot Project proposed on Salt Spring Island.

There was discussion about researching the best practices of the introduction of Eco-Village Housing in other jurisdictions and how they could be used to create a pilot project on Salt Spring Island if a land owner proponent could be found.

There was discussion about the Public Hearing process for Proposed Bylaw No. 530.

5. ADJOURNMENT

The meeting was adjourned at 11:40 a.m.

Rhonan Heitzmann, Chair

CERTIFIED CORRECT:

Rob Pingle, Recorder



Salt Spring Island Local Trust Committee Public Hearing Record

REGARDING PROPOSED BYLAW NO. 526 FARMWORKER HOUSING – HOUSING ACTION PROGRAM PROJECT

Date: Thursday, August 18, 2022

Location: Harbour House Hotel, Crofton Room
121 Upper Ganges Road, Salt Spring Island, BC

Members Present: Peter Luckham, Chair
Peter Grove, Local Trustee
Laura Patrick, Local Trustee

Staff Present: Louisa Garbo, Acting Regional Planning Manager (A/RPM)
Rob Pingle, Recorder
Daniela Murphy, Legislative Clerk/Deputy Secretary
Stefan Cermak, Director Local Planning Services
Jason Youmans, Island Planner

**Media and
Others Present:** Gulf Islands Driftwood Reporter
Approximately 40 members of the public

1. CALL TO ORDER

Chair Luckham convened the public hearing at 11:00 a.m. and acknowledged that the Local Trust Committee is meeting within Coast Salish Territory.

2. INTRODUCTIONS AND OPENING STATEMENT FROM THE CHAIR

Chair Luckham introduced himself, the Trustees and staff. He then read the notice of Public Hearing in accordance with the Local Government Act and stated that oral and written submissions were equally acceptable as long as the submissions were given to the Trustees before the close of the Public Hearing. He also advised that public information binders are available for review and that no further submissions may be submitted to the Trustees after the close of the Public Hearing.

3. REVIEW OF PUBLIC HEARING NOTICE

A/RPM Garbo explained the notification methods used to advise the public. She reported referrals were sent to 14 agencies and 13 First Nations and a total of 27 referral responses were received. All

agency referral responses are available on the website and in the public hearing binders. Nineteen public submissions have been received.

4. BYLAW NO. 526

Update of Changes to the Bylaw

A/RPM Garbo outlined the key points of proposed Bylaw No. 526. This bylaw proposes to amend the Salt Spring Island Land Use Bylaw to implement residential changes from the Agricultural Land Commission to allow farmworker dwelling units on Agriculture 1 and 2-zoned properties.

5. BYLAW NO. 526 – SUBMISSIONS

Chair Luckham asked if any members of the public would like to speak to proposed Bylaw No. 526, cited as “Salt Spring Island Land Use Bylaw No. 355, 1999, Amendment No. 3, 2021”.

Carlos Grooms, SSI Resident

Identified as a farm owner on the island with a vision to food security on the island. Has experienced a challenge with the volume of labour required. Spoke in favour of the proposed Bylaw as presented.

Adam Gold, SSI Resident

Identified as a farm owner on the island with a wish to provide good housing to his farm workers. Spoke in favour of the proposed Bylaw as presented.

Vincent Gagnon, SSI Resident

Identified as a farm worker on the island who has experienced the need for more farm worker housing. Spoke in favour of the proposed Bylaw as presented.

Maddy Smith, SSI Resident

Identified as a farm worker on the island who has experienced the need for more farm worker housing. Spoke in favour of the proposed Bylaw as presented.

Irja Kriegel, SSI Resident

Spoke in favour of the proposed Bylaw as presented as it supports food security on the island.

Hannah Reipl, SSI Resident

Identified as a farm worker on the island who has experienced the need for more farm worker housing. Spoke in favour of the proposed Bylaw as presented. As a resident born on the island she has experienced housing insecurity her whole life.

Maxine Leichter, SSI Resident

Spoke to the history of farming.

Wayne Hewitt, SSI Resident

Spoke to the rich history of farming in BC and on the island. Spoke in opposition of the proposed Bylaw as presented as a survey was not conducted in advance of the process.

Tom Billings, SSI Resident

Identified as a permaculturalist and organic farmer. Spoke in favour of the proposed Bylaw as presented as it assists to enable sustainable farming practices on the island.

Elizabeth FitzZaland, SSI Resident

Spoke to her experience creating the Salt Spring Farm Plan and the recorded need for farm worker housing. Spoke in favour of the proposed Bylaw as presented and expressed appreciation for the housing size limits within it.

Rebecca Bloch, SSI Resident

Identified as a farm owner. Spoke in favour of the proposed Bylaw as presented.

Sue Earle, SSI Resident

Identified as a farm owner for over twenty years and the continual challenges with housing staff she has experienced. Spoke in favour of the proposed Bylaw as presented as it assists

Nick Jones, SSI Resident

Identified as a farm owner. Spoke in favour of the proposed Bylaw as presented as it addresses the lack of suitable housing for farm workers on the island.

Anne Macey, SSI Resident

A member of the Agricultural Alliance, spoke in favour of the proposed Bylaw as presented. Noted the aging of the island farm property owners and the opportunities this presents to them.

Harry Warner, SSI Resident

Identified as a farm owner. Spoke in favour of the proposed Bylaw.

Marie Beaudoin, SSI Resident

Identified as a property owner of A1 land with an adult child that needs housing on the property to allow the working of the land. Spoke in favour of the proposed Bylaw as presented.

Pablo Ochoa, SSI Resident

Spoke in favour of the proposed Bylaw as presented to address the labour shortage on the island.

Amy Sandidge, SSI Resident

Spoke in favour of the proposed Bylaw as presented to allow for more labour intensive organic farming.

Chair Luckham called a second time for any comments or submissions on the proposed bylaw.

Maxine Leichter, SSI Resident

Spoke to the need for farms needing farm workers and farm workers needing housing. Spoke in opposition to the clause that only required a property owner to have farm status to qualify for additional housing.

Wayne Hewitt, SSI Resident

Spoke to the extension of the Bylaw to any land that is not within the ALR. Spoke in opposition of the proposed Bylaw as some properties hold events that last longer than what is allowed within the regulations. Mentioned the activities of farming outside the appropriate zones.

Chair Luckham called for submissions a third and final time.

Elizabeth FitzZaland, SSI Resident

Spoke to the process of the Public Hearing and the confusion that may be caused by the two hearings being held today.

Rebecca Bloch, SSI Resident

Spoke to the history of the settlement patterns for farm land and the cost for farm land within the ALR. Noted that modern settlement patterns and farming procedures can allow for farming in more areas than originally assumed.

Jordan Lidster, SSI Resident

Identified as a farm owner. Spoke in favour of the proposed Bylaw as presented.

Joanne Freidman, SSI Resident

Identified as a farm owner and the challenges experienced to farm organically without additional housing for farm workers. Spoke in favour of the proposed Bylaw as presented.

Pablo Ochoa, SSI Resident

Spoke in favour of the proposed Bylaw as presented as it reflects what is happening in the community and provides security to farmers and farm workers.

Wayne Hewitt, SSI Resident

Presented a map that shows the lands that could be impacted by the proposed Bylaw with a curiosity if the Bylaw represents a want rather than a need.

Corey Johnson, SSI Resident

Spoke in favour of the proposed Bylaw as presented.

Maxine Leichter, SSI Resident

Spoke to the need for a map that identifies the land areas altered by the proposed Bylaw.

Rhonan Heitzman, SSI Resident

Spoke in favour of the proposed Bylaw as presented.

Julian Bruce, SSI Resident

Spoke in favour of the proposed Bylaw as presented and requested clarity on the areas of the island that are eligible for this change. Expressed concern with the potential for abuse of this new housing becoming short term vacation rentals.

Joanne Freidman, SSI Resident

Spoke to the positive aspects of agri-tourism.

6. ADJOURNMENT

Chair Luckham declared the Public Hearing closed at 12:22 p.m.

I DECLARE THAT THIS IS A FAIR AND ACCURATE SUMMARY OF THE NATURE OF THE REPRESENTATIONS RESPECTING THE BYLAW THAT WERE MADE AT THE HEARING.

Rob Pingle, Recorder



Salt Spring Island Local Trust Committee Public Hearing Record

REGARDING PROPOSED BYLAW NO. 530 ACCESSORY DWELLING UNITS – HOUSING ACTION PROGRAM PROJECT

Date: Thursday, August 18, 2022

Location: Harbour House Hotel, Crofton Room
121 Upper Ganges Road, Salt Spring Island, BC

Members Present: Peter Luckham, Chair
Peter Grove, Local Trustee
Laura Patrick, Local Trustee

Staff Present: Louisa Garbo, Acting Regional Planning Manager (A/RPM)
Rob Pingle, Recorder
Daniela Murphy, Legislative Clerk/Deputy Secretary
Jenn Baddeley, Office Administrative Assistant
Jason Youmans, Island Planner
Charly Caproff, Planning Technician
Stefan Cermak, Director Land Use Planning

Media and Others Present: Gulf Islands Driftwood Reporter
Approximately 109 members of the public

1. CALL TO ORDER

Chair Luckham convened the public hearing at 4:00 p.m. and acknowledged that the Local Trust Committee is meeting within Coast Salish Territory.

2. INTRODUCTIONS AND OPENING STATEMENT FROM THE CHAIR

Chair Luckham introduced himself, the Trustees and staff and read the notice of Public Hearing in accordance with the Local Government Act. He stated that oral and written submissions were equally acceptable as long as the submissions were given to the Trustees before the close of the Public Hearing. He also advised that public information binders are available for review and that no further submissions may be submitted to the Trustees after the close of the Public Hearing.

3. REVIEW OF PUBLIC HEARING NOTICE

A/RPM Garbo explained the notification methods used to advise the public. She reported referrals were sent to 8 agencies and 13 First Nations and a total of 13 referral responses were received. All agency referral responses are available on the website and in the public hearing binders. Two hundred eight public submissions have been received.

4. BYLAW NO. 530

A/RPM Garbo outlined the key points of proposed Bylaw No. 530. This bylaw proposes to amend the Salt Spring Island Land Use Bylaw to allow Accessory Dwelling Units (ADUs) in quite a few zones, the intent is to help alleviate the tight rental supply issues and provide additional housing options on Salt Spring Island.

5. BYLAW NO. 530 – SUBMISSIONS

Chair Luckham asked if any members of the public would like to speak to proposed Bylaw No. 530, cited as “Salt Spring Island Land Use Bylaw No. 355, 1999, Amendment No. 1, 2022”.

Bill Henderson, SSI Resident

Performed a song that suggested not to change the island, let the island change you.

Julia Lucich, SSI Resident

Spoke to the lack of safety for the people looking for affordable house and in favour of the proposed Bylaw as presented.

Jessica Harkema, SSI Resident

Spoke in favour of the proposed Bylaw as presented. They expressed a belief that the housing crisis has lasted for more than thirty years. They requested that more opportunities be explored for future support of affordable housing.

Mairi Welman, SSI Resident

Spoke to the population growth and poverty issues on the island and in favour of the proposed Bylaw as presented.

Debra Campbell, SSI Resident

Spoke to their concerns about the proposed Bylaw as presented and expressed similar opinion to the comments made by First Nations. They expressed concern about the ability to ensure the ADUs were not used as short term vacation rentals.

Michael Wall, SSI Resident

Spoke to their concerns about the proposed Bylaw as presented as other communities with similar bylaws resulted in raised property values that results in less affordability.

Maxine Leichter, SSI Resident

Spoke to their concerns about the proposed Bylaw as presented as they believe it is in opposition to the Official Community Plan and the Islands Trust Policy Statement.

Elissa Poole, SSI Resident

Spoke to their concerns about the proposed Bylaw as presented as they believe it is a fundamental change to the Official Community Plan. They expressed concern that the new units will not be used for full time rental housing.

Ronald Wright, SSI Resident

Spoke to their concerns about the proposed Bylaw as presented as they believe it does not address the need for affordable housing with a likely outcome of increased property values.

Sharron Bywater, SSI Resident

Spoke to their concerns about the proposed Bylaw as presented as they believe it does not provide assurances that the dwellings created will be available as affordable housing for local workers.

Frants Attorp, SSI Resident

Spoke to their concerns about the proposed Bylaw as presented as they believe it will add 50% or more to the maximum build out for the island. Believes the change proposed requires an Official Community Plan amendment.

Elizabeth White, SSI Resident

Spoke to their concerns about the proposed Bylaw as presented without the addition of the Speculation and Vacancy Tax and adequate bylaw enforcement.

Mielle Chandler, SSI Resident

Spoke to the need to make a living from the land as a property owner with a blue collar careers. Would like to see short term vacation rentals to be included in the Bylaw. Also noted that the parking noted would not be adequate to some and requested that tiny homes be included in the bylaw.

Dave McKerrell, SSI Resident

Spoke in favour of the proposed Bylaw as presented.

Ryan Elson, SSI Resident

Spoke to their personal experience of trying to find affordable suitable housing and in favour of the proposed Bylaw as presented.

Maïkan Bordeleau, SSI Resident

Spoke to their personal experience as a builder with the belief that the bylaw does more good than harm and in favour of the proposed Bylaw as presented. Expressed the benefit of tiny homes as they do not require excavation.

Wayne Hewitt, SSI Resident

Spoke to their work in water preservation on the island and to their concerns about the proposed Bylaw not providing enough assurances that water preservation will be maintained.

Daniel Wood, SSI Resident

Spoke to their personal experience as a long term resident and small business owner and in favour of the proposed Bylaw as presented.

Rhonan Heitzmann, SSI Resident

Spoke in favour of the proposed Bylaw as presented and identified items in the Official Community Plan that supports the Bylaw.

Bonnie Reynolds, SSI Resident

Spoke on behalf of Ruth Tarasoff and expressed concern for the proposed Bylaw as presented. They believe it violates ecological concerns and does not safe guard affordable housing.

Jenny McLean, SSI Resident

Spoke to their history on the island and expressed concern for the proposed Bylaw as presented as it confers development rights onto land owners that are not required to create affordable housing.

Jean Wilkinson, SSI Resident

Spoke to their support for the concerns expressed by others for the proposed Bylaw as presented. Feels that the change is too wide open and short sighted and lacking in data such as water availability.

Ron Cooke, SSI Resident

Spoke in favour of the proposed Bylaw as presented and the concerns he has for the housing issues that he has seen grow during his time living here.

Meadow Johnston, SSI Resident

Spoke in favour of the proposed Bylaw as presented and the difficulties they are having to find a home.

Ben Corno, SSI Resident

Spoke with gratitude for the conversation and believes including covenants, protection of watersheds and the use of tidy homes could create an improved Bylaw.

Dolores Bender-Graves, SSI Resident

Spoke to their support for the concerns expressed by others for the proposed Bylaw as presented, would rather see changes that creates concentrated housing.

Calico Chang, SSI Resident

Spoke in favour of the proposed Bylaw as presented and their experience in the community as a health care worker interacting with many families with housing issues.

Fernando Dos Santos, SSI Resident

Spoke in favour of the proposed Bylaw as presented and noted their experience with the challenges to create affordable housing due to water management issues.

Chair Luckham called a second time for any comments or submissions on the proposed bylaw.

Corey Johnson, SSI Resident

Spoke to their experience as an employer on the island struggling to find housing for their staff and in favour of the proposed Bylaw as presented as a first step to address this issue.

Amy Sandidge, SSI Resident

Spoke to their experience as a staff at the high school with additional vacancies in her workplace and in favour of the proposed Bylaw as presented.

Harrold Sweiringa, SSI Resident

Spoke to their experience as the chair of the ferries advisory committee and the employment issues BC Ferries is experience due to lack of housing and in favour of the proposed Bylaw as presented.

Jessica Terezakis, SSI Resident

Spoke in favour of the proposed Bylaw as presented and how it will assist people fleeing domestic violence.

Robin Williams, SSI Resident

Spoke in favour of the proposed Bylaw as presented and their experience having work done on their property that has workers not able to secure housing.

Frants Attorp, SSI Resident

Expressed concern for the proposed Bylaw as presented as it alters the settlement patterns on the island without a review of the Official Community Plan.

Wayne Hewitt, SSI Resident

Expressed concern for the proposed Bylaw as presented as it does not address Islands Trust Policy Statement clause 4.4.2.

Rohnan Heitzmann, SSI Resident

Spoke in favour of the proposed Bylaw as presented and referring to pilot projects taken already.

Jenny McClean, SSI Resident

Expressed concern for the proposed Bylaw as presented as it does not create density around Ganges and could result in an overtaking of the Bylaw Enforcement System.

Jessica Harkeman, SSI Resident

Spoke in favour of the proposed Bylaw as presented and does not believe that this will result in the creation of more short term vacation rentals. They spoke in favour of the creation of more suites.

Maïkan Bordeleau, SSI Resident

Spoke in favour of the proposed Bylaw as presented and the belief that one new dwelling does not equate to one new density.

Maxine Leichter, SSI Resident

Expressed concern for the proposed Bylaw as presented but support for affordable housing. They believe the free market is to blame for this situation and the public sphere is the best way to address it which is not the case with the proposed Bylaw. They expressed concern for the lack of funding by Islands Trust Council for Bylaw Enforcement.

Chair Luckham called for submissions a third and final time.

John Coyne, SSI Resident

Spoke in favour of the proposed Bylaw as presented as a step to address the housing crisis and the creation of good will for the Local Trust Committee.

Doreen Hewitt, SSI Resident

Expressed concern for the proposed Bylaw as presented due to the lack of an Official Community Plan review to create consensus around the ideas presented within it.

Maxine Leichter, SSI Resident

Expressed concern for the proposed Bylaw as presented as the current standards for proving water are inadequate.

Robin Williams, SSI Resident

Spoke in favour of the proposed Bylaw as presented with his experience attempting to create affordable housing through the Dragonfly Society.

Dolores Bender-Graves, SSI Resident

Spoke to the need for ongoing monitoring to ensure the proposed Bylaw truly addressed the need intended by it.

Jenny McClean, SSI Resident

Spoke to the years required to truly assess a decision and the imperative to ensure this Bylaw does not address.

Bonnie Reynolds, SSI Resident

Spoke as a young adult and the minimal lifestyle they lead and the lack of tiny home villages or trailer parks within the Bylaw.

Maxine Leichter, SSI Resident

Spoke to the alternative affordable housing solutions that have been presented such as secondary suites or the ability to allow rezoning of illegal properties with signed covenants to ensure the dwelling is affordable.

Ronald Wright, SSI Resident

Expressed concern for the proposed Bylaw as presented as it is not a tiny step that could potentially double the number of people on the island.

6. ADJOURNMENT

Chair Luckham declared the Public Hearing closed at 6:06 p.m.

I DECLARE THAT THIS IS A FAIR AND ACCURATE SUMMARY OF THE NATURE OF THE REPRESENTATIONS RESPECTING THE BYLAW THAT WERE MADE AT THE HEARING.

Rob Pingle, Recorder

Follow Up Action Report

Salt Spring Island

22-Mar-2022

Activity	Responsibility	Dates	Status
1 Expansion of SS LTC Sector Meetings That the Salt Spring Island Local Trust Committee request staff to schedule a Special Meeting with the Local Trust Committee and the building, construction and trades sector at a mutually convenient time.	Louisa Garbo		In Progress
2 SS-DVP-2022.2 - C. Fevang - 105 McKenzie Crescent, Piers Island That Salt Spring Island Local Trust Committee request that the applicant submit to the Islands Trust a shoreline stabilization report completed by a geotechnical engineer/landscape architect/coastal geologist or biologist identifying the feasibility of a soft shore design for the subject property (SS-DVP-2022.2, 105 McKenzie Crescent - Piers Island).	Geordie Gordon		Completed

17-May-2022

Activity	Responsibility	Dates	Status
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Follow Up Action Report

Salt Spring Island

17-May-2022

Activity	Responsibility	Dates	Status
1 Water Sustainability - Draft Proof of Water at Time of Subdivision Bylaw That the Salt Spring Island Local Trust Committee request staff to provide the following information: ·Communication materials for the introduction of the bylaw ·Potential amendments based on the discussion today including 5.5.14 and Table 1.	Jason Youmans William Shulba		In Progress

12-Jul-2022

Activity	Responsibility	Dates	Status
1 REPORTS - Project List dated July 2022 That the Salt Spring Island Local Trust Committee request staff to contact the two Land Use Contract holders.	Jason Youmans		In Progress

Follow Up Action Report

Salt Spring Island

12-Jul-2022

Activity	Responsibility	Dates	Status
2 Proposed Bylaw No. 526 - Changes to Residential Permissions in the Agricultural Land Reserve & Bylaw Amendment Options for Dwellings on Large Farms That the first reading of Salt Spring Island Local Trust Committee Bylaw No. 526, cited as "Salt Spring Island Land Use Bylaw No. 355, 1999, Amendment No. 3, 2021", be rescinded. That the Salt Spring Island Local Trust Committee amend Proposed Bylaw No. 526 by making the following changes to the proposed bylaw in Appendix 3 of the staff report dated July 12, 2022: - striking the word 'immediate' from the definition of farm workers dwelling unit, - striking the requirement for a covenant - striking the words "or by an association to which the owner of the agricultural land belongs" That Salt Spring Island Local Trust Committee Proposed Bylaw No. 526, cited as "Salt Spring Island Land Use Bylaw No. 355, 1999, Amendment No. 3, 2021", as amended, be read a first time. That Salt Spring Island Local Trust Committee Proposed Bylaw No. 526,	Daniela Murphy Geordie Gordon Louisa Garbo		Completed

Follow Up Action Report

Salt Spring Island

12-Jul-2022

Activity	Responsibility	Dates	Status
cited as "Salt Spring Island Land Use Bylaw No. 355, 1999, Amendment No. 3, 2021", be read a second time.			
3 Proposed Bylaw No. 526 - Changes to Residential Permissions in the Agricultural Land Reserve & Bylaw Amendment Options for Dwellings on Large Farms That the Salt Spring Island Local Trust Committee requests staff to schedule a virtual public information session and public hearing for Salt Spring Island Local Trust Committee Proposed Bylaw No. 526, cited as "Salt Spring Island Land Use Bylaw No. 355, 1999, Amendment No. 3, 2021".	Daniela Murphy Geordie Gordon Jennifer Baddeley Louisa Garbo Rob Pingle		Completed

Follow Up Action Report

Salt Spring Island

12-Jul-2022

Activity	Responsibility	Dates	Status
4 Proposed Bylaw No. 526 - Changes to Residential Permissions in the Agricultural Land Reserve & Bylaw Amendment Options for Dwellings on Large Farms That the Salt Spring Island Local Trust Committee add: Increase of setbacks for any new uses from all lot lines adjacent to the McFadden Creek Nature Sanctuary of 200m; and Increase of setbacks for any new uses from all lot lines adjacent to other ITC conservation areas to 30 m to the Salt Spring Island Local Trust Committees Land Use Bylaw Amendments project list.	Louisa Garbo		Completed

Follow Up Action Report

Salt Spring Island

12-Jul-2022

Activity	Responsibility	Dates	Status
5 Proposed Bylaw No. 530 - Accessory Dwelling Units That the Salt Spring Island Local Trust Committee gives Proposed Bylaw No. 530, cited as "Salt Spring Island Land Use Bylaw No. 355, 1999, Amendment No. 1, 2022," as amended, be read a second time. That the Salt Spring Island Local Trust Committee has reviewed the Islands Trust Policy Statement Directives Only Checklist and determined that Proposed Bylaw No. 530, cited as "Salt Spring Island Land Use Bylaw No. 355, 1999, Amendment No. 1, 2022," is not contrary to or at variance with the Islands Trust Policy Statement" That the Salt Spring Island Local Trust Committee requests staff to host a virtual public information session and public hearing for Salt Spring Island Local Trust Committee Proposed Bylaw No. 530, cited as "Salt Spring Island Land Use Bylaw No. 355, 1999, Amendment No. 1, 2022."	Daniela Murphy Jennifer Baddeley Louisa Garbo Rob Pingle		Completed

Follow Up Action Report

Salt Spring Island

12-Jul-2022

Activity	Responsibility	Dates	Status
6 J. Clark to LTC - Dated June 26, 2022 - Concerning ISED Letter dated May 17, 2022 That the Salt Spring Island Local Trust Committee request staff to retain a legal counsel to prepare a letter of response to the May 17, 2022 ISED letter in consideration of relevant materials received to date. That the Salt Spring Island Local Trust Committee request Chair Luckham to contact Michael Krenz of Rogers requesting suspension of activities at Channel Ridge pending a letter from Islands Trust legal counsel and follow up with a letter of the above request.	Louisa Garbo		Completed

Follow Up Action Report

Salt Spring Island

12-Jul-2022

Activity	Responsibility	Dates	Status
7 SS-DVP-2022.5 - R. McDiarmid - 1521 Beddis Road, SSI That the Salt Spring Island Local Trust Committee request the applicant for SS-DVP-2022.5 provide an updated survey prepared by a British Columbia Licenced Surveyor showing the location of the proposed carport, all other structures within the setbacks to the lot lines, and all buildings labelled correctly. That the Salt Spring Island Local Trust Committee request the applicant for SS-DVP-2022.5 obtain a Site Alteration Permit from the British Columbia Archaeology Branch for the proposed carport development. That the Salt Spring Island Local Trust Committee place SS-DVP-2022.5 in abeyance until recommendation 1 and 2 of the report dated July 12, 2022 are satisfied.	Geordie Gordon Rob Pingle		In Progress

Follow Up Action Report

Salt Spring Island

12-Jul-2022

Activity	Responsibility	Dates	Status
8 SS-DVP-2022.1 - D. Corcoran - Clamshell Islet That the Salt Spring Island Local Trust Committee request staff to enter into a cost recovery agreement with the applicant to facilitate a visit to the subject site by First Nations and defer the application to a future meeting.	Geordie Gordon Louisa Garbo		In Progress
9 SS-DVP-2022.1 - D. Corcoran - Clamshell Islet That the Salt Spring Island Local Trust Committee place a review of the residential zoning on islets on the projects list under Item 2 Land Use Bylaw.	Louisa Garbo		In Progress
10 SS-RZ-2017.3 - J. Colligan - 2188 North End Road, SSI That the Salt Spring Island Local Trust Committee place application SS-RZ-2017.3 in abeyance until the conclusion of the Salt Spring Island Local Trust Committee Housing Action Program Proposed Bylaw No. 530.	Geordie Gordon Rob Pingle		In Progress

Follow Up Action Report

Salt Spring Island

12-Jul-2022

Activity	Responsibility	Dates	Status
11 OTHER BUSINESS - Watershed Stewardship Video That Salt Spring Island Local Trust Committee support the development of a Salt Spring Island Watershed Stewardship video series by providing letters of support.	Jennifer Baddeley Louisa Garbo		In Progress

09-Aug-2022

Activity	Responsibility	Dates	Status
1 By general consent, the minutes of July 12, 2022 Salt Spring Island Local Trust Committee Regular meeting were adopted.	Jennifer Baddeley Rob Pingle		Completed
By general consent, the minutes of July 7, 2022 Salt Spring Island Local Trust Committee Special meeting were adopted.			

Follow Up Action Report

Salt Spring Island

09-Aug-2022

Activity	Responsibility	Dates	Status
2 Budget Business Case for Salt Spring LTC Projects That the Salt Spring Island Local Trust Committee amend the Business Case for the major amendment to the Salt Spring Island Local Trust Committee Official Community Plan shown in Appendix 1 of the staff report dated August 9, 2022 by increasing the projected budget by \$100,000 to include technical analysis and collaboration, and include the review of the Salt Spring Island Local Trust Committee Land Use Bylaw in the title of the project.	Louisa Garbo		In Progress
3 Budget Business Case for Salt Spring LTC Projects That the Salt Spring Island Local Trust Committee endorse the Business Case for the major amendment to the Salt Spring Island Local Trust Committee Official Community Plan and Land Use Bylaw shown in Appendix 1 of the staff report dated August 9, 2022 as amended and forward it to the Islands Trust Financial Planning Committee for consideration of inclusion in the 2023-2024 Islands Trust budget.	Louisa Garbo		In Progress

Follow Up Action Report

Salt Spring Island

09-Aug-2022

Activity	Responsibility	Dates	Status
4 Budget Business Case for Salt Spring LTC Projects That the Salt Spring Island Local Trust Committee endorse the Business Case for the Ganges (Shiya'hwt/SYOW_ T) Village Area Plan shown in Appendix 2 of the staff report dated August 9, 2022 and forward it to the Islands Trust Financial Planning Committee for consideration of inclusion in the 2023-2024 Islands Trust budget.	Louisa Garbo		In Progress
5 Budget Business Case for Salt Spring LTC Projects That the Salt Spring Island Local Trust Committee request the Executive Committee follow up with the Minister of Municipal Affairs on his expressed interests for the Ganges (Shiya'hwt/SYOW_ T) Village Area Plan as a pilot for cooperative planning with First Nations.	Louisa Garbo		In Progress
6 Budget Business Case for Salt Spring LTC Projects That the Salt Spring Island Local Trust Committee request staff to report back on options to facilitate the development of a new protocol agreement or a memo of understanding between the Local Trust Committee and the Capital Regional District to facilitate improved cooperation on local and regional planning issues.	Louisa Garbo		In Progress

Follow Up Action Report

Salt Spring Island

09-Aug-2022

Activity	Responsibility	Dates	Status
7 SSIWPA Special Property Tax Requisition Business Case That the Salt Spring Island Local Trust Committee endorse the SSIWPA special property tax requisition business case attached to the staff report of July 27, 2022 and forward it to Islands Trust Financial Planning Committee for inclusion in the draft 2023/24 Islands Trust budget.	Jason Youmans		In Progress
8 SS-DP-2018.14 & SS-DVP-2021.24 - J. Verville, Kirsten Reite Architecture - 2661 and 2621 Fulford-Ganges Road, SSI (The Vortex) That the Salt Spring Island Local Trust Committee amend development permit SS-DVP-2021.24 to remove clause 3.3, clause 4, Schedule No. 3 and Schedule No. 4, make consequential numbering alterations to affect this change, and issue the permit as amended.	Daniela Murphy Jason Youmans		In Progress

Follow Up Action Report

Salt Spring Island

09-Aug-2022

Activity	Responsibility	Dates	Status
9 SS-DP-2018.14 & SS-DVP-2021.24 - J. Verville, Kirsten Reite Architecture - 2661 and 2621 Fulford-Ganges Road, SSI (The Vortex) That the Salt Spring Island Local Trust Committee replace Section 3.4.2.1 of proposed development permit SS-DP-2018.14 as follows: ·Before issuance of any building permits pursuant to this project the applicant must provide an irrevocable letter of credit or a security deposit in the amount of \$442,500.	Daniela Murphy Jason Youmans		In Progress

Follow Up Action Report

Salt Spring Island

09-Aug-2022

Activity	Responsibility	Dates	Status
10 SS-DP-2018.14 & SS-DVP-2021.24 - J. Verville, Kirsten Reite Architecture - 2661 and 2621 Fulford-Ganges Road, SSI (The Vortex) That the Salt Spring Island Local Trust Committee amend Section 3.9 of proposed development permit SS-DP-2018.14 as follows: By amending clause 3.9.1 to replace "on pages 3 and 5 of Schedule No. 8" with "in Schedule No. 8."; and By inserting new clause 3.9.2: - A qualified professional must develop, and provide to Islands Trust staff, prior to system operation commencing, a metering and monitoring plan that enables on-going evaluation of the sewage disposal system performance and receiving environment condition. It should address: - A baseline assessment of the receiving environment undertaken prior to development commencing; - Daily discharge flow from the system; - Treatment system performance measuring effluent quality objectives; - Environmental performance of its receiving environment in accordance with performance standards in Schedule No. 8; and By inserting new clause 3.9.3: - A qualified professional must meter and monitor the sewage disposal system in accordance with the plan approved in 3.9.2 above, and provide Islands Trust with a report on system performance relative to the	Daniela Murphy Jason Youmans		In Progress

Follow Up Action Report

Salt Spring Island

09-Aug-2022

Activity	Responsibility	Dates	Status
objectives identified in Schedule No. 8. This report must be provided annually for the first five years once the system is brought into service, and be available in perpetuity at Islands Trust's request throughout the lifetime of the development. Monitoring requirements may be adjusted to reflect the results of the on-going evaluation. Adjustments in the monitoring program must be described in the annual report; and By renumbering existing clause 3.9.2 to become 3.9.4; and By inserting new clause 3.95: - Upon completion of detailed sewage system design as described as described in Schedule No. 8, the owner will submit to Islands Trust, at the owner's cost; and By inserting new clause 3.9.5.1: - Confirmation from a qualified hydrogeologist that upon system operation, including any relief and interception drainage, pre- and post-development groundwater flows to Fulford and Soule Creeks will remain constant.			

Follow Up Action Report

Salt Spring Island

09-Aug-2022

Activity	Responsibility	Dates	Status
11 SS-DP-2018.14 & SS-DVP-2021.24 - J. Verville, Kirsten Reite Architecture - 2661 and 2621 Fulford-Ganges Road, SSI (The Vortex) That the Salt Spring Island Local Trust Committee amend SS-DP-2018.14 as follows: By adding clause 3.13 Development Permit Term: - If the development described in this development permit is not commenced within three years of the issuance of the permit this permit automatically lapses.	Daniela Murphy Jason Youmans		In Progress

Follow Up Action Report

Salt Spring Island

09-Aug-2022

Activity	Responsibility	Dates	Status
12 SS-DP-2018.14 & SS-DVP-2021.24 - J. Verville, Kirsten Reite Architecture - 2661 and 2621 Fulford-Ganges Road, SSI (The Vortex) That the Salt Spring Island Local Trust Committee amend SS-DP-2018.14 as follows: By adding clause 3.11.5.1 - Before issuance of any building permits pursuant to this project the applicant must provide an irrevocable letter of credit or a security deposit in the amount of \$5,000 to undertake emergency stream protection works in the vicinity of Soule Creek to be held and deployed in accordance with permit clause 3.11.5; and By adding clause 3.10.4.1 - Before issuance of any building permits pursuant to this project the applicant must provide an irrevocable letter of credit or a security deposit in the amount of \$5,000 to undertake emergency stream protection works in the vicinity of Fulford Creek to be held and deployed in accordance with permit clause 3.10.4; and By renumbering so accordingly.	Daniela Murphy Jason Youmans		In Progress

Follow Up Action Report

Salt Spring Island

09-Aug-2022

Activity	Responsibility	Dates	Status
13 SS-DP-2018.14 & SS-DVP-2021.24 - J. Verville, Kirsten Reite Architecture - 2661 and 2621 Fulford-Ganges Road, SSI (The Vortex) That the Salt Spring Island Local Trust Committee issue development permit SS-DP-2018.14 as amended upon satisfaction of the following conditions: 1) That the sewage disposal system site plan in Schedule No. 8 be replaced with the sewage system disposal system site plan shown in Appendix No. 1 of the staff report dated August 8, 2022; 2) That despite all references otherwise within the schedules to development permit SS-DP-2018.14, the sewage disposal field at 2661 Fulford Ganges Road will be sited in accordance with Appendix 1 of the staff report dated August 8, 2022; 3) That prior to permit issuance, and within 60 days of this resolution, the applicant must submit for SS LTC approval a revised landscaping plan consistent with Sections E.2.4 and E.2.8 of Development Permit Area 2 to replace Schedule No. 4 in development permit SS-DP-2018.14 and reflecting the relocated sewage disposal field.	Daniela Murphy Jason Youmans		In Progress

Follow Up Action Report

Salt Spring Island

09-Aug-2022

Activity	Responsibility	Dates	Status
14 SS-DP-2018.14 & SS-DVP-2021.24 - J. Verville, Kirsten Reite Architecture - 2661 and 2621 Fulford-Ganges Road, SSI (The Vortex) That the Salt Spring Island Local Trust Committee encourages the proponent to consider establishing a local advisory group to provide local knowledge on environmental issues related to the design, construction and operation of the project.			In Progress
15 SS-DP-2018.14 & SS-DVP-2021.24 - J. Verville, Kirsten Reite Architecture - 2661 and 2621 Fulford-Ganges Road, SSI (The Vortex) That the Salt Spring Island Local Trust Committee recognizes the proponent's commitment to maintaining an ongoing working relationship with the Tsawout First Nation in regard to further development related approvals, design, construction and operation (reference to the July 27, 2022 letter from Casey Dick-Wyatt, Lands Manager, Tsawout First Nation).	Jason Youmans		In Progress

Follow Up Action Report

Salt Spring Island

09-Aug-2022

Activity	Responsibility	Dates	Status
16 SS-DP-2018.14 & SS-DVP-2021.24 - J. Verville, Kirsten Reite Architecture - 2661 and 2621 Fulford-Ganges Road, SSI (The Vortex) That the Salt Spring Island Local Trust Committee request staff work with CRD staff and the Fulford Water Service Commission to identify community planning opportunities that could be linked to any potential future expansion of the Fulford Water Local Service Area and report back to the Salt Spring Local Trust Committee.			In Progress
17 SS-DP-2022.4 - M. Sawchuk - 234 Tripp Road, SSI That the Salt Spring Island Local Trust Committee approves issuance of Development Permit SS-DP-2022.4 (Sawchuk).	Daniela Murphy Phil Testemale		Completed
18 SS-DP-2022.4 - M. Sawchuk - 234 Tripp Road, SSI That the Salt Spring Island Local Trust Committee add a review of impacts of future lake levels of St Mary's lake to the Land Use Bylaw projects list.	Louisa Garbo		In Progress

Follow Up Action Report

Salt Spring Island

09-Aug-2022

Activity	Responsibility	Dates	Status
19 SS-TUP-2022.2 - Islands Trust - 1 - 500 Lower Ganges Road, SSI That the Salt Spring Island Local Trust Committee approve issuance of Temporary Use Permit (TUP) SS-TUP-2022.2.	Daniela Murphy Louisa Garbo		Completed



SALT SPRING ISLAND LOCAL TRUST COMMITTEE POLICY & STANDING RESOLUTIONS LIST

Date	Resolution Number	Topic	Resolution
2010-02-04	SSI-11-10	Bylaw Enforcement Reports	It was MOVED and SECONDED, that the Salt Spring Island Local Trust Committee directs staff to provide quarterly in-camera and public reports on on-going and current bylaw enforcement investigations and actions in the Salt Spring Local Trust Area. <u>CARRIED</u>
2013-01-10	SSI-09-13	North Salt Spring Waterworks District Reporting	It was MOVED and SECONDED, that the Salt Spring Island Local Trust Committee request the North Salt Spring Waterworks District to report back to the Local Trust Committee every two years from the date of adoption of Proposed Bylaw 461 on: a) changes in water demand by the North Salt Spring Waterworks District customers with new secondary suites within the pilot area; b) total withdrawal from its system in relation to its licensed capacity; c) impacts on the Maxwell Lake, St. Mary Lake, and the district's water supply in general that can be attributed to the introduction of secondary suites within the pilot area. <u>CARRIED</u> *Bylaw 461 was adopted May 2, 2013



SALT SPRING ISLAND LOCAL TRUST COMMITTEE POLICY & STANDING RESOLUTIONS LIST

Date	Resolution Number	Topic	Resolution
2016-06-02	SS-2016-114	Grantville Neighbourhood lawful non-conforming sewage disposal field repair or replacement	It was MOVED and SECONDED, that the Salt Spring Island Local Trust Committee adopt “Standing Resolution 2” as specified in Appendix 2 of the staff report dated May 25, 2016. (shown below): That the Salt Spring Island Local Trust Committee direct staff to administer and enforce Bylaw 484 according to the following policies: 1. Where a sewage disposal field or septage pit is lawfully non-conforming with respect to Bylaw 484, and pursuant to Local Government Act Section 529, the Salt Spring Island Local Trust Committee considers that the following actions do not constitute maintenance, alteration, or extension, and therefore require a development variance permit application to the Salt Spring Island Local Trust Committee: a) Removal and replacement of the dispersal system in its entirety. 2. Where a sewage disposal field or septage pit is lawfully non-conforming with respect to Bylaw 484, and where a health hazard exists as defined under the B.C. Public Health Act, an Authorized Person may carry out immediate, temporary repairs of the system that result in a further contravention to Bylaw 484 than that existing at the time the repair or alteration was started to prevent or contain the hazard. Permanent repairs or alterations that result in a further contravention of Bylaw 484 than that existing at the time the repair or alteration was started, or 1(a) above, should be supervised by a Professional and will require a development variance permit application to the Salt Spring Island Local Trust Committee following resolution of the emergency. 3. “Authorized Person” and “Professional” have the same meaning as in the Sewerage System Regulation. <u>CARRIED</u>



SALT SPRING ISLAND LOCAL TRUST COMMITTEE POLICY & STANDING RESOLUTIONS LIST

Date	Resolution Number	Topic	Resolution
2017-03-02	SS-2017-16	Quarterly Application Summary Staff Reports	It was MOVED and SECONDED, that the Salt Spring Island Local Trust Committee direct staff to provide a quarterly summary of application tracking. <u>CARRIED</u>



SALT SPRING ISLAND LOCAL TRUST COMMITTEE POLICY & STANDING RESOLUTIONS LIST

Date	Resolution Number	Topic	Resolution
2018-08-16	SS-2018-177	Cannabis Regulation	It was MOVED and SECONDED, that the Salt Spring Island Local Trust Committee adopt the following standing resolution with respect to the processing of non-medical cannabis retail license applications: • Proposed or amended licenses for non-medical cannabis retail establishments require an application to the Local Trust Committee. • The application process shall comprise a public consultation component, which includes at least one notification to neighbours, one public meeting, posting of public notices and one advertisement in a local periodical. • The public consultation process shall be determined by the Local Trust Committee after initial review of the proposal. • However, as a minimum, the Local Trust Committee will mail or otherwise deliver a notice to all owners and residents of properties within a 500 metre radius of the subject property where the establishment is proposed at least 10 days before adoption of a resolution providing comment on the application. The required notice shall include the following information: ○ Name of the applicant and a description of the proposal in general terms; ○ The location of the proposed establishment and the subject site; ○ The place where, and date and time when, both a public meeting will be held and a resolution of the Local Trust Committee considered; ○ The name and contact information of the Islands Trust planning staff member who can provide copies of the proposed or amended license application; ○ How public comments may be submitted to the Local Trust Committee. <u>CARRIED</u>



SALT SPRING ISLAND LOCAL TRUST COMMITTEE POLICY & STANDING RESOLUTIONS LIST

Date	Resolution Number	Topic	Resolution
2018-12-06	SS-2018-278	Cannabis – Processing of Notice to Local Authorities	It was MOVED and SECONDED, That the Salt Spring Island Local Trust Committee adopt the following standing resolution: that the Salt Spring Island Local Trust Committee request that Notices of Intention to apply for a Federal Cannabis License be included in the Local Trust Committee Regular Meeting agenda package. <u>CARRIED</u>
2019-04-30	SS-2019-88	Families as Stakeholders	It was MOVED and SECONDED, That the Salt Spring Island Local Committee direct staff to include families as stakeholders in Project Charters and to propose family oriented engagement techniques, or to explain why such inclusion is not appropriate. <u>CARRIED</u>



SALT SPRING ISLAND LOCAL TRUST COMMITTEE POLICY & STANDING RESOLUTIONS LIST

Date	Resolution Number	Topic	Resolution
2019-08-27	SS-2019-153	STVR	It was MOVED and SECONDED, that the Salt Spring Island Local Trust Committee rescind Resolution SS-2017-120 and adopt the following new short-term vacation rental enforcement policy: that given finite resources available for enforcement activities and in order to ensure the most effective results for enforcement activities, Short-Term Vacation Rentals (STVRs) that have one or more of the following characteristics will be subject to proactive enforcement: 1. They are advertised on the Internet, newspapers or other media; 2. More that one dwelling on the lot is simultaneously made available for STVRs; 3. While the property is rented persons are staying in tents, trailers, or Recreational Vehicles; 4. There are issues related to health and safety; 5. There is a written complaint by owners or residents on nearby lots about bona fide nuisance issues such as noise or parking congestion related to the STVR; 6. The owner of the property uses more than one property on Salt Spring Island as an STVR; that a Short-Term Vacation Rental (STVR) is defined as rental of a dwelling, suite, or cottage in a residential zone for less that 30-day periods; that a Short-Term Vacation Rental (STVR) is defined as the rental of a dwelling, suite, cottage, camping unit, accessory building or structure for a commercial guest accommodation use in a non commercial or commercial guest accommodation zone for less than a 30-day period; that nothing in this enforcement policy should be interpreted as giving permission to violate the Land Use Bylaw and the Salt Spring Island Local Trust Committee may change this policy at any time and may give direction to expand enforcement activities at any time. <u>CARRIED</u>



SALT SPRING ISLAND LOCAL TRUST COMMITTEE POLICY & STANDING RESOLUTIONS LIST

Date	Resolution Number	Topic	Resolution
2019-11-26	SS-2019-253	Reconciliation	It was MOVED and SECONDED, that the Salt Spring Island Local Trust Committee adopt the following standing resolution with respect to First Nations in the Local Trust Area: Whereas the Local Trust Committee seeks to engage in Reconciliation with local First Nations, governments and the island community by honouring the Truth and Reconciliation Commission (TRC) Calls to Action, United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), Draft Principles that Guide the Province of British Columbia's Relationship with Indigenous Peoples, and Islands Trust First Nations Engagement Principles, the Local Trust Committee endeavours to: a) Annually, write a letter to First Nations, (re) introducing trustees and staff and provide a schedule of known Local Trust Committee meetings for the upcoming year, as well as, provide an update of current projects and advocacy activities; b) For various Local Trust Committee meetings, invite elders from local First Nations to attend and provide a traditional welcome to the territory; c) Work with First Nation governments on cooperative initiatives, including and not limited to, language, place names, territorial acknowledgements, and community education on Coast Salish and local First Nations' cultural heritage and history; d) Work with First Nation governments on engagement principles for inclusive land use, marine use, and climate change planning; advocacy, protection and stewardship; and knowledge and information sharing protocols; e) Establish and maintain government-to-government dialogue with First Nations, now and into the future, based on respect and recognition of Aboriginal rights and title, treaty rights, and First Nations' traditional territories within the Islands Trust Area. <u>CARRIED</u>



SALT SPRING ISLAND LOCAL TRUST COMMITTEE POLICY & STANDING RESOLUTIONS LIST

Date	Resolution Number	Topic	Resolution
2019-12-17	SS-2019-275	Referral of Items to the Agricultural Advisory Planning Commission	It was MOVED and SECONDED, that the Salt Spring Island Local Trust Committee refer Agricultural Land Commission applications directly to the Agricultural Advisory Planning Commission, prior to consideration by the Salt Spring Island Local Trust Committee when: a) Applications demonstrate either that local farming or the greater community would benefit and conditions of Official Community Plan policy B.6.2.2.16 apply, or b) Applications are for public recreation use and are consistent with the Official Community Plan. <u>CARRIED</u>



SALT SPRING ISLAND LOCAL TRUST COMMITTEE POLICY & STANDING RESOLUTIONS LIST

Date	Resolution Number	Topic	Resolution
2020-04-28	SS-2020-045	Policy Options for Bylaw Enforcement Compliance on Unlawful Uses	It was MOVED and SECONDED, that the Salt Spring Island Local Trust Committee adopt the following policy on unlawful land uses and planning applications: a. Where an application is received and a use is continuing in contravention of a land use bylaw, staff are directed to request that the applicant cease the use prior to processing the application, and that staff are directed to continue with enforcement until the use is ceased. b. The applicant may request that the Local Trust Committee proceed with consideration of the application while the use is continuing; and, where the Local Trust Committee considers there is a community need to process the application while the prohibited use is continuing, the Local Trust Committee may direct that bylaw enforcement actions, including the issuing of notices, temporarily cease. c. Where the Local Trust Committee does not consider that there is a community need, or the applicant has not made such a request of the Local Trust Committee; bylaw enforcement actions, including the issuing of notices, will continue. d. In deciding whether to grant land use approval for a use that was commenced in contravention of a land use bylaw, the Local Trust Committee may consider whether the applicant has suspended the prohibited land use pending a decision on the application. <u>CARRIED</u>



SALT SPRING ISLAND LOCAL TRUST COMMITTEE POLICY & STANDING RESOLUTIONS LIST

Date	Resolution Number	Topic	Resolution
2021-06-29 Amended 2021-11-09 Amended 2022-02-15	SS-2021-109 SS-2021-214 SS-2022-017	Unlawful Dwellings	It was MOVED and SECONDED, that the Salt Spring Island Local Trust Committee endorse the Housing Action Program Task Force's recommendation to amend standing resolution SS-2021-109 to state that enforcement activities will be deferred for all existing unlawful dwellings being used for residential purposes until there are safe, secure appropriate housing options that are affordable for all demographics and household types in perpetuity, except in the following circumstances: a. there are concerns regarding health and safety; b. there are concerns that sewage is not being disposed of in an approved septic or sewage disposal system; c. there are concerns that septic or sewage disposal systems are being used in excess of capacity or ability as a result of unlawful dwellings; d. there are concerns of possible contamination of wells or other drinking water sources; e. unlawful dwellings are in environmentally sensitive areas; f. there are non-permitted campgrounds; and, g. that the Salt Spring Island Local Trust Committee may give direction to resume enforcement activities on any property that poses risk to the health and safety of the neighbouring residents and the residents on the property in question. <u>CARRIED</u>
2021-06-29	SS-2021-111	Bylaw Enforcement Policy on Portable Sawmills	It was MOVED and SECONDED, that the Salt Spring Island Local Trust Committee adopt the following enforcement policy: Enforcement on portable sawmills will be deferred while the Local Trust Committee considers amendments to the Land Use Bylaw. <u>CARRIED</u>



SALT SPRING ISLAND LOCAL TRUST COMMITTEE POLICY & STANDING RESOLUTIONS LIST

Date	Resolution Number	Topic	Resolution
2021-11-09	SS-2021-213	Residential Use in Commercial Accommodations	It was MOVED and SECONDED, That the Salt Spring Island Local Trust Committee endorse the Housing Action Program Task Force’s recommendation to defer enforcement of residential use in commercial accommodations, such as cabins, hotels, guest houses, and motels that provide long-term (more than 30 days) residency in order to offer an interim solution to the housing needs on Salt Spring Island. <u>CARRIED</u>
2021-12-14	SS-2021-237	First Nations Consultation for Proposed Antenna Systems	It was MOVED and SECONDED, That the Salt Spring Island Local Trust Committee adopt the following standing resolution with respect to First Nations consultation in accordance with the “Strategy for Antenna Systems” in the Local Trust Area: a. The proponent will consult with the Local Trust Area representative during the pre-consultation phase to determine proximity of the proposed antenna system to known archaeological sites and/or areas of archaeological potential and obtain a list of First Nations rights and title holders; b. The proponent is recommended to undertake consultation during the pre-consultation phase with the Islands Trust and a First Nations cultural knowledge holder for the siting of the proposed antenna system as it relates to cultural and sacred sites; c. The proponent will obtain and provide a BC Archaeological Information request response from the BC Archaeology Branch to confirm proximity of the proposed antenna system to known archaeological sites and/or areas of archaeological potential including permit requirements under the Heritage Conservation Act; d. The proponent will obtain and provide an Archeological Impact Assessment for antenna systems proposed to be sited on or within 100 metres of a known archaeological site or cultural/sacred site identified by a First Nations cultural knowledge holder; and e. The proponent will provide written notice – including, if applicable, the Archeological Impact Assessment – sent by regular mail or hand delivered to all First Nations rights and title holders identified during the pre-consultation phase <u>CARRIED</u>

Top Priorities Report

Salt Spring Island

1. *Water Sustainability - coordinate multiple jurisdictions in planning for water sustainability and watershed protection.*

Currently includes: Coordination of SSIWPA; Development of Proof of Water Bylaw; Weston Lake Water Availability Study; Watershed Strategic Plan; Ongoing well-monitoring.

April 2022: Draft Weston Lake Study being reviewed by staff; Contract issued for phase 2 of Watershed Strategic Plan; staff seeking LTC direction on reduced SSIWPA budget.

Nov. 19, 2021: kick off meeting with Econics for phase 1 of Watershed Strategic Plan: a Situational Analysis

July 15, 2021: Signed MOU submitted to CRD for Weston Lake Study. RFP posted (Nov. 2021)

May 25, 2021: LTC approves project charter of Watershed Protection Plan

April 27, 2021: MOU approved for Weston Lake Assessment

March 11, 2021 - TC budget approve: \$75,500 special tax requisition for 2021/22 SSIWPA; up to \$80,000 from surplus funds to spend on a watershed strategic plan and Weston Lake Watershed Assessment

Responsible

Jason Youmans
William Shulba

Dates

Rec'd: 07-Jun-2012
Target: 30-Dec-2022

2. *Protection of the Coastal Douglas-fir and Associated Ecosystems: An Islands Trust Tool Kit (2018)*

July, 2022 - Ongoing conversations with wildfire ecologists to consider direct award of contract

June, 2022 - RFP for wildfire ecologist (unsuccessful)

Responsible

Jason Youmans

Dates

Rec'd: 17-Dec-2019
Target: 01-Dec-2022

Top Priorities Report

Salt Spring Island

Oct. 5, 2021 - SSLTC endorse 2022/23 business case that includes: First Nations engagement, funds for a density bonus zoning appraisal report, a fire ecology analysis and workshop, and education and communication materials.

Science Working Group Meetings: Nov. 18, 2020; April 12, 2021; June 15, 2021; July 13, 2021

April 27, 2021 - education materials received

July 28, 2020 - Project Charter endorsed. Phase 1: Information gathering and analyzing, consultation, and education.

3. *Ganges (Shiya'hwt/Syowt) Village Planning*

Responsible

Dates

March 26 & 27, 2022-AHNE facilitates workshop with GVTF. Final Report of all engagement activities anticipated for April or May LTC meeting.

Louisa Garbo

Rec'd: 08-Jun-2020
Target: 31-Mar-2022

Nov. 9, 2021 - Ahne Studio finalizes engagement plan with SS LTC and task force. Ahne and staff begin numerous engagement activities including: survey, ideas fair, walk shops, stakeholder virtual events, school engagement, pop up engage3ment and community design charrette.

Task Force Meetings ongoing.

March 11, 2021-TC approved \$97,000 project budget

Nov. 10 2020 - Project Charter, Public Engagement Framework, and Task Force Terms of Reference adopted. Endorsed applying for C2C funding.

Top Priorities Report

Salt Spring Island

4. Housing Action Program

Responsible

Dates

Feb. 3, 2022 - report to SS LTC includes secondary suites draft bylaw, advancing tiny homes pilot project, consideration of OCP amendments-LTC request amendments to focus on accessory dwelling units

Louisa Garbo

Rec'd: 06-Oct-2020
Target: 01-Oct-2022

Nov. 18, 2021 - SS LTC meet with members of agricultural community - request staff to amend Bylaw 527 (housing in the ALC and large farming properties) and send out to referrals

Nov. 9, 2021 - SSLTC pass numerous resolutions including: deferring enforcement for unpermitted residential use in specific circumstances, requesting RPC to consider expediting affordable housing applications, request potential bylaw amendments to permit accessory dwelling units (including secondary suites).

April 27, 2021-12 persons appointed to Housing Task Force. Task Force Meetings ongoing.

Jan. 22, 2021 - Project Charter. Adopted.

Dec. 15, 2020 - LTC resolves that any further consideration of Bylaw No. 471 (TUPs for Residential use) take place in the context of LTC's 'Housing Challenges and Solutions' project.

Projects Report

Salt Spring Island

1. *OCP Amendments*

Responsible

Date Received

- First Nations Heritage and Cultural Site Protection (Jan. 2015)
- Piers Island Bill 27 OCP Update (Dec. 2015)
- Marine Environment Protection (Foreshore Audit) (June 2016)
- Official Community Plan Review (Nov. 2017)
- Development of a Music Strategy (June 2020)
- Waste Transfer Stations (Waste Management Plan) (July 2020)
- Add a map of the Salish Sea Trail (Oct. 2021)
- Add public access to lake and marine shorelines as an eligible community amenity in Section H.3.2 of the Salt Spring Island Official Community Plan (Feb. 2022)

06-Oct-2020

2. *Land Use Bylaw Amendments*

Responsible

Date Received

Projects Report

Salt Spring Island

·Housing for Farm Workers and Residential Options in the ALC (Nov. 2008)	06-Oct-2020
·Outer Islands (Feb. 2015)	
·LUB Update: Affordable Housing (June 2015)	
·Accessory Buildings Without a Principle Use (Dec. 2016)	
·Technical and Minor Amendments (Mar. 2017)	
·Limit fence height to 2.4m; increase dock width from 1.2m to 1.5m; culverts as structures in waterbody setbacks	
·Reduce Permitted Lot Coverage in Rural Upland Zones (Aug. 2018)	
·Ganges Village Planning - Harbourwalk (Oct. 2019)	
·Commercial Truck Parking and Storage (July 2020)	
·Regulate Cannabis Production (Sept. 2020)	
·Portable Sawmills (Nov. 2020)	

3. *Direct Bylaw Enforcement*

	Responsible	Date Received
·Bylaw Enforcement Policies (Feb. 2015)		06-Oct-2020
·Short Term Vacation Rentals (STVRs) (May 2017)		

4. *Administrative Processes and Procedures*

	Responsible	Date Received
·Land Use Contracts (Feb. 2015)		06-Oct-2020
·Soil Removal Bylaw update (Feb. 2015)		
·Improving Communications (Mine permits for aggregate pits and quarries.) (Jan. 2020)		

Projects Report

Salt Spring Island

5. *Advocate*

Responsible

Date Received

·none listed

06-Oct-2020

Applications

Agricultural Land Reserve

File Number	Applicant Name	Date Received	Purpose
SS-ALR-2021.4	Moonshine Mama's Kitchens Ltd.	27-Aug-2021	Non-Farm Use - 2143 Fulford-Ganges Road
Planner: Rob Pingle			
Planning Status			
<u>Status Date:</u> 25-Apr-2022 File transferred to Planner Gordon.			
<u>Status Date:</u> 16-Feb-2022 Applicant advised application has changed - recommended to speak to ALC whether application required			
<u>Status Date:</u> 04-Feb-2022 Dormant application notice sent			

Board of Variance

File Number	Applicant Name	Date Received	Purpose
SS-BOV-2022.1	Robertson, Terrence	27-Jun-2022	Variances to lot coverage and natural boundary setback - 351 Mountain Park Dr, SSI
Planner: Phil Testemale			
Planning Status			
<u>Status Date:</u> 12-Aug-2022 E-mail to applicant on req'd changes to application and info, and schedule. Applicant phoned.			
<u>Status Date:</u> 11-Jul-2022 File assigned to Planner Testemale			

Applications

Development Permit

File Number	Applicant Name	Date Received	Purpose
SS-DP-2018.14	Kirsten Reite Architecture	18-Sep-2018	Proposed development of 17 commercial accommodation units, a restaurant, retail space, reception area, and 2 parking lots (former Fulford Inn property) in DPA2 / DPA3 / DPA6 & DPA7 - 2621 & 2661 Fulford-Ganges Road, SSI

Planner: Jason Youmans

Planning Status

Status Date: 17-May-2022

LTC resolution to extend First Nations referral window by further 60 days. New referral response deadline is July 19, 2022.

Status Date: 04-May-2022

Staff are in correspondence with First Nations re. site visit

Status Date: 03-Mar-2022

APC consideration of DP application

File Number	Applicant Name	Date Received	Purpose
SS-DP-2021.10	Nagel, Uta	14-Sep-2021	Carport and Shed within DPA 4, 6 & 7 - 770 Beaver Point Road

Planner: Jason Youmans

Planning Status

Status Date: 25-Apr-2022

File reassigned to Jason Youmans.

Status Date: 04-Apr-2022

Email regarding next steps for application to move forward

Status Date: 30-Nov-2021

Phone call regarding next steps for application to move forward

Applications

Development Permit

File Number	Applicant Name	Date Received	Purpose
SS-DP-2021.4	UCG Universal Consulting Group LTD Planner: Jason Youmans	15-Mar-2021	NEW TASTING ROOM, WASHROOM/ACCESSORY BUILDING, CARETAKER'S COTTAGE, 4-PLEX - 270 Furness Road
Planning Status			
<u>Status Date:</u> 25-Apr-2022 File reassigned to Jason Youmans.			
<u>Status Date:</u> 01-Feb-2022 Follow-up email to applicant re. application status			
<u>Status Date:</u> 09-Dec-2021 DVP for retaining wall opened			
File Number	Applicant Name	Date Received	Purpose
SS-DP-2022.5	Polaris Land Surveying Planner: Jason Youmans	04-May-2022	Permit to allow subdivision in DPA 7 - 536 Beaver Point Road, SSI
Planning Status			
<u>Status Date:</u> 18-May-2022 File assigned to Planner Youmans			
File Number	Applicant Name	Date Received	Purpose
SS-DP-2022.7	Polaris Land Surveying INC Planner: Anthony Fotino	10-Aug-2022	Dock in DPA3 - 250 Collins Road, SSI
Planning Status			
<u>Status Date:</u> 23-Aug-2022 Planner Fotino assigned to file			

Applications

Development Variance Permit

File Number	Applicant Name	Date Received	Purpose
SS-DVP-2021.17	Nagel, Uta	13-Sep-2021	Carport and Shed within the setback - 770 Beaver Point Road

Planner: Jason Youmans

Planning Status

Status Date: 24-May-2022

Planner in correspondence with the applicant.

Status Date: 25-Apr-2022

File reassigned to Jason Youmans.

Status Date: 04-Apr-2022

Email regarding next steps for application to move forward

File Number	Applicant Name	Date Received	Purpose
SS-DVP-2021.22	UCG	09-Dec-2021	Setback Variance for Brewery and Retaining Wall - 270 Furness Road

Planner: Jason Youmans

Planning Status

Status Date: 25-Apr-2022

File reassigned to Jason Youmans.

Status Date: 13-Dec-2021

File forwarded to planner for review - SS-DVP-2021.22

Applications

Development Variance Permit

File Number	Applicant Name	Date Received	Purpose
SS-DVP-2021.23	Shalbaf, Sina	13-Dec-2021	Variance for structure setback to a water body - 150 Margolin Drive

Planner: Phil Testemale

Planning Status

Status Date: 18-May-2022

E-mail communication with applicant - QEP report submission for September.

Status Date: 25-Apr-2022

File reassigned to Planner Phil Testemale.

Status Date: 21-Mar-2022

Awaiting QEP report in support of variance application

File Number	Applicant Name	Date Received	Purpose
SS-DVP-2021.24	Kirsten Reite Architecture	20-Dec-2021	Follows on expiry of pervious permit SS-DVP-2018.17.

Proposed variance to permit: The siting of sewage system tanks, sewage disposal fields, commercial guest accommodation units; and a sub-electrical room. - 2621 & 2661 Fulford-Ganges Road, SSI

Planner: Jason Youmans

Planning Status

Status Date: 10-Mar-2022

See file SS-DP-2018.14 for updates as both files are moving in parallel.

Status Date: 23-Dec-2021

Planner Youmans assigned to the file - SS-DVP-2021.24

Status Date: 12-Dec-2021

Applicant advised that DVP-SS-2018.17 would expire January 4, 2022 if work not substantially started.

Applications

Development Variance Permit

File Number	Applicant Name	Date Received	Purpose
SS-DVP-2021.7	Craig, Brian	26-Feb-2021	Variance for Gate House and Beach Stairs - 344 Reginald Hill Road

Planner: Stephen Baugh

Planning Status

Status Date: 25-Apr-2022

File reassigned to Planner Stephen Baugh.

Status Date: 01-Sep-2021

Revised site plan required

Status Date: 18-Jun-2021

Site Visit

File Number	Applicant Name	Date Received	Purpose
SS-DVP-2022.1	Aurora Professional Group INC	06-Jan-2022	Variance regarding disposal field and setback to natural boundary of the sea - Clam Shell Island

Planner: Sonja Zupanec

Planning Status

Status Date: 20-Jul-2022

File assigned to Planner Zupanec

Status Date: 16-May-2022

Tsawout First Nations indicates an extension to respond to referral is required. No timeline given.

Status Date: 05-May-2022

Cowichan Tribes indicates interest in a site visit. Requires cost recovery, staff are attempting to arrange.

Applications

Development Variance Permit

File Number	Applicant Name	Date Received	Purpose
SS-DVP-2022.10	Girard, Jordan	28-Feb-2022	Front lot line variance to build SFD - 322 Collins Road, SSI

Planner: Phil Testemale

Planning Status

Status Date: 12-Aug-2022

E-mail to applicant: initial contact and request for information

Status Date: 19-Jul-2022

File transferred to Phil Testemale

Status Date: 02-Mar-2022

Planner Gordon assigned to file - SS-DVP-2022.10

File Number	Applicant Name	Date Received	Purpose
SS-DVP-2022.11	Edgar, Peter	17-Mar-2022	Lot Line Variance - 227 Roland Road, SSI

Planner: Stephen Baugh

Planning Status

Status Date: 25-Apr-2022

File reassigned to Planner Stephen Baugh

Status Date: 01-Apr-2022

Emailed applicant - re. site visit, arch info & MoTI setback permit

Status Date: 28-Mar-2022

Planner Mayes assigned to file - SS-DVP-2022.11

Applications

Development Variance Permit

File Number	Applicant Name	Date Received	Purpose
SS-DVP-2022.12	Polaris Land Surveying	02-May-2022	Variances to allow a boundary adjustment - 744 Lower Ganges Road, SSI

Planner: Stephen Baugh

Planning Status

Status Date: 15-Aug-2022

File re-assigned to Planner Baugh

Status Date: 06-May-2022

Planner Youmans assigned to file - SS-DVP-2022.12

File Number	Applicant Name	Date Received	Purpose
SS-DVP-2022.13	Polaris Land Surveying	04-May-2022	Variances to allow subdivision - 536 Beaver Point Road, SSI

Planner: Jason Youmans

Planning Status

Status Date: 18-May-2022

Planner Youmans assigned to file

File Number	Applicant Name	Date Received	Purpose
SS-DVP-2022.16	Hausen, Ellen	05-Aug-2022	To allow a stair structure in the setback - 124 Margaret Ave, SSI

Planner: Anthony Fotino

Planning Status

Status Date: 23-Aug-2022

Planner Fotino assigned to file

Liquor Control Branch

File Number	Applicant Name	Date Received	Purpose
SS-LCB-2022.1	Thrive Advisors	06-Jul-2022	Tasting room expansion - 270 Furness Road, SSI

Planner: Jason Youmans

Planning Status

Status Date: 11-Jul-2022

File assigned to Planner Youmans

Applications

Rezoning

File Number	Applicant Name	Date Received	Purpose
SS-RZ-2017.2	Fernando & Tammy Dos Santos	15-Feb-2017	Proposal to permit 30 affordable housing dwelling units and common building - 221 Drake Road, SSI.

Planner: Jason Youmans

Planning Status

Status Date: 19-Jul-2022

File transferred to Jason

Status Date: 29-Apr-2022

Meeting with applicant and W. Shulba. Applicant indicates water system management/ownership work is on-going.

Status Date: 16-Dec-2021

MoTI updates referral response - road upgrade request removed

File Number	Applicant Name	Date Received	Purpose
SS-RZ-2021.3	Chapman, Bryce	14-Jun-2021	To amend OCP land use designation from Channel Ridge Residential (CRR) on the East side of the property to Residential Designation (RN) and to amend Land Use Bylaw zoning from R6(a) to R8 on same portion - 361 Sunset Drive

Planner: Louisa Garbo

Planning Status

Status Date: 19-Jul-2022

File re-assigned to planner Garbo

Status Date: 14-Jun-2022

Staff report deferred to August 2022 meeting at applicant's request.

Status Date: 22-Oct-2021

Planner response to applicant questions on density in Channel Ridge

Applications

Soil Deposit and Removal

File Number	Applicant Name	Date Received	Purpose
SS-SDP-2022.2	Kerrigan, Neil	27-Jun-2022	Pond construction - 155 Alexander BLVD, SSI

Planner: Charly Caproff

Planning Status

Status Date: 12-Jul-2022

File assigned to Planner Caproff

File Number	Applicant Name	Date Received	Purpose
SS-SDP-2022.3	Diggin' It Excavating LTD	15-Jul-2022	Leveling property for development - 131 Knott PI, SSI

Planner: Charly Caproff

Planning Status

Status Date: 19-Jul-2022

Planner Caproff assigned to the file

Strata Conversion

File Number	Applicant Name	Date Received	Purpose
SS-SC-2018.2	Wilson, Dulcy	15-May-2018	Proposed strata conversion - 162 / 164 Maliview Drive, SSI

Planner: Jason Youmans

Planning Status

Status Date: 25-Apr-2022

File reassigned to Jason Youmans

Status Date: 04-Feb-2022

Dormant application notice sent

Status Date: 29-Apr-2021

Advised applicant of additional reports required by CRD

Applications

Subdivision

File Number	Applicant Name	Date Received	Purpose
SS-SUB-2011.2	Spencer's Excavating	29-Apr-2011	Proposed 4 Lot Subdivision - 159 Collins Road, SSI

Planner: Sonja Zupanec

Planning Status

Status Date: 20-Jul-2022

File assigned to Planner Zupanec

Status Date: 04-Jul-2022

Follow up to request approved storm water management plan copy.

Status Date: 11-Feb-2022

MoTI has accepted the Storm Water Management Plan

File Number	Applicant Name	Date Received	Purpose
SS-SUB-2020.3	Wey Mayenburg Land Surveying Inc.	21-Dec-2020	Proposed 3 lot subdivision - 521 Mansell Road

Planner: Charly Caproff

Planning Status

Status Date: 05-Jul-2022

PLRS letter in file. Contacted MOTI on July 5 to ask about the Island Health note. They said that "We still have not received anything from Island Health. We leave it up to the applicant to communicate with agencies such as Island Health to follow up on requirements of the PLRS. If that applicant has submitted application and fees to Island Health and a review has been completed, we would hear from Island Health or I would think at least the applicant."

Status Date: 05-Jul-2022

Contacted the applicant to inform them I have taken over the file and to send any pertinent reports/correspondence to me regarding the 3 lot conventional subdivision

Status Date: 24-Jun-2022

File re-assigned to Charly Caproff

Applications

Subdivision

File Number	Applicant Name	Date Received	Purpose
SS-SUB-2021.1	Polaris Land Surveying Inc	19-Jan-2021	4-Lot Subdivision - 536 Beaver Point Road, SSI
Planner: Phil Testemale			
Planning Status			
<u>Status Date:</u> 12-Aug-2022			
Phil to review status of DP/DVP with Jason			
<u>Status Date:</u> 19-Jul-2022			
File transferred to Phil Testemale			
<u>Status Date:</u> 25-Apr-2022			
File reassigned to Geordie Gordon			
File Number	Applicant Name	Date Received	Purpose
SS-SUB-2021.2	Polaris Land Surveying Inc	25-Jan-2021	Proposed 2 lot boundary adjustment and acquisition of road dedication to ensure all remains are within the cemetery boundary - 744 LOWER GANGES RD
Planner: Stephen Baugh			
Planning Status			
<u>Status Date:</u> 24-Jun-2022			
File re-assigned to Stephen			
<u>Status Date:</u> 25-Apr-2022			
File reassigned to Geordie Gordon			
<u>Status Date:</u> 08-Jun-2021			
PLR recieved from MoTI			

Applications

Subdivision

File Number	Applicant Name	Date Received	Purpose
SS-SUB-2021.3	Shalbaf, Sina	31-Mar-2021	2 lot subdivision 150 Margolin Drive

Planner: Phil Testemale

Planning Status

Status Date: 20-Jul-2022

E-mail to applicant - assignment and forthcoming review.

Status Date: 24-Jun-2022

File re-assigned to Phil

Status Date: 25-Apr-2022

File reassigned to Geordie Gordon

File Number	Applicant Name	Date Received	Purpose
SS-SUB-2021.4	Massender, Ian (Matthew)	27-Aug-2021	Boundary Adjustment - 244 Rainbow Road

Planner: Phil Testemale

Planning Status

Status Date: 24-Jun-2022

File re-assigned to Phil

Status Date: 25-Apr-2022

File reassigned to Geordie Gordon

Status Date: 23-Nov-2021

Septic report received

Applications

Subdivision

File Number	Applicant Name	Date Received	Purpose
SS-SUB-2021.5	Polaris Land Surveying Inc	16-Sep-2021	Boundary adjustment - 1201/1231 Beaver Point Road
Planner: Stephen Baugh			
Planning Status			
<u>Status Date:</u> 24-Jun-2022 File re-assigned to Stephen			
<u>Status Date:</u> 25-Apr-2022 File reassigned to Geordie Gordon			
<u>Status Date:</u> 10-Dec-2021 Revised site plan required to complete referral response			
File Number	Applicant Name	Date Received	Purpose
SS-SUB-2021.6	MiCo Properties	17-Nov-2021	Two Lot Subdivision - 1281 Fulford-Ganges Road
Planner: Charly Caproff			
Planning Status			
<u>Status Date:</u> 22-Jul-2022 Contacted MOTI regarding status of PLRS letter			
<u>Status Date:</u> 04-Jul-2022 Contacted applicant and asked them to send any reports/correspondence for processing.			
<u>Status Date:</u> 24-Jun-2022 File re-assigned to Charly Caproff			

Applications

Subdivision

File Number	Applicant Name	Date Received	Purpose
SS-SUB-2021.7	Juengst, Patricia	13-Dec-2021	2 Lot Subdivision - 007-521-031

Planner: Peter Dougan

Planning Status

Status Date: 19-Jul-2022

File transferred to Peter Dougan

Status Date: 25-Apr-2022

File reassigned to Geordie Gordon

Status Date: 15-Dec-2021

Referral Response sent to MoTI

File Number	Applicant Name	Date Received	Purpose
SS-SUB-2022.1	Polaris Land Surveying INC	10-Jun-2022	3 lot subdivision - 250 Collins Road

Planner: Anthony Fotino

Planning Status

Status Date: 24-Aug-2022

File transferred to Planner Fotino

Status Date: 13-Jul-2022

File transferred to Planner Dougan

Status Date: 04-Jul-2022

Planner Thomaidis assigned to file

Applications

Subdivision

File Number	Applicant Name	Date Received	Purpose
SS-SUB-2022.2	Polaris Land Surveying	13-Jun-2022	Boundary Line Adjustment - 271 Beddis Road, SSI

Planner: Peter Dougan

Planning Status

Status Date: 22-Aug-2022

Referral response sent to MOTI

Status Date: 13-Jul-2022

File transferred to Peter Dougan

Status Date: 04-Jul-2022

Planner Thomaidis assigned to file

File Number	Applicant Name	Date Received	Purpose
SS-SUB-2022.3	Polaris Land Surveying	15-Jul-2022	3 lots Conventional Subdivision - 115 Lumley Road, SSI

Inc

Planner: Charly Caproff

Planning Status

Status Date: 24-Aug-2022

Referral response sent to MOTI

Status Date: 12-Aug-2022

Submission will be a few days over the 30 day deadline. MOTI has been notified. Referral letter was originally sent on July 14 2022. Submission will likely be Wednesday August 17.

Status Date: 09-Aug-2022

Planner Caproff reassigned to file

Applications

Temporary and Industrial Use Permit

File Number	Applicant Name	Date Received	Purpose
SS-TUP-2022.2	Islands Trust	17-Jun-2022	Temporary Use Permit to allow Local Government Offices (renewal) - 500 Lower Ganges Road, SSI

Planner: Louisa Garbo

Planning Status

Status Date: 16-Aug-2022

Permit issued.

Status Date: 13-Jul-2022

File assigned to A/RPM Garbo

Islands Trust
LTC EXP SUMMARY REPORT F2023
Invoices posted to Month ending June 2022

655 Salt Spring	Invoices posted to Month ending June 2022	<u>Budget</u>	<u>Spent</u>	<u>Balance</u>
65000-655	LTC "Trustee Expenses"	<u>1,744.00</u>	<u>155.88</u>	<u>1,588.12</u>
		<u>1,744.00</u>	<u>155.88</u>	<u>1,588.12</u>
LTC Local				
65200-655	LTC - Local Exp - LTC Meeting Expenses	5,465.00	250.00	5,215.00
65210-655	LTC - Local Exp - APC Meeting Expenses	999.00	102.00	897.00
65220-655	LTC - Local Exp - Communications	1,500.00	500.00	1,000.00
65230-655	LTC - Local Exp - Special Projects	<u>1,391.00</u>	<u>0.00</u>	<u>1,391.00</u>
TOTAL LTC Local Expense		<u>9,355.00</u>	<u>852.00</u>	<u>8,503.00</u>
Projects				
73001-655-4020	Salt Spring Ganges Village Area Planning	19,000.00	14,182.00	4,818.00
73001-655-4034	SSIWPA Coordinator Expense	60,000.00	11,350.00	48,650.00
73001-655-4035	SSIWPA Events & Communications Expense	0.00	75.00	-75.00
73001-655-4037	SSIWPA Project - Weston Lake	30,000.00	27,293.60	2,706.40
73001-655-4038	SSIWPA Project - Watershed Protection Plan	38,400.00	14,100.00	24,300.00
73001-655-4113	Salt Spring Protect CDF Ecosystem	32,000.00	0.00	32,000.00
73001-655-4119	Salt Spring Housing Challenges & Solutions	<u>25,000.00</u>	<u>300.00</u>	<u>24,700.00</u>
TOTAL Project Expenses		<u>204,400.00</u>	<u>67,300.60</u>	<u>137,099.40</u>

DATE OF MEETING: September 6, 2022

TO: Salt Spring Island Local Trust Committee

FROM: Louisa Garbo, Acting Regional Planning Manager, Salt Spring Island Team

SUBJECT: Proposed Bylaw No. 526 – Changes to Residential Permissions in the Agricultural Land Reserve and Options for Dwellings on Large Farms

RECOMMENDATIONS

1. That the Salt Spring Island Local Trust Committee Bylaw No. 526, cited as “Salt Spring Island Land Use Bylaw No. 355, 1999, Amendment No. 3, 2021”, be read a third time.
2. That the Salt Spring Island Local Trust Committee Bylaw No. 526, cited as “Salt Spring Island Land Use Bylaw No. 355, 1999, Amendment No. 3, 2021”, be forwarded to the Secretary of the Islands Trust for approval by the Executive Committee.

BACKGROUND

Proposed Bylaw No. 526, if adopted, will amend Salt Spring Island Land Use Bylaw No. 355 (LUB) to implement the Agricultural Land Commission (ALC) residential permissions within the Agricultural Land Reserve (ALR) that came into effect at the end of 2021, which would allow farmworker dwelling units on Agriculture 1 and 2-zoned properties. Properties zoned A 1 or A2 will be permitted an additional dwelling for farmworkers if the property is classified as a farm under the *Assessment Act*. The floor areas in the bylaw for a farmworker’s dwelling are consistent with permissions granted by the Agricultural Land Commission. The proposed bylaw will also amend Section 3.17 of the LUB to utilize subdivision potential for farmworker housing.

The bylaw proposes changes to the definition of a farmworker’s dwelling unit to include use by employees of the farm business, whether full time or seasonally, and for family members. The bylaw also proposes options for farms not zoned Agriculture to build additional farmworker housing by using unrealized subdivision potential to construct additional dwellings if certain conditions, such as registering covenants on the use of additional dwellings and no further subdivisions, are met.

The bylaw proposes changes to agritourist accommodation permissions to provide clarity on the total number of rooms that can be used as part of accommodation. These changes bring the Land Use Bylaw into conformity with the Agricultural Land Reserve.

The SS LTC considered the proposed bylaw at their meeting on February 15, 2022, where the following resolutions were passed:

SS-2022-021

It was MOVED and SECONDED,

That Salt Spring Island Local Trust Committee Bylaw No. 526, cited as “Salt Spring Island Land Use Bylaw No. 355, 1999, Amendment No. 3, 2021,” be read a first time.

CARRIED

SS-2022-022

It was MOVED and SECONDED,

That the Salt Spring Island Local Trust Committee request staff refer Proposed Bylaw No. 526 to agencies, organizations and First Nations, as identified in this staff report dated February 15, 2022.

CARRIED

The SS LTC subsequently, at their meeting on July 12, 2022, considered the proposed bylaw and adopted the following resolutions:

SS-2022-98

It was MOVED and SECONDED,

That Salt Spring Island Local Trust Committee Proposed Bylaw No. 526, cited as “Salt Spring Island Land Use Bylaw No. 355, 1999, Amendment No. 3, 2021”, be read a second time.

CARRIED

SS-2022-99

It was MOVED and SECONDED,

That the Salt Spring Island Local Trust Committee requests staff to schedule a virtual public information session and public hearing for Salt Spring Island Local Trust Committee Proposed Bylaw No. 526, cited as “Salt Spring Island Land Use Bylaw No. 355, 1999, Amendment No. 3, 2021”.

CARRIED

Please see online previous staff reports for information on the consultation and referral processes, the agencies’ comments, and the staff review of the SS OCP policies and the Islands Trust Policy. Previous staff reports can be found on the project webpage at <https://islandstrust.bc.ca/island-planning/salt-spring/projects/>

Open house, online consultation, and public hearing

An in-person open house was originally planned for July 21, 2022; however, per resolution SS-2022-118 by SS LTC as above, the open house was changed to be hosted virtually to allow more people to attend. In addition to the open house via a zoom conference, staff also held a “Conservation with a Planner” program to provide additional opportunities for the public to ask questions and offer comments to staff.

A public hearing was held on August 18, 2022. The public hearing notice was advertised in two consecutive editions of the Gulf Islands Driftwood on August 3 and August 10, 2022, all notification requirements were completed in accordance with the *Local Government Act*. A copy of the complete public hearing binder has been posted on the Islands Trust Website at: <https://islandstrust.bc.ca/island-planning/salt-spring/projects/>

Comments from the public supported Proposed Bylaw 526 cited the serious lack of safe and quality housing for farm workers which create challenges in hiring farm workers, but also expressed concerns with the covenant clause that could hinder the effort by imposing an encumbrance on the properties. Concerns from the public opposed the bylaw citing concerns with water quality and quantity, and those who own properties outside ALR may abuse the farm status. Details of all public comments received throughout the process can be found online in the “Public Hearing Binders” of the [Housing Action Program – Farm Worker Housing project](#) page.

Rationale for Recommendation

Proposed Bylaw No. 526 intends to implement recent legislation in support of farm worker housing, and the proposed bylaw has been referred to relevant agencies and organizations with limited changes

recommended. The proposed bylaw was amended by SS LTC and given a first and second reading at their meeting on July 12, 2022.

Alternatives

The Salt Spring Island Local Trust Committee may consider the following options:

1. The SS LTC may request further information prior to moving forward to the third reading. Staff advises that the implications of this alternative would impose further demand on limited staff resources. If selecting this alternative, the SS LTC should describe the specific information needed and the rationale for this request. Recommended wording for the resolution is as follows:

That the Salt Spring Island Local Trust Committee requests staff [insert request]

NEXT STEPS

- Upon the SS LTC giving the amended bylaw third reading, staff will forward it to Islands Trust Executive Committee (EC) for consideration.
- Prepare for the fourth reading.

Submitted By:	Louisa Garbo, Acting Regional Planning Manager	August 20, 2022
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ATTACHMENTS

Appendix 1 Proposed Bylaw No. 526

PROPOSED

SALT SPRING ISLAND LOCAL TRUST COMMITTEE BYLAW NO. 526

A BYLAW TO AMEND SALT SPRING ISLAND LAND USE BYLAW NO. 355, 1999

The Salt Spring Island Local Trust Committee, being the Trust Committee having jurisdiction in respect of the Salt Spring Island Local Trust Area under the *Islands Trust Act*, enacts as follows:

1. Citation

This bylaw may be cited for all purposes as “Salt Spring Island Land Use Bylaw, 1999, Amendment No. 3, 2021”.

2. Salt Spring Island Local Trust Committee Bylaw No. 355, cited as “Salt Spring Island Land Use Bylaw, 1999,” is amended as follows:

2.1 By replacing the definition of “dwelling unit, farmworker’s” under Section 1.1 – Definitions – with the following:

“dwelling unit, farmworker’s” means a *dwelling unit* that is *accessory* to a *commercial farm business* on a *lot* and is used for the *residential* accommodation of farmworkers employed in that *farm business* or for family.

2.2 By replacing the table under Subsection 9.1.1 – Permitted Uses of Land, Buildings and Structures – with the following:

	A1	A2
Principal Uses, Buildings and Structures		
<i>Agriculture, farm buildings and structures</i> <i>Information Note: By definition, “agriculture” includes the processing, storage, and sale of farm products produced on that agricultural land. These uses must consistent with the Agricultural Land Reserve Use Regulation.</i>	♦	♦
<i>Single-family dwellings</i>	♦	♦
Accessory Uses		
<i>A secondary suite</i> subject to Section 3.16	♦	♦
Where a lot is classified as a farm under the <u>Assessment Act</u> , in addition to a <i>secondary suite</i> , a second <i>accessory dwelling unit</i> is permitted provided that it is:		
a) a pre-existing <i>dwelling unit</i> constructed before February 22, 2019; or		
b) a <i>manufactured home</i> constructed between July 4, 2019 and December 31, 2021; or		
c) a <i>farmworker’s dwelling unit</i> not exceeding:	♦	♦
i. 56 square metres in <i>floor area</i> on a lot between 1.2 hectares and 2 hectares in area; or		
ii. 90 square metres in <i>floor area</i> on a lot greater than 2 hectares in area; or		
iii. 186 square metres in <i>floor area</i> on a lot greater than 40 hectares in area.		

<i>Information Note:</i> For lots 40 hectares or less in area where the single-family dwelling exceeds 500 square metres in floor area, permission to construct an additional dwelling unit for farm use must be applied for and approved in writing by the Agricultural Land Commission.		
Home-based business use subject to Section 3.13	♦	♦
Commercial guest accommodation in a campground on agricultural land classified as a farm under the <u>Assessment Act</u> <i>Information Note:</i> This use requires an agri-tourism activity consistent with the <u>Agricultural Land Reserve Use Regulation</u> to be occurring on the lot.	♦	

- 2.3 By replacing the table under Subsection 9.1.2 – Siting and Density of Permitted Uses, Buildings and Structures – with the following:

	A1	A2
Lot Coverage		
Maximum combined <i>lot coverage</i> of all <i>buildings and structures</i> , excluding greenhouses (per cent)	35	35
Maximum combined <i>lot coverage</i> of all <i>buildings and structures</i> , including greenhouses (per cent)	75	75
Maximum <i>lot coverage</i> of all <i>campsites, buildings and structures</i> in a <i>campground</i> (per cent)	5	N/A
Number of Units and Site Areas		
Maximum combined number of bedrooms used in a <i>bed and breakfast home-based business</i> and <i>campsites</i> on any <i>lot</i> <i>Information Note:</i> The <u>Agricultural Land Reserve Use Regulation</u> only permits a <i>bed and breakfast home-based business</i> (tourist accommodation) to be operated within the <i>principal residence</i> with a maximum of four bedrooms used for accommodation. . Developing a <i>campsite</i> is only permitted if an <i>agri-tourism</i> activity consistent with the <u>Agricultural Land Reserve Use Regulation</u> is occurring on the <i>lot</i> .	10	N/A
Setbacks		
Despite Article 4.3.1(2), the following <i>lot line</i> setbacks apply in the <i>zone</i> indicated:		
Minimum <i>rear lot line</i> setback (metres) for <i>buildings, structures</i> and <i>uses</i> that are not listed in Subsections 4.3.4 through 4.3.9	4.5	4.5

- 2.4 “By replacing Section 3.17 – Dwellings on Large Farms – with the following:

- 3.17 Despite other provisions of this bylaw, where *agriculture* is a permitted *principal use* on a *lot* not in an *Agricultural zone*, additional *farmworkers’ dwelling units* corresponding with the *subdivision* potential of the *lot* are permitted provided that:
- (1) the *lot* is classified as a farm under the Assessment Act;
 - (2) the *lot* complies with Section 3.5;
 - (3) the number of additional *farmworker’s dwelling units* correspond with the *subdivision* potential of the *lot* in accordance with Subsection 5.8.1 and the zone-applicable Subdivision and Servicing Requirements of Part 9;

- (4) each *farmworker's dwelling unit* must be supplied with *potable* water in accordance with Section 5.5;
- (5) the maximum *floor area* of a *farmworker's dwelling unit* is 186 square meters;
- (6) the owner grants to the Salt Spring Island Local Trust Committee a covenant under the Land Title Act restricting *use* of the *farmworkers' dwelling units* and prohibiting further *subdivision* of the *lot*.

Information Note: Applications should be consistent with the guidelines in H.2.1.3 of the Salt Spring Island Official Community Plan.

2.5 By inserting in Section 3.11 – Dwelling Units – the following:

3.11.5 The maximum floor area for a *dwelling unit* is 500 square metres.

And by making consequential numbering alterations to effect this change.

READ A FIRST TIME THIS 12TH DAY OF JULY 2022

READ A SECOND TIME THIS 12TH DAY OF JULY 2022

PUBLIC HEARING HELD THIS _____ DAY OF _____ 20_____

READ A THIRD TIME THIS _____ DAY OF _____ 20_____

APPROVED BY THE EXECUTIVE COMMITTEE OF THE ISLANDS TRUST THIS

 _____ DAY OF _____ 20_____

ADOPTED THIS _____ DAY OF _____ 20_____

Chair

Secretary

DATE OF MEETING: September 6, 2022

TO: Salt Spring Island Local Trust Committee

FROM: Louisa Garbo, Acting Regional Planning Manager, Salt Spring Island Team

SUBJECT: Housing Action Program Proposed Bylaw No. 530 "Accessory Dwelling Units"

RECOMMENDATIONS

1. That the Salt Spring Island Local Trust Committee requests third reading for Bylaw No. 530, cited as "Salt Spring Island Land Use Bylaw No. 355, 1999, Amendment No. 1, 2022" be put on hold until staff consults with Tsawout First Nation to address their concerns.

PURPOSE

The purpose of Proposed Bylaw No. 530, if adopted, will amend the Land Use Bylaw (LUB) to allow Accessory Dwelling Units (ADUs) in a few zones; the intent is to help alleviate the tight rental supply issues and provide additional housing options on Salt Spring Island. The Salt Spring Island Local Trust Committee (SS LTC) gave the Proposed Bylaw No. 530 the first reading on April 19, 2022, and requested staff to proceed with the formal referral process on the draft bylaw and make necessary changes based on comments from agencies, First Nations and the community. The revised bylaw was presented to LTC at their meeting on July 12, 2022, with further changes recommended by LTC.

The bylaw proposes a definition of an accessory dwelling unit, the regulations for detached units, and units within the principal dwelling, which is often termed as a secondary suite. The bylaw also identified certain zones that allow for ADUs, and the parking requirements for the ADUs.

BACKGROUND

In response to the community's need for immediate actions to help ease the housing crisis, the Housing Action Program Task Force, at their meeting on August 19, 2021, requested that the Salt Spring Island Local Trust Committee (SS LTC) to consider an amendment to the Salt Spring Island Land Use Bylaw No. 355 (LUB) to allow secondary suites to be developed in all zones on Salt Spring Island per their resolution below:

That the Housing Action Program Task Force recommends the Salt Spring Island Local Trust Committee update Secondary Suites Bylaw No 461 as follows:

- *permit secondary suites in all zoning districts or districts chosen by the Salt Spring Island Local Trust Committee;*
- *allow secondary suites in accessory buildings;*
- *protect water for secondary suites and mandate that an alternative supply must be used where water concerns exist;*
- *update water requirements to align with Island Health regulations for multifamily dwellings;*
and
- *require a Housing Agreement to specify that the secondary suite is to be used for long-term use.*

CARRIED

On November 9, 2021, upon discussion of the recommendation by the Housing Action Program Task Force, the SS LTC adopted the resolution below requesting staff to explore the option of not only allowing secondary suites but all accessory dwelling units to be permitted on the island:

SS-2021-217

That the Salt Spring Island Local Trust Committee endorse the Housing Action Program Task Force's recommendation and request staff to report back on potential bylaw amendments to permit accessory dwelling units in all zones.

CARRIED

On February 15, 2022, staff provided a first draft of the bylaw on accessory dwelling units for SS LTC consideration. Salt Spring Island Local Trust Committee (SS LTC) requested staff to amend the bylaw per the resolution below:

SS-2022-019

That the Salt Spring Island Local Trust Committee request staff to amend Salt Spring Island Local Trust Committee Draft Bylaw No. 528, cited as "Salt Spring Island Land Use Bylaw, 199, Amendment No. 4, 2021" as follows:

- *Remove the definition of density;*
- *Add a new definition of suites in combination with accessory building;*
- *Permitting both kinds of suites in all zones except for islets; and*
- *Explore appropriate conditions and restrictions to phase in and manage impacts.*

CARRIED

On April 19, 2022, Salt Spring Island Local Trust Committee (SS LTC) gave the draft Bylaw No. 530 on accessory dwelling units (ADUs) a first reading:

SS-2022-069

That the Salt Spring Island Local Trust Committee Bylaw No. 530 on Accessory Dwelling Units, cited as "Salt Spring Island Land Use Bylaw, 1999, Amendment No. 1, 2022," be read a first time.

SS-2022-070

That the Salt Spring Island Local Trust Committee requests staff to send Bylaw No. 530 to external agencies, groups, and First Nations for referral.

CARRIED

On July 12, 2022, Salt Spring Island Local Trust Committee (SS LTC) gave the draft Bylaw No. 530 on accessory dwelling units (ADUs) a second reading:

SS-2022-116

That the Salt Spring Island Local Trust Committee gives Proposed Bylaw No. 530, cited as "Salt Spring Island Land Use Bylaw No. 355, 1999, Amendment No. 1, 2022," as amended, be read a second time.

CARRIED

SS-2022-117

That the Salt Spring Island Local Trust Committee has reviewed the Islands Trust Policy Statement Directives Only Checklist and determined that Proposed Bylaw No. 530, cited as "Salt Spring Island Land Use Bylaw No. 355, 1999, Amendment No. 1, 2022," is not contrary to or at variance with the Islands Trust Policy Statement"

CARRIED

SS-2022-118

That the Salt Spring Island Local Trust Committee requests staff to host a virtual public information session and public hearing for Salt Spring Island Local Trust Committee Proposed

Bylaw No. 530, cited as "Salt Spring Island Land Use Bylaw No. 355, 1999, Amendment No. 1, 2022."

CARRIED

The SS LTC also recommended several changes at their meeting in July, which included:

- the simplification of the definition of "accessory dwelling unit"
- the removal of the covenant requirement
- the minimum lot size requirement for the Rural Islet (Ri) zone to have an ADU
- additional zones being permitted to have ADUs in the land use table under Subsection 9.10.1
- the deletion of the zone variations as they relate to seasonal cottages.

Please see online previous staff reports for information on the consultation and referral processes, the agencies' comments, and the staff review of the SS OCP policies and the Islands Trust Policy.

- [Staff report and attachments for April 19, 2022](#)
- [Staff report and attachments for July 12, 2022](#)

Open house, online consultation, and public hearing

An in-person open house was originally planned for July 21, 2022; however, per resolution SS-2022-118 by SS LTC as above, the open house was changed to be hosted virtually to allow more people to attend. In addition to the open house via a zoom conference, staff also held a "Conservation with a Planner" program to provide additional opportunities for the public to ask questions and offer comments to staff.

The opponents to the Proposed Bylaw No. 530 cited comments and concerns, including but not limited to the followings:

- the bylaw is inconsistent with the policies outlined in the SS OCP
- concerns with the lack of water and infrastructure capacity
- the bylaw will generate growth to exceed the SS OCP projected population of 17,000
- no assurance that ADUs are affordable
- the bylaw is inconsistent with the protect and preserve mandate of Islands Trust
- concerns with more illegal Short Term Vacation Rentals as a result of the bylaw
- concerns with impacts on existing seasonal and full-time cottages
- concerns with doubling the existing density on the island if the bylaw is approved
- concerns with the removal of the covenant clause that should not have been removed

The supporters of the Proposed Bylaw No. 530 cited comments and concerns, including but not limited to the followings:

- significant staffing shortages due to the lack of housing on the island
- ADUs provide much-needed housing to the community
- ADUs offer housing within a small environmental footprint
- the bylaw offers housing options for workers and young families
- although the bylaw is not perfect and does not solve the housing crisis, it is a good start

On the day of the public hearing on August 18, 2022, staff received comments from Tsawout First Nation expressing their opposition to Proposed Bylaw 530, citing concerns with the environmental impact and the living capacity will have on Tsawout First Nation's rights to manage the traditional territory. Their comments warrant additional consultation; for this reason, staff is recommending additional time for discussion with Tsawout First Nation before the third reading.

Furthermore, a common concern brought up at the open house and the public hearing pertained to the removal of the covenant clause in the draft bylaw should be added back in the bylaw. Staff concurs with

such concerns as the covenant clause will better support policies within the Salt Spring Island Official Community Plan (SS OCP) and assist in developing a monitoring system. For this reason, the covenant clause has been added back to the draft bylaw. Additionally, some information notes from the current land use bylaw on building permits and provision of water and sewer facilities have also been added back to Bylaw No. 530 per the Advisory Planning Commission's request. The latest version of Proposed Bylaw 530 "Accessory Dwelling Units" is shown in Appendix 1.

Details of all public comments received throughout the process can be found online in the "Public Hearing Binders" [Housing Action Program – Accessory Dwelling Units \(ADUs\)](#) project page.

Rationale for Recommendation

Proposed Bylaw No. 530 has been referred to relevant agencies and organizations with no changes recommended except with a suggestion to include the building code and fire code requirements and the provision of water and sewer. Proposed Bylaw No. 530 on ADUs intends to help alleviate the tight rental supply issues and provide additional housing options on Salt Spring Island. The SS LTC gave Proposed Bylaw No. 530 its first reading on April 19, 2022, and requested staff to proceed with the formal referral process. The proposed bylaw was amended by SS LTC and given a second reading at their meeting on July 12, 2022. However, the letter from Tsawout First Nation indicated that more consultation is necessary to clarify their concerns and to seek input on the revision.

Alternatives

The Salt Spring Island Local Trust Committee may consider the following options:

1. The SS LTC may hold Proposed Bylaw No. 530 in abeyance to address concerns from Tsawout First Nation and the members of the public. The implications of a resolution to hold Proposed Bylaw No. 530 in abeyance is that no further work will be done on advancing the bylaw until the new SS LTC directs staff to do so. If the SS LTC choose to hold Proposed Bylaw No. 530 in abeyance, SS LTC may wish to recommend that Proposed Bylaw No. 530 be placed on the top priority projects list for the new SS LTC to consider. Resolutions to this option may read as follows:
 - *That the Salt Spring Island Local Trust Committee requests staff to hold Proposed Bylaw No. 530 in abeyance until such time as . . .*

Submitted By:	Louisa Garbo, Acting Regional Planning Manager	August 24, 2022
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ATTACHMENTS

Appendix 1 Proposed Bylaw No. 530 "Accessory Dwelling Units"

PROPOSED

SALT SPRING ISLAND LOCAL TRUST COMMITTEE BYLAW NO. 530

A BYLAW TO AMEND SALT SPRING ISLAND LAND USE BYLAW NO. 355, 1999

The Salt Spring Island Local Trust Committee, being the Trust Committee having jurisdiction in respect of the Salt Spring Island Local Trust Area under the *Islands Trust Act*, enacts as follows:

1. Citation

This bylaw may be cited for all purposes as “Salt Spring Island Local Trust Committee, Bylaw No. 355. Land Use Bylaw, 1999, Amendment No. 1, 2022”.

2. Salt Spring Island Local Trust Committee Bylaw No. 355, cited as “Salt Spring Island Land Use Bylaw, 1999,” is amended as follows:

2.1 By replacing the definition on “full-time rental cottage” with the following in Section 1.1 “Definitions:”

“Accessory Dwelling Unit” means a *dwelling unit accessory* to a *single-family dwelling unit* intended as an independent, separate unit, and subordinate to the *principal structure*, which contains sleeping, living, cooking and sanitary facilities, and its own independent entrance.

2.2 By deleting Schedule “I” Secondary Suites Map

2.3 By replacing Section 3.14 “Seasonal Cottages” and Section 3.15 “Full-Time Rentals Cottages” with the following:

3.14 ACCESSORY DWELLING UNITS

3.14.1 In zones where an *accessory dwelling unit* is permitted, the following regulations apply:

- (1) the *accessory dwelling unit* is not located within a portion of a *lot* that is identified as a Community Well Capture Zone on Map 22 of the Salt Spring Island Official Community Plan;
- (2) the *accessory dwelling unit* is not located within a *community water system*, except where written confirmation from the operator of the *community water system* is provided that the site has sufficient capacity to supply the *accessory dwelling unit*;
- (3) the *accessory dwelling unit* must not be operated as a *Bed and Breakfast home-based business*, nor rented on a *temporary* basis.

3.14.2 A building permit must be obtained for the *accessory dwelling unit* to satisfy all code requirements;

3.14.3 The maximum height of an *accessory dwelling unit* is 7 metres;

- 3.14.4 The maximum *floor area* of an *accessory dwelling unit* is 56 square metres on *lots* less than 1.2 hectares in area;
- 3.14.5 The maximum *floor area* of an *accessory dwelling unit* is 90 square metres on *lots* greater than 1.2 hectares;
- 3.14.6 Only one *accessory dwelling unit* or one *secondary suite* shall be permitted per *lot*;
- 3.14.7 The *accessory dwelling unit* can be freestanding or combined with an *accessory building*;
- 3.14.8 The *accessory dwelling unit* must not have a *basement*;
- 3.14.9 The *accessory dwelling unit*, including any stairs, decks or porches or other *structures* that are attached to the unit, or that function as part of the unit, should not be located within 6 metres of any other *building* on a *lot*;
- 3.14.10 *Accessory dwelling units* do not include recreational vehicles, or *accessory dwelling units* on wheels;
- 3.14.11 An *accessory dwelling unit* must not be subdivided from the *principal dwelling unit* under the Land Title Act or the Strata Property Act.

2.4 By replacing Section 3.16 “Secondary Suites” with the following:

3.15 SECONDARY SUITES

- 3.15.1 *Secondary Suites* are permitted only within a permitted *principal single-family dwelling unit* provided that:
 - (1) the *secondary suite* is not located within a portion of a *lot* that is identified as a Community Well Capture Zone on Map 22 of the Salt Spring Island Official Community Plan;
 - (2) the *secondary suite* is not located within a *community water system*, except where written confirmation from the operator of the *community water system* is provided that the site has sufficient capacity to supply the *secondary suite*; and
 - (3) the *secondary suite* is not operated as a *Bed and Breakfast home-based business*, nor rented on a *temporary* basis.
- 3.15.2 Only one *secondary suite* or one *accessory dwelling unit* shall be permitted per *lot*;
- 3.15.3 The entrance to a *secondary suite* from the exterior of the *building* must be separate from the entrance to the *principal dwelling unit*.
- 3.15.4 A building permit must be obtained for the *secondary suite* to satisfy all code requirements;
- 3.15.5 The maximum *floor area* of a *secondary suite* is 90 square metres.
- 3.15.6 A *secondary suite* must not be subdivided from the *principal dwelling unit* under the Land Title Act or the Strata Property Act.

- 2.5 By adding to the table under Subsection 9.9.1 “Permitted Uses of Land, Buildings, and Structures” with the following:

	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12
Accessory Uses												
<i>Accessory Dwelling Units</i> , subject to Section 3.14							♦	♦	♦			
<i>Secondary Suites</i> , subject to Section 3.15			♦		♦	♦	♦	♦	♦	♦		
<i>Home-based businesses</i> , subject to Section 3.13	♦	♦	♦	♦	♦	♦	♦	♦	♦			

- 2.6 By adding to the table under Subsection 9.10.1 “Permitted Uses of Land, Buildings and Structures” with the following:

	R	RU1	RU2	RU3	RW1	RW2	Ri	CD3	F1
Accessory Uses									
<i>Accessory Dwelling Units</i> , subject to Section 3.14	♦	♦		♦			1	♦	♦
<i>Secondary Suites</i> , subject to Section 3.15	♦	♦	♦	♦	♦	♦	♦	♦	♦
<i>Home-based business use</i> , subject to Section 3.13	♦	♦	♦	♦	♦	♦	♦	♦	♦

¹ The minimum lot size for an *accessory dwelling unit* must be 1.2 ha.

- 2.7 By adding a change to the table under Subsection 7.1.5 “Minimum Number of Parking Spaces for Automobiles, Disabled Parking and Bicycles” with the following:

TABLE 3 MINIMUM NUMBER OF PARKING SPACES FOR AUTOMOBILES, DISABLED PARKING AND BICYCLES			
LAND USE	Number of Automobile Parking Spaces Required	Number of required Automobile Parking Spaces which must be designed for use by the disabled	Number of Bicycle Parking Spaces Required
RESIDENTIAL			
<i>Single-family dwelling</i>	2 per unit	0	0
<i>Accessory Dwelling Unit or Secondary Suite</i>	1 per unit	0	0

- 2.8 By deleting Section 9.9.4 Exceptions in Particular Locations “Zone Variation R7(a)”
- 2.9 By deleting Section 9.10.4 Exceptions in Particular Locations “Zone Variation R(f)”
- 2.10 By deleting Section 9.10.4 Exceptions in Particular Locations “Zone Variation RU1(f)”
- 2.11 This bylaw should replace all mentions of *seasonal cottages* and *full-time rental cottages*, with *accessory dwelling units*.

- 2.12 This bylaw should be in harmony with Proposed Bylaw No. 526 which deletes any mention of *seasonal cottages* from the Agriculture zones.

And by making consequential numbering alterations to effect this change.

READ A FIRST TIME THIS 19TH DAY OF APRIL, 2022
READ A SECOND TIME THIS 12TH DAY OF JULY, 2022
PUBLIC HEARING HELD THIS ____ DAY OF ____ 20____
READ A THIRD TIME THIS ____ DAY OF ____ 20____

APPROVED BY THE EXECUTIVE COMMITTEE OF THE ISLANDS TRUST THIS
____ DAY OF ____ 20____

ADOPTED THIS ____ DAY OF ____ 20____

Chair

Secretary

File No.: 6500-20 – Water
Sustainability

DATE OF MEETING: September 6, 2022

TO: Salt Spring Island Local Trust Committee

FROM: Jason Youmans, Island Planner, Salt Spring Island Team
William Shulba, P.Geo, Senior Freshwater Specialist, Local Planning Services

COPY: Gary Holman, CRD Electoral Area Director
Karla Campbell, CRD, General Manager, Salt Spring Island
Salt Spring Island Watershed Protection Alliance (SSIWPA)
Louisa Garbo, A/Regional Planning Manager

SUBJECT: Lake Weston Water Availability and Climate Change Assessment

RECOMMENDATION

1. That the Salt Spring Island Local Trust Committee receive the Lake Weston Water Availability and Climate Change Assessment Final Report attached as Appendix 1 to the staff report of August 24, 2022.
2. That the Salt Spring Island Local Trust Committee request staff to work with the Capital Regional District and Government of British Columbia to identify funding and project management opportunities to undertake an Environmental Flow Needs assessment for Lake Weston and Weston Creek.
3. That the Salt Spring Island Local Trust Committee request staff to refer the Lake Weston Water Availability and Climate Change Assessment Final report to the Ministry of Forests Water Authorizations Branch for information, review and comment.
4. That the Salt Spring Island Local Trust Committee request staff to refer the Lake Weston Water Availability and Climate Change Assessment Final report to the Salt Spring Island Watershed Protection Alliance (SSIWPA) for information and discussion.

STAFF REPORT SUMMARY

The purpose of this staff report is to provide the Salt Spring Island Local Trust Committee (SS LTC) with a Water Availability and Climate Change Assessment for Lake Weston undertaken by GW Solutions.

SS LTC was the primary funder of this work using a portion of its unspent special property tax requisition funds for watershed protection coordination from previous fiscal years. Capital Regional District staff managed the project. An Islands Trust Island Planner and Islands Trust Senior Freshwater Specialist were members of the project team.

The assessment report concludes that seasonally, Lake Weston appears to drop below the minimum level required to sustain the Environmental Flow Needs (EFN) of Weston Creek given current surface water and groundwater withdrawals. Weston Creek provides spawning habitat for resident cutthroat trout as well as other ecological services and thus has been presented as the limiting factor to water withdrawals from the lake. The assessment report predicts that this problem will likely be exacerbated in the coming decades as the climate changes.

A detailed EFN assessment was not part of the scope of this study. In order to ensure the sustainability of the freshwater resources of the Weston Creek Watershed, Islands Trust staff recommend that an EFN assessment to establish the lower license limit of the lake surface elevation, as well as to determine conservation levels based on lake level elevation and creek flows be undertaken. Such an assessment will help inform withdrawal decisions by Fulford Water System and/or new licensing by the Province.

The GW Solutions report concludes that there is a strong need for more robust monitoring of groundwater wells and surface water flows both upstream and downstream of Lake Weston, greater emphasis on water conservation during the March to September period, and the need to protect the groundwater recharge potential of the watershed.

BACKGROUND

SS LTC commissioned this study on the recommendation of SSIWPA and the CRD electoral area director to help inform future land use planning changes in the Fulford Village area and to support the Fulford Water System in its service decisions. The assessment report is similar to recent studies undertaken by North Salt Spring Waterworks District for St. Mary Lake and Lake Maxwell in recent years as part of the inventory of freshwater knowledge on Salt Spring Island.

At its meeting of January 19, 2021 the Salt Spring Island Local Trust Committee passed the following resolution concerning the development of a Lake Weston Water Availability and Climate Change Assessment:

SS-2021-004

It was MOVED and SECONDED,

That the Salt Spring Island Local Trust Committee request that Islands Trust Council amend the 2021/22 draft budget to include a draw of \$30,000 from Salt Spring Island Local Trust Committee surplus funds – which includes the remainder of the constituency grant received by SSIWPA in 2017 – for the development of a Lake Weston Water Availability and Climate Change Assessment Study to be carried out by a contractor in cooperation with the Capital Regional District.

CARRIED

This resolution followed on a resolution from the Salt Spring Island Watershed Protection Alliance (SSIWPA) from its December 17, 2021 meeting recommending that the LTC support such an initiative:

By general consent, *the Salt Spring Island Watershed Protection Alliance recommends the Salt Spring Island Local Trust Committee allocate \$14,097 from the SSIWPA surplus (Constituency fund) to the Lake Weston Water Availability and Climate Change Assessment Study by the CRD.*

At its December 15, 2020 meeting, the LTC received [correspondence](#) (see page 40) from CRD electoral area director Gary Holman seeking the LTC's financial support for this initiative.

Development of such a study was identified in SSIWPA's 2020/21 work plan, and again in its [2021/22 work plan](#).

Islands Trust and CRD entered into a memorandum of understanding (MOU) in July 2021 to jointly undertake this work, with Islands Trust funding and CRD staff managing the contract. A request for proposals was posted in November 2021, and [GW Solutions](#) was the successful bidder for the work. The MOU between Islands Trust and CRD was extended several times to reflect shifting timelines.

Work on the study began in January 2022

ANALYSIS

Water Availability and Climate Change Assessment – Study Summary

GW Solutions describes Lake Weston as having a surface area of approximately 180,137 m² (18 Hectares) and a maximum depth of 12.2 metres and that Lake Weston is a “flow-through” lake wherein groundwater feeds and discharges directly into the lake via the faults on the upgradient northern side of the lake and seeps out of the lake on the downgradient southern side back into the groundwater zone.

GW Solutions engaged a modified water balance model based on the Thornthwaite-Mather approach to assess the water availability of Lake Weston Watershed. The consultant estimated water withdrawals/usage from groundwater and licenced surface water resources and estimated water availability for both groundwater resources and surface water features under different climate conditions based on global climate models (scenarios; 2030s, 2050s, and 2070s) for the study area.

The water balance model concluded that the total annual precipitation in the watershed was about 2585 cubic decameters per year (dam³/year) and the water surplus¹ was 1608 dam³/year which is comprised of both surface water runoff (993 dam³/year) and groundwater recharge (615 dam³/year). Note that 1 dam³ is 1 million litres of water. Of the total precipitation, evapotranspiration represents 35%, surface water runoff represents 40% and groundwater recharge represents 25%.

The study concludes that, based on seasonal fluctuations and current withdrawals, during the summer months the lake appears to drop below the minimum level required to sustain the Environmental Flow Needs (EFN) of Weston Creek, which provides spawning habitat for resident cutthroat trout and that this problem will likely be exacerbated in the coming decades as the climate changes.

The study notes:

“A comparison of annual groundwater recharge and total annual water usage (from Lake Weston and wells) indicates that, on an annual basis, groundwater recharge is sufficient to satisfy the current demand. However, groundwater recharge occurs mostly in the winter months while the water demand is higher in the dry summer months, mostly for water supply and irrigation. This means that during the summer months, water supply demand exceeds recharge which leads to seasonally declining water levels of Lake Weston and Aquifer 1147. These levels then rise again each fall and winter in response to recharge events.” (pg. 75)

The study continues:

“Water shortages are predicted from March to September when the demand will seasonally exceed the surplus of water. This means that during this period, licensed withdrawals exceed groundwater recharge (replenishment of supply) potentially leading to decreased groundwater baseflow to the creek and thus water available for environmental flow needs (aquatic ecosystems: lakes, creeks, wetlands, etc).” (pg. 75)

The consultants make the following recommendations for the agencies with jurisdiction over the ongoing health of Lakes Weston:

¹ Water surplus is the combination of surface water runoff and groundwater recharge which is the remaining water after evapotranspiration loss.

1) Groundwater monitoring

The consultants recommend an expanded groundwater monitoring regime in the Lake Weston watershed through dedicated observation wells or private wells equipped with dataloggers.

2) Climate stations

The consultants recommend an agency-run climate station be established in the Lake Weston watershed

3) Hydrometric stations

The consultants recommend establishing a hydrometric station to measure flow in the creek leaving the lake.

4) Water use metering

The consultants recommend the installation of flow metres for all connections within the Fulford Water System and for all surface and groundwater extraction points in the watershed.

5) Water conservation

The consultants recommend enhanced conservation measures between March to September and especially in July and August to ensure that fish habitat is maintained and significant water restrictions are avoided.

6) Environmental flow needs

The consultants recommend a detailed Environmental Flows Needs assessment of Weston Creek and Lake Weston be undertaken to determine the fish species present and the minimum flow required to maintain habitat for those species. The consultants note that incorporating EFNs into a water budget for Lake Weston may reduce the volume of water available for human use.

7) Watershed protection and land use decision making

The consultants recommend that the areas with highest groundwater recharge potential be protected to ensure that land use activities do not disturb soil and its ability to absorb water and recharge groundwater.

Water Availability and Climate Change Assessment – Staff Analysis

The *Lake Weston Water Availability and Climate Change Assessment* was created using available spatial information as well as monitoring information. The analysis of water availability using the methodology employed by GW Solutions – similar to those completed by Kerr Wood Leidal (KWL) for St. Mary Lake and Lake Maxwell – was directly informed and calibrated using long-term continuous monitoring of lake levels and creek flow monitoring. In the case of Lake Weston, lake level monitoring was provided by Islands Trust via the SSIWPA Groundwater Wells and Lake Level Monitoring Project. Creek monitoring was supplied by the Salt Spring Island Water Preservation Society Freshwater Catalogue, a community-based research project.

The strengths of the approach taken for the *Lake Weston Water Availability and Climate Change Assessment* are the use of available spatial data to yield derivative data products such as the recharge potential mapping. In addition to using on-island knowledge of the watershed, the project team organized and processed data from a

community-driven science project. Some of the weaknesses of the assessment are inherent to the difficulty in assessing extraction volumes from domestic groundwater users, un-metered surface water licenses, and lack of detailed surface-water groundwater interaction knowledge of creeks of Salt Spring Island to the aquifers.

Notwithstanding the ecological role of Lake Weston runoff providing environmental flows to Weston Creek in the rainy season, the lower limit of Lake Weston is likely a combination of EFN to Weston Creek as well as ecological impacts to its shoreline from lower water levels, as well as the ability of the lake to fill to a sustainable level from the dry to rainy season.

Although this was not a water service systems study of the Fulford Water System, the results provide a compelling story about the role drinking water lakes have on the ecological services of the watersheds they are contained within and how those ecological services provide a positive feedback to the lake to ensure its sustainability. A balance of extraction and ecological services is presented throughout the recommendations of the report, including, but not limited to, further study of the ecology of the lake, creek, groundwater, and watershed as a whole. In order to ensure the sustainability of the existing groundwater users and the Fulford Water System, the CRD, in cooperation with the Province and the Islands Trust, should undertake an EFN assessment to estimate a lower limit of lake levels to inform licensing and conservation decisions. Islands Trust staff concur with the GW Solutions recommendation that a metering program of the Fulford Water System would be helpful to engage in water auditing, balancing the raw water inputs, treated water, and end user volumes to assess the health of the distribution infrastructure of the Fulford Water System.

GW Solutions also recommends that SS LTC should consider regulations and/or policies to ensure surface water and groundwater protection in the Lake Weston watershed. Such could begin with a review of existing policies and regulations, or be considered as part of a larger Island-wide watershed protection project. The incoming SS LTC following the October 2022 elections could consider this as a priority project.

In light of the GW Solutions assessment report, it is likely that the existing Salt Spring Water Allocation Plan (1993) and licensed allocations on Lake Weston should be reviewed and updated by the Province in cooperation with the CRD and the Islands Trust, with a focus on Lake Weston.

Additionally, and in deference to the precautionary principle, it is the opinion of Islands Trust Senior Freshwater Specialist that in absence of further study, the GW Solutions report provides the caution that presently, and more so in the future of a changing climate, Lake Weston is fully allocated with its current withdrawals, albeit those withdrawals are likely a fraction of total allocated licensed volumes.

GW Solutions' recommendations for ongoing monitoring of surface and groundwater quantity and quality, as well as climate monitoring and end-user metering, are indicative of the information deficit concerning freshwater resources on Salt Spring Island and the challenges with which agencies must contend when faced with allocation or land-use decisions that may impact freshwater quantity or quality, which the Islands Trust Policy Statement requires local trust committees to consider in their land use regulations. Establishing a robust monitoring regime of the type advocated for by GW Solutions is needed, but would require dedicated year-over-year funding for the lifetime of monitoring program, which would likely only come through the establishment of a watershed protection service under the CRD or a similarly-funded Provincial initiative with the participation of local organizations.

The ongoing Salt Spring Island Watershed Stewardship and Protection Strategic Plan process may inform next steps for agencies of jurisdiction to fund and execute freshwater initiatives on the Island.

Consultation

GW Solutions engaged agencies and local organizations as necessary to gather relevant data to inform the study, including review by the chair of the SSIWPA technical working group.

Protocols

Islands Trust role in this study was defined by an MOU with the Capital Regional District. The SS LTC was the primary funder of the work, while CRD staff managed the consultant with input from Islands Trust staff.

First Nations

First Nations were not involved in this study. However, the finished product will be made available to them for their information. Significant future land use changes in the Fulford area would likely require First Nations consultation.

Rationale for Recommendation

- 1. That the Salt Spring Island Local Trust Committee receive the Lake Weston Water Availability and Climate Change Assessment Final Report attached as Appendix 1 to the staff report of August 24, 2022.**

Staff Comment: GW Solutions produced the report specified in the service contract and per the project charter.

- 2. That the Salt Spring Island Local Trust Committee request staff to work with the Capital Regional District and Government of British Columbia to identify funding and project management opportunities to undertake an Environmental Flow Needs assessment for Lake Weston and Weston Creek.**

Staff Comment: As noted above and within the final report, questions remain about the environmental flow needs of Weston Creek given that it is fed by a combination of both surface water flow and groundwater. Further study is required to investigate whether the current seasonal reduction in stream flow below the 10 percent mean annual discharge (MAD) considered the minimum required for stream health is detrimental to the lake and stream.

Staff recommend that Islands Trust and CRD work jointly again in coordination with the Province to procure and manage this work, as it will have important implications for licensing and allocation decisions on Lake Weston.

Staff anticipate that this work will cost in the order of \$30,000 to \$100,000.

- 3. That the Salt Spring Island Local Trust Committee request staff to refer the Lake Weston Water Availability and Climate Change Assessment Final report to the Ministry of Forests Water Authorizations Branch for information, review and comment.**

Staff Comment: This study may help inform future water allocation decisions for Lake Weston by the provincial government. Additionally, provincial staff may be able to offer suggestions on appropriate next steps given the report's findings.

- 4. That the Salt Spring Island Local Trust Committee request staff to refer the Lake Weston Water Availability and Climate Change Assessment Final report to the Salt Spring Island Watershed Protection Alliance (SSIWPA) for information and discussion.**

Staff Comment: SSIWPA identified undertaking a Lake Weston study as a priority project within its workplan over several recent years. Steering Committee members and its Technical Working Group will wish to discuss its findings.

Next Steps

If the SS LTC accepts the study as presented, staff will initiate discussions with the CRD and Province about funding and project management options for an Environmental Flow Needs assessment for Lake Weston and Weston Creek. Staff will refer the finished study to Ministry of Forests water authorizations staff and SSIWPA.

Staff will work to carry out alternative direction provided by SS LTC.

Submitted By:	Jason Youmans, Islands Planner	August 24, 2022
Submitted By:	William Shulba, Senior Freshwater Specialist	August 25, 2022
Concurrence:	Louisa Garbo, A/Regional Planning Manager	August 25, 2022

ATTACHMENTS

1. Lake Weston Water Availability and Climate Change Assessment – Final Report
2. Project Charter v1.1 – Lake Weston Water Availability and Climate Change Assessment

Lake Weston Water Availability and Climate Change Assessment

Prepared for:

Capital Regional District
PO Box 1000
Victoria, BC V8W 2S6

Prepared by:

GW Solutions Inc.
July 26, 2022

Executive Summary

Capital Regional District (CRD) Parks & Environmental Services and the Salt Spring Island Local Trust Committee of the Islands Trust required a climate-adapted water availability study for the Lake Weston / Weston Creek watershed on Salt Spring Island (SSI). The purpose of this study is to assess future water supply availability for the Lake Weston watershed in consideration of current water licences and predicted climate change scenarios. The Fulford Water System is currently the only local community water service provider in the Lake Weston/Weston Creek watersheds. There are also 24 point-of-diversion licences to extract water for domestic and irrigation supply from Lake Weston. In consideration of future growth scenarios within, and outside of, the Lake Weston watershed, it is necessary to identify the safe yield of water supplies while ensuring water requirements for environmental flow needs are preserved to ensure aquatic ecosystems (wetlands, creeks, lakes, etc.) are protected.

To meet the goal of project, GW Solutions has developed a water balance model (based on the Thornthwaite-Mather approach) to assess the water availability within the watersheds that contribute to the main study area, Lake Weston watershed. We estimated water withdrawals/usage from groundwater and licenced surface water resources and compared this usage to water availability. Finally, the estimated available water (for both groundwater resources and surface water features) under different climate conditions based on global climate models (scenarios; 2030s, 2050s, and 2070s) has been compared with the current water usage in the study area. This comparison enables us to understand if the study area is likely to experience stress due to withdrawals that exceed available supply. The results also help the CRD to determine if there is potential for community expansion within the study watershed based on sustainable water supply.

The Lake Weston Watershed is dominated by the star-shaped approximately 500-metre-wide Lake Weston and a limited number of stream drainages; however, the majority of creeks and rivers are reported to not flow all year round or have very limited flow during the dry season. Lake Weston has a maximum depth of 12.2 meters and is connected to the upper groundwater system. The lake occurs within a topographic depression at the intersection of two faults which has enabled the lake to form. Groundwater feeds or discharges directly into the lake via the faults on the upgradient side of the lake and seeps out of the lake on the downgradient side back into the groundwater zone. The lake also has a surface water outlet, Weston Creek, which appears to flow all year round.

Water supply in the Lake Weston watershed is obtained from two sources: 1) directly from Lake Weston and 2) Aquifer 1147 which is pumped from wells distributed throughout much of the watershed. The only water usage that is measured (metered) is the Fulford Community Water System taken from Lake Weston. The remainder of the water usage from Lake Weston and Aquifer 1147 is not measured and can only be estimated based on the amounts in the water licences and applicable coefficients. The fire protection water licence (institutional) is the largest licence however this water is licenced for firefighting and firefighting training only and is used only intermittently (e.g. 3000 gallons were drawn in 2019 but none in 2020 and 2021). Most of the water withdrawn for training is circulated

back to Lake Weston. There are several private domestic water supplies taken from Aquifer 1147 and significant water usage for irrigation taken from Lake Weston. The highest water usage from Lake Weston is the May-September period likely reflecting increased irrigation in summer. This contrasts to the assumed pumpage from domestic wells which is similar in summer and winter.

The water balance model shows the total annual precipitation in the watershed is about 2585 dam³/year and the water surplus is 1608 dam³/year which is comprised of both surface water runoff (993 dam³/year) and groundwater recharge (615 dam³/year). Of the total precipitation, evapotranspiration represents 35%, surface water runoff represents 40% and groundwater recharge represents 25%.

A comparison of annual groundwater recharge and total annual water usage (from Lake Weston and wells), as estimated from water licences, indicates that on an annual basis groundwater recharge is sufficient to satisfy the current total demand. However, groundwater recharge occurs mostly in the winter months while the water demand is higher in the dry summer months, mostly for water supply and irrigation. This means that during the summer months, water supply demand exceeds recharge which leads to seasonally declining water levels of Lake Weston and Aquifer 1147. These levels then rise again each fall and winter in response to recharge events.

Climate change models predict that winters in the CRD will be warmer with more rain and less snow. The rain will fall as more intense events leading to higher levels of surface runoff potentially leading to higher soil erosion and flooding and potentially less groundwater recharge. The spring snowmelt will tend to disappear reducing the historical groundwater recharge heading into the dry summer months. During summer, temperatures will be higher, precipitation lower and groundwater baseflow (feeding creeks, lakes, wetlands) will therefore be lower. Runoff is predicted to decrease significantly in the summer months (-20% to -28%) while in the winter months runoff will increase by a small amount (2% to 4%). Water shortage is predicted from March to September when the demand will seasonally exceed the surplus of water. This means that during this period, licenced withdrawals exceed groundwater recharge (replenishment of supply) potentially leading to decreased groundwater baseflow to the creek and thus water available for environmental flow needs (aquatic ecosystems: lakes, creeks, wetlands, etc.).

The Lake Weston level varies from a high of about 61.35 masl (meters above sea level) in January to a low of 60.55 masl in August (average 0.8 m variation) and appears to reach a level where it becomes stable (increasing very slightly) in the summer months. In drainages where fish are present, the minimum flow required to sustain the fisheries resource for fair spawning and rearing habitat is 5-10% of the Mean Annual Discharge (MAD). For Weston Creek, 10%MAD corresponds to a Lake Weston water level of about 61 masl. A 20%MAD corresponds to a lake level 10 cm higher at about 61.1 masl and a 30%MAD is about 61.15 masl.

The relationship between usage and Lake Weston level is represented with an approximate trend line providing an approximation of the usage that corresponds to the 10%MAD,

20%MAD and 30%MAD. It can be seen that to achieve even the minimum 10%MAD in Weston Creek the usage in the summer months would need to be reduced to usage levels similar to the winter months. This would require significant summer restrictions on irrigation (farm and household) usage. This highlights the need for accurate usage data to confirm these results and to allow consideration of the need for more appropriate water conservation programs.

Development and implementation of water conservation measures, for all water users, from March to September is recommended to minimize water shortages during summer months. Additional monitoring is recommended including installation of a new climate station in the upper elevations of the watershed where the majority of groundwater recharge occurs. In addition, it is recommended the installation of dedicated groundwater monitoring wells and/or the identification of suitable existing wells that could be monitored. Monitoring should prioritize understanding the impact of water usage and climate change on the watershed. Additionally, work is needed to better define environmental flow needs for both Lake Weston and Weston Creek based a detailed survey of the groundwater-dependant aquatic habitat and the measurement of the minimum flows necessary to maintain the habitat.

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APPENDICES

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GW Solutions Inc. General Conditions and Limitations

APPENDIX 2

Groundwater Recharge Coefficients and Groundwater Recharge Potential and Recharge Coefficients

APPENDIX 3

Water Balance Inputs and Outputs

APPENDIX 4

Climate Change Analysis

APPENDIX 5

Water Rights Licences: Points of Diversions (accessed February 2022)

APPENDIX 6

Glossary

1 BACKGROUND

The Capital Regional District (CRD) Parks & Environmental Services and the Islands Trust Salt Spring Island Local Trust Committee required a climate-adapted water availability study for the Lake Weston/ Weston Creek watershed (ID: 08HA0020) on Salt Spring Island (SSI).

The purpose of this study is to assess future water supply availability for the Lake Weston watershed in consideration of current water licences and predicted climate change scenarios.

The Fulford Water System is currently the only community water supply system in the Lake Weston and Weston Creek watersheds. In consideration of future residential density changes within the study area, it is necessary to identify the safe yield of water supply while ensuring that water requirements for environmental flow needs are preserved.

2 STUDY AREA DESCRIPTION

Figure 1 and Figure 2 present the Lake Weston Watershed boundary and some neighbouring watersheds in the study region. It is noted that the Lake Weston Watershed is a sub watershed of Weston Creek Watershed. The bedrock geology (Figure 3) of Salt Spring Island was mapped in detail by Greenwood and Mihalynuk (2009) by studying outcrops and interpreting existing borehole stratigraphy data. The Lake Weston watershed is comprised of granitic rocks of the Salt Spring intrusions and volcanic rocks of the Nitinat Formation. The structural distribution of the Upper Nanaimo Group was created by multiple ancient deformational (Mustard, 1994) and more recent glacier glacio-isostatic deformations (Clague, 1983). The bedrock throughout the southern Gulf Islands thus has been extensively folded and fractured (Journeay and Morrison, 1999).

The watershed is dominated by a groundwater-fed lake (Lake Weston; Water Body ID: 315620) and largely ephemeral drainages that do not flow year-round but only flow seasonally in the rainy season or temporarily following rain events. Lake Weston has an area of 180,137 m² and is in the crude shape of a cross with three distinct arms. The longest span between arms (northeast arm to southwest arm) is about 700m and the maximum depth is 12.2 meters (Figure 4). The lake appears to be at the intersection of several geologic faults which have weakened the rock and produced a depression in which the lake is formed. This type of lake is referred to as “flow-through,” since groundwater feeds and discharges directly into the lake via the faults on the upgradient northern side of the lake and seeps out of the lake on the downgradient southern side back into the groundwater zone. Flow-through lakes occur when the water table is higher on one side of the lake than the other, creating a gradient for groundwater to enter and leave the lake. An illustration of a flow-through lake is provided in Figure 5. The lake also has a stream outlet, Weston Creek, which flows year-round due to a combination of outflow from Lake Weston and groundwater discharge (baseflow) from the aquifer into the creek (see also Figure 38 for a regional cross-section through Lake Weston).

The proportion of water that is from groundwater in the Lake Weston inflow (E1) and the Weston Creek outflow (at the mouth) was studied by Howe and Allen (2020). They found the proportion of groundwater in the inflow varies from 10% during high flows (25 L/s) to 47% during low flow (4 L/s). In the Weston Creek outflow, the proportion varies from 12% during high flow (20 L/s) to 100% during low flow (1.1 L/s). This indicates the high proportion of groundwater discharging into both Lake Weston and Weston Creek.

Land-use in the study region is dominated by rural residences, agricultural and forest (Figure 6).

GW Solutions has developed a water balance model as a tool to assess the water availability within the Lake Weston watershed. This report describes the model to quantify water availability as runoff and groundwater recharge under different conditions of climate change. An analysis of estimated water withdrawals/usage from groundwater and surface water resources was also completed and compared to water availability.

To meet the goals of the project, the estimated available water (from both groundwater resources and surface water features) under different climate conditions has been compared with the current water usage in the study area. This comparison enables an evaluation of whether the area is under stress due to large withdrawals in comparison to water availability. The results will assist the CRD to determine the potential for community expansion within this area, in a sustainable manner.

Two main factors have been considered for this study.

a) *Understanding and planning for climate change*; the results are presented for investigations for three-time frame scenarios: 2030s, 2050s, and 2070s.

b) *Protection of valuable water resources and the aquatic ecosystems*; it is understood that the Water Availability Study should incorporate the baseline requirements for, not only water use by the community, but also for preservation of the health of aquatic ecosystems (aquifers, creeks, springs, wetlands, lakes).

The report is divided into the following four sections:

Section 4: Water Usage. All water usage quantities from surface water and groundwater sources quantified and/or estimated and classified according to use of water (domestic, irrigation, institutional, community water supply).

Section 5: Water Balance. Development of data sets and equations for estimating various components of the water balance including monthly estimates of groundwater recharge and surface water runoff.

Section 6: Climate Change Analysis. Analysis of the impacts of various climate change severity scenarios (based on global climate models) on the water budget for various time periods in the future 2030s, 2050s, and 2070s.

Section 7: Analysis of Results and Data Gaps. Analysis of the key results of the study and additional data (i.e. data gaps) that would help improve the accuracy of the predictions.

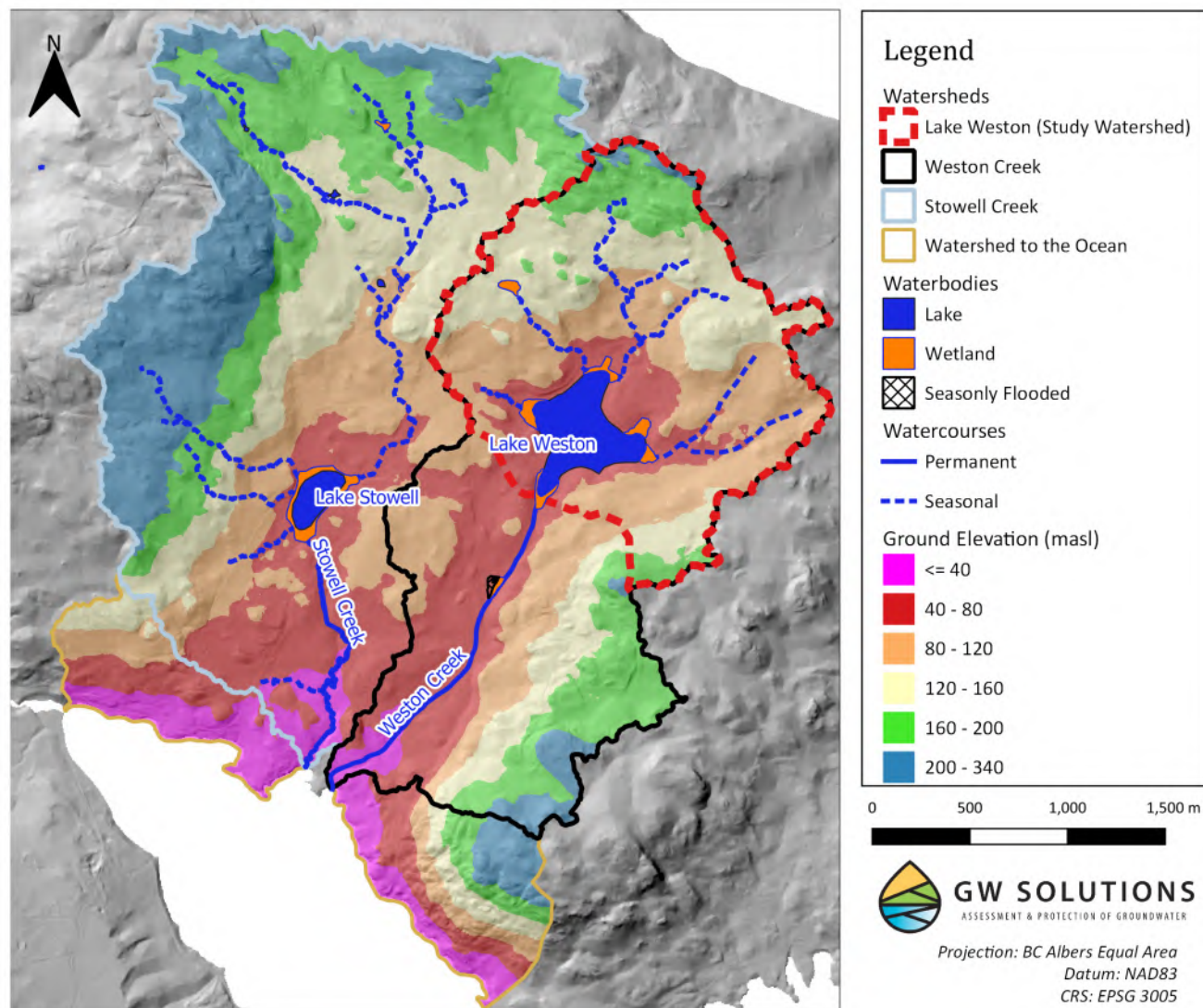


Figure 1. Lake Weston and Weston Creek watersheds.

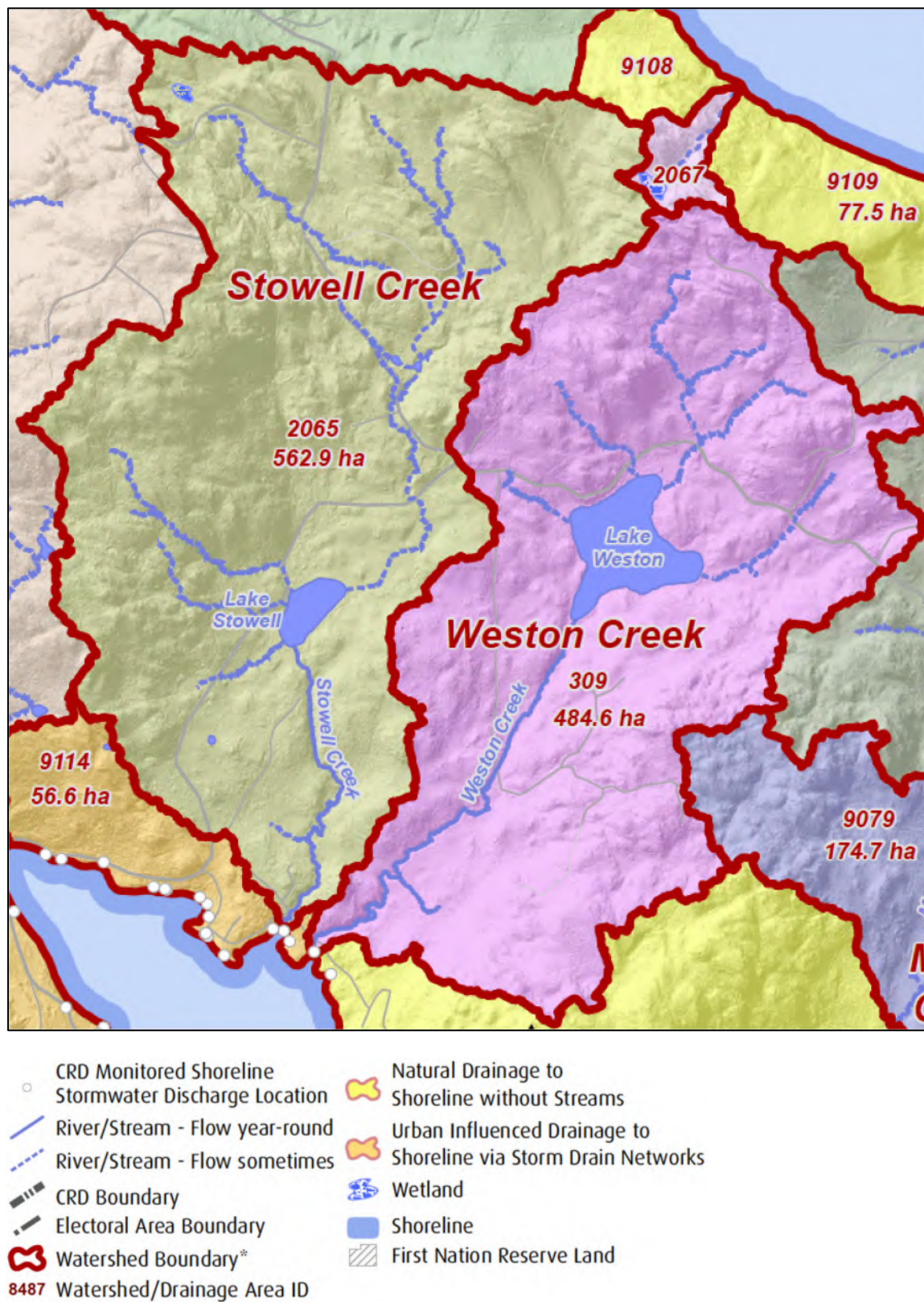
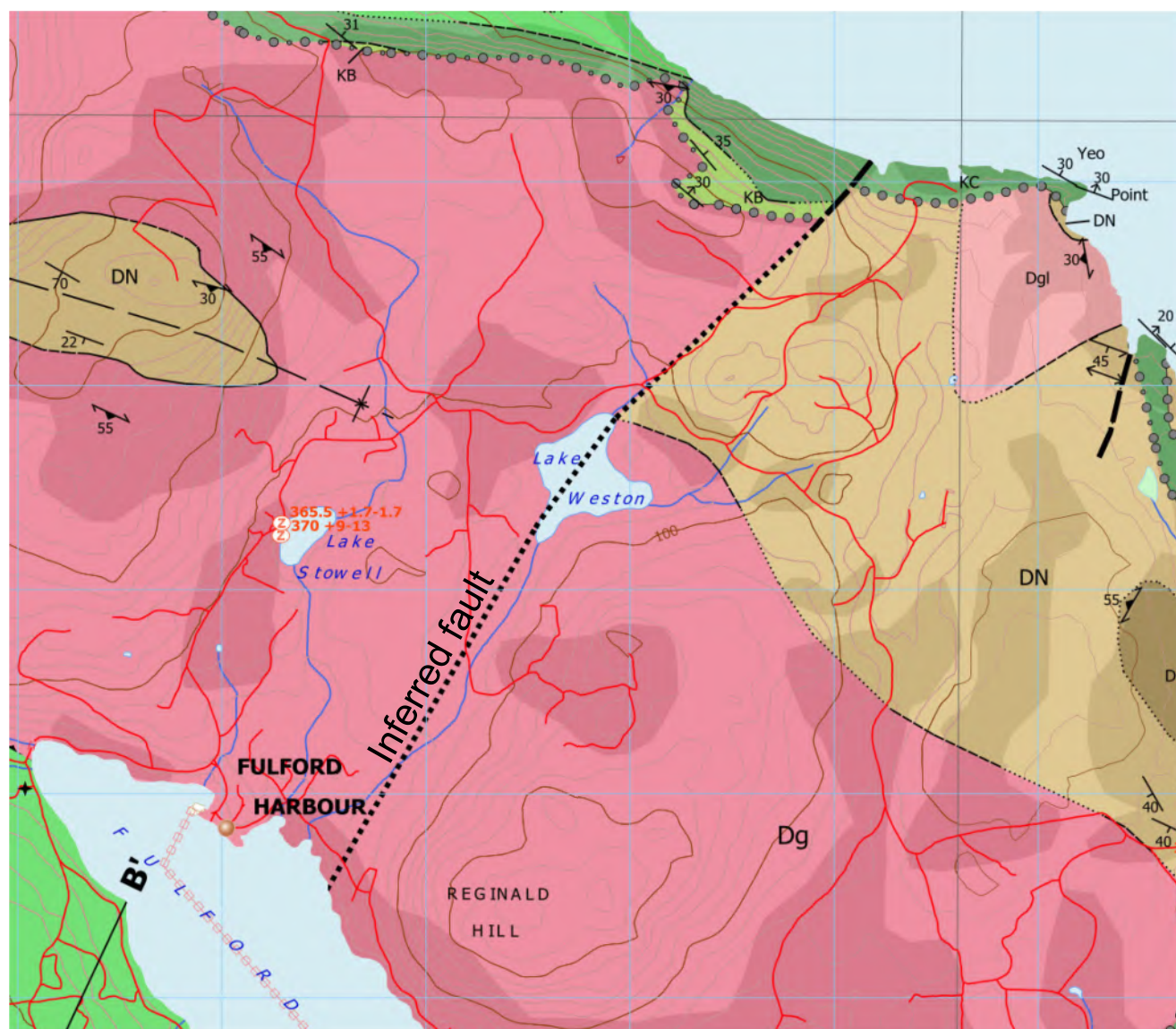


Figure 2. Weston Creek watershed and neighboring watersheds (CRD, 2018)



Sicker Group Volcanics

DN	Nitinat Formation Pyroxene-phyric mafic agglomerate, pyroxene bearing tuffs, lapilli tuffs and flows. Individual sub units and flows are difficult to trace confidently. Pyroxene crystals are commonly altered to actinolite.
----	---

Salt Spring Intrusions

Dg	Granite and granodiorite, undivided (Dg) commonly protomylonitic with conspicuous quartz 'eyes'. Produces a hornfels texture in Nitinat Formation country rocks.
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Figure 3. Study area geology (from Greenwood and Mihalynuk, 2009)

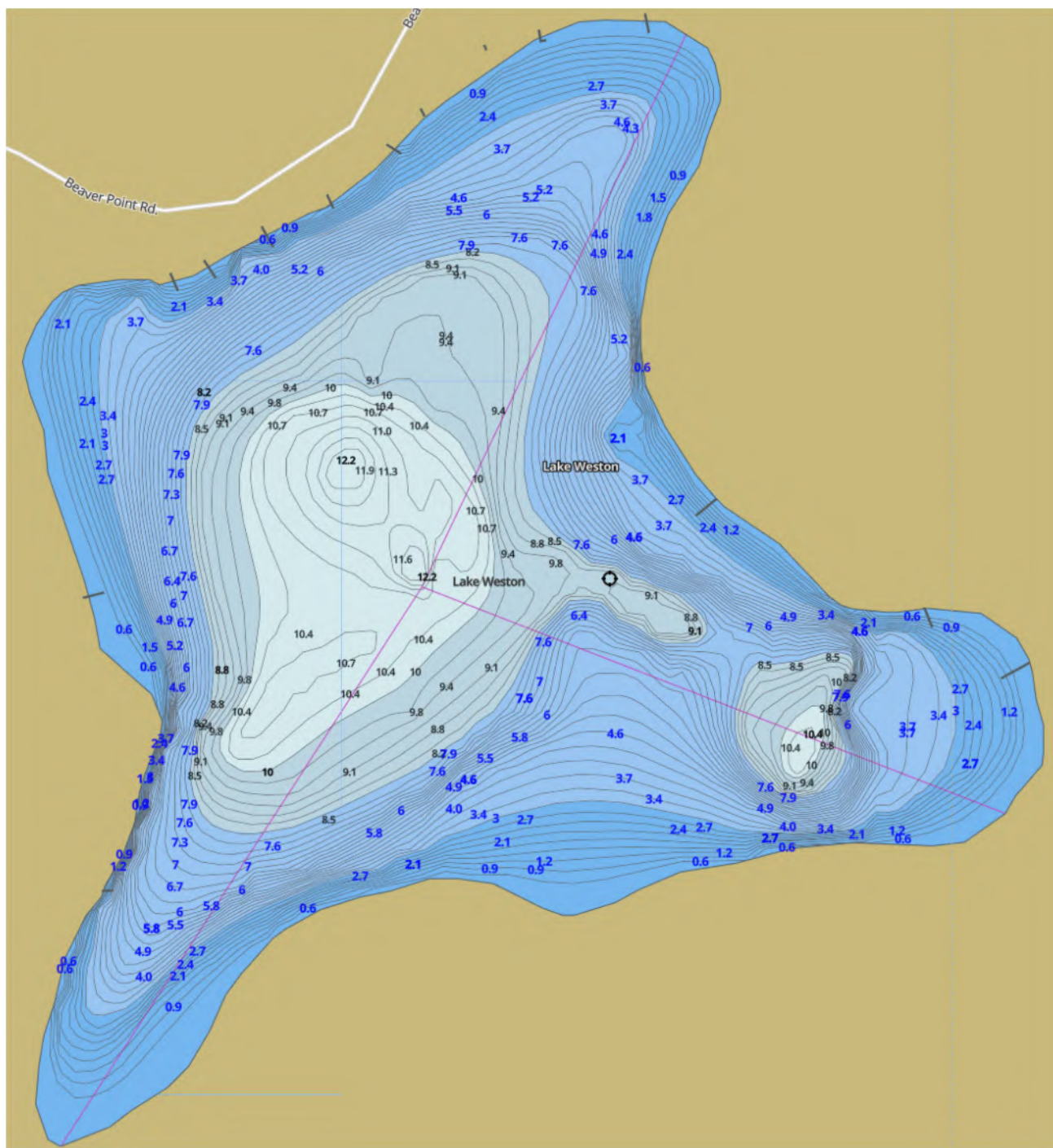


Figure 4. Lake Weston depth in meters, shape and dimensions (www.gpsnauticalcharts.com)

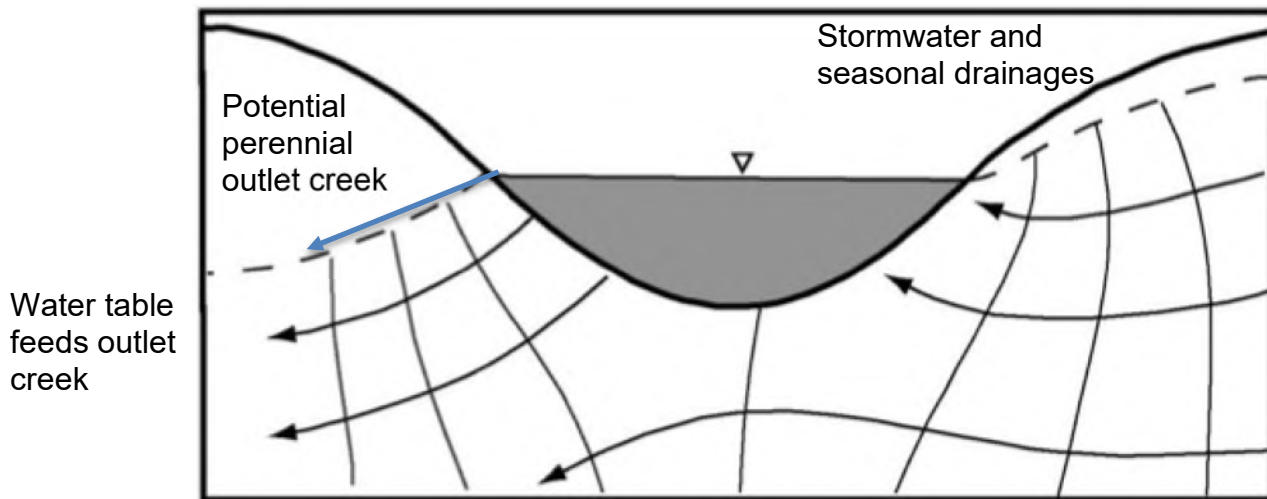


Figure 5. Flow-through lake. The water table is higher on one side of the lake than the other thus groundwater seeps into the lake on the upgradient side and seeps out of the lake on the downgradient side.

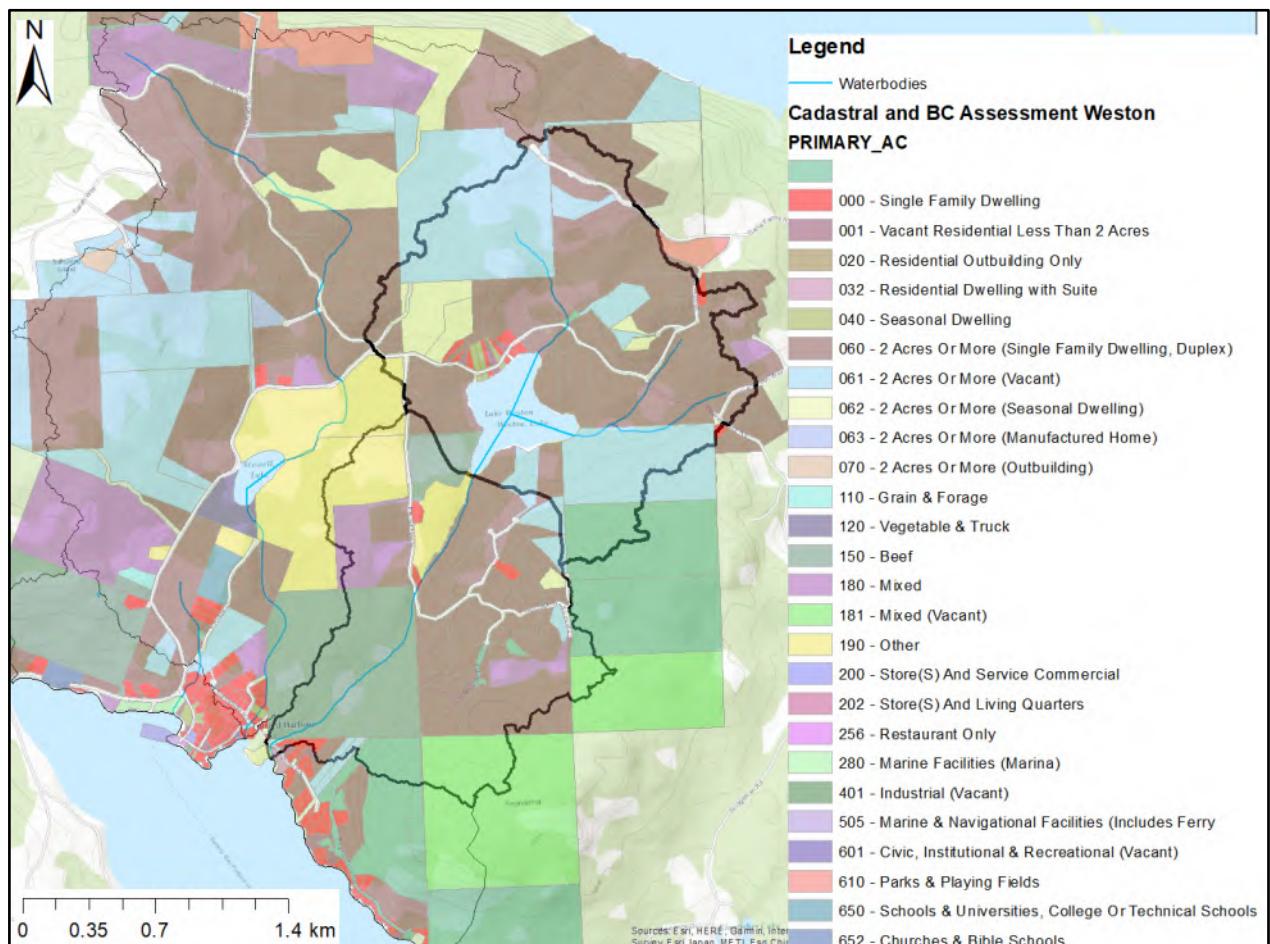


Figure 6. Land-use within and near study area

3 APPROACH

We employed the following approach:

1. To understand the current water demand for the Lake Weston watershed, water usage for surface water and groundwater sources has been estimated using a methodology developed by GW Solutions which includes licensed points of diversion (surface water and springs), points of well diversion, parcel information and the GWELLS database. Metered water use data for the Fulford Water System was provided by the CRD.
2. The next step in our water availability assessment is understanding the water balance for the study area. A baseline water balance model has been developed by using Climate Normals (average monthly climate variables data 1981-2010) as input. For this project, GW Solutions has used an ArcGIS based water balance tool created by James Dyer from the University of Ohio (Dyer, 2019, 2021). The model estimates monthly potential evapotranspiration, soil moisture storage, actual evapotranspiration, soil moisture deficit, and soil moisture surplus using the grid-based Thornthwaite-Mather approach. The water balance methodology is described in detail in Section 5. The water balance model estimates the available moisture *Surplus* (among other outputs), which is defined as the moisture remaining after evapotranspiration and therefore available for surface water runoff and groundwater recharge. GW Solutions on behalf of Island Trust has developed a recharge mapping methodology to estimate groundwater recharge and surface runoff volumes. In this approach the groundwater recharge flux is estimated and differentiated from *Surplus* by applying several deterministic coefficients (e.g. surficial composition, lineaments, estimated depth to groundwater and satellite-based delineations of preferential groundwater recharge and discharge areas) for groundwater recharge. The baseline water balance model is calibrated using a statistical approach for actual measured flow data.
3. The climate change effects on the climate variables such as precipitation, radiation and temperature, have been projected for three time-periods – 2030, 2050, and 2070 using ClimateBC Data Project with selecting the IPCC's most recent *Coupled Model Intercomparison Project* (CMIP6) scenarios.
4. The outcomes of climate change projections were then entered into the calibrated water balance model as input and the water availability/surplus was estimated as the output for different climate change scenarios.
5. Finally, the current water usages were compared to the water availability of surface water and groundwater resources considering different climate change conditions to understand the degree of water stress in the watershed.

4 WATER USAGE

Understanding and estimating the water usage within the Lake Weston area is critical to the sustainable management of surface water and groundwater resources. GW Solutions worked collaboratively with the Capital Regional District (CRD) and Island Trust to compile available measured water usage (groundwater and surface water). The only metered water system in the watershed is Fulford Water System and this data was obtained from CRD. This metered information was critical to understand the temporal variability (month to month) in water usage. For all other water users (without metered data), we estimated water usage as described in the following sections.

4.1 Estimation of Surface Water Withdrawals

The water availability assessment requires an estimation of monthly and yearly surface water withdrawal volumes. The BC Water Rights database, which includes water licence information for surface water sources, was used to estimate the surface water withdrawal volumes. A water source (i.e., spring, pond, or stream) can have multiple licenses and associated Points of Diversion (POD's); and each license can have one or more POD's. For each water license, basic information is provided such as license status, expiry date, licensed volume (units), water use purpose and period of usage.

Figure 7 shows the current licensed PODs for the study area, limited to withdrawals and classified by type of use (i.e., domestic, irrigation, industrial/commercial, institutional and water supply systems). There are 24 PODs within the Lake Weston watershed with the largest associated with the Fulford Water System which as the only metered system in the study area (Figure 8). All other water usage must be estimated based on licences and usage type. However, in an event of fire, the Fire Suppression license will become the largest at a potential maximum rate of 80 liters/second.

Detailed information for Non-Domestic PODs is provided in Figure 9. According to the licences the domestic use ranges between 2 to 5 cubic meters per day per licence. A complete list of Water Rights for Lake Weston is presented in Appendix 5.

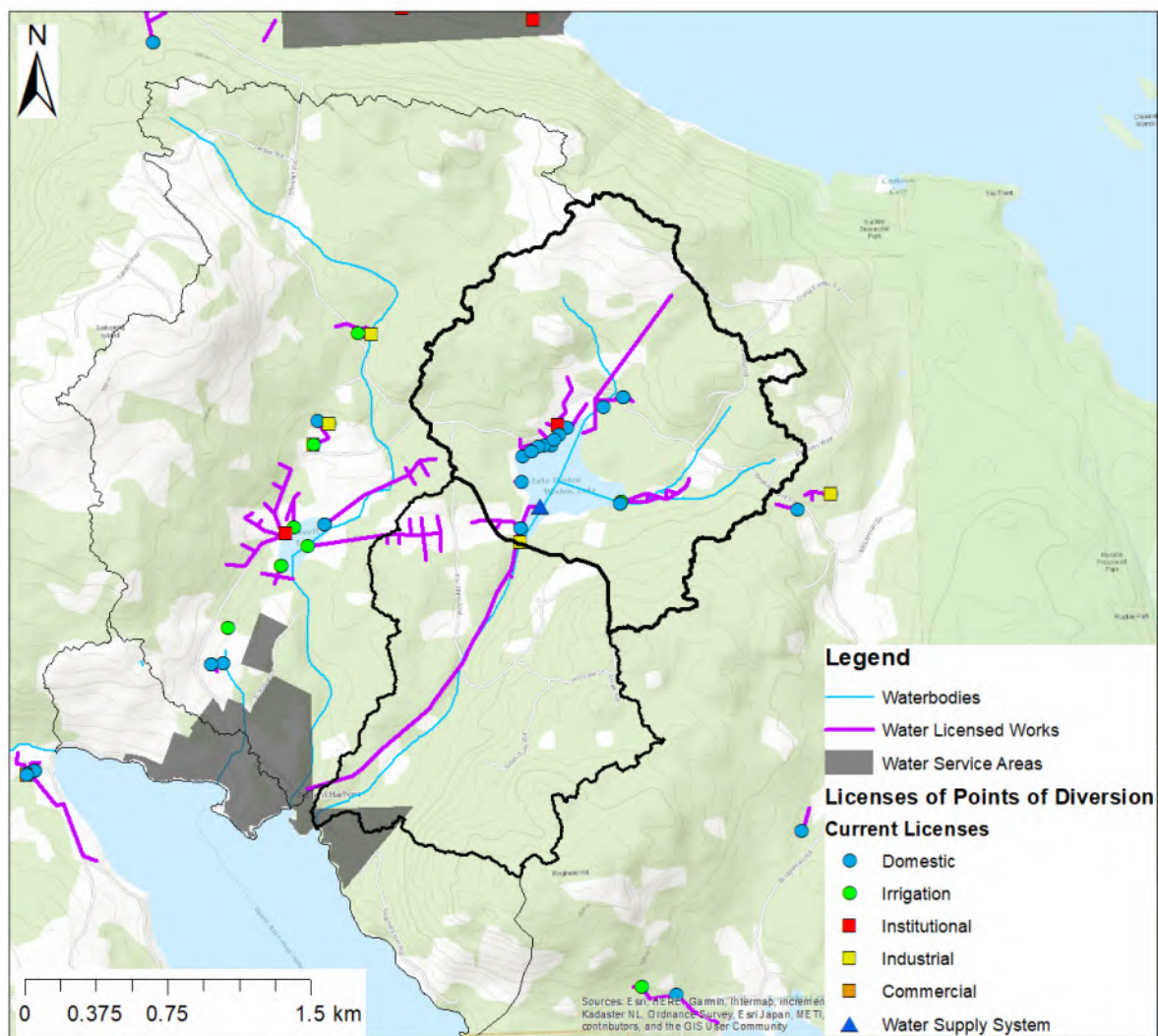


Figure 7. Current water right licences for Points of Diversion according to type of usage

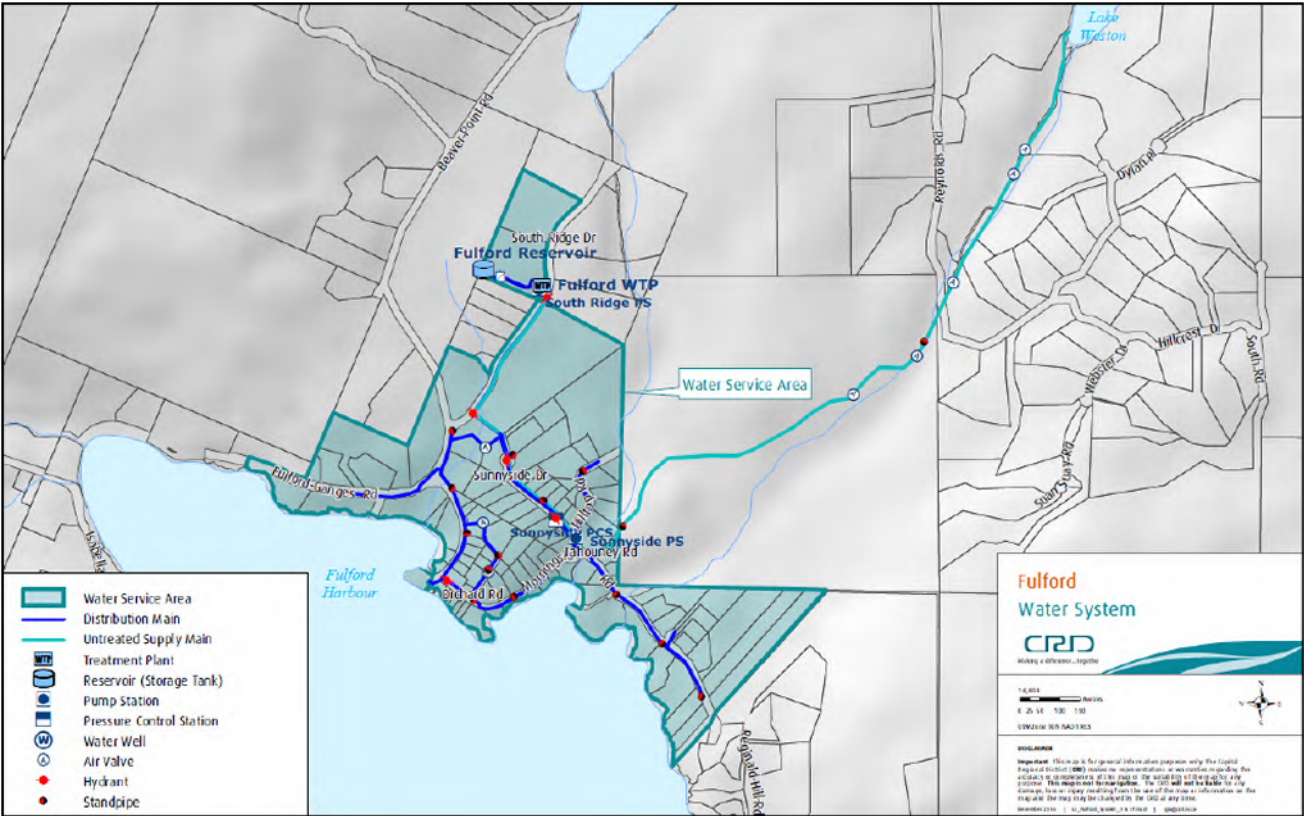


Figure 8. Service areas for Fulford Water Supply System regulated by CRD

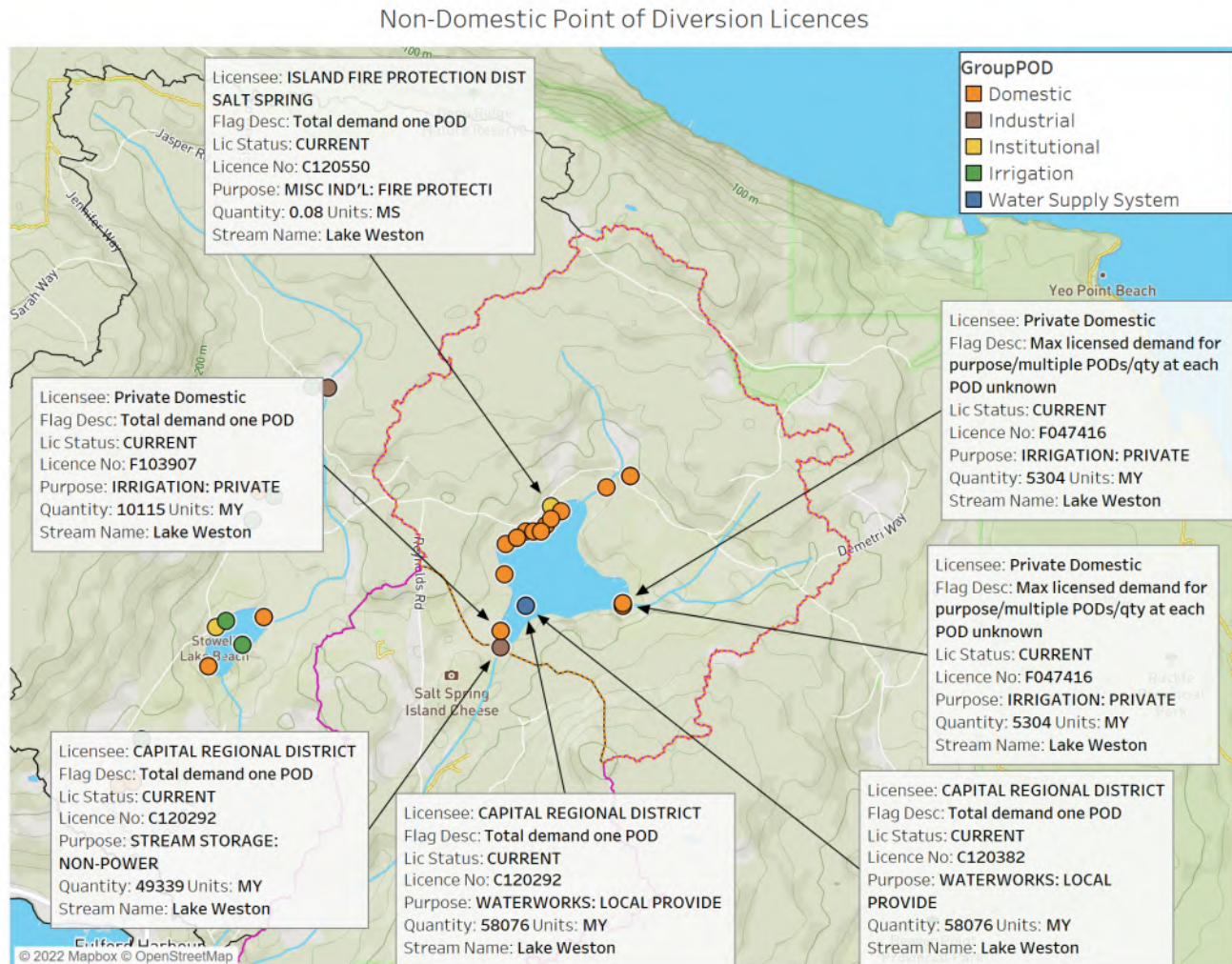


Figure 9. Details on non-domestic current licences for Points of Diversion

MY= m^3 /year, MS= m^3 /s

4.1.1 Methodology and estimation of volumes for current PODs (surface water)

Licensed volumes in the POD database are reported in yearly, monthly, daily, or hourly use rates. To normalize the licensed volumes to monthly rates, we applied coefficients that model seasonal patterns of water including seasonality from the Fulford Water System. Coefficients were estimated based on monthly use trends for water supply systems on Vancouver Island (i.e., North Salt Spring Waterworks District, Nanaimo and Fulford Water System), Ecofish Baseline Report and Rood and Hamilton (1995) (domestic), BC Ministry of Agriculture Livestock Watering Factsheets (livestock and irrigation), and the BC Agriculture Water Demand Model (irrigation).

Table 1 summarizes the monthly coefficients used for the conversion to monthly rates including when the information was converted to consistent units. Monthly rates were then added to derive yearly water use for surface streams and springs. The sum of the all the months equals to 12. The coefficient indicates months where greater water use happens and the proportion of water usage for each month. For instance, in *Irrigation: Private* under current climate scenarios there is no water usage from October to April (coefficient=0), the water usage in July and August (coefficient=3.6) is three times higher than in May and September (coefficient=1.2) and 33% more than the usage in June (coefficient=2.4).

Table 1. Monthly allocation coefficients for estimated water use from PODs

Group POD	Purpose	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
Domestic	DOMESTIC	0.85	0.85	0.85	0.85	0.95	1.00	1.50	1.50	1.10	0.85	0.85	0.85
Irrigation	IRRIGATION: PRIVATE	0.00	0.00	0.00	0.00	1.20	2.40	3.60	3.60	1.20	0.00	0.00	0.00
Irrigation	LAND IMPROVE: GENERAL	0.95	0.95	0.95	0.95	1.05	1.07	1.08	1.08	1.07	0.95	0.95	0.95
Irrigation	LIVESTOCK & ANIMAL: STOCK	0.85	0.85	0.85	0.85	0.95	1.00	1.50	1.50	1.10	0.85	0.85	0.85
Irrigation	LWN, FAIRWAY & GRDN: RES	0.00	0.00	0.00	1.20	2.40	2.40	2.40	2.40	1.20	0.00	0.00	0.00
Industrial	GRNHOUSE & NURSERY: GRNHO	0.00	0.12	0.12	0.24	1.20	1.68	2.88	2.88	2.04	0.72	0.12	0.00
Industrial	LWN, FAIRWAY & GRDN: WATE	0.00	0.00	0.00	1.20	2.40	2.40	2.40	2.40	1.20	0.00	0.00	0.00
Commercial	COMM. ENTERPRISE: ENTERPR	0.95	0.95	0.95	0.95	1.05	1.07	1.08	1.08	1.07	0.95	0.95	0.95
Institutional	MISC IND'L: FIRE PROTECTI	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
Water Supply System	WATERWORKS: LOCAL PROVIDE	0.85	0.85	0.85	0.85	0.95	1.00	1.50	1.50	1.10	0.85	0.85	0.85

BC fire season from April to September

4.2 Estimation of Groundwater Withdrawals

4.2.1 Water wells database, cadastral information, and water service areas

The BC water wells database (GWELLS), land-use from the BC Assessment Authority, and water service areas were used to estimate groundwater withdrawal. The wells database includes the vast majority of wells; however, it does not include all wells since reporting to B.C was voluntary until the *Water Sustainability Act* came into force in 2016. Additionally, dug wells typically are not registered within GWELLS. The well use types are classified as:

Water Supply System, Test Well, Private Domestic, Observation Well, Irrigation, Commercial and Industrial, Other and Unknown Well Use. There are known water supply systems utilizing groundwater within the Lake Weston watershed. Additionally, no non-domestic groundwater license Points of Well Diversion or non-domestic groundwater use applications were found within watershed at the time of data compilation.

Wells that do not extract water were removed from the analysis, including abandoned or decommissioned wells, dry holes, test wells and observation wells.

The GWELLS database does not include information on pumped volumes. To estimate the water use from groundwater wells, we combined the following information:

- Parcel boundary and land use data from BC Assessment, provided by the ITC.
- Active wells from the GWELLS database (Figure 10).

4.2.1.1 *Estimation of water volumes (groundwater) using wells database and cadastral information*

Groundwater use was estimated based on joining active wells to the parcel's land use (the "primary actual use" attribute from BC Assessment). Wells could then be classified by type of use: Water Supply System, Recreational, Irrigation, Institutional, Industrial, Domestic, Transportation and Commercial.

Average groundwater use for each land use type was estimated and adapted from Miles and Guy (2009) and is summarized in Table 2. The effects of seasonality and parcel size on water use were also taken into account. Three seasonality labels are used:

- "Area based": volume estimation based on parcel area,
- "Seasonal use (May-Sep)": volume estimation based on 5 months of water use (May to September); and
- "Area based and seasonal use (May-Sept)": volume estimation based on combination of parcel area and period of use (May to September).

Coefficients from the BC Agricultural Water Demand Model (irrigation) and the BC Ministry of Agriculture's Livestock Watering Factsheets (livestock and irrigation) were used for agricultural users (parcels with an irrigation use). Monthly and seasonal variations were estimated based on reported use for the domestic and water supply systems (Table 1). The coefficients are similar to those used for the POD water use estimation.

It is expected parcels within the Irrigation category will overestimate water demand. The method assumes 50% of the land is actively irrigated with volumes assigned according to the seasonal percentages in Table 3. However, to more accurately estimate the irrigated land, field survey and data collection will be required.

The estimate of total groundwater use was calculated based on data from springs (POD) and water wells.

Table 2. Average water use estimates based on parcel information

Group	Primary Actual Use	Estimation type and seasonality	L/day/parcel	Number per ha
Domestic	000 - Single Family Dwelling		625	
Domestic	040 - Seasonal Dwelling	Seasonal use (May-Sep)	625	
Domestic	060 - 2 Acres or More (Single Family Dwelling, Duplex)		1,250	
Domestic	062 - 2 Acres or More (Seasonal Dwelling)	Seasonal use (May-Sep)	1,250	
Irrigation	150 - Beef	Area based	50	1
Irrigation	180 - Mixed	Area based and seasonal use (May-Sept)	10,000	
Irrigation	190 - Other	Area based and seasonal use (May-Sept)	10,000	

Table 3: Monthly seasonal variations for estimation of monthly pumped volumes

Month	No of days	Irrigation	Water Supply System	Domestic and others
		Distributed (%)	Increased by (%)	Increased by (%)
January	31		0%	0%
February	28		0%	0%
March	31		0%	0%
April	30		0%	0%
May	31	10%	15%	10%
June	30	20%	25%	12%
July	31	30%	80%	14%
August	31	30%	80%	14%
September	30	10%	20%	13%
October	31		0%	0%
November	30		0%	0%
December	31		0%	0%

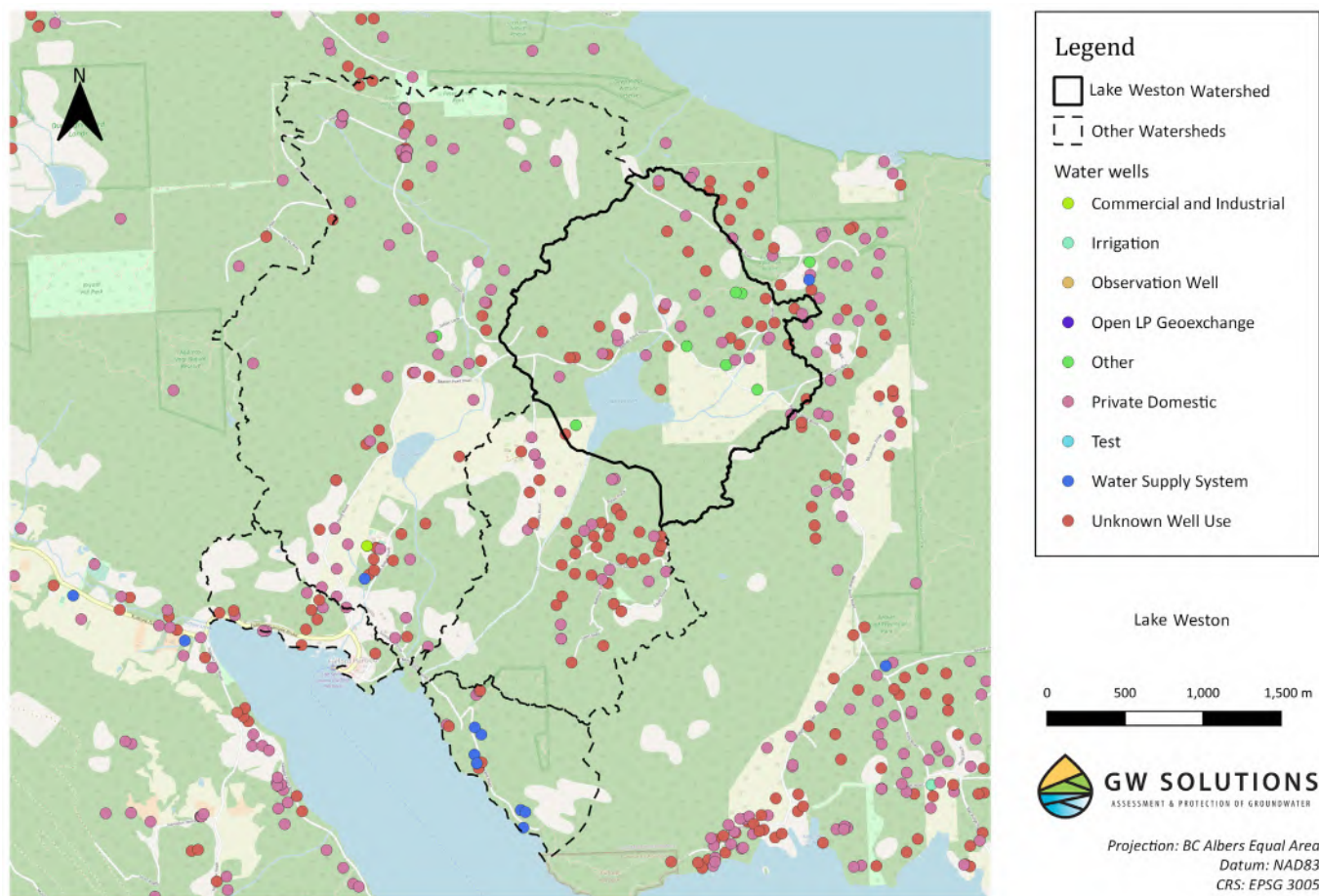


Figure 10. Registered Groundwater Wells in the Study Area

5 WATER BALANCE

5.1 Methodology

A water balance for the Lake Weston Watershed was estimated using an ArcGIS-based model developed by James Dyer from the University of Ohio (Dyer, 2019, 2021). The model estimates monthly potential evapotranspiration, soil moisture storage, actual evapotranspiration, soil moisture deficit, and soil moisture surplus using a grid-based, Thornthwaite-Mather approach (Thornthwaite and Mather, 1955).

Figure 11 summarizes the gridded water balance model methodology as a flowchart.

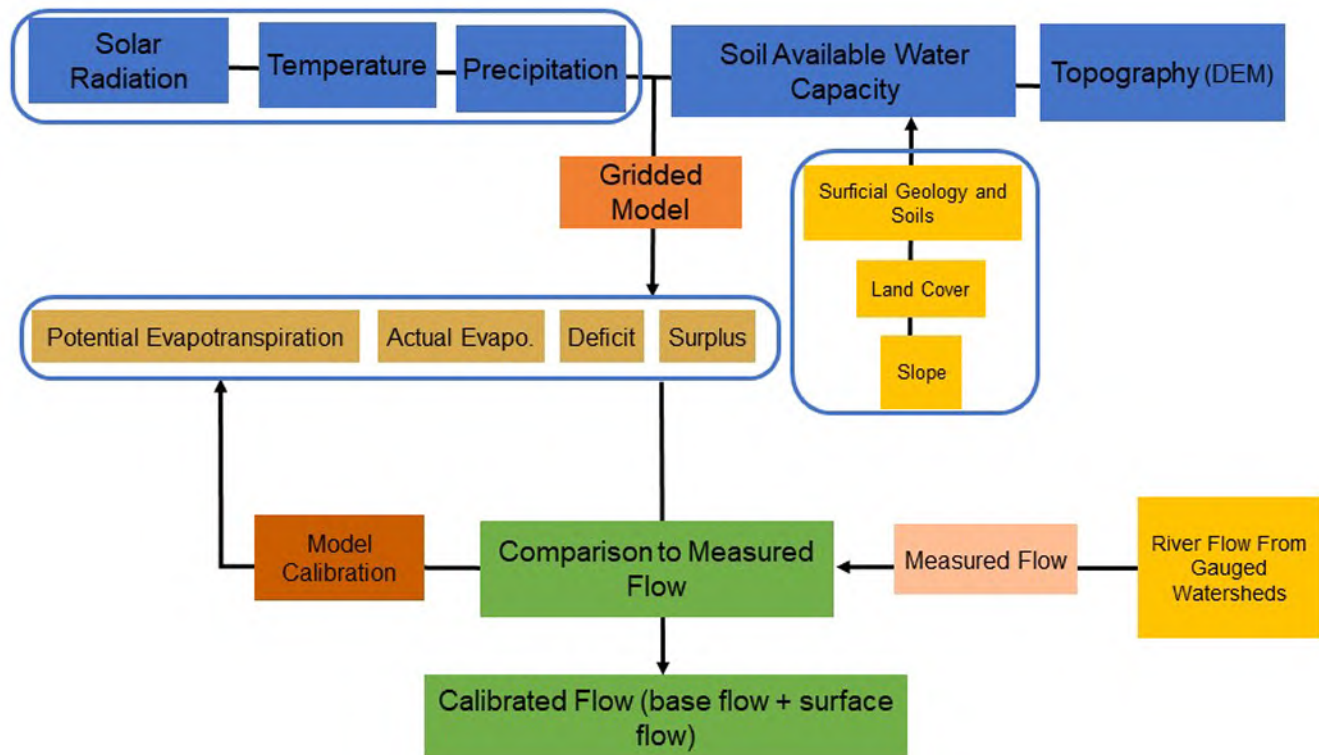


Figure 11. Gridded water balance model methodology

5.1.1 Model inputs

The main data inputs were monthly temperature (average), monthly total precipitation, a digital elevation model (DEM), soil available water capacity (AWC), and monthly total solar radiation. Each input is described in more detail in Table 4.

Table 4. The details of Model Inputs for the water balance

Model Input	Description	Source
Monthly average temperature and total precipitation	Gridded, monthly precipitation and temperature maxima and minima were obtained from the Pacific Climate Impact Consortium (PCIC).	PCIC (2020)
Digital Elevation Model (DEM)	A digital elevation model (DEM) was used to derive rasters of Slope (inclination of the ground), and Aspect (direction of the slope). The DEM was derived from LiDAR elevations and was upscaled to a 20 x 20-meter grid size.	BC Lidar (2021)
Soil Available Water Capacity (AWC)	Soil related data was retrieved from the British Columbia Soil Information Finder Tool that includes soil composition (mineral or organic), texture, coarse fragment content, drainage, layer thicknesses and characteristics, soil physical and chemical properties, as well as landform and parent material. Soil mapping also includes available water holding capacity at different depths (0.15, 0.30, 0.45, 0.60, 0.75, 0.90, 1.05 and 1.20 m).	Province of British Columbia (2020)
Monthly total solar Radiation	Solar radiation was estimated based on topographic surface (DEM), geographic location and time of the year. Solar radiation data ($\text{kJ m}^{-2} \text{day}^{-1}$) was obtained from WorldClim (http://worldclim.org/version2) at a resolution of 30 seconds ($\sim 1 \text{ km}^2$). This data was converted to watt hours per square meter (wh/m^2) per month for the model.	WorldClim (2020)

5.1.2 Model outputs

The model outputs are:

- **Potential Evapotranspiration (PE)** –the evaporative water loss from vegetation for which water availability is not a limiting factor. PE depends mainly on heat and solar radiation. Estimated using the Turc method.
- **Actual Evapotranspiration (AE)** – the water loss from vegetation given actual water availability (from precipitation and soil moisture storage). If water is not a limiting factor, actual evapotranspiration is equal to potential evapotranspiration.
- **Deficit** – the moisture stress and occurs when the evaporative and vegetation demand is not met by available water. In other words, it is the difference between potential and actual evapotranspiration.
- **Surplus** – the excess water that is not evaporated or transpired or stored in the soil. When soil moisture field capacity is reached, surplus leaves a site through either surface runoff or soil infiltration (groundwater recharge) or a combination of both.

Appendix 3 describes the water balance inputs and output for the study region including the Lake Weston Watershed.

5.1.3 Model calibration

Measured stream flow information for one hydrometric station, Fulford Creek near Fulford Harbour (08HA0020) were used to calibrate the water balance model. The measured flow data was downloaded from BC Aquarius web portal. Figure 12 shows the historical fluctuation of surface water flow and daily and monthly average of surface water flow for Fulford Creek station. Figure 13 shows the delineated watershed for the station.

5.1.3.1 Water flux model calibration

Water fluxes calculated with the water balance model were compared to measured flow values for the gauged watershed. Figure 13 shows the measured and modeled flows in cubic decameters (dam^3) for the gauged watershed, Fulford Creek near Fulford Harbour.

The difference in flow (modeled vs measured) could also be attributed to the following:

- Monthly Precipitation Grids are a result of an interpolation of the available climate normal data, the number and spatial distribution of climate stations and topography climate model correction. Errors will also result from interpolation, density of monitoring stations and altitude correction in the interpretation of the temperature grid data. There is no active climate station within the watershed.
- The water balance model does not include measured water extraction (i.e. well pumping volumes or surface water points of diversion). Additionally, water usage might have increased over time which might have influenced the modelled flows in watersheds where the water usage is large.
- The actual timing of snow melt has not been included in the model. Precipitation is the sum of snow and rain in the month they occur, however, most of the snow melt occurs in the late winter and early spring.
- The incompleteness of measured values. For example, Fulford Creek does not have normal data for the period 1981-2010.

5.1.3.2 Model outputs acceptability assessment

To evaluate the acceptability of the water balance model, measured flows were compared to modelled flows using three statistical approaches: Nash-Sutcliffe Efficiency (NSE), Percent Bias (PBIAS) and the RMSE-Observations Standard Deviation Ratio (RSR).

The statistical results are presented in Table 5. In general, NSE varies from negative infinity to 1 where close to 1 is highly satisfactory. RSR varies from 0 (highly satisfactory) to any large number. PBIAS is reported as percentage where the lower values indicate generally good match between modelled and measured values. GW Solutions considers a satisfactory model if $\text{NSE} > 0.85$, $\text{RSR} < 0.40$, and $\text{PBIAS} < 15\%$ for streamflow modeling.

Historical flow data for Fulford Creek is presented in Figure 12. The monthly comparison of modelled and measured flows for the Fulford Creek station (Figure 13) indicates a good match between modelled and measured flows.

Table 5. Statistical comparison between modelled and measured flows

Station Number	Station Name	Data Group	RSR	NSE	PBIAS
08HA0020	Fulford Creek near Fulford Harbour	From 2017 to 2021	0.10	0.99	5.5%

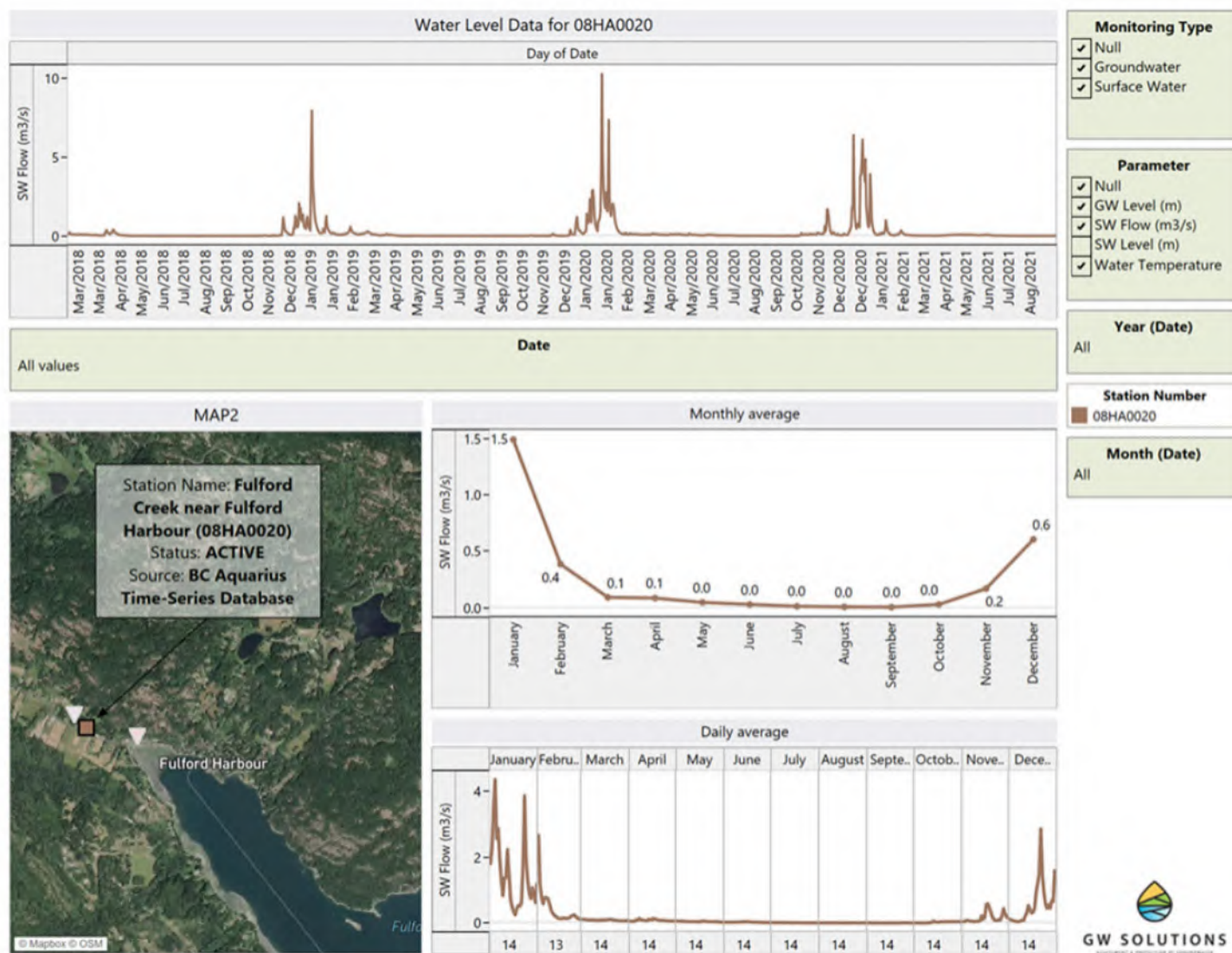


Figure 12. Historical flow data for the Fulford Creek station (08HA0020)

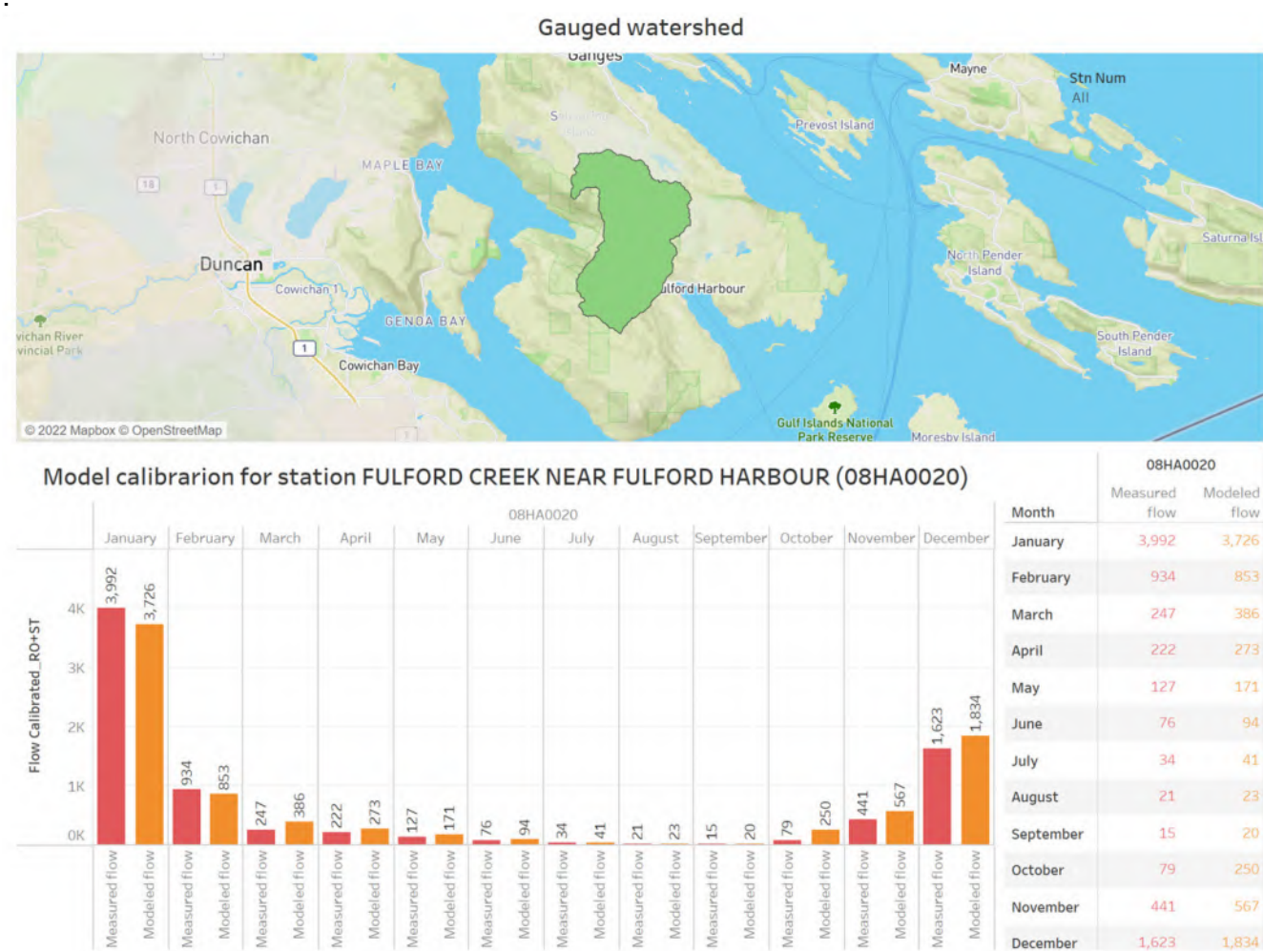


Figure 13. Monthly comparison of modeled and measured flows for the Fulford Creek watershed (08HA0020)

5.2 Estimation of Groundwater Recharge and Runoff

The water balance model estimates monthly potential evapotranspiration, soil moisture storage, actual evapotranspiration, soil moisture deficit, and soil moisture surplus (i.e. runoff and groundwater recharge). To differentiate the groundwater recharge component from the surplus, an equation for Groundwater Recharge Potential has been developed and applied. Figure 14 is a flowchart showing how the water surplus (i.e. groundwater recharge and surface water runoff) is calculated.

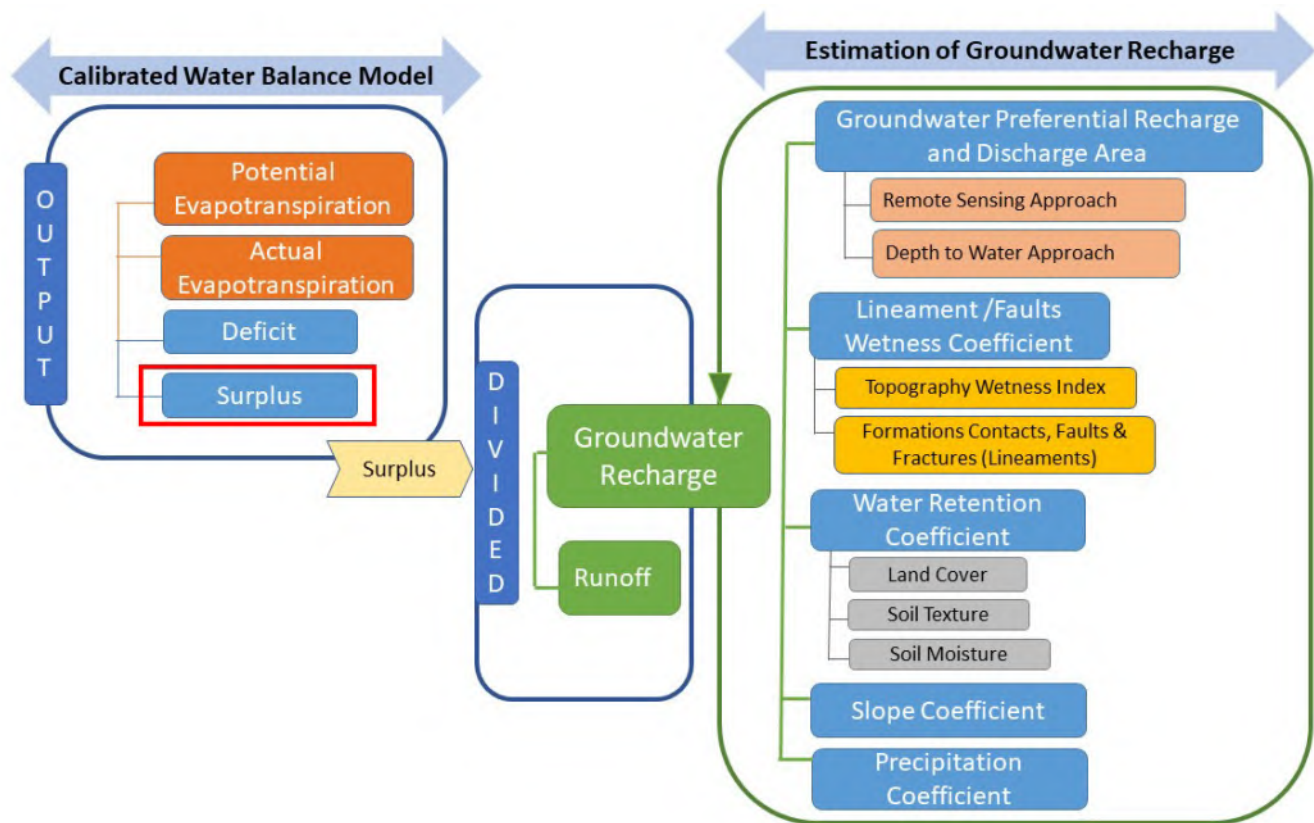


Figure 14. A flowchart presenting a differentiating the groundwater recharge component from surplus

5.2.1 Groundwater Recharge Potential

GW Solutions on behalf of Island Trust has developed a GIS-based methodology that incorporates diffuse and localized recharge pathways to estimate the spatial variability of recharge potential. The method uses infiltration/groundwater recharge coefficients for each of the spatial variables controlling recharge. Figure 15 is a flowchart for the integration of data inputs to estimate the groundwater recharge potential.

Groundwater recharge is the process whereby water moves from precipitation to the subsurface and consequently to replenish aquifers. Groundwater recharge is dependent upon factors such as the amount of precipitation (snow/rain), land surface slope (topography), the amount of water interception by plants (water retention or water used by plants), evaporation of open water or water on the land surface, and the permeability of the soil and subsurface geologic formations. Each of these factors is assigned an appropriate weighting factor in the calculation of recharge potential. Weighting factors were determined based on previous studies and predominant factors influencing groundwater recharge observed across Vancouver Island.

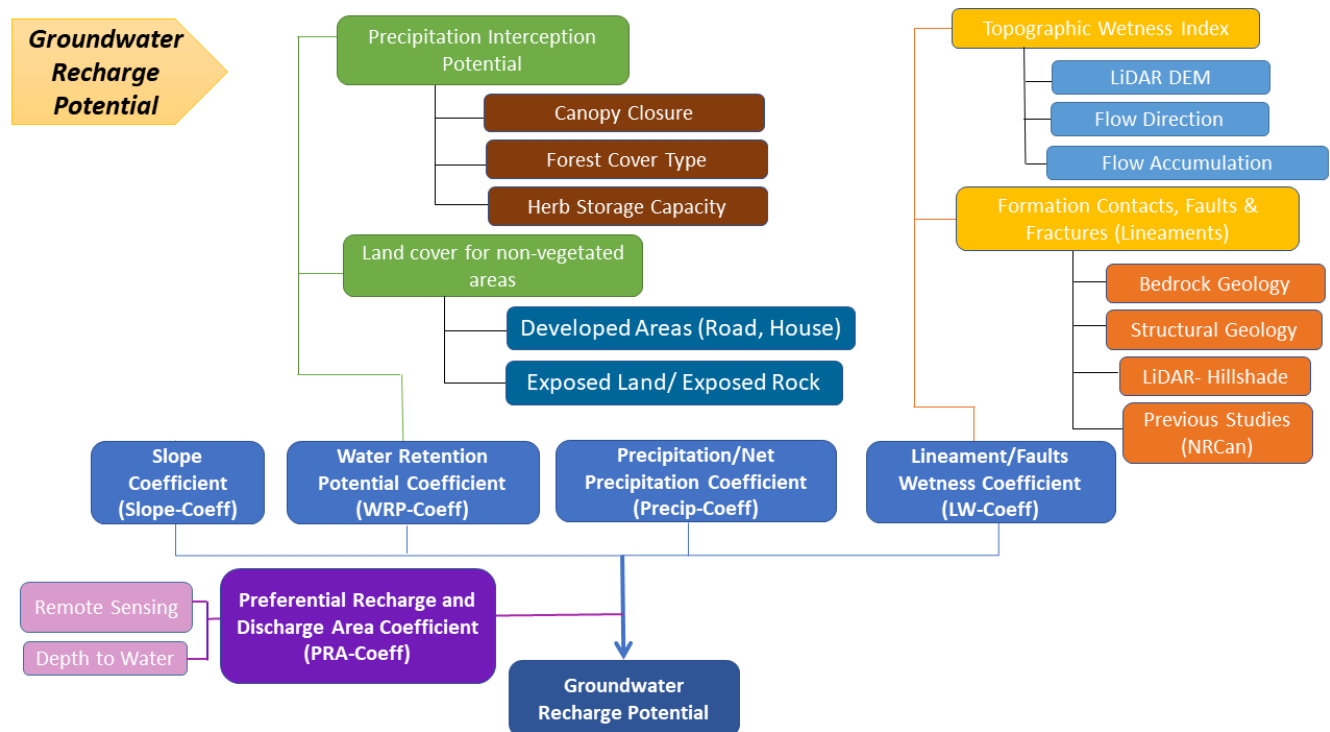


Figure 15. A flowchart showing the integration of data inputs to estimate the groundwater recharge potential

The following datasets or layers of information were used for groundwater recharge mapping and recharge estimation:

Slope Factor

Topography greatly influences the potential for water infiltration to the subsurface. In groundwater recharge areas, low slopes promote infiltration whereas steep slopes promote runoff and decreased infiltration.

LiDAR at 1-meter resolution as well as a 1-meter Digital Elevation Model (DEM) were downloaded from BC LiDAR and processed by GW Solutions. Slope was derived from the 1-meter DEM previously processed from LiDAR imagery.

Water Retention Potential (WRP) Factor

GW Solutions used vegetation effects and land cover data into a Water Retention Potential coefficient.

a) Precipitation Interception Potential

Vegetation affects groundwater recharge through the interception of precipitation by the foliage (i.e., evapotranspiration); Greater foliage interception leads to longer exposure to the atmosphere and increased evaporation. The Islands Trust recently investigated the role of soil and vegetation on precipitation, producing a precipitation interception potential map. The map was developed as follows:

- A literature review to determine which vegetation characteristics contribute significantly to precipitation interception.
- The Vegetation Resource Inventory (VRI) available for the Islands Trust region was correlated with vegetation interception characteristics.
- A weighting scheme was developed, based on the literature review, that assigns a relative importance of relevant VRI attributes that impact precipitation interception.
- The variables that have been considered for quantifying and mapping of precipitation interception include 1) Canopy Closure, 2) Forest Cover Type, and 3) Herb Storage Capacity. Each of the variables of interception were assigned a weight describing their relative importance to rainfall interception.
- VRI attributes were processed in GIS; assigned weighting values were used to create a surface representing precipitation interception potential for the Islands Trust area.

b) Land Cover/Land Surface

For non vegetated areas (exposed rock and developed areas), GW Solutions used NRCAN circa 2000 Land Cover vector polygons to derive land cover classes.

Bedrock geology; faults, lineaments and bedrock formation contacts

Groundwater in bedrock aquifers is mostly stored and transmitted in fractures and faults, which are largely controlled by regional bedrock lineaments (Surrett et. al., 2008; Allen et. al., 2002). Groundwater is also preferentially recharged via bedrock lineaments, however quantifying the role of each lineament is highly complex.

Detailed mapping of the landscape is now possible due to the availability of LiDAR imagery. The LiDAR imagery is processed to derive a “bare earth” model of the landscape, which can reveal subtle structures (bedrock faults, bedding planes and lineaments) not visible from the ground. We have delineated fracture zones using the following sources of information:

- 1- LiDAR with 1m resolution was obtained from LiDAR BC; Bedrock lineaments were digitized from a high-resolution hillshade
- 2- Bedrock geology maps of formation contacts and large-scale structural geology (faults and folds).
- 3- Lineament maps produced by NRCan, which have been reviewed and revised based on the LiDAR-1m.

The lineation is considered to be potential groundwater recharge pathways in the recharge zones and groundwater discharge pathways in the discharge zones.

Topographic Wetness Index

GW Solutions generated the Topographic Wetness Index (TWI) using the 1-metre LiDAR. The TWI is commonly used to assess topographic effects on hydrologic processes. TWI is a function of the slope and the upstream contributing area. Large values of TWI are typically associated with low slopes (i.e. valleys or flat lowlands) and large catchment areas.

Precipitation

Annual total precipitation gridded data were obtained from the Pacific Climate Impact Consortium (PCIC, 2020). The information corresponds to normal data for the 1981-2010 period. Total annual normal precipitation varies across the study area from 880 to 1033 mm.

Preferential Groundwater Recharge and Discharge Areas

Groundwater recharge mainly occurs where the water table is deeper below the land surface and the soils are sufficiently permeable or “well-drained” to allow infiltration. The areas where the water table is shallow, intercepts the land surface (e.g. springs) and where groundwater feeds wet areas (e.g., creeks, lakes, wetlands) are known as groundwater discharge areas.

Groundwater recharge is typically characterized by the downward movement of groundwater while groundwater discharge is defined as the upward movement of groundwater to the land surface. Groundwater discharge areas are typically located in topographic lows such as stream valleys providing seasonal or year-round discharge (a.k.a. baseflow) to streams, or feeding lakes, wetlands, and estuaries. In contrast, groundwater recharge typically occurs in upland areas where precipitation rates are high and evapotranspiration is low, leading to high amounts of surplus (runoff and recharge).

Many approaches have been proposed for estimating the presence of preferential areas for groundwater discharge and recharge, using a variety of data sources. GW solutions reviewed several academic and public-sector methodologies to select methods for defining and delineating groundwater discharge and recharge potential areas that could be applied to the study area. Two approaches were selected:

- Interpreted depth to groundwater (inferred from the BC GWells database, and Salt Spring Island Leapfrog modelling).
- Remote sensing, satellite-based multispectral image analysis (from the Sentinel satellite mission 20x20 meter resolution)

These selected approaches and their applications are explained as follow:

a) Depth to Groundwater Methodology

The depth to groundwater is a dominant control of groundwater recharge across the Salt Spring Island. Previous studies have shown that the depth of water table has a significant role in controlling groundwater recharge rate. Despite surficial conditions that are suitable for groundwater infiltration, a shallow water table limits the amount of water that can infiltrate underground.

When a sufficient number of water level measurements are available in a given area, the depth of the water table is derived from the differentiation of elevation of the ground surface and groundwater elevation surface. We use the terminology “average interpreted groundwater elevation” and “depth to water” to describe the potential for groundwater recharge. For instance, if the groundwater level is above the ground surface, it will limit groundwater recharge and indicate mostly groundwater discharge is occurring. The opposite condition will occur when the groundwater level is below ground and groundwater recharge is the dominant process.

$$\text{Average Interpreted Depth to Water} = \text{Ground Surface Elevation} - \text{Average Interpreted Groundwater Elevation}$$

The Average Interpreted Groundwater Elevation surfaces were interpolated from classified groundwater elevation points derived from the Average Interpreted Depth to Water from BC Government’s GWELLS and the locations of known springs from surface water licences. Springs are locations where groundwater discharges to the land surface.

Using a Leapfrog 3-D model developed for Salt Spring Island, a surface of groundwater elevation (Groundwater Elevation Grids) was created then exported into QGIS as a raster file. The Average Interpreted Piezometric Level is the average water level in water wells. The Average Interpreted Depth to Water was generated by subtracting the Average Interpreted Groundwater Elevation from the Land Surface Elevation (DEM) using QGIS.

According to active monitoring wells across Salt Spring Island (e.g. PGOWN and SSI Island Trust community well network), the water table elevation can fluctuate by several meters over the year; groundwater levels are closer to the ground surface in winter and deeper in late summer/early fall. This leads to areas with *temporary groundwater discharge*, especially in the spring or after major rain events, yet these areas are groundwater recharge areas for the remainder of the year. For example, this could include areas at high elevation (i.e. Mount Belcher) where wells periodically exhibit artesian conditions.

For this study, all areas with either permanent or temporary groundwater discharge were classified as groundwater discharge areas. Areas where the range of groundwater fluctuations is always above the water table were classified as groundwater recharge areas.

b) Remote Sensing/ Satellite Multispectral Image Analysis Methodology

The approach of using satellite multispectral image analysis includes application of the Normalized Difference Vegetation Index (NDVI) and the Normalized Difference Moisture Index (NDMI). This method was chosen due to its ease of implementation, reliance on free and publicly available data, and accuracy in identifying soil moisture levels on the landscape. Soil moisture level is then used as a proxy for groundwater discharge potential.

The method focuses on identifying areas of potential groundwater discharge by using the spectral signatures of soil moisture and green vegetation. High perennial (year-round) soil moisture can darken soils or encourages green vegetation to flourish in otherwise dry climatic conditions. Such indications of landscape “wetness” and “greenness” are thus indications of potential groundwater discharge, and can be isolated from the rest of the landscape using satellite-based spectral indices.

A *spectral index* can be understood as a mathematical manipulation of certain wavelengths of detectable light that are designed to highlight characteristics of the landscape, such as greenness or wetness, while minimizing other confounding effects. A vast number of spectral indices have been defined for various scenarios. The NDVI (Normalized Difference Vegetation Index) and the NDMI (Normalized Difference Moisture Index) are both well-known and widely used indices that have been applied to a broad variety of applications for detecting landscape wetness or vegetation.

The NDVI is designed to highlight the presence of dense, green vegetation, or “greenness”, while the NDMI is designed to highlight the level of moisture within vegetation or soil, defined as “wetness”. By comparing landscape “greenness” and “wetness” between the wet season and the dry, it is possible to observe which areas of the landscape *preserve* their wetness and greenness through the wet and into the dry season. Such areas indicate either direct groundwater discharge (e.g., spring, wetland, lake) or a shallow water table allowing the survival of phreatophyte (groundwater dependent) vegetation. Comparisons between the wet and dry seasons are critical since the method relies on isolating the *persistence* of wetness between seasons.

Implementing this method required multispectral satellite images for the wet and dry season over the study area. These images were available free of charge from both the Landsat and the Sentinel satellite missions. Data from the sentinel mission was preferred due to its higher spatial and spectral resolution compared to Landsat.

C) Preferential recharge/discharge areas (PRDA)

The *Depth to Water* and *NDVI-NDMI* methods were selected as inputs to estimate the spatial variability of recharge/discharge potential. Both these methods could be implemented with the available data, and their respective results matched well.

Based on the groundwater discharge probability maps, an attribute ratings system has been developed to assign specific values to each groundwater discharge/recharge probability group. Table 6 presents the assigned groundwater recharge coefficients based on the discharge/recharge probabilities.

The areas of low probability of groundwater discharge (low-medium, low, very low), are the preferential areas for groundwater recharge.

Table 6. Groundwater recharge potential coefficient based on the probability of groundwater discharge.

Groundwater Recharge Potential	Probability of Groundwater Discharge Area	Groundwater Recharge coefficient
Very Low	High probability	0.1
Moderate	Medium probability	0.3
Moderately High	Low-Medium probability	0.7
High	Low probability	0.9
Very High	Very Low probability	1

5.2.2 Calculation of groundwater recharge potential

GW Solutions has used the following equation (Equation 1) to estimate the groundwater recharge potential.

Within the study area, the groundwater flow system is in both bedrock and overburden media, thus the sum of slope, soil and land cover, precipitation coefficients, and also geological structure coefficient (e.g. faults, geologic contacts) determine the areas of high potential groundwater recharge.

$$\text{Equation 1) } RP = R_{PRDA} [30\% * (R_{WRP}) + 20\% * ((R_{\text{slope}}) + 25\% * (R_{LW}) + 25\% * (R_{\text{precipitation}}))]$$

Where:

RP= Recharge potential (0 - 1)

R_{PRDA} = Preferential recharge/discharge areas Factor (0.1-1)

R_{WRP} = Water Retention Potential Factor (0.1 – 0.3)

R_{slope} = Slope Factor (0.03 – 2.0)

R_{LW} = Bedrock Lineaments Wetness Factor (0.1 – 0.25)

$R_{\text{precipitation}}$ = Precipitation Factor (0.1 – 0.25)

Appendix 2 provides the maps for all groundwater recharge coefficients. Figure 16 presents the resulting map for the integrated groundwater recharge potential.

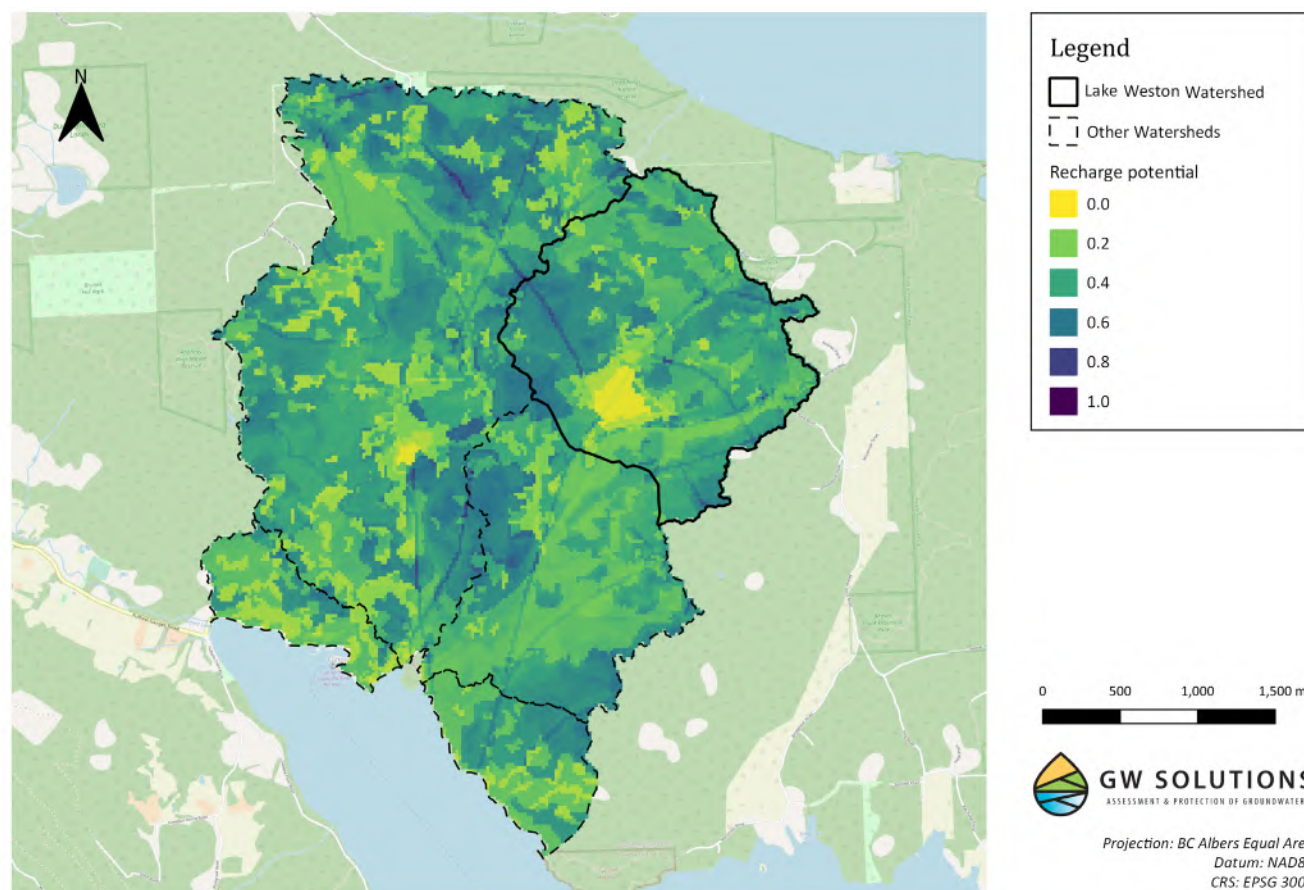


Figure 16: Groundwater recharge potential map for the study region

5.3 Sensitivity Analysis

The Sensitivity Analysis for the water balance analysis consisted of evaluating twelve scenarios which represent the range of possible variations for the following input parameters:

- Precipitation
- AWHC Available Water Holding Capacity (water available to vegetation)
- Solar Radiation
- Temperature

The scenarios, listed in Table 7, are designed to vary the inputs by either + or -15% from normal (i.e. long-term average). Precipitation was also varied by the most extreme values ever recorded (lowest and highest) at meteorologic station 235 (Victoria International Airport). Solar radiation was also varied for only the summer months when values are the highest.

Table 7. Scenarios for Water Balance Sensitivity Analysis

Parameter	Scenario
AWHC	-15% from normal
AWHC	+15% from normal
Precipitation	-15% from normal
Precipitation	+15% from normal
Precipitation	Driest condition experienced in 1985
Precipitation	Wettest condition experienced in 1997
Solar radiation	summer months +15% from normal
Solar radiation	summer months -15% from normal
Solar radiation	all months +15% from normal
Solar radiation	all months -15% from normal
Temperature	+15% from normal
Temperature	-15% from normal

The results, summarized in Figure 17., show that for the study area the most sensitive input parameter is precipitation affecting the surplus estimates by -50% to +87%. The remaining input parameters affect recharge by less than 5%. This highlights the importance of collecting more complete precipitation data over the entire watershed to reduce the uncertainty of this parameter.

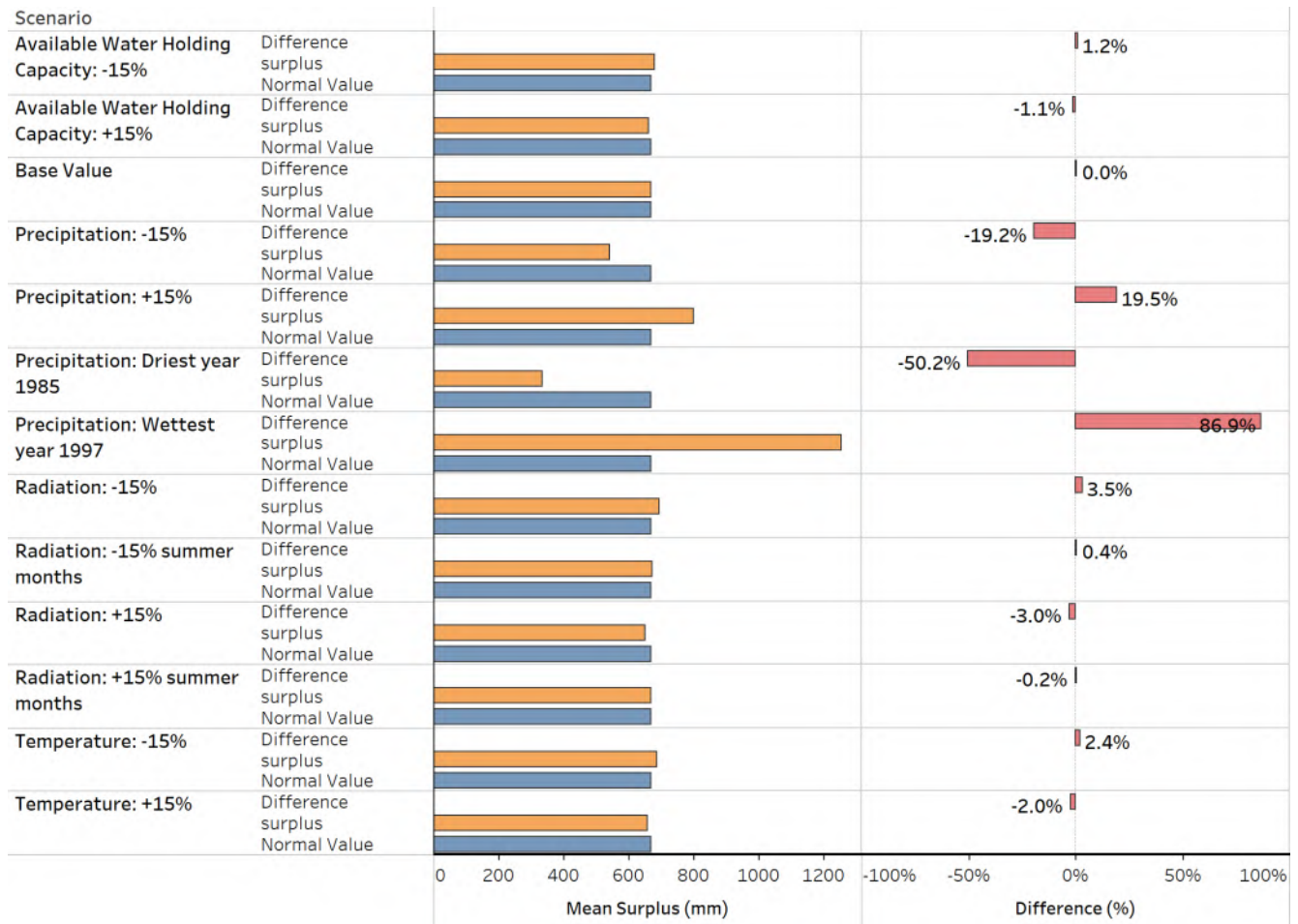


Figure 17. Results of Sensitivity Analysis to water balance inputs

6 CLIMATE CHANGE ASSESSMENT

6.1 Impacts of Climate Change on Freshwater Resources

Over the past 50 years, the amount of rain falling during very heavy precipitation events has increased for much of the world as the amount of rain falling during the most intense 1% of storms has increased as much as 30%. Warming winter temperatures cause more precipitation to fall as rain rather than snow. Furthermore, rising temperatures cause snow to begin melting earlier in the year. This alters the timing of streamflow in rivers that have their sources in mountainous areas.

Alterations in the seasonal timing, type (rain versus snow) and amount of precipitation in a certain area effects the entire freshwater cycle. Shorter and more intense rainy seasons increase surface water runoff and decrease groundwater recharge leading to a lowering of the water table and less groundwater discharge to groundwater dependent ecosystems (e.g., shallow aquifers, springs, creeks, rivers, lakes, wetlands, and estuaries). Thus, there is too much water in the winter and too little water in the summer.

Climate change is probably one of the most challenging pressures facing freshwater resources. Climate change is expected to produce reductions in freshwater availability in the future. The key change associated with global warming is an increase in near-surface air temperature which has profound negative impacts on the global water cycle affecting all freshwater systems. The increase in surface temperature leads to several changes to freshwater resources, as described below, in Table 8.

Table 8: Climate change impacts on water resources

Climate impact	Description
Decreased Snowpack	Decreased snowpack can significantly impact dry-season water availability. If precipitation falls as rain instead of snow, then groundwater recharge occurs throughout the winter instead of the usual pattern of a spring groundwater recharge event. The spring recharge event helps maintain a high water table at the beginning of summer when precipitation is reduced and water levels in general are at their lowest. Continued recharge through the winter results in a shift in peak river runoff to winter/early spring, away from late spring/summer (when water demand is often highest) thus leading to drier or potentially drought-like conditions in late summer/autumn.
Higher Evapotranspiration	Higher evaporation (from all surfaces, soils, and water bodies) and higher transpiration occur due to an increase in temperature, leaving less water to infiltrate into the soil and causing a reduction in groundwater recharge.

Climate impact	Description
Higher Intensity Rainfall Events	When the atmospheric temperature is warmer, particularly during the summer months, the increased evapotranspiration causes precipitation events to tend to occur as high-volume, high-intensity events, especially during winter months. Sporadic, high intensity rainfall – rather than low-volume, temporally distributed rainfall – tends to produce a large amount of surface runoff (soil erosion, flooding) but very little groundwater recharge as there is a limit to the amount of water that can infiltrate in most soils at any given time, based on the soil’s “field capacity”.
Degradation of Water Quality	Decreased groundwater recharge or increased sporadicity in the timing of recharge can lead to a reduced amount of freshwater to dilute water contamination (e.g., saltwater intrusion, nitrogen/phosphorous from septic systems leading to algal blooms, acid mine drainage), especially during the dry summer months. This can result in increased concentrations of harmful substances in the water (water pollution), negatively affecting aquatic ecosystems, and undermine the health and sustainability of groundwater and groundwater-dependent ecosystem. These reduced-flow conditions may also result in the accumulation of water-borne contaminants at water supply intakes being used by humans and animals, and the deterioration of lakes and rivers often used for recreational purposes. Changes in hydrological and thermal regimes may further increase the risk of disease outbreaks in aquatic systems, impact eutrophication, create hypoxic and dead zones, as well as lead to community transitions that alter ecosystem structure and function.

6.2 Projected Climate Change for the Capital Regional District

The 2017 report Climate Projections for the Capital Regional District (CRD) uses current climate model outcomes to provide a “best estimate” snapshot of how climate change will unfold across the CRD over the coming decades. All models project daytime high and nighttime low temperatures to rise. While temperature can be expected to increase year-round, the greatest increases will occur in the summer months. Monthly high and low temperatures show that the “new normal” for the region may be very unlike the past. Rising temperatures will lead to hotter summer days and nights, milder winters with the near loss of frost days and snowpack in all but the highest elevations. There will be a modest increase in annual precipitation by the 2050s, though the increase in precipitation will be distributed unevenly over the seasons. The largest increases will occur in the fall season, while rain will decrease significantly in the summer months. Our region can expect stronger and more frequent extreme rainfall events, longer summer dry spells, and an extension of the dry season into September and October.

6.3 Model-Predicted Climate Change for the Next Decades

The impact of climate change to the water resources of the study region was analyzed using data from the ClimateBC data project (Wang et al., 2016), which provides statistically downscaled climate projection data across BC, based on a selection of models from the IPCC's most recent *Coupled Model Intercomparison Project* (CMIP6). The CMIP6 *Global Climate Models* (GCMs) aim to estimate the patterns of future climate change under different scenarios of climate "forcing". These scenarios are called "shared socio-economic pathways" (SSPs) and are meant to represent various possible socio-economic pathways that society could take to attend to climate change in the coming years (Riahi et. al., 2017). In the present analysis, 4 SSP scenarios have been considered, SSP 2.6, 4.5, 7.0 and 8.5 spanning the range from most optimistic (high rates of emission reduction and mitigation policies over the coming decade) to pessimistic (little to no climate change mitigation, leading to runaway climate change). Additionally, future climate change under each of these scenarios has been predicted for three time-periods – 2030, 2050, and 2070. Further details about climate models and input data selection are presented in Appendix 4.

Once data representing projected climate change for the 4 SSPs in the three future periods was obtained, we calculated future projected water budgets for each of these scenarios and compared the results to the current "normal" values observed in the past 30 years (1981-2010). The comparison was done spatially over the Lake Weston watershed as well as its adjacent watersheds. Model-predicted changes to the Lake Weston water budget are thus described for each climate variable followed by an interpretation of how these changes will impact water resources in the region.

The data is presented in two types of figures to show the predicted changes across the watershed for the major climate and water budget variables (temperature, precipitation, soil storage and moisture surplus). Charts are generated for every combination of projection years and SSP scenarios:

- charts for each variable by month, showing: the projected values, the absolute change in the value compared to present normals and the percentage change in the value compared to normal
- summary charts comparing the percentage change of all variables compared to normal ; and
- maps of Lake Weston and the surrounding watersheds showing the predicted amount of change for each variable and how it varies within each region

Figure 18 presents an example for summary charts comparing the percentage change of climate variables such as precipitation, temperature and radiation for different projection year compared to normals for SSP 8.5.

Figure 19 to Figure 21 show the spatial change of predicted climate variables comparing to normals for the projection year of 2050 for SSP 8.5.

Appendix 4 provides the summary charts and related maps for predicted climate variables and their comparison to normals for 4 SSP scenarios (SSP 2.6, 4.5, 7.0 and 8.5) and for three time-periods – 2030, 2050, and 2070.

The projected data from the 13-model ensemble predict a significant increase in precipitation during the winter, and a smaller yet still considerable increase in spring and fall precipitation. The magnitude of increase is greatest during the December to February period. The data also predict a decrease in summer precipitation. These patterns are consistent across all the SSP scenarios, and indeed the magnitude of these changes is higher the more pessimistic the SSP is.

Solar radiation is projected to increase during the summer months and decrease during the fall and spring periods, remaining relatively unchanged during the rest of the winter. Interestingly, the magnitude of change is projected to be the strongest within the 2030s period, suggesting that the most meaningful shifts in radiation patterns will happen within the next 2 decades. As with precipitation, the magnitude of change is higher with more pessimistic SSPs. Additionally, all SSPs and year periods seem to project a slight increase in radiation during March alone, amid an otherwise reduced-radiation Spring.

Average temperatures are projected to increase in all months for 2030, 2050 and 2070 across all SSP scenarios, with the highest increases being in July and August. Even under the most optimistic scenario (SSP 2.6), temperatures are projected to rise by nearly 2 degrees Celsius in July and August by 2070. In contrast, under SSP 8.5 the projected increase in July and August is nearly 5 degrees.

Available moisture surplus is projected to increase considerably during the winter months of December to February, while also increasingly slightly during the fall months of October and November. Additionally, surplus is projected to decrease during the spring period, especially in March. As with the others, the magnitude of these patterns is exacerbated under less optimistic SSPs.

These patterns are consistent with changes expected under climate change globally. Increasing temperatures, particularly during the summer months, combined with higher solar radiation and lower summer precipitation will mean a reduced potential for groundwater recharge during the summer. The current hydrological regime, however, already operates within a pattern of excess water during the winter months and low precipitation during the summer. The impact of climate change on this system appears to be a reduction in the available window or annual time-period for groundwater recharge.

Precipitation is projected to occur in higher magnitudes within a smaller time-period (primarily December to February). There is also an increase in precipitation during September which is attributed to rain events associated with the change in seasons from summer to fall weather patterns. This combined with reduced solar radiation during months leads to an excess of moisture surplus during the winter, increasing the possibility of flash flooding since the capacity for groundwater infiltration at any given time cannot be exceeded upon saturation. Furthermore, reduced precipitation and higher temperatures during the summer reduces the potential for groundwater recharge during the months when groundwater uptake is greatest. The projected decline in moisture surplus during March

illustrates a reducing temporal window within which moisture surplus can recharge aquifers. Overall, these patterns will adversely affect the sustainability of the groundwater system by leading to a pattern of excess water when it is not needed and water deficits during periods when it is necessary.

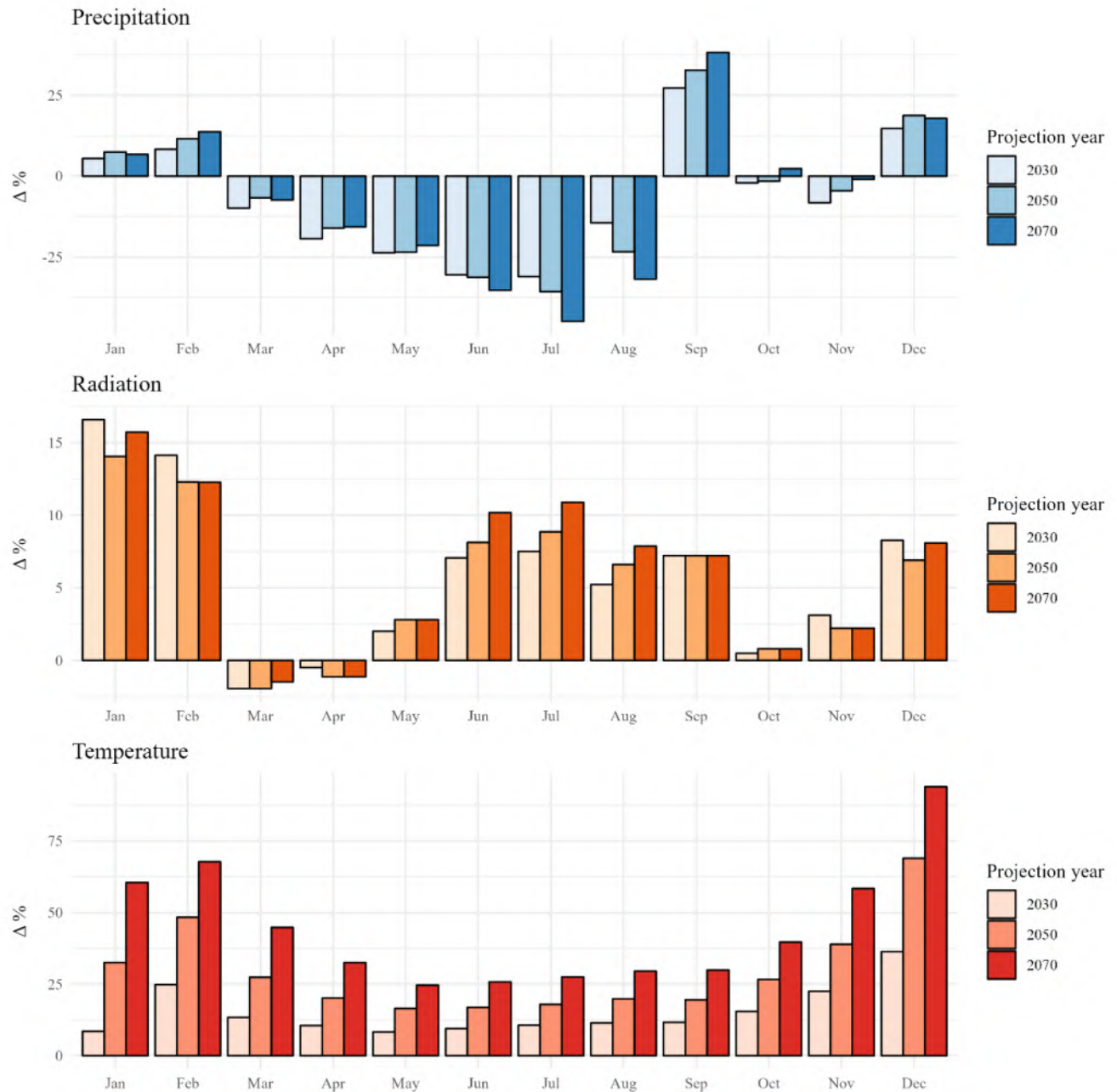


Figure 18. Percentage change relative to climate normal, summarized by month for the Lake Weston watershed, SSP 8.5

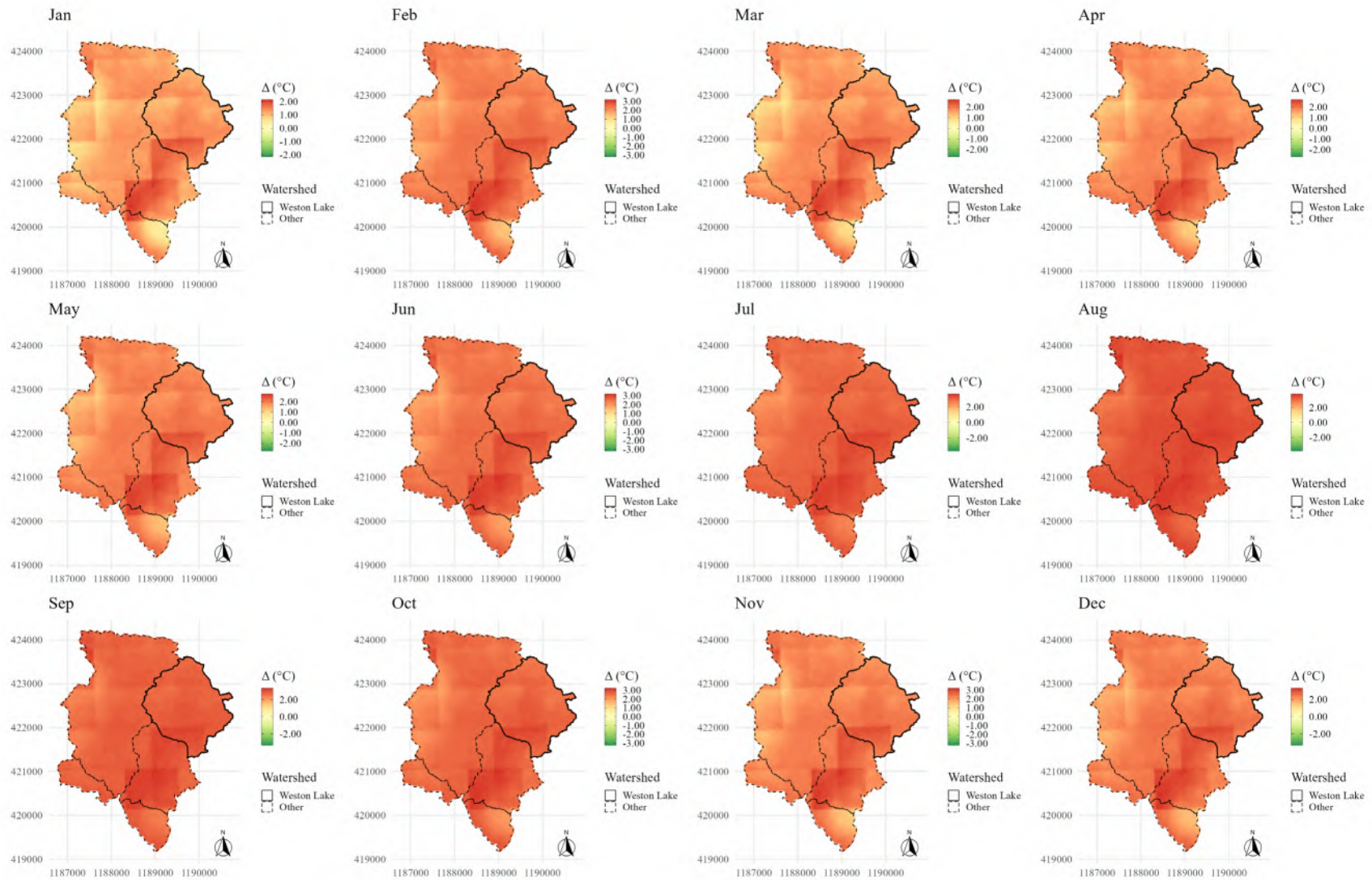


Figure 19: Monthly change in average temperature between year 2050 and present normals, SSP 8.5

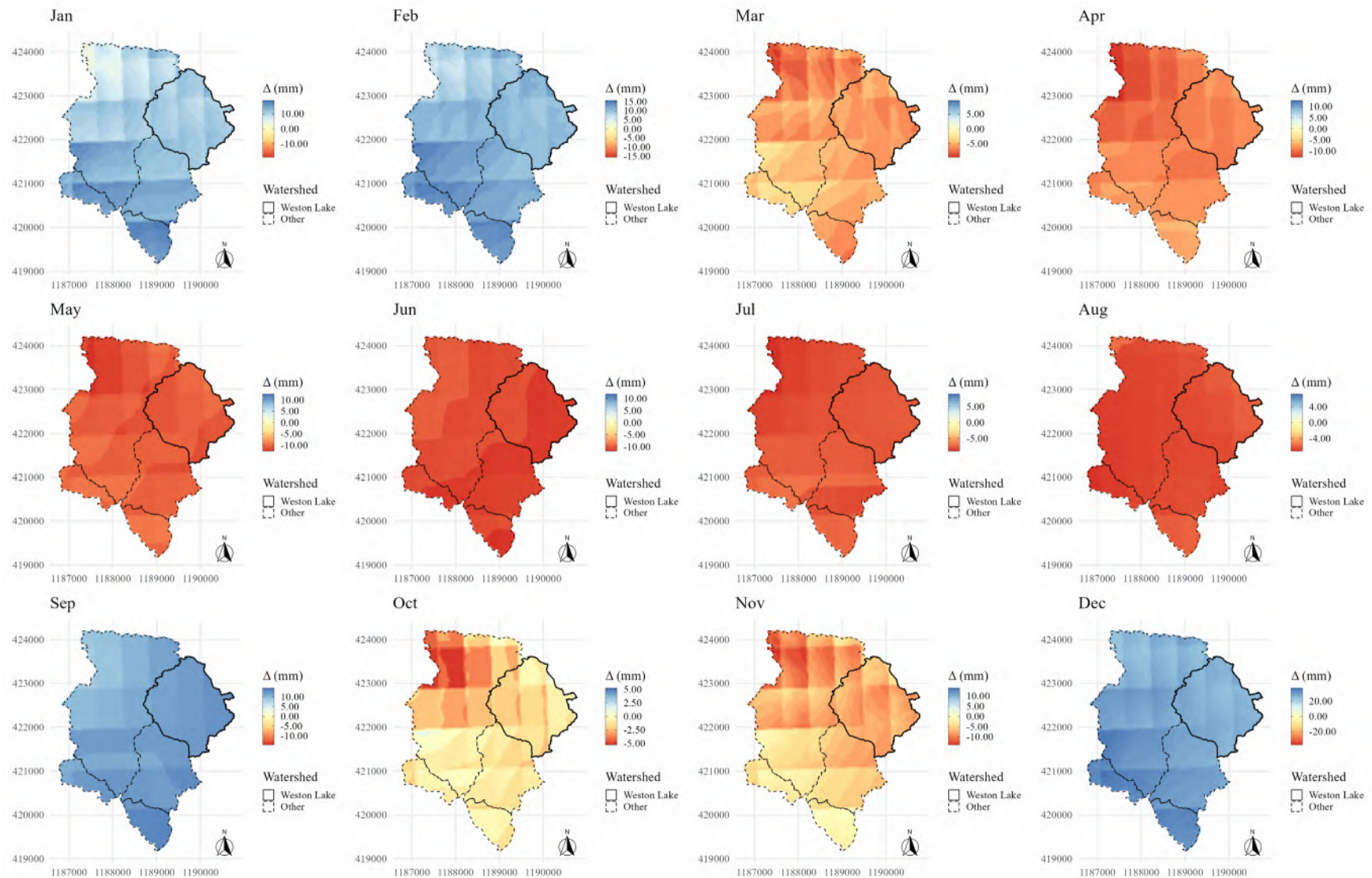


Figure 20: Monthly change in precipitation between year 2050 and present normals, SSP 8.5

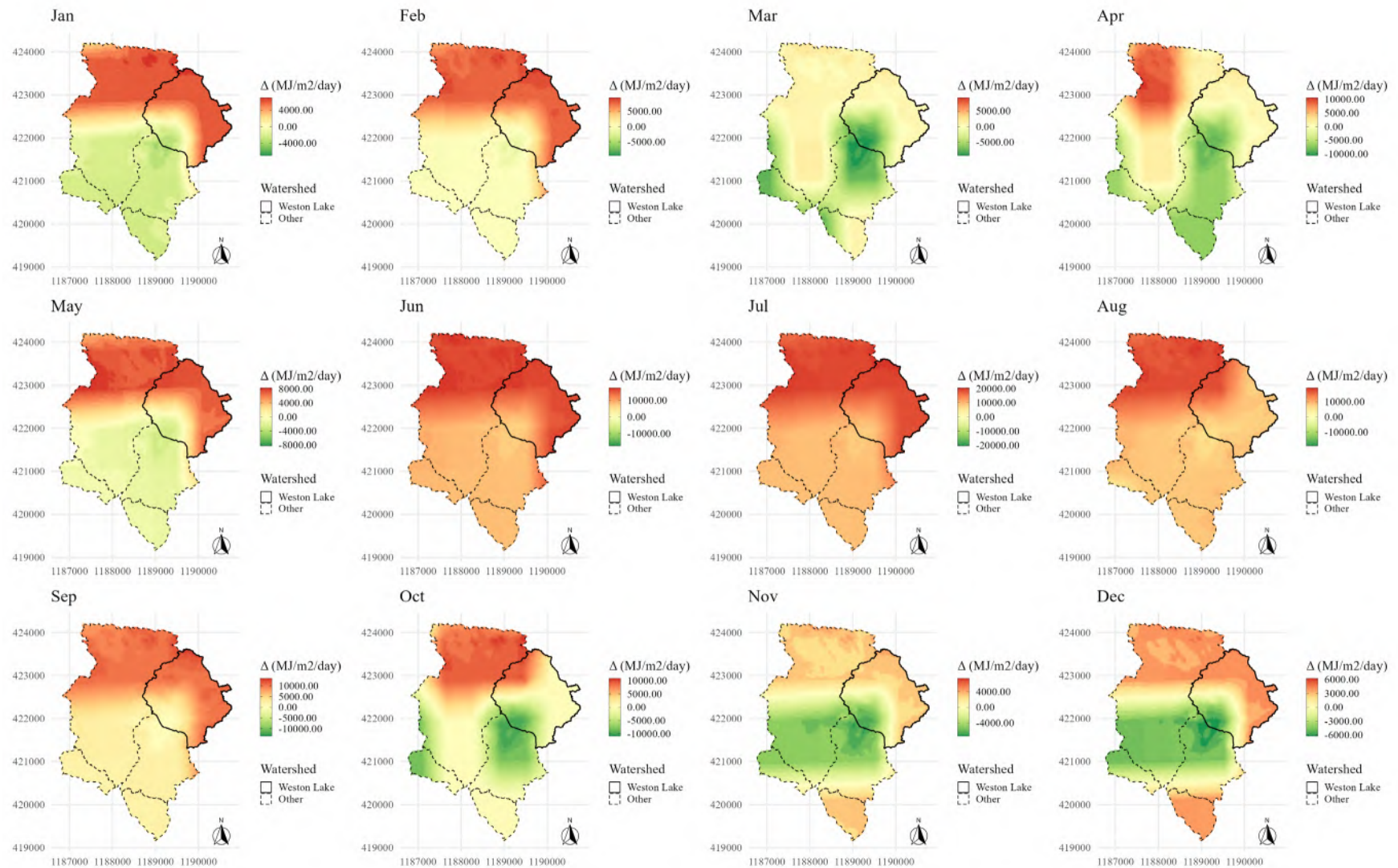


Figure 21: Monthly change in radiation between year 2050 and present climate normals, SSP 8.5

6.3.1 Temperature

Minimum, average, and maximum temperatures are projected to increase in all months for 2030, 2050 and 2070 across both modeled areas, with the largest increase in July and August.

6.3.2 Precipitation

Generally, the climate change model predicts a significant increase in precipitation for fall and winter (October to February), mostly as rain, and a slight increase in spring precipitation. The model also predicts a considerable decrease in precipitation in summer. Precipitation as rain therefore occurs over a shorter period (fall-winter) with more intense rainfall events thus leading to an increase in surface water runoff (increasing soil erosion and flood risk) and a decrease in groundwater recharge as the soil infiltration rate is limited as soils become saturated to their field capacity.

The largest increase in precipitation (during winter) and the largest decrease in precipitation (during summer) occurs at the higher elevations where most of the precipitation falls.

6.3.3 Solar Radiation

Solar radiation is projected to increase during the summer months and decrease during the late-winter, early-spring period, remaining relatively unchanged during the rest of the winter.

7 RESULTS ANALYSIS

7.1 Water Usage

Water use is estimated in cubic decameters or dam^3 (1,000 m^3 equals 1 dam^3) and presented for groundwater (Aquifer 1147) and Surface Water (Lake Weston). Figure 22 shows the results for the current estimated water usage including the fire protection licence. Figure 23 shows the seasonal usage for both surface water and groundwater resources without the fire protection licence.

The Lake Weston withdrawals are much larger than the groundwater withdrawals and the fire protection licence (institutional) water usage is by far the largest amount. Aside from the fire protection licence, the major water usage is for the Fulford Water System. It is noted the Fulford system usage increases significantly in July, August and September presumably due to household irrigation. There are also several private domestic water supplies taken and significant amount of water usage for irrigation taken from Lake Weston. Many residents within the study area obtain their domestic water from groundwater wells (15.74 dam^3 - aquifer 1147). It is also noted that the highest water usage from Lake Weston is the May-September period. This contrasts to groundwater usage which is similar in summer and winter.

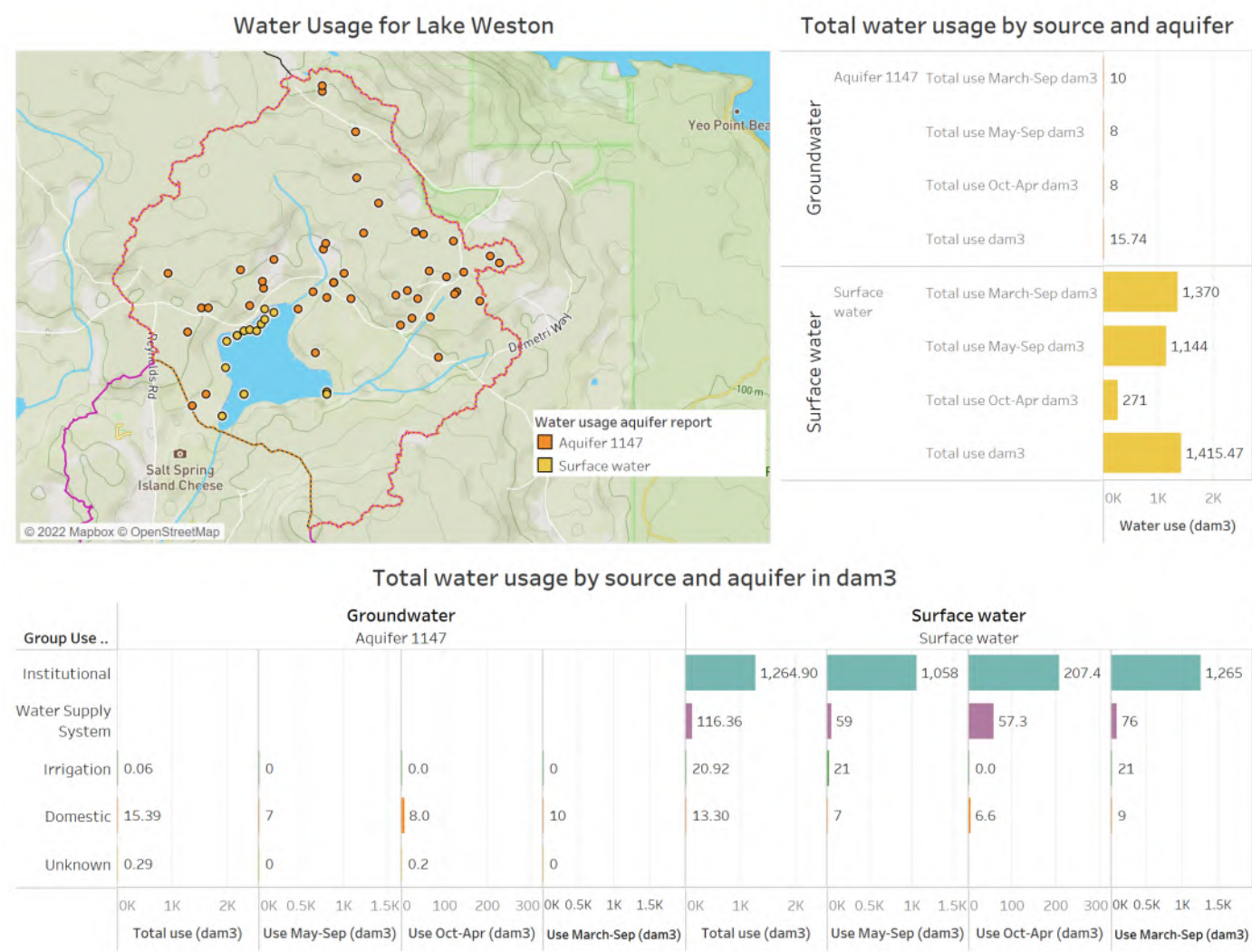


Figure 22. Total water usage by aquifer number and licenced surface water source (including fire protection licence)

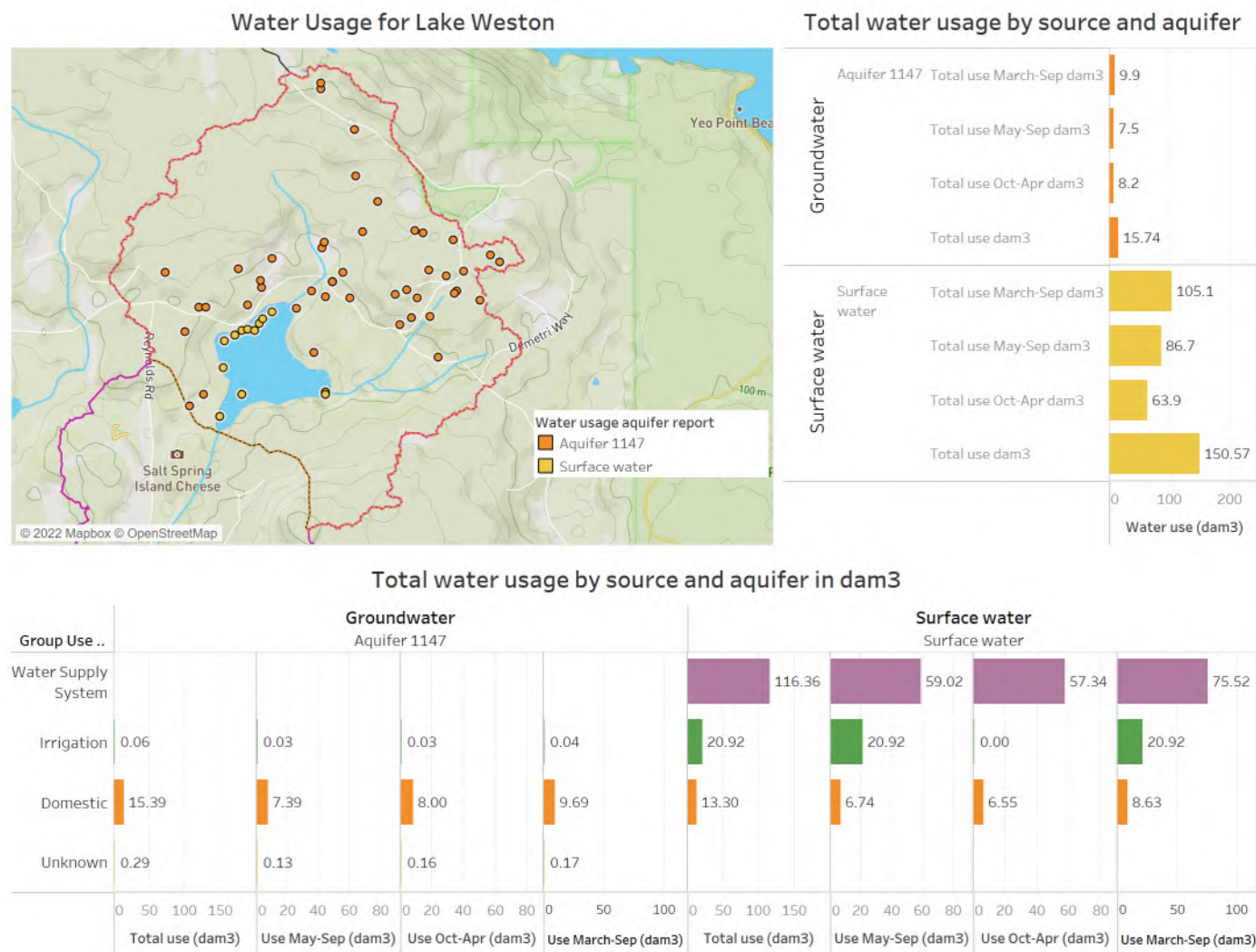


Figure 23. Total water usage by aquifer number and licenced surface water source (not including fire protection licence)

7.2 Watershed Budget

The groundwater surplus in a watershed is the difference between in the annual volumes of groundwater recharge and groundwater usage for a watershed or aquifer. This surplus groundwater is a major component of the water cycle and feeds springs, creeks, rivers, lakes, wetlands and coastal areas and is accounted for in B.C. as environmental flow needs (EFNs).

Figure 24 presents the water balance components for an entire year, including precipitation, evapotranspiration and water surplus (surface water runoff and groundwater recharge). On the usage side, it can be seen that groundwater usage (16 dam^3) is significantly less than surface water usage (Lake Weston 151 dam^3) and both are significantly less than groundwater recharge (615 dam^3) which feed the groundwater and Lake Weston.

Figure 25 shows the seasonal water balance components (Wet: October to February and Dry: March to September). It is observed during the dry period (March to September) the water usage is larger than both runoff and groundwater recharge.

Figure 26. presents the average monthly water balance components and water usage for the study region. It can be seen the highest water usage is from April to September which also coincides with the period of little or no precipitation, groundwater recharge or runoff.

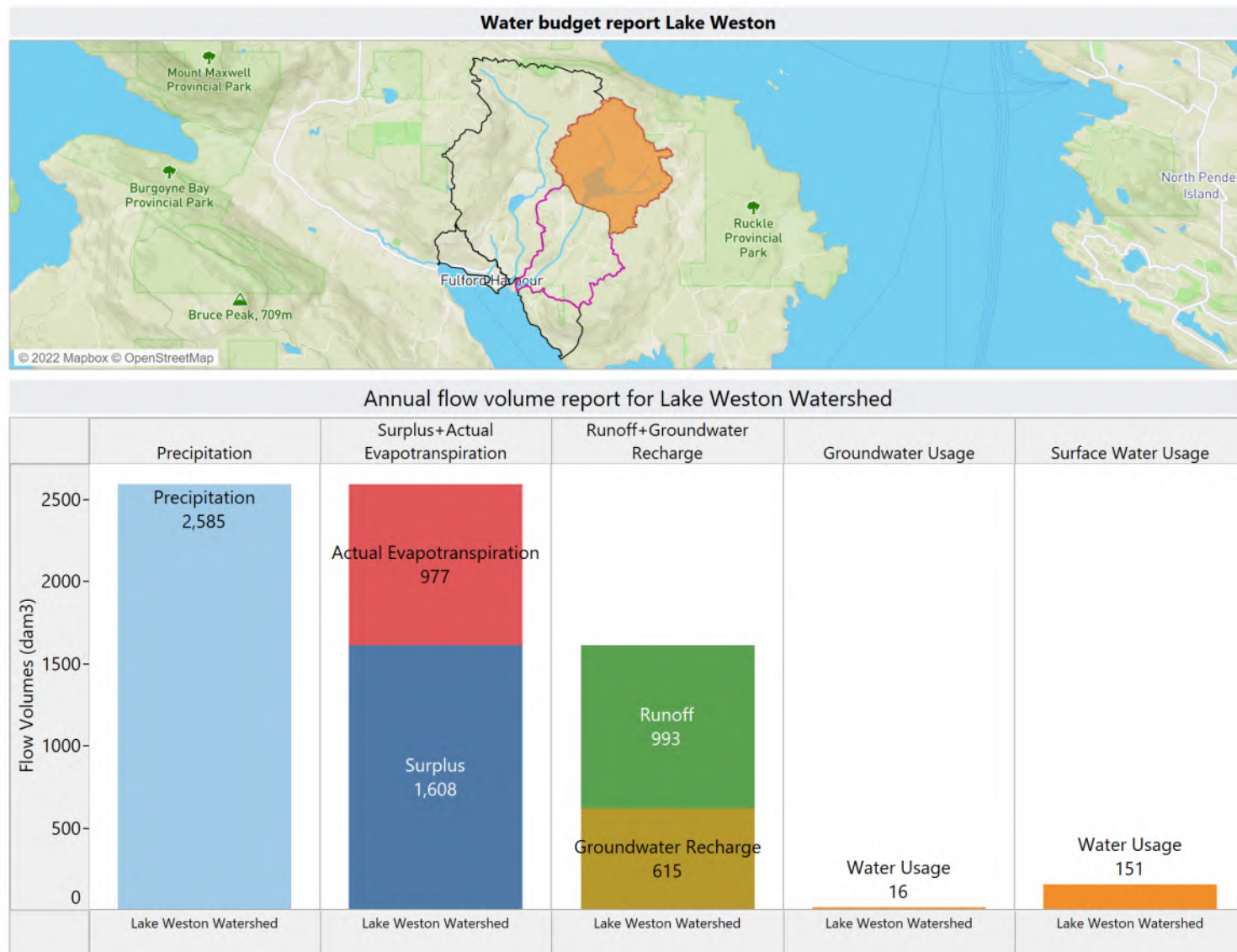


Figure 24: Water balance components compared to water usage from groundwater and surface water (Fire protection licence not included).

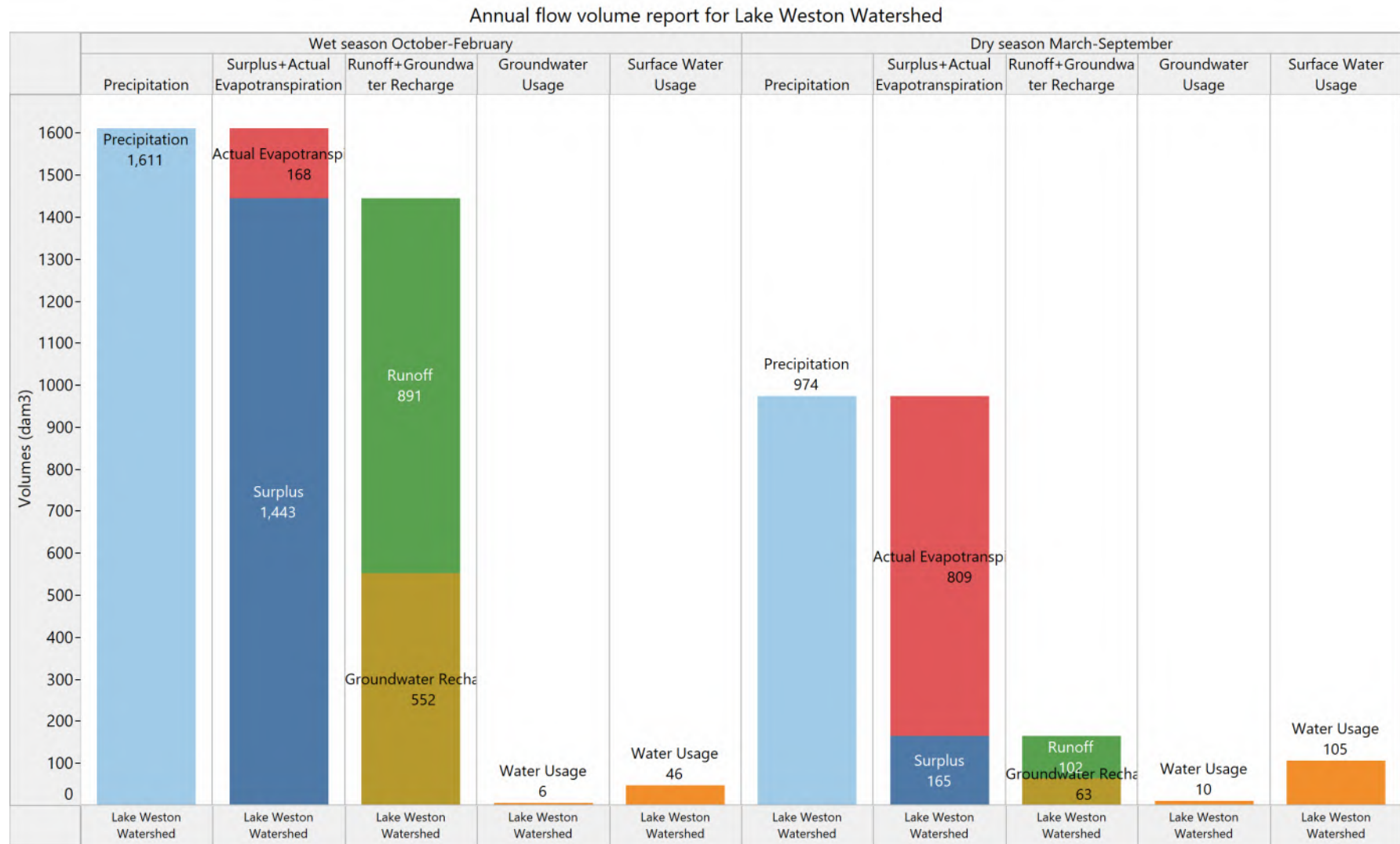


Figure 25. Annual water budget volumes for the wet season (Oct-Feb) and dry season (Mar-Sep) (Fire protection licence not included).

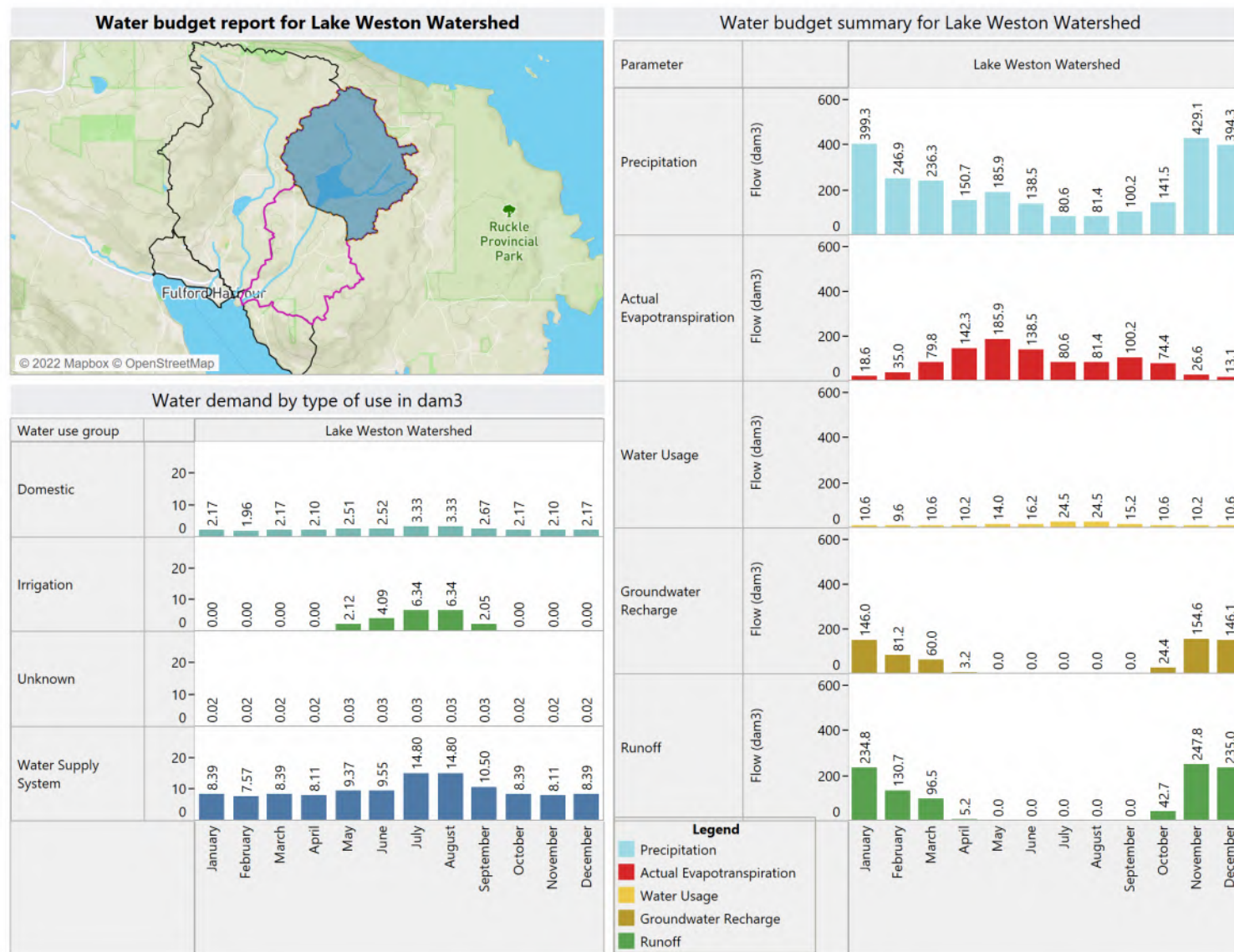


Figure 26. Monthly water demand by type of use and water budget summary (Fire protection licence not included).

7.3 Climate Change Predictions for the Lake Weston Watershed

The climate of the Lake Weston watershed is predicted to be significantly different in the coming decades. The winters will be warmer with more rain and less snow. The rain will fall over a shorter period (i.e. more intense events) leading to higher levels of surface runoff potentially leading to higher soil erosion and flooding and less groundwater recharge as saturated soils do not allow for infiltration. The spring snowmelt will tend to disappear reducing the historical groundwater recharge heading into the dry summer months. During summer, temperatures will be higher, precipitation lower and groundwater baseflow (feeding creeks, lakes, wetlands) will therefore be lower. It will be common to experience too much water in winter and droughts in summer.

Estimated runoff for March to September (Figure 27), October to February (Figure 28) and December to January (Figure 29) is presented for various climate severity scenarios for the years 2030, 2050 and 2070. For the summer months, runoff is predicted to decrease significantly (-20% to -30%) while in the winter months runoff will increase by a small amount (2% to 4%). This reduction in runoff is translated to water deficit in the future where demand will surpass surplus.

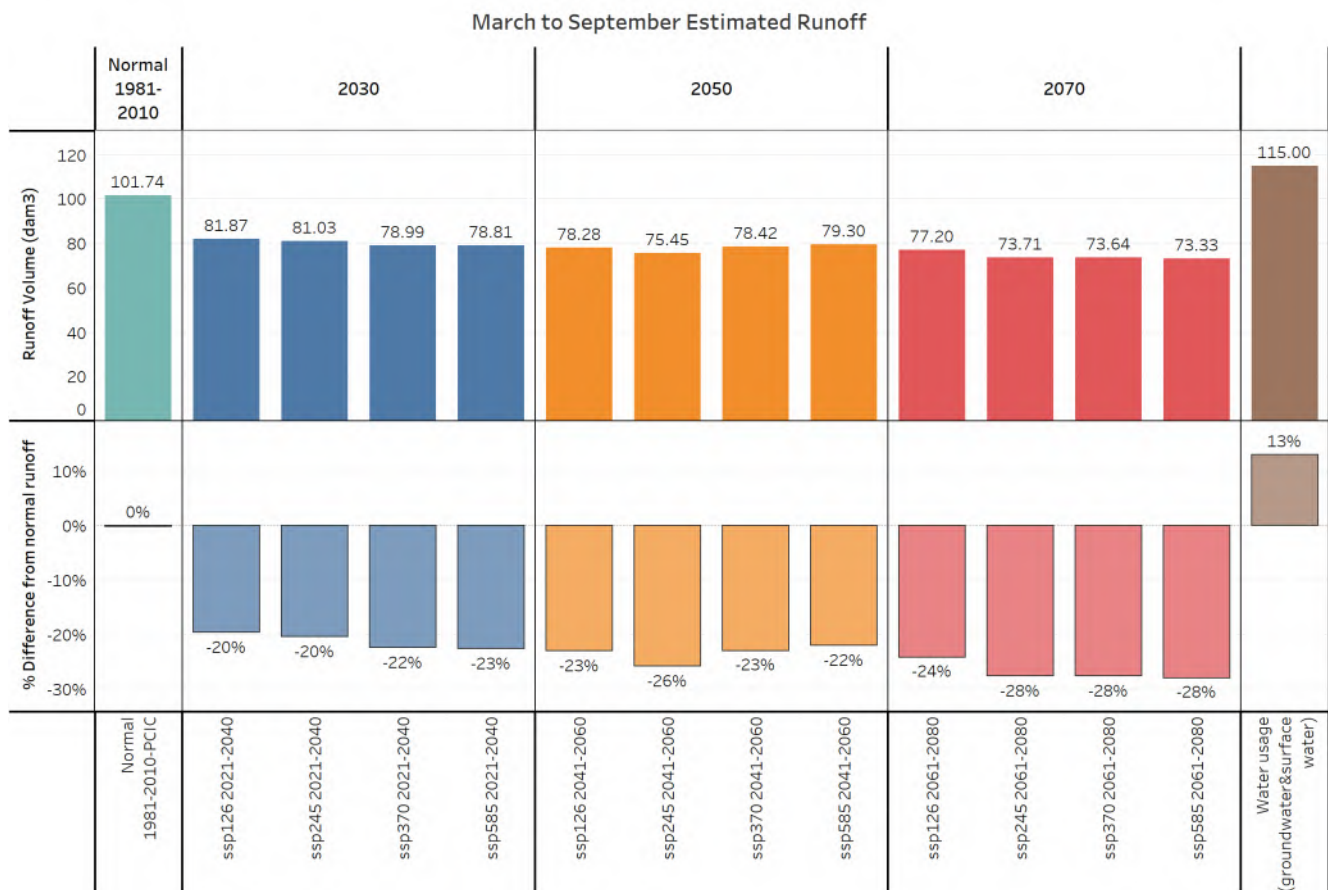


Figure 27. Estimated Runoff for March to September for various climate scenarios for the current conditions (normals), and years 2030, 2050 and 2070 compared to licensed surface water (fire protection licence not included).

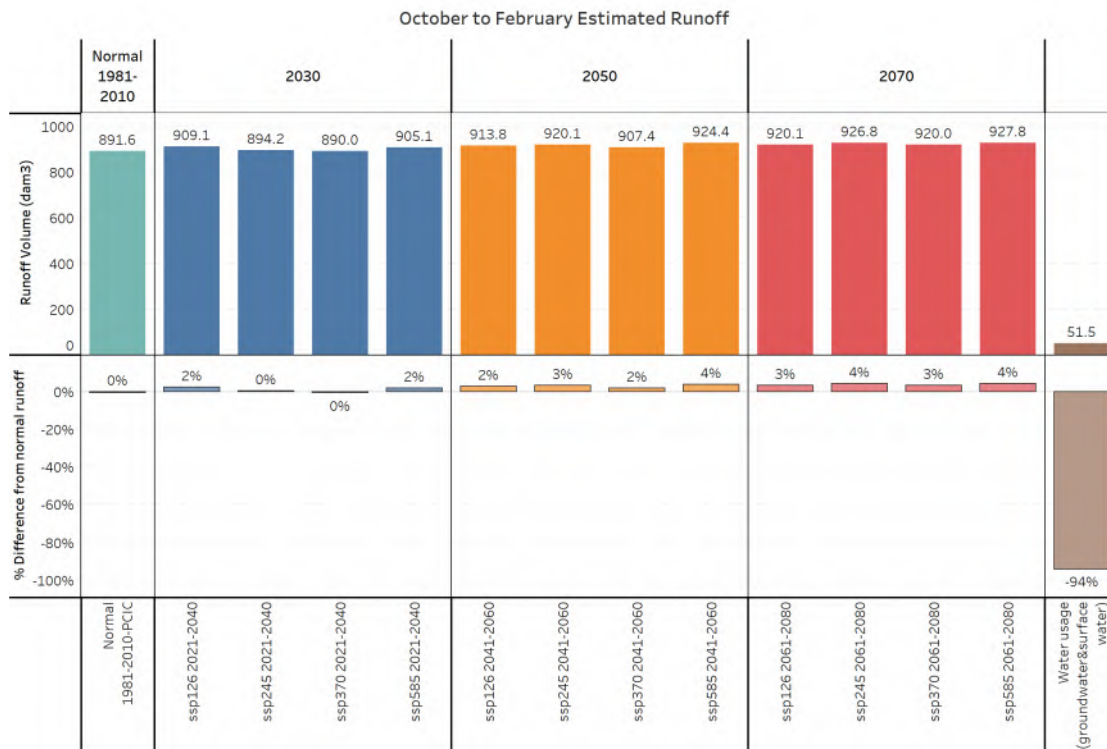


Figure 28. Estimated Runoff for October to February for various climate severity scenarios for the years 2030, 2050 and 2070 (fire protection licence not included).

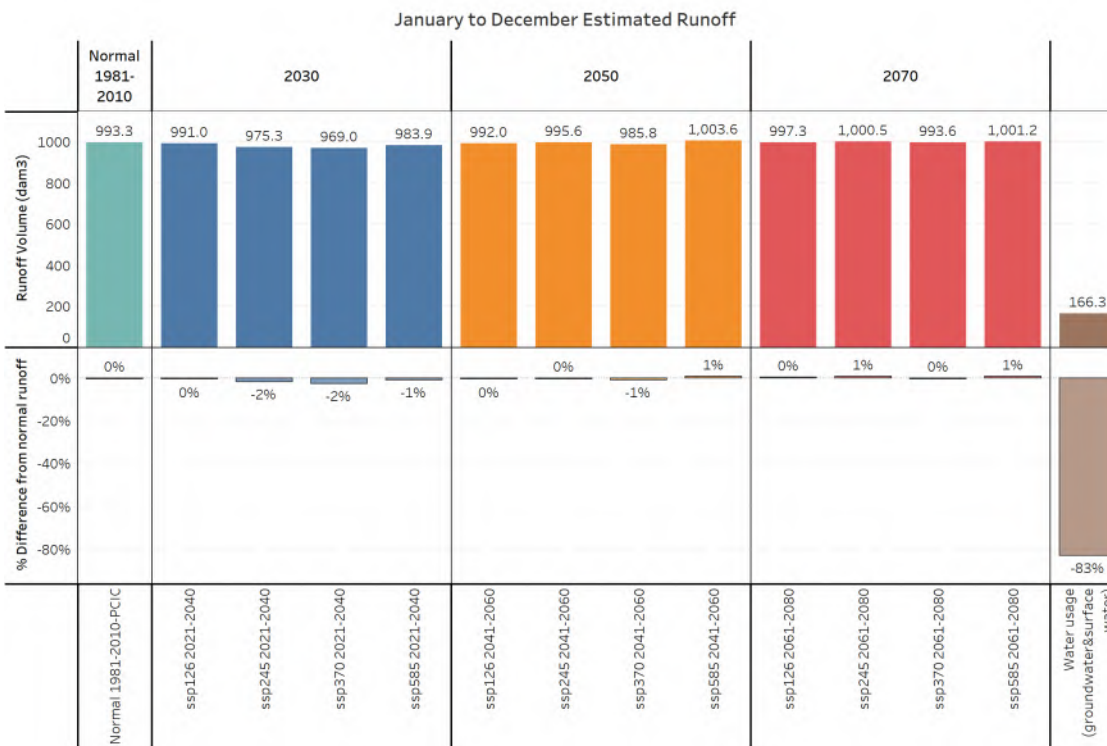


Figure 29. Estimated Runoff for January to December for various climate severity scenarios for the years 2030, 2050 and 2070 (fire protection licence not included).

7.3.1 Surface Water and Groundwater Monitoring on Salt Spring Island

There are several active and inactive groundwater and surface water monitoring points located within and near the study area (Figure 30).

There are two active groundwater monitoring wells:

- SSIWPAGWM-1009 (ITC) data from 2018-2020.
- Figure 31, although the data covers a short time period, it indicates a slight decrease in water level of 20-30cm over these years.

As there are no groundwater monitoring wells in the study area with a long-term data set, data from Provincial Groundwater Observation Well OW373 on Salt Spring Island to the north of Lake Weston was obtained. The data shows a downward trend line of water levels for all months except November, December and February for the years 2006 to 2021 (Figure 32). The black dashed lines indicate the statistical trend for all the years during each month (upward/increasing over time, downward/decreasing over time or flat/unchanged with time). The downward trends are especially pronounced during August and September.

There is one active streamflow station:

- Fulford Creek (BC Aquarius database) monthly streamflow data from 2017-2021. This data is plotted in Figure 33 and indicates increasing trends from October to February, decreasing trends in March and April (reflecting less snow melt) and steady trends during the summer months.

There are three active surface water stations in the Weston Creek watershed:

- Lake Weston Inflow creek E1 which is monitored by the Water Preservation Society (WPS) SSI FWC Project (SSI Freshwater Catalogue).
- Lake Weston at outlet (SSIWPA) with data from 2019-2020.
- Weston Creek near mouth which is monitored by the WPS SSI FWC Project (SSI Freshwater Catalogue).

Data from these stations is presented in Section 7.5.

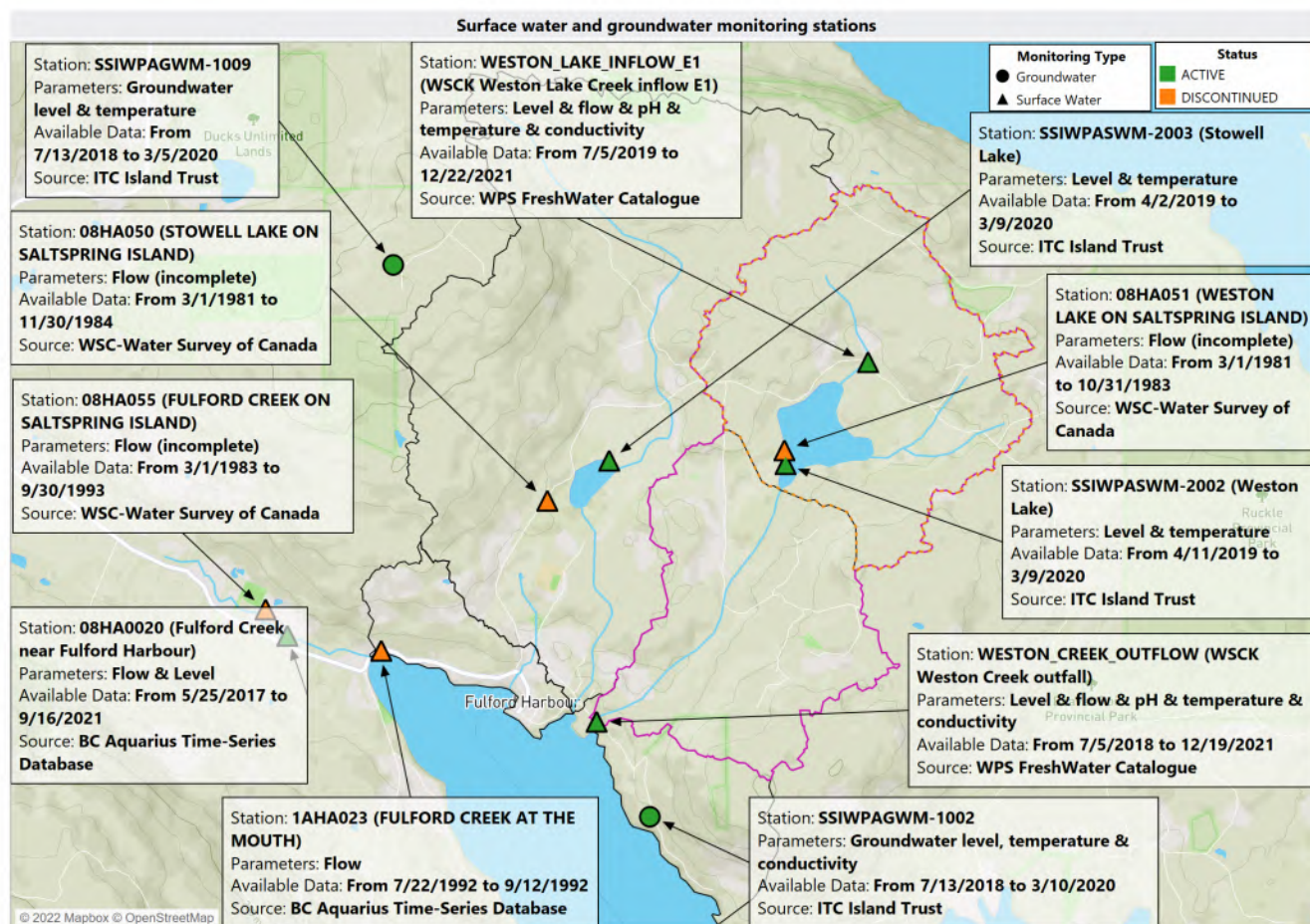


Figure 30 Surface water and groundwater monitoring stations

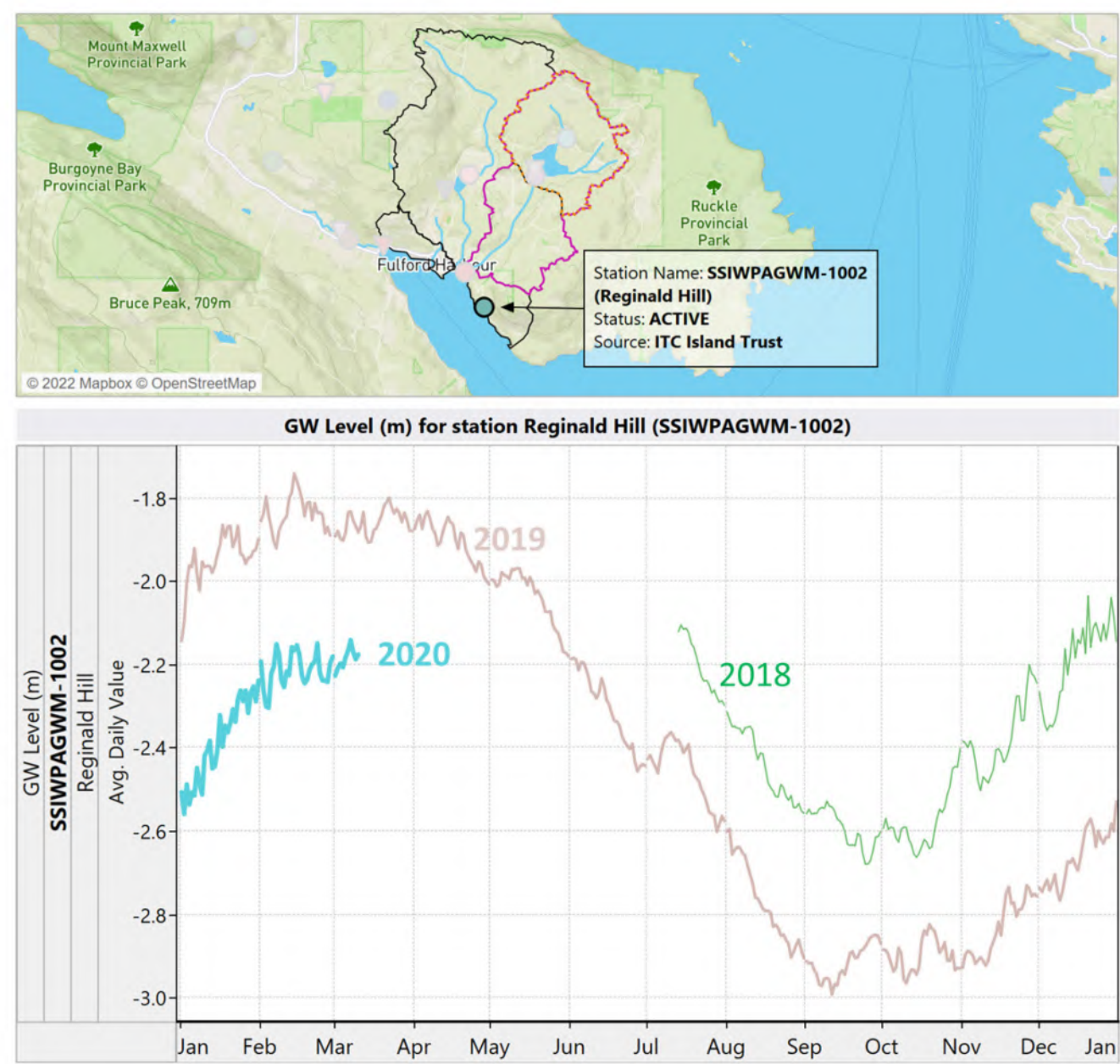


Figure 31 Groundwater level for Reginald Hill volunteer observation well.

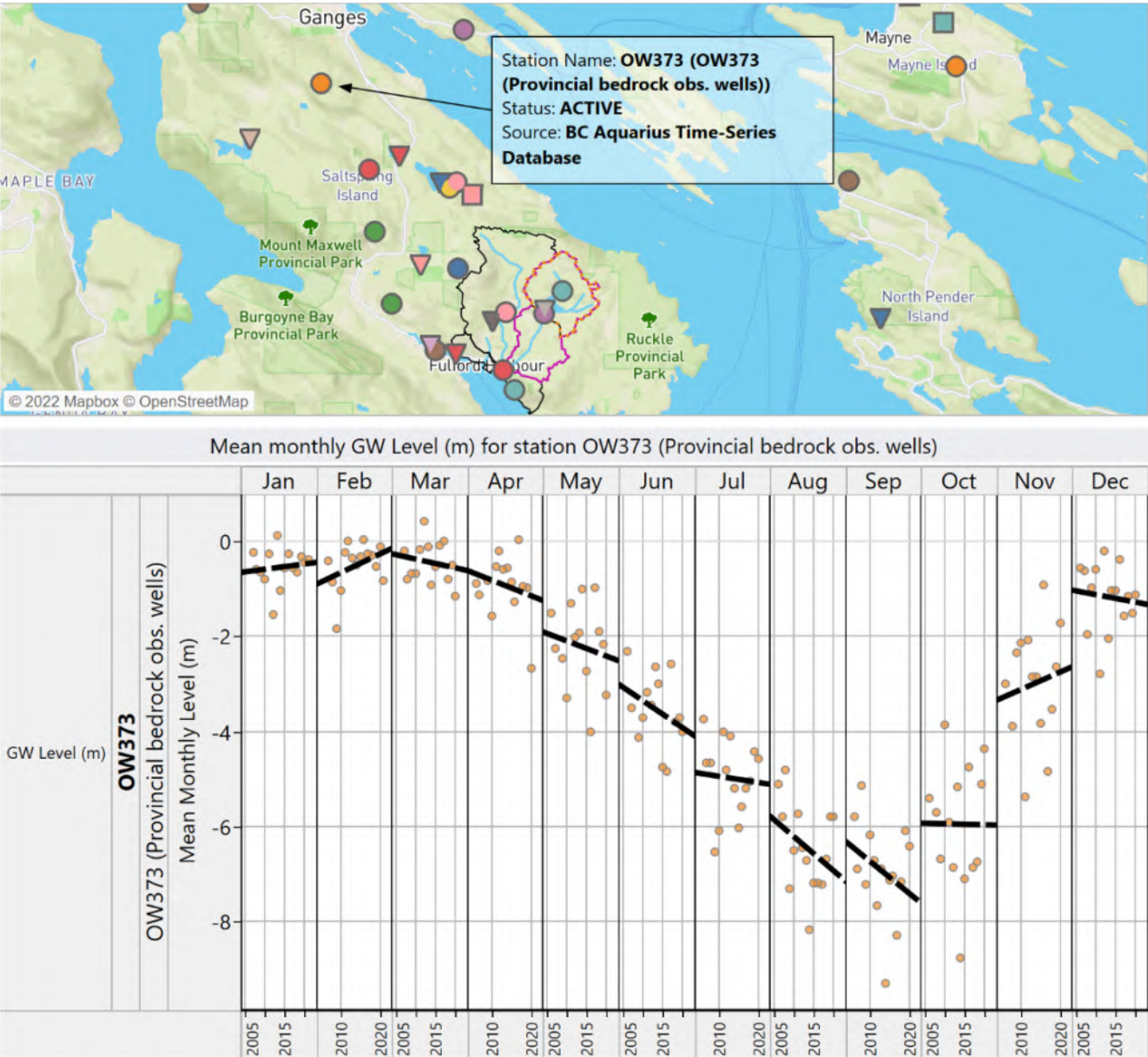


Figure 32. Mean monthly groundwater levels for OW373 (Provincial Observation Wells Network) from 2006 to 2021.

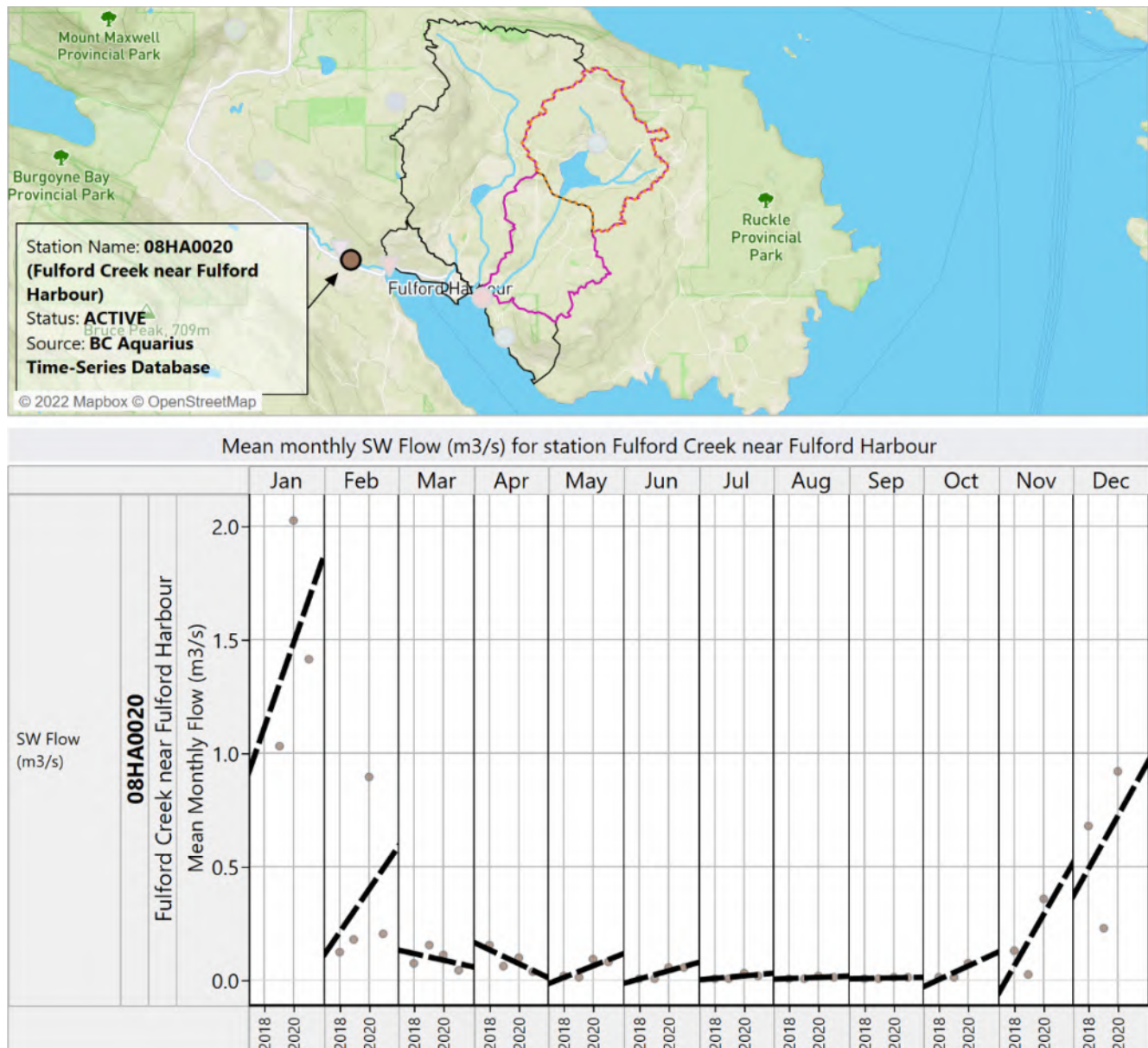


Figure 33. Mean monthly flow trends in Fulford Creek from 2018-2021.

7.4 Environmental Flow Needs

Aquatic ecosystems consist of groundwater, springs, creeks, rivers, lakes, wetlands and estuaries and the water allocated to protect aquatic ecosystems is referred to as Environmental Flow Needs (EFNs). The aquatic ecosystem most commonly used to define EFNs is fish habitat in streams which is referred to as Instream Flow Requirements (IFR). Lake Weston and Weston Creek have been identified as habitat for cutthroat trout (Barnet et. al., 1993) and thus it is important that a minimum lake water level and creek flow be maintained year-round.

The most common method of defining IFRs to protect fish habitat is based on the Modified Tennant (a.k.a. Montana) Method (Table 9; Tennant, 1976) which assumes that some proportion of the mean annual discharge (MAD) is required to sustain the biological integrity of a river ecosystem to sustain fish spawning and rearing. Based on original field data collected from 11 rivers in Montana, Nebraska and Wyoming and further supplemented with additional data from hundreds of gauged flow regimens in 21 states, Tennant (1976) recommended percentage values of MAD predicted to sustain predefined ecosystem attributes. In drainages where fish are present, the minimum flow required to sustain the fisheries resource for fair spawning and rearing habitat is 10% of the Mean Annual Discharge (MAD).

Table 9: Creek flows as a percentage of Mean Annual Discharge and fish spawning/rearing habitat condition (Tennant, 1976).

Creek Flows as % of Mean Annual Discharge	Spawning/Rearing Habitat Condition
30-60% MAD	Excellent
20-30% MAD	Good
10-20% MAD	Fair
5-10% MAD	Poor
<5% MAD	Severely degraded

The B.C. Water Sustainability Act (WSA; 2014) specifically identifies stream flow requirements for ecosystems and species. Authority is given to temporarily protect flows in times of drought and to order mitigation measures where water removal is likely to have significant adverse impacts on a stream.

The key sections of the WSA pertaining to EFNs are:

Section 15: Statutory decision makers must consider EFNs when issuing new surface and groundwater licences (for aquifers that are connected to surface water). This policy is not a method or enforceable law for determining EFNs but instead provides guidelines for assessing risk to EFNs. It sets out different management actions depending on different levels of risk and assist the decision maker in identifying where cautionary measures could be taken or additional analysis is needed.

Sections 86-88: Water users are required to cease water withdrawals during drought under a *critical flow protection order* or *fish population order*.

Section 43: Water and land-use decision makers have the ability to set water objectives (including water flows and quality) that must be considered when issuing authorizations.

The BC EFN policy establishes three risk management levels by evaluating stream sensitivity, stream size, cumulative withdrawals from the stream, and hydrological characteristics of the stream.

In many parts of B.C. groundwater discharges contribute a high percentage of base flow in streams and groundwater extractions from aquifers that are hydraulically connected to a stream can significantly diminish streamflow, particularly in small streams during critical low flow periods. The WSA recognizes the hydraulic connection between groundwater and surface water, particularly in shallow sand and gravel aquifers where groundwater withdrawals directly affect availability of stream water for other users and for aquatic ecosystems. The WSA thus recognizes that groundwater and surface water must be managed under the same regulatory regime. Groundwater use is integrated into the water-licensing system, similarly to how surface water was previously managed. The WSA applies the consideration for EFN to aquifers that are *reasonably likely to be hydraulically connected to a stream*. For an application to be successful, the technical assessment would need to demonstrate that sufficient water is available to meet the needs of the intended use, and that the requested water withdrawal will not cause undue harm to other water users or the EFNs of hydraulically connected streams.

It is important to note the very different time frames between groundwater, which generally flows very slowly (e.g. months to centuries) and surface water, which flows relatively quickly (e.g. days). This results from the flow restriction of the natural geologic materials and, as a result, the time required for the impacts of groundwater pumping (or water-diversion from a spring) can take decades to be observed with declining water levels in wells or baseflow to creeks or other groundwater-dependant ecosystems.

Case Study: Sooke River, Vancouver Island

A value of 10% MAD (mean annual discharge) was determined using the modified Tennant method as the conservation flow (i.e. EFN) in the low flow months (Burt, 2006). Monitoring of the conservation flow releases has been carried out and the results indicate that flow releases from the Sooke reservoir result in an increase in the variety and abundance of aquatic invertebrates. An improvement in the health of trout fry has also been observed.

Case Study: Tsolum River, Comox, Vancouver Island

The Courtenay Water Allocation Plan uses the Modified Tennant (Montana) Method to recommend that an estimated minimum of 10% of MAD (mean annual discharge) be maintained in the Tsolum to support aquatic life (Riddell & Bryden, 1996). Provincial scientists have decided that maintaining flows of 10% MAD in Vancouver Island streams may not be realistic. Many streams on the east coast of Vancouver Island have highly variable flow regimes and may not have had flows above 10% MAD in the summer prior to human disturbance. It has been suggested that a more appropriate target may be to maintain 5% MAD in the Tsolum River watershed during low flows (Szcot, 2018).

7.5 Lake Weston Safe Yield

Lake Weston is directly fed by groundwater and its pumping is similar to that of a large well. The safe yield of a water well (or lake acting as a well) is the maximum annual water volume that can be sustainably extracted year-round and year after year without gradually drawing groundwater out of storage (causing declining levels in the well and/or nearby wells) or decreasing the groundwater seepage that feeds aquatic ecosystems (aquifers, springs, wells, wetlands, creeks, lakes) referred to as Environmental Flow Needs. The safe yield for Lake Weston consists of two components.

1. Water storage in Lake Weston. Water storage is important for aquatic life within the lake including maintaining water temperatures sufficiently low enough for certain species. Water storage in the lake also allows for a certain amount of water to be drawn for short-term emergency purposes (fire department or wildfire) or to sustain water supplies during a drought or the predicted hot dry summers in the decades to come.
2. Flow in Weston Creek. Sufficient flow during “normal” climatic variations year-round and year to year to maintain the creek as an aquatic ecosystem and habitat for cutthroat trout and other species.

Water Storage in Lake Weston:

Lake Weston water volumes corresponding to different lake levels are shown in Figure 34 to Figure 36. The Lake Weston level varies from a high of about 61.35 masl in January to a low of 60.55 masl in August (average 0.8 m variation) and appears to reach a level where it becomes stable (increasing very slightly) in the summer months. It can also be seen that as the water level declines the decrease in volume becomes more pronounced as the lake is a conical shape (Figure 36).

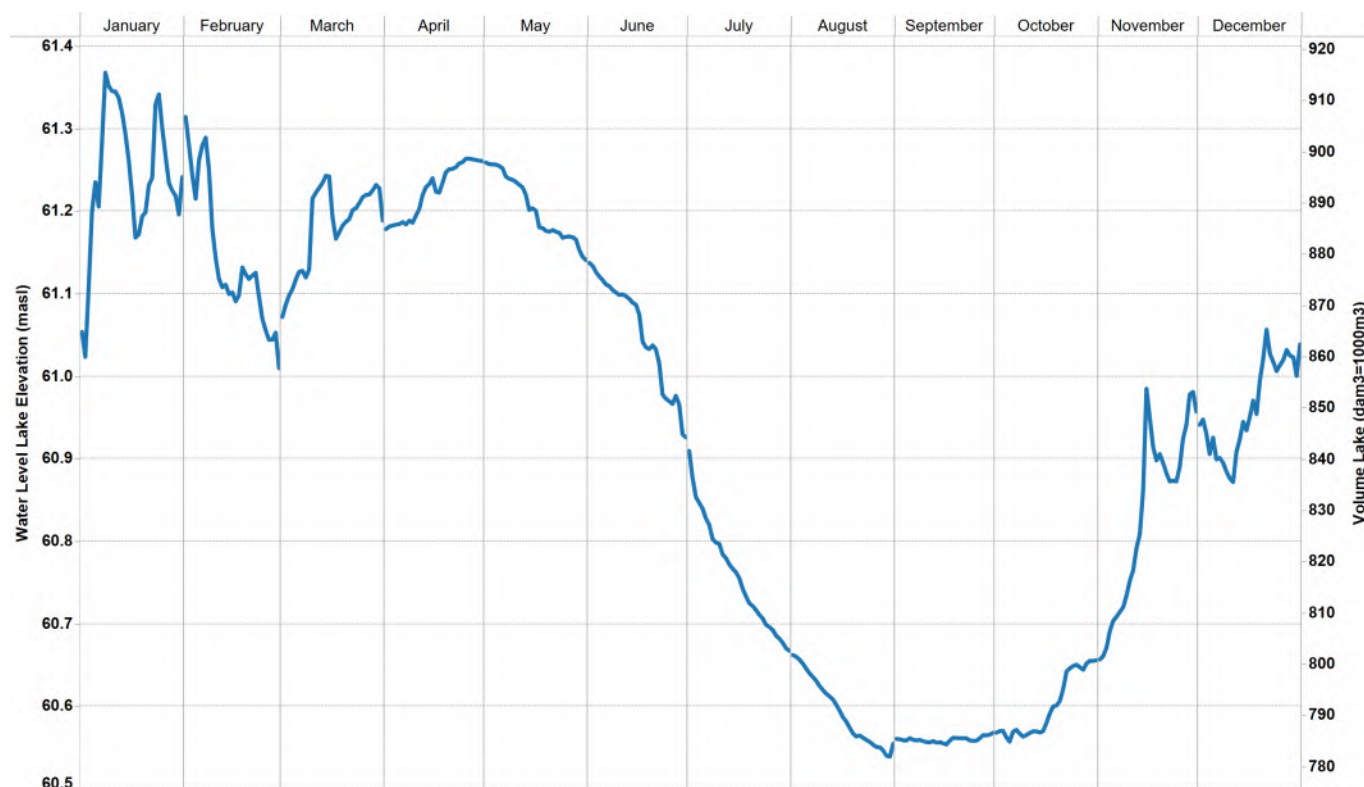


Figure 34. Lake Weston water level and storage volume from April, 2019 to March, 2020.

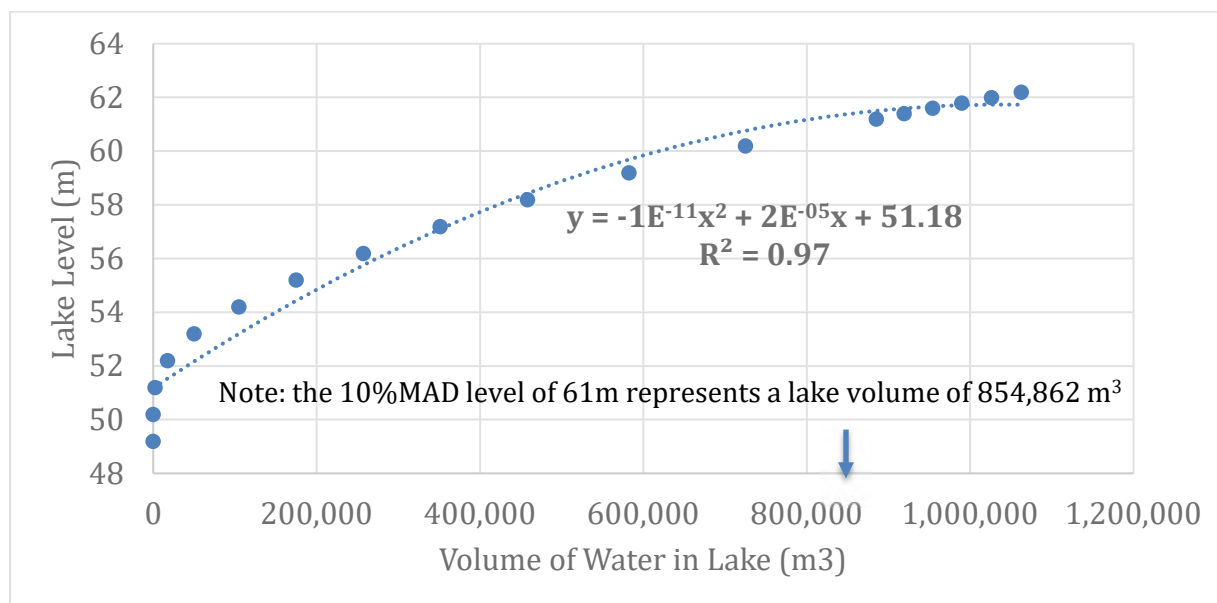


Figure 35. Lake Weston water level (April, 2019 to March, 2020) versus volume of water in lake.

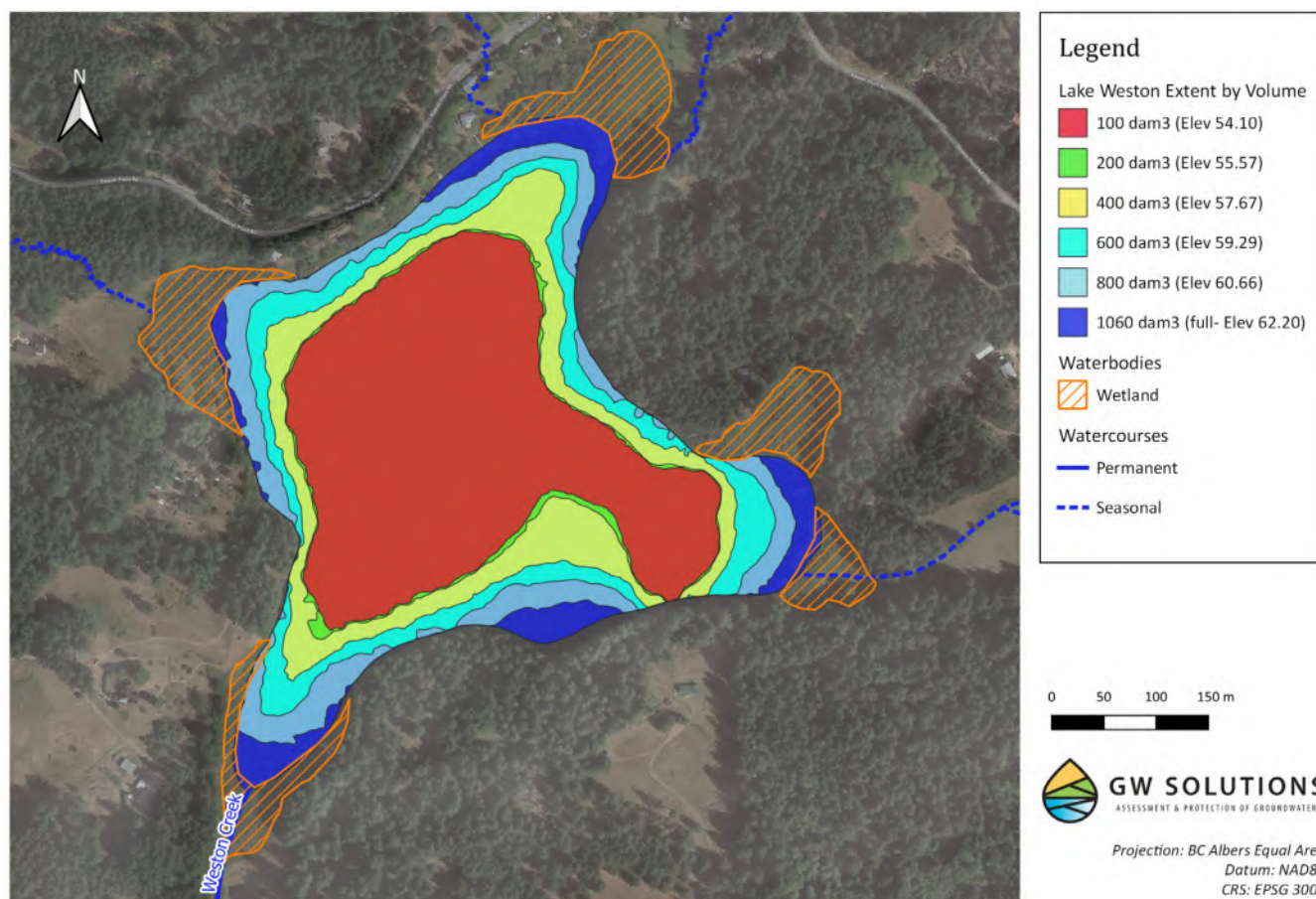


Figure 36. Lake Weston volumes for various areal extents.

Figure 37 is a monthly graph of water volumes of Lake Weston for various climate scenarios (2030, 2050, 2070). It can be seen Lake Weston volumes are predicted to decrease significantly in the next decades during the summers when groundwater recharge and runoff are non-existent or negligible.

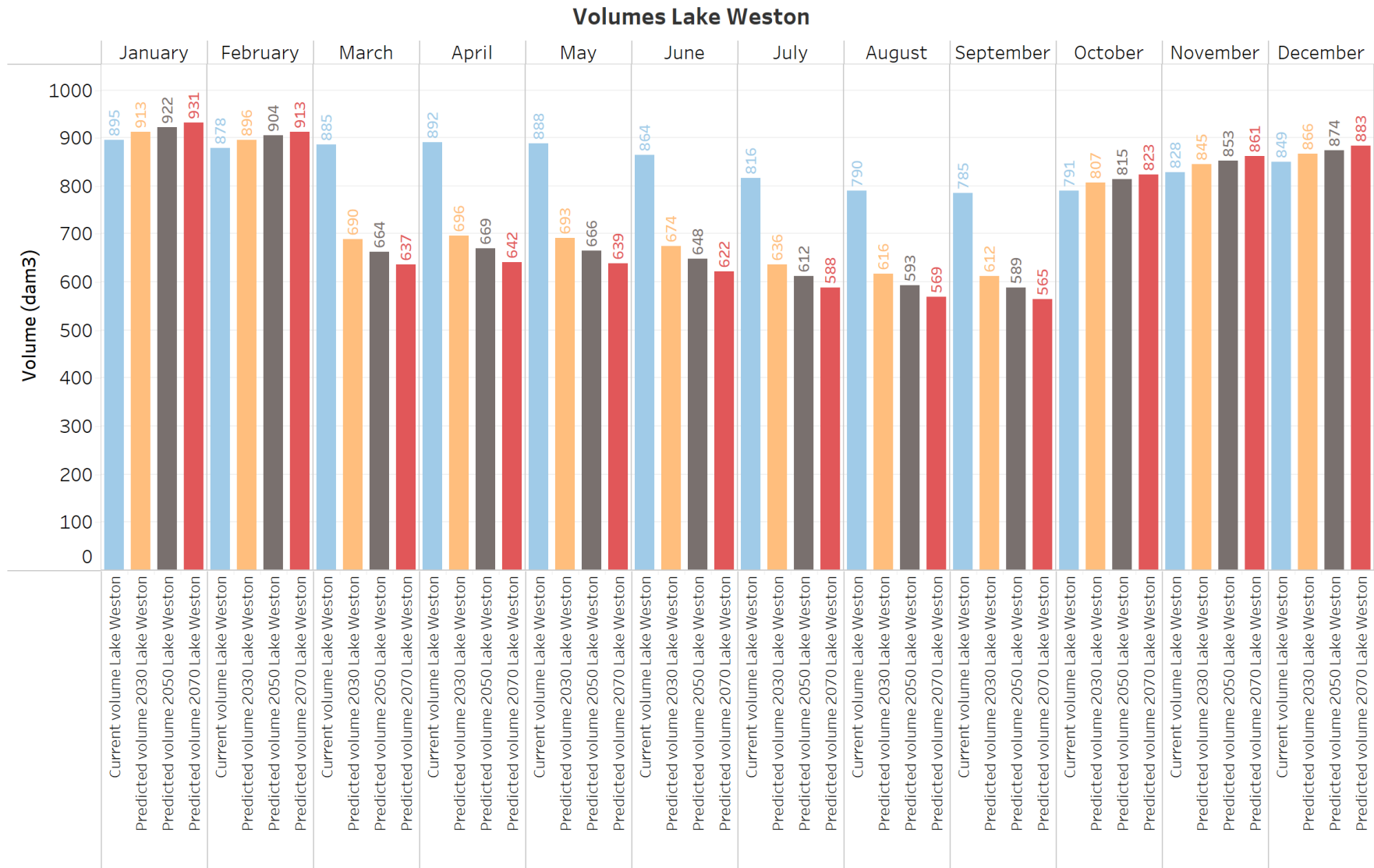


Figure 37. Lake Weston monthly volumes for climate scenarios.

Weston Creek Flow:

Figure 38 shows an illustrative cross-section of the watershed passing through Lake Weston and following the approximate route (slightly off-section) of Weston Creek. It can be seen that Lake Weston is directly connected to and fed by the groundwater system. Weston Creek is fed by both outflow from Lake Weston and also by groundwater discharge at specific groundwater discharge locations controlled by faults along the course of the creek. These faults have not been mapped but are assumed based on the uneven (i.e. flat then steep drop) topography along the creek and evidence of groundwater discharge (flooding or fish habitat).

Figure 39 is a map of key groundwater discharge and fish habitat locations in the watershed. It can be seen that there are springs in several locations above Lake Weston and key areas of groundwater discharge along the various arms or creeks feeding Lake Weston. These is fish habitat in two of these arms, the northeast arm and east arm. Along Weston Creek there are several fish migration gradient barriers (i.e. steep gradient) and at least one fish habitat identified directly adjacent to an area of frequent groundwater discharge (leading to field flooding seasonally). There may be other smaller fish habitats fed by groundwater discharge along Weston Creek that have not been identified.

Figure 40 shows a plot of Lake Weston water level, the Weston Creek outflow and total water usage (groundwater and surface water). Weston creek varies seasonally from a high monthly average of 0.017 m³/s in March to a low of 0.0010 m³/s in August. Based on the data obtained, it appears the flow can become very low during the summer, from the three plus years of flow records (WPS SSIFWC) Weston Creek flows year-round, though with very limited summer flow.

As noted earlier in this report, water usage is highest in the May-September period and it is especially high in July and August when rainfall is low and evaporation is high. If increased water usage leads to lowered groundwater levels then groundwater-dependent creeks (like Weston Creek) can temporarily become dry or almost dry during late summer.

In Figure 41, water temperature and electrical conductivity follow distinct seasonal trends for the inflow and outflow, however, it is noted the inflow electrical conductivity and pH become gradually higher in the summer season due to the predominance of groundwater (which is more mineralized than surface water or rainwater) at this time of year. As expected, the inflow E1 increases substantially during the winter season diminishing during the summer, this inflow creek shows clearer indications of groundwater baseflow (Millson, 2020, cf Howe and Allen 2020) than the Weston Creek outflow. The Weston creek outflow chemistry, in contrast to the inflow, does not increase significantly in the winter months as the outflow emanates mostly from Lake Weston which absorbs much of the runoff and dilutes groundwater baseflow in the discharge into Weston Creek, though Weston Creek is also fed through groundwater seepage along its course as it, like Lake Weston, is in direct connection with the aquifer.

It is noted that inflow E1 is not the only inflow to Lake Weston as the lake is natural groundwater discharge body. Inflow E1 is one of two major surface water inflows to Lake

Weston (the other inflow is the east arm) and there may be other water-bearing faults intersecting the lake that are unseen. Lake Weston also likely receives some inflow in the subsurface through seepage from the smaller fractures in the aquifer.

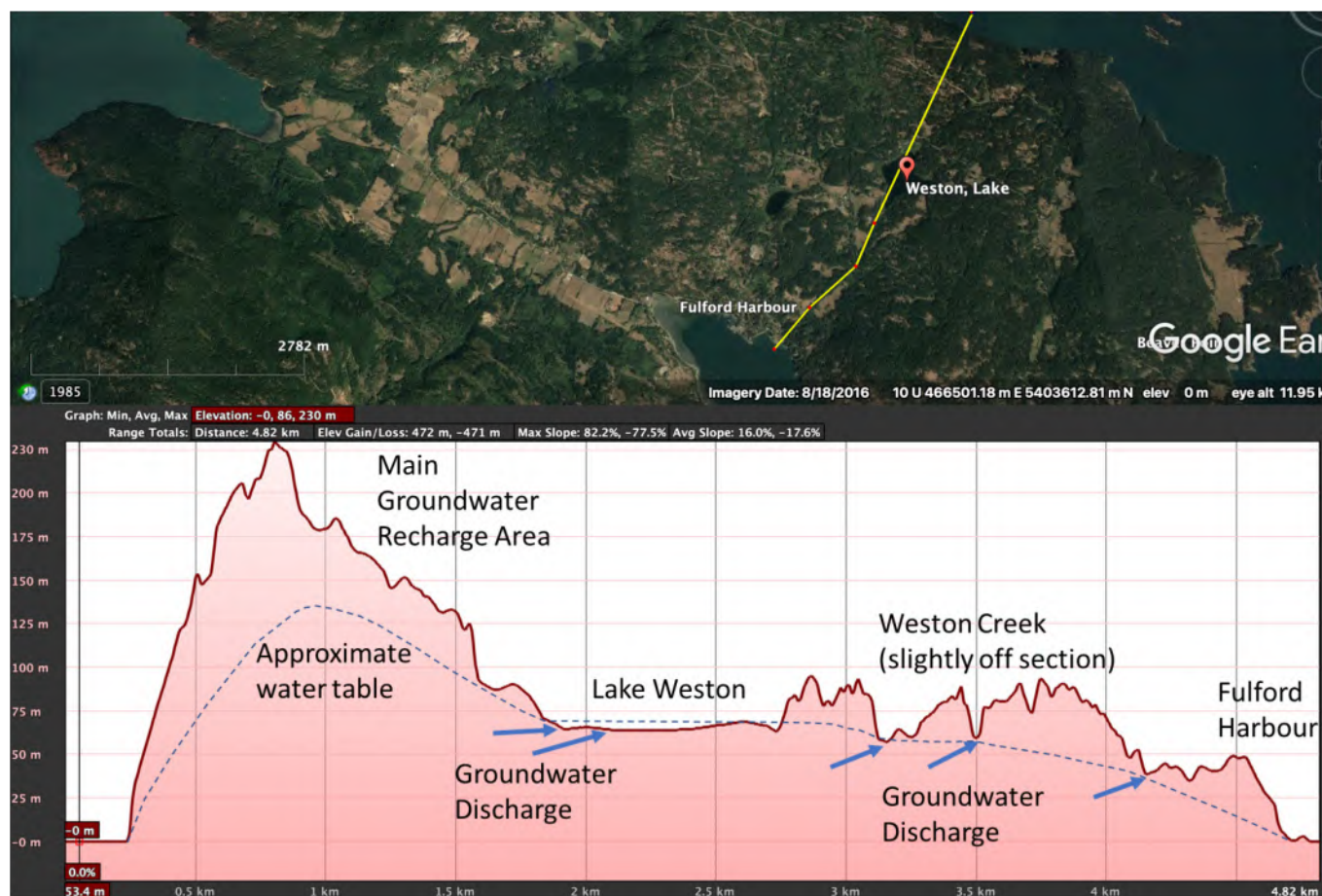


Figure 38. Topographic profile and illustrative cross-section across entire Lake Weston and Weston Creek watershed.

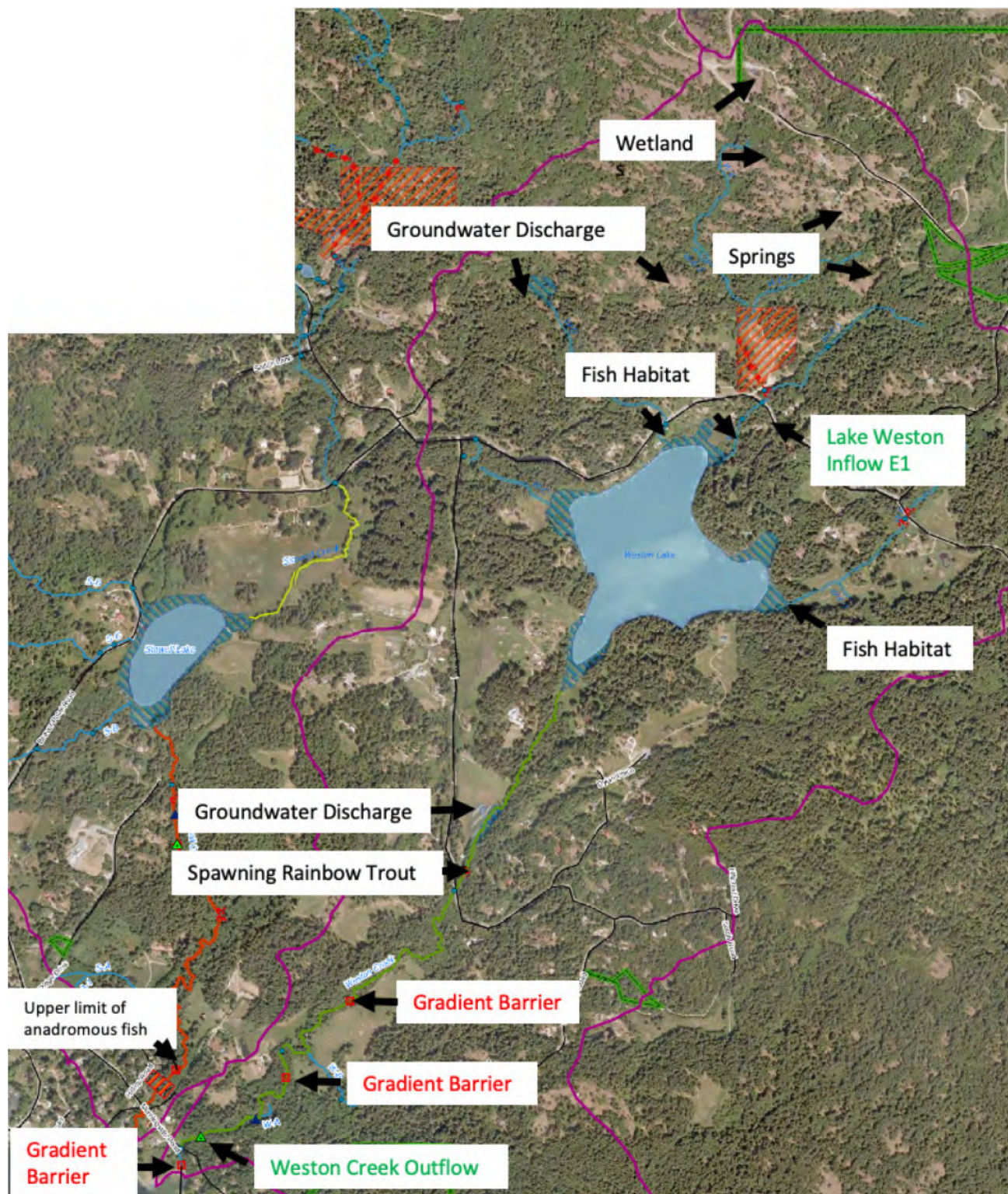


Figure 39. Groundwater discharge and fish habitat in Lake Weston and Weston Creek.

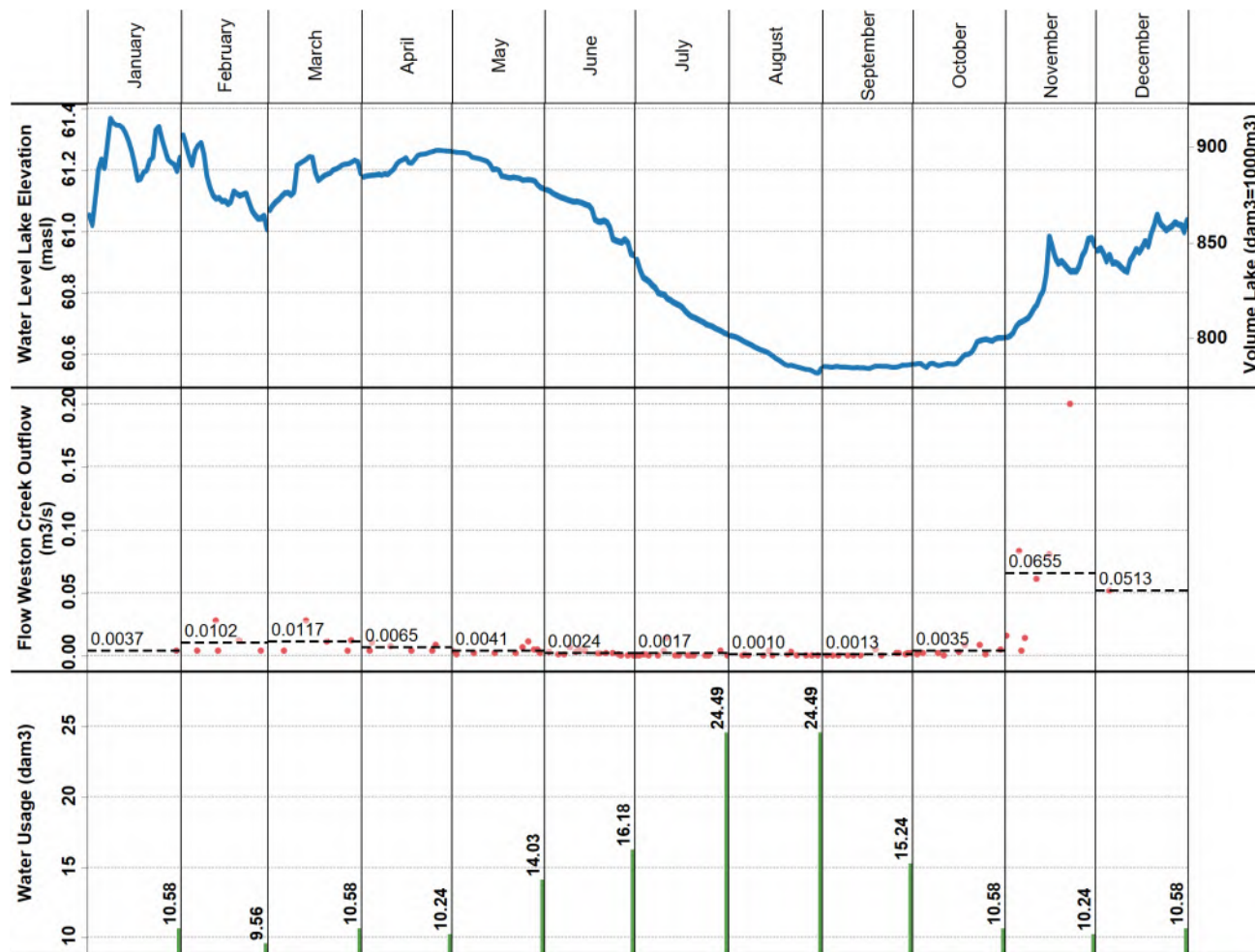


Figure 40. Lake Weston water levels, Weston Creek flow (April, 2019 to March, 2020) compared to estimated water usage (fire protection licence not included).

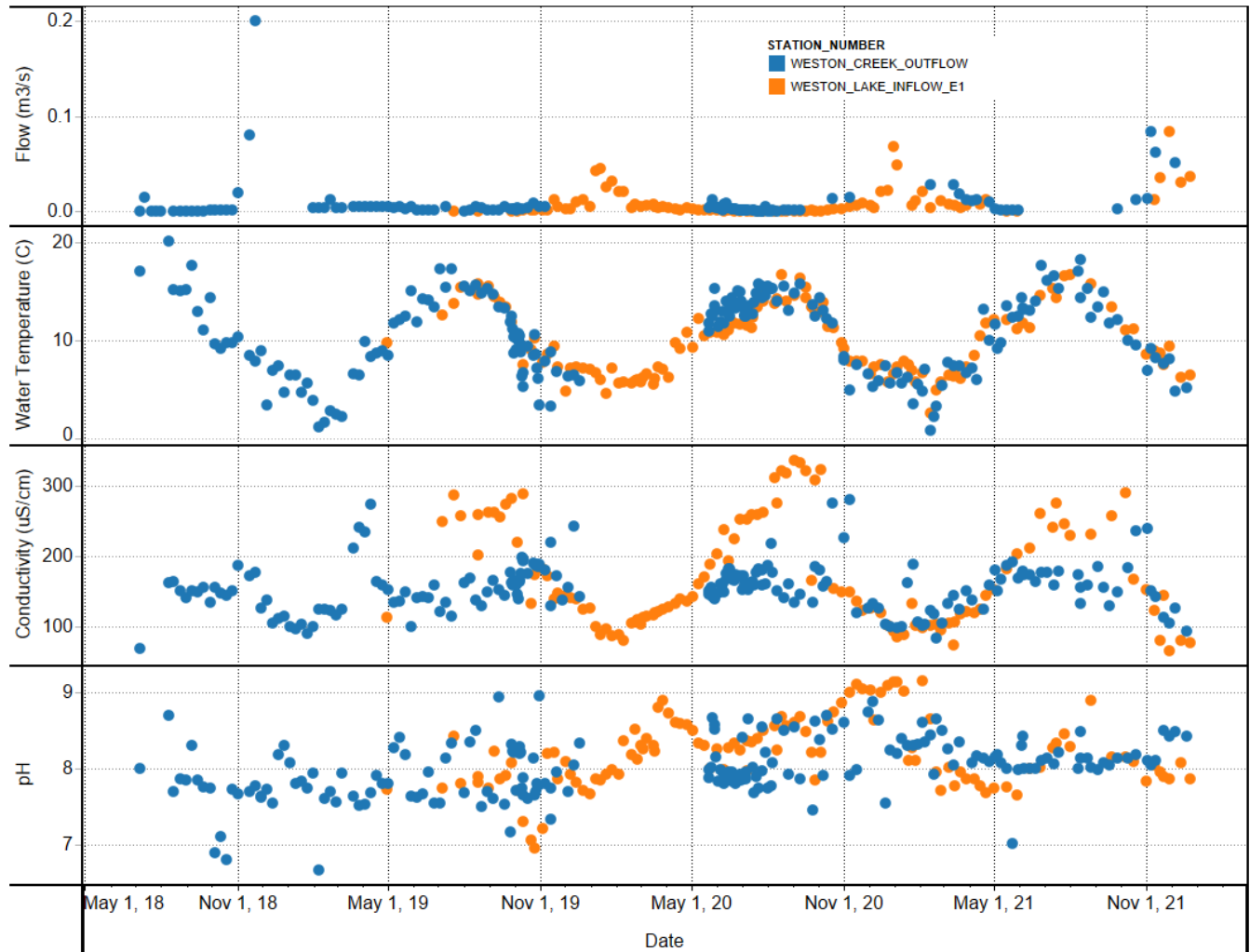


Figure 41. Lake Weston inflow, Weston Creek outflow, temperature, electrical conductivity and pH from May, 2018 to December, 2021 (NB not all flow data is plotted).

Figure 42 is a scatter plot comparing Weston Creek flow (vertical axis) and Lake Weston water levels (horizontal axis). An approximate trend line is drawn through the data points with the lower flows (less influenced by short-term spikes from storms) to give an approximate relationship between the lake water level and the creek flow. As explained in the section on Environmental Flow Needs, the minimum flow to maintain an aquatic habitat for fish varies between 10%MAD and 30%MAD (Tennant, 1976). The minimum 10%MAD for Weston Creek corresponds to a Lake Weston water level of about 61 masl (meters above sea level). A 20%MAD corresponds to a lake level 10 cm higher at about 61.1 masl and a 30%MAD is about 61.15 masl.

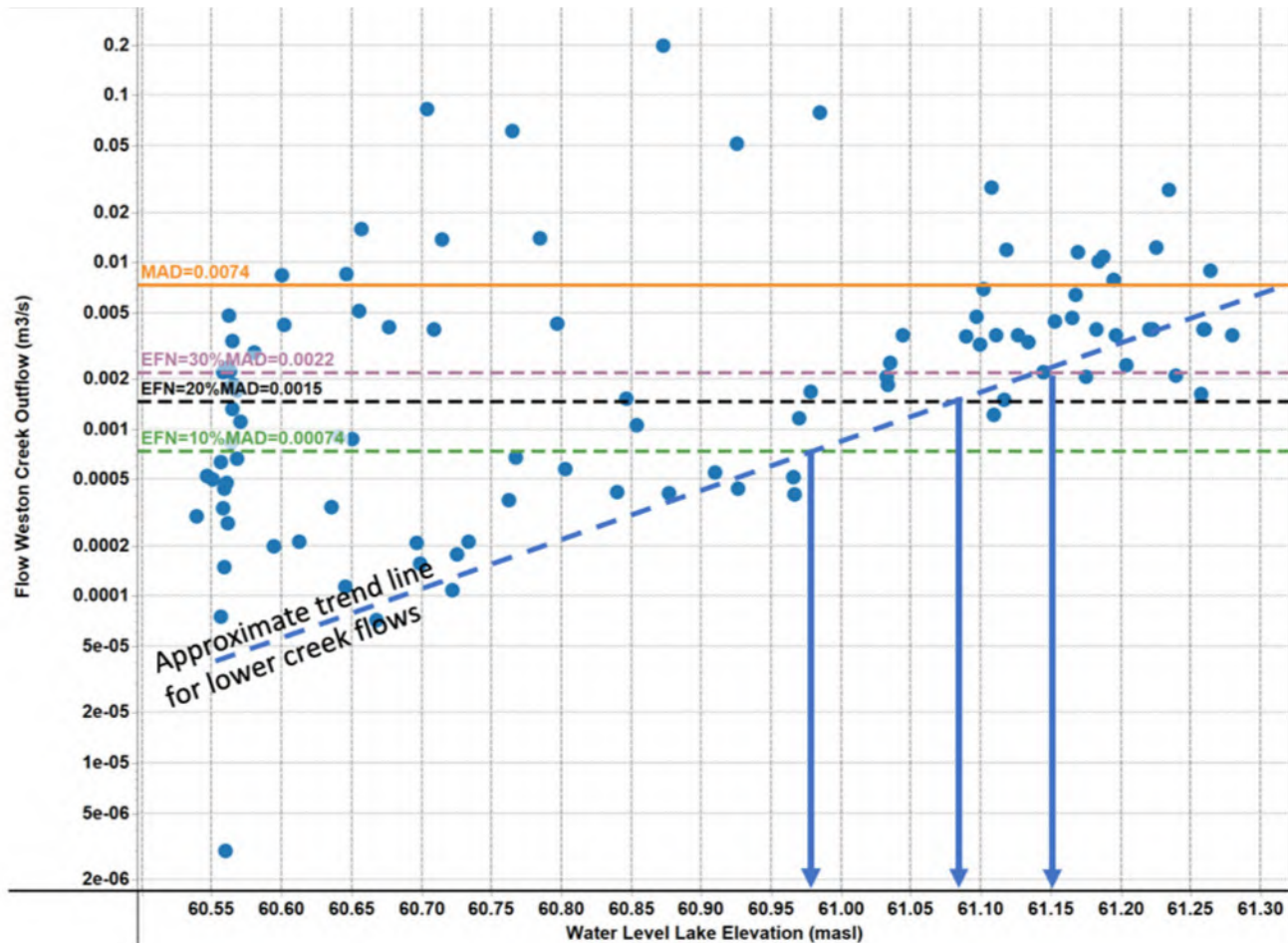


Figure 42. Lake Weston water level versus Weston Creek outflow with various %MAD (mean annual discharge).

Figure 43 is a plot of Lake Weston water level on the vertical left axis and the Weston Creek outlet on the vertical right axis showing all data collected over several years for each month. Although the Weston Creek outflow average in August is $0.001 \text{ m}^3/\text{s}$, the flow is significantly less than this value for much of the summer months. The level of Lake Weston is clearly lower than the 10%MAD (61 masl) level during the July-November period and, to achieve this level in the summer, the usage during the summer would need to be reduced. It is noted that the volume of water in Lake Weston at a level of 61 masl is approximately $854,862 \text{ m}^3$ (see Figures 35 and 36).

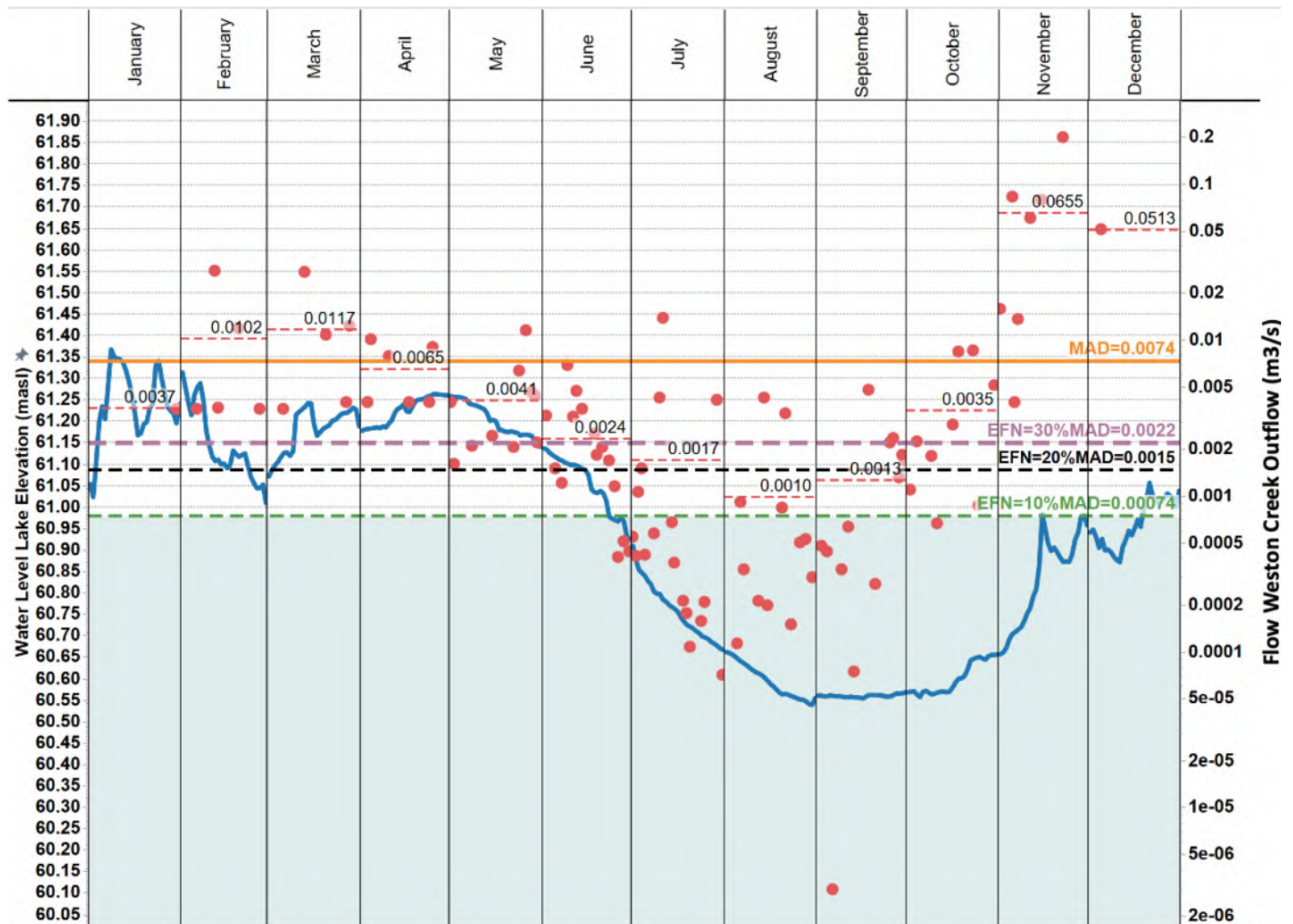


Figure 43. Lake Weston water level (blue line), Weston Creek outflow (red dots; with monthly averages) and various %MAD (mean annual discharge).

Figure 44 is a scatter plot comparing total water usage (groundwater and surface water) to Lake Weston level. It can be seen there is a weak inverse relationship and an approximate trend line has been drawn. Based on two data points a second trend line was drawn "Trend line upper limit" to provide the highest potential relationship between water usage and Lake Weston level. The high amount of scatter in the plot (indicating a weak correlation) is expected as water usage is not the only factor affecting the Lake Weston level. The lake level is also impacted by precipitation events (especially in the winter) which can produce short-term storm runoff and medium term increases in groundwater inflow. It also noted that the water usage is an estimate as the Fulford Water System is the only water usage that is actually measured. The basic relationship between usage and Lake Weston level is represented with an approximate trend line providing an approximation of the usage that corresponds to the 10%MAD, 20%MAD and 30%MAD. It can be seen that in order to achieve even the minimum 10%MAD in Weston Creek the usage in the summer months would need to be reduced to usage levels similar to the winter

months. This would require significant summer restrictions on irrigation (farm and household) usage. This highlights the need for accurate usage data to confirm these results and water conservation programs.

The climate change analysis has indicated that in the coming decades the water surplus (groundwater recharge and surface water runoff) could decrease by as much as 30% in the summer. Although higher precipitation is predicted for the winter, much of this will come as storms that are too intense to allow for significant recharge. This means the total annual recharge could decrease leading to a gradual lowering of the water table. Recharge will certainly be reduced in the summer months however this decrease may not be balanced by increased recharge in the winter if the precipitation occurs as high intensity storms as predicted.

The other major factor that can affect the Lake Weston water level (and thus Weston Creek) is land-use in the watershed which can affect the ability of the land to absorb water and recharge groundwater. It is critical in a small groundwater-dependent watershed like Weston Creek that land-use is not altered (e.g. deforestation, buildings, pavement) to ensure groundwater recharge is not affected. Finally, it is noted that the groundwater of the Weston creek watershed does not have a natural geologic layer above it to protect it from contamination thus the groundwater (and lake) is highly vulnerable to contamination from septic systems or agricultural runoff and various geochemical studies (e.g. Nordin, 1986) have confirmed the rise in nutrients in Lake Weston.

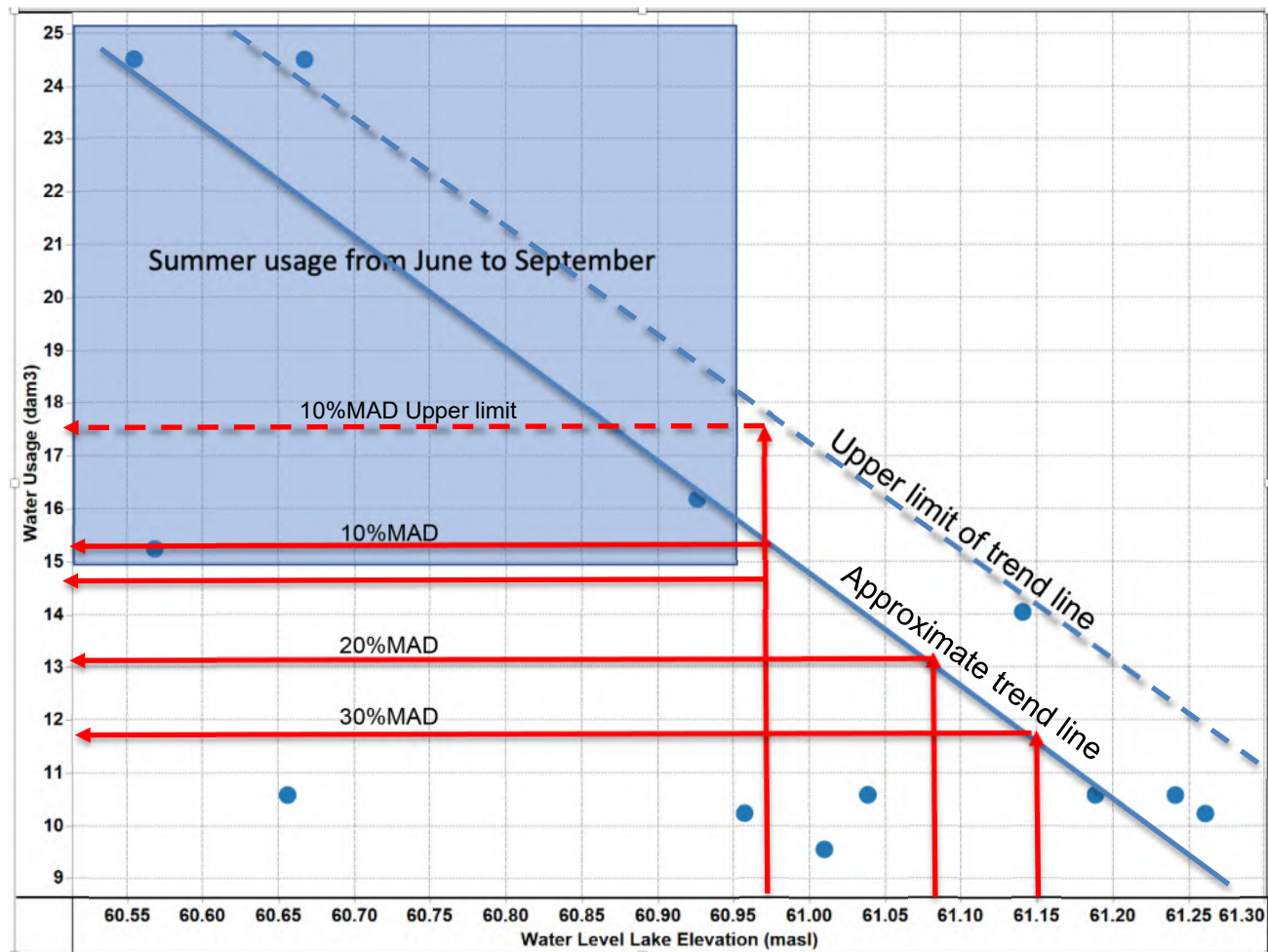


Figure 44. Lake Weston water levels versus estimated total water usage (groundwater and surface water; fire protection licence not included). Trend line is very approximate due to poor correlation. Upper limit of trend line indicates highest possible water usage for the Lake Weston level that maintains a 10%MAD.

Table 10 is a monthly summary of water usage volumes, volumes for Lake Weston and flow in Weston Creek. This data is plotted as monthly bar graphs in Figure 45. It can be seen that estimated water usage during the summer months, July and August in particular, is significantly higher than the remainder of the year. Actual usage of the Fulford Water System only increases slightly in the summer months. This is in contrast to the licenced surface water withdrawals for irrigation in the summer which are significantly higher than the remainder of the year.

7.6 Lake Weston Safe Yield Without Consideration of EFNs

An analysis of the safe yield of Lake Weston without consideration of EFNs was requested and provided as follows. Note that the consideration of EFNs is fundamental for the determination of safe yield and a lack of consideration of EFNs could have significant consequences to the aquatic ecosystem which is naturally vulnerable due to the small island setting (i.e. small recharge areas).

It is important to understand that the safe yield of Lake Weston cannot be determined independently of the safe yield of the entire aquifer within the watershed as Lake Weston is directly connected to and fed by the aquifer. This any additional lowering of the water level of Lake Weston will lead to a lowering of the water table in the aquifer immediately surrounding the lake which could affect water wells. Thus, the safe yield of the entire watershed must be considered and not only that of Lake Weston.

A common index of aquifer stress compares the total amount of recharge in the watershed to the total water usage. For the Lake Weston watershed the total annual groundwater recharge is 615 dam³ and the total water usage is 167 dam³ (151 dam³ from Lake Weston and 16 dam³ from groundwater wells). The amount of usage is thus 27% of recharge for this watershed which is reasonably high and indicates the maximum amount of water is already being pumped from this aquifer.

Another indicator of aquifer stress is water quality degradation. When wells (or groundwater-fed lakes being pumped like a well) are pumped heavily, such that the water table is lowered, they will draw water from further and further away increasing the well's zone of capture and the potential to draw contaminated groundwater. Excessive pumping can also induce recharge directly from poorer quality surface waters. Additionally, Excessive pumping can also divert groundwater that would have discharged into a surface water thus decreasing the baseflow of the surface water with resultant lower flows and higher concentrations of contaminants.

Table 10. Weston Creek flow, Lake Weston level and Water Usage.

Month	Estimated current use of GW (dam ³)	Estimated current use of SW (dam ³)	Estimated current use GW+SW (dam ³)	Current use FWS (dam ³)	Current Max use FWS (dam ³)	Licensed use FWS (dam ³)	Licensed use SW (dam ³)	Licensed use SW (dam ³)	Licensed use GW (dam ³)	Licensed use GW+SW (dam ³)	Total volume in Lake Weston (dam ³)	Monthly mean flow Weston Creek (m ³ /s)	Monthly mean flow Weston Creek (dam ³)	Predicted volume 2030 in Lake Weston (dam ³)	Predicted volume 2050 in Lake Weston (dam ³)	Predicted volume 2070 in Lake Weston (dam ³)	GW recharge (dam ³)	Runoff (dam ³)
JAN	1.2	3.3	4.5	2.4	3.9	8.4	9.3	9.3	0	10.5	895	0.0037	9.9	913	922	931	146	235
FEB	1.1	3.2	4.3	2.4	4.5	7.6	8.4	8.4	0	9.5	878	0.0119	28.8	896	904	913	81	131
MAR	1.2	3.7	4.9	2.7	7.4	8.4	9.3	9.3	0	10.5	885	0.0131	35.1	690	664	637	60	97
APR	1.2	3.4	4.5	2.4	3.7	8.1	216.4	9.0	0	10.2	892	0.0088	22.8	696	669	642	3	5
MAY	1.4	6.1	7.6	2.9	2.6	9.4	226.8	12.6	0	14.0	888	0.0035	9.4	693	666	639	0	0
JUN	1.4	8.4	9.8	3.2	3.4	9.6	222.1	14.7	0	16.1	864	0.0024	6.2	674	648	622	0	0
JUL	1.6	11.7	13.3	3.6	2.8	14.8	237.1	22.8	0	24.5	816	0.0014	3.7	636	612	588	0	0
AUG	1.6	11.8	13.5	3.8	5.6	14.8	237.1	22.8	0	24.5	790	0.001	2.7	616	593	569	0	0
SEPT	1.5	5.9	7.3	2.6	3.9	10.5	221.1	13.7	0	15.2	785	0.0013	3.4	612	589	565	0	0
OCT	1.2	3.3	4.5	2.3	3.4	8.4	9.3	9.3	0	10.5	791	0.0042	11.2	807	815	823	24	43
NOV	1.2	3.2	4.3	2.2	4.0	8.1	9.0	9.0	0	10.2	828	0.0593	153.7	845	853	861	155	248
DEC	1.2	3.2	4.4	2.3	3.6	8.4	9.3	9.3	0	10.5	849	0.0513	137.4	866	874	883	146	235
Totals	16	67	83.0	33	49	116	1415	151	0	166.3			424				615	993
Comments		Is assumed Fire Suppression use of 57 m ³		Average 2011-2020	2011 recorded use	Two licenses C120382 and C120292	It includes Fire Suppression at 7000 m ³ /day from April to September	It does not include Fire Suppression	No license applications	For GW use we include the estimated since no groundwater license is present. No fire protection		January to March might not be representative due to the lack of data		March to September -22%. Oct to Feb +2%	March to September -25%. Oct to Feb +3%	March to September -28%. Oct to Feb +4%	Water balance model	Water balance model

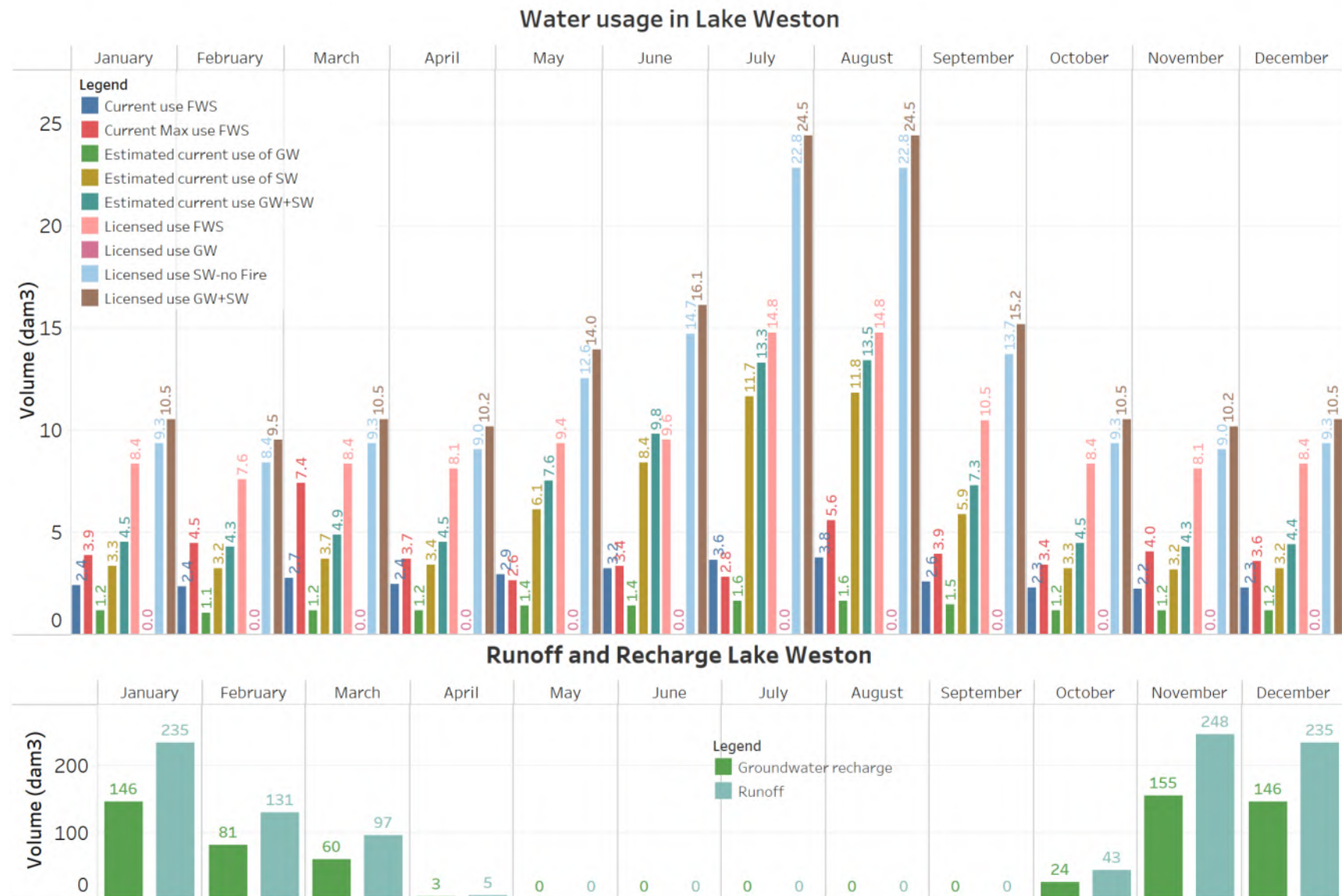


Figure 45. Monthly volumes comparing current estimated and licenced usages.

8 CONCLUSIONS

1. **Water Usage (Actuals).** Water usage consists of a combination of water wells, surface water (Lake Weston) and springs used for domestic water supply, irrigation, a community water system (Fulford Water System) and fire protection. The only available metered water usage data is from the Fulford Water System (average usage of 33 dam³). Fire protection usage is sporadic (e.g. 3000 gallons were drawn in 2019 but none in 2020 and 2021). The total annual Lake Weston (surface water) usage is 151 dam³ without any fire protection usage. Groundwater usage is much less at 16 dam³. The highest total (combined surface water and groundwater) usage is from April to September (peaking in July and August).
2. **Water Usage (Licences).** The total amount of licenced water is 1415 dam³ which is comprised of the fire licence (1264 dam³), the Fulford Water System (116 dam³) and several private irrigation licences (totalling 35 dam³).
3. **Water Balance.** Total annual precipitation in the Lake Weston watershed is about 2585 dam³/year and the surplus is 1608 dam³/year which is divided between surface water runoff (993 dam³/year) and groundwater recharge (615 dam³/year). Surface water runoff represents approximately 40% of total precipitation and groundwater recharge represents 25% of total precipitation. These values are typical for humid coastal hydrogeologic environments. A comparison of annual groundwater recharge and total annual water usage (from Lake Weston and wells) indicates that, on an annual basis, groundwater recharge is sufficient to satisfy the current demand. However, groundwater recharge occurs mostly in the winter months while the water demand is higher in the dry summer months, mostly for water supply and irrigation. This means that during the summer months, water supply demand exceeds recharge which leads to seasonally declining water levels of Lake Weston and Aquifer 1147. These levels then rise again each fall and winter in response to recharge events.
4. **Climate Change.** Climate change models for 2030, 2050 and 2070 predict that winters in the CRD will be warmer with more rain and less snow. The rain will fall as more intense events leading to higher levels of surface runoff potentially leading to higher soil erosion and flooding and potentially less groundwater recharge. The spring snowmelt will tend to disappear reducing the historical groundwater recharge heading into the dry summer months. During summer, temperatures will be higher, precipitation lower and groundwater baseflow (feeding creeks, lakes, wetlands) will therefore be lower. Runoff is predicted to decrease significantly in the summer months (-20% to -28%) while in the winter months runoff will increase by a small amount (2% to 4%). Water shortage is predicted from March to September when the demand will seasonally exceed the surplus of water. This means that during this period, licenced withdrawals exceed groundwater recharge (replenishment of supply) potentially leading to decreased groundwater baseflow to the creek and thus water available for environmental flow needs (aquatic ecosystems: lakes, creeks, wetlands, etc.).

5. **Environmental Flow Needs.** The Lake Weston level varies from a high of about 61.35 masl in January to a low of 60.55 masl in August (0.8 m variation) and appears to reach a level where it becomes stable in the summer months. For Weston Creek, to achieve 10%MAD flow the level of Lake Weston must be maintained at an elevation of at least 61 masl. Currently, this level is not maintained between July and September each year and this situation will worsen in the future according to the climate change predictions.
6. **Safe Yield of Watershed and Lake Weston.** The relationship between usage and Lake Weston level is represented with an approximate trend line providing an approximation of the usage that corresponds to the 10%MAD, 20%MAD and 30%MAD. To achieve even the minimum 5-10%MAD in Weston Creek the usage in the summer months would need to be reduced to usage levels similar to the winter months. This would require significant summer restrictions on irrigation (farm and household) usage. This highlights the need for accurate usage data to confirm these results and water conservation programs in the summer. It is not recommended that Lake Weston be pumped without consideration of EFNs (fish habitat in Lake Weston and Weston Creek) as the pumping of Lake Weston will lower the water table in the nearby aquifer affecting nearby water wells and inducing further degradation of water quality in Lake Weston.

9 RECOMMENDATIONS AND DATA LIMITATIONS

1. **Water level monitoring:** Additional groundwater monitoring throughout the area to create a watershed level water monitoring network and understand where in the watershed surface water or groundwater levels are declining over time. The importance of a groundwater monitoring network is accentuated by the fact that Lake Weston is a groundwater fed lake thus it is very dependent on healthy groundwater levels in the aquifer and natural groundwater recharge in the watershed above the lake. Groundwater monitoring data throughout the watershed is very important to ensure any changes in groundwater levels (e.g. due to higher well pumping) or decreased recharge are observed providing early indications of potential problems before they grow too large. Groundwater monitoring can be done either through the use of dedicated observation wells, or with privately-owned wells (volunteer observation wells) that are equipped with dataloggers that continuously measure water level and electrical conductivity (a proxy for salinity which is an indicator of salt-water intrusion and/or contamination). Further in-creek flow and chemistry monitoring may refine the understanding of in-creek groundwater baseflow contributions to lake recharge and ecosystem health.
2. **Climate stations.** Given that precipitation is the most sensitive parameter for estimating groundwater recharge and runoff, it is especially important to collect local precipitation data. The only climate station in the study area is at the Fulford Elementary School; however, this station has not been active since 2020. It is

recommended that this station be operated continuously and maintained by the Islands Trust or CRD to ensure data integrity and continuity.

3. **Hydrometric stations.** There is one active hydrometric station in Lake Weston which is maintained and operated by Island Trust. This station measures water level and temperature. In addition to this, we recommend measuring flow at the mouth of the lake. This information will be critical for future decisions regarding impact of climate change on the water availability and further calibrate water balance model.
4. **Water use metering.** There is only one metered water system in the area, the Fulford Water System thus water use for all other water supplies has been estimated using information from proxy models. An improved estimate of water usage is very important, and it is recommended that for each water well and surface water extraction system either a flow meter be added to the system or another method be applied to estimate the volume used over time. In addition, is it recommended that flow meters be added for each property supplied by the Fulford Water System.
5. **Water conservation.** Increased measures should be promoted to minimize water consumption from March to September and especially during July and August when the aquatic ecosystem is most stressed. Reducing usage in the summer months will also help maintain a sufficient amount of water in storage in the lake and the surrounding and thus avoid more serious water restrictions (e.g. limits on domestic usage) and maintaining sufficient flow in Weston Creek to maintain fish habitat even during late summer.
6. **Environmental flow needs.** EFNs for the Lake Weston watershed consist of sufficient baseflow to Lake Weston and sufficient flow in Weston Creek to maintain fish habitats that have been identified at three locations: the two arms of Lake Weston and a groundwater discharge area along the creek. The maintenance of these fish habitats by ensuring sufficient water level of Lake Weston and flow in Weston Creek will also have the added benefit of continuing the natural discharge of freshwater to Fulford Harbour. Each of these three locations should be assessed in the field to determine: a) the fish species present, b) the minimum flow required to maintain the habitat and c) how to monitor the water level or flow at each location. The minimum flow may or may not be 10%MAD (i.e. the minimum MAD level) as there is evidence (e.g. Toslum Creek, BC) that lower MAD levels may be suitable. The level of Lake Weston depends on natural groundwater recharge from the watershed and thus land-use (Recommendation 7). The flow in Weston Creek depends on the level of Lake Weston and on natural groundwater discharge to the creek (baseflow) from the aquifer. Thus, to protect the fish habitat of Lake Weston and Weston Creek, the overall watershed and aquifer need to be protected to ensure the continuation of natural groundwater recharge and the maintenance of groundwater levels in the aquifer. The incorporation of EFNs into a water budget will impact the local community by reducing the amount of water available for water supply.
7. **Watershed protection and land-use decision making.** Place a high importance on land development and land management decisions that do not jeopardize water resources. Given the high importance of groundwater in the watershed it is highly

recommended that the areas with the highest groundwater recharge potential be protected to ensure land-use activities do not disturb the soil and its ability to absorb water and recharge groundwater.

10 STUDY LIMITATIONS

This document was prepared for the exclusive use of ITC and CRD. The inferences concerning the data, site and receiving environment conditions contained in this document are based on information obtained by GW Solutions and others and are based solely on the condition of the site at the time of the site studies. Soil, surface water and groundwater conditions may vary with location, depth, time, sampling methodology, analytical techniques, and other factors.

In evaluating the subject study area and water quality data, GW Solutions has relied in good faith on information provided. The factual data, interpretations and recommendations pertain to a specific project as described in this document, based on the information obtained during the assessment by GW Solutions on the dates cited in the document, and are not applicable to any other project or site location. GW Solutions accepts no responsibility for any deficiency or inaccuracy contained in this document as a result of reliance on the aforementioned information.

The findings and conclusions documented in this document have been prepared for the specific application to this project and have been developed in a manner consistent with that level of care normally exercised by hydrogeologists currently practicing under similar conditions in the jurisdiction.

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If new information is discovered during future work, GW Solutions should be requested to re-evaluate the conclusions of this document and to provide amendments, as required, prior to any reliance upon the information presented herein. The validity of this document is affected by any change of site conditions, purpose, development plans or significant delay from the date of this document in initiating or completing the project.

The produced graphs, images, and maps have been generated to visualize results and assist in presenting information in a spatial and temporal context. The conclusions and recommendations presented in this document are based on the review of information

available at the time the work was completed, and within the time and budget limitations of the scope of work.

ITC and CRD may rely on the information contained in this memorandum subject to the above limitations.

11 CLOSURE

Conclusions and recommendations presented herein are based on available information at the time of the study. The work has been carried out in accordance with generally accepted engineering and geoscience practice. No other warranty is made, either expressed or implied. Engineering judgement has been applied in producing this report.

This report was prepared by personnel with professional experience in the fields covered. Reference should be made to the General Conditions and Limitations attached in Appendix 1.

GW Solutions is pleased to produce this document. If you have any questions, please contact us.

Yours truly,

GW Solutions Inc.

Prepared by:

July 26, 2022

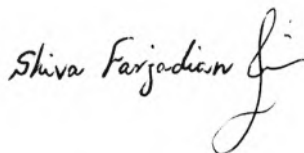


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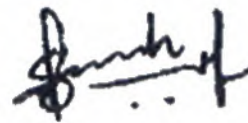
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12 REFERENCES

Allen, D.M., Liteanu, E., Bishop, T.W., and Mackie, D.C. (2002). Determining the hydraulic properties of fractured bedrock aquifers of the Gulf Islands, B.C. Final report. Department of Earth Sciences, Simon Fraser University. Submitted to Al Kohut, BC Ministry Water, Land and Air Protection.

Barnett, L, Bleic, B.& Van Bruggen, W. (1993) Saltspring Island Water Allocation Plan, Nov. 1993. Regional Water Management, Vancouver Island Region, Victoria, BC.

Barron, O. V., Emelyanova, I., Niel, T. G. V., Pollock, D., & Hodgson, G. (2014). Mapping groundwater-dependent ecosystems using remote sensing measures of vegetation and moisture dynamics. *Hydrological Processes*, 28(2), 372–385.
<https://doi.org/10.1002/hyp.9609>

Brown, Erdman & Associates LTD., 1981. Groundwater Resource Study, Transtide Industries LTD., Highland District Project, Initial Brief, North Vancouver, BC.

Cai, W. et al. Increased frequency of extreme La Niña events under greenhouse warming. *Nature Climate Change*. Published online January 26, 2015. doi: 10.1038/NCLIMATE2492.

Cai, W. et al. Increasing frequency of extreme El Niño events due to greenhouse warming. *Nature Climate Change*. Published online January 19, 2014. doi: 10.1038/nclimate2100.

Capital Regional District, April 16, 2019. Fulford Water Service, 2018 Annual Report.

Capital Regional District, Climate Projections for The Capital Region, April 2017. Trevor Murdock and Stephen Sobie from Pacific Climate Impacts Consortium and Gillian Aubie Vines from Pinna Sustainability lead writer of this report.

CRD (2018). Watersheds of Saltspring Island. Facilities Management & Engineering Services. https://www.crd.bc.ca/docs/default-source/es-watersheds-pdf/regional-watershed-maps/watersheds-of-salt-spring-island-map-2018.pdf?sfvrsn=f8ad10ca_2

CRD (2019), 2m Digital Elevation Model (LiDAR), Digital data obtained from Capital Regional District.

Doody, T. M., Barron, O. V., Dowsley, K., Emelyanova, I., Fawcett, J., Overton, I. C., Pritchard, J. L., Van Dijk, A. I. J. M., & Warren, G. (2017). Continental mapping of groundwater dependent ecosystems: A methodological framework to integrate diverse data and expert opinion. *Journal of Hydrology: Regional Studies*, 10, 61–81. <https://doi.org/10.1016/j.ejrh.2017.01.003>

Dyer, J. M. 2019. A GIS-Based Water Balance Approach Using a LiDAR-Derived DEM Captures Fine-Scale Vegetation Patterns. *Remote Sensing*. 2019, 11(20), 2385

Greenwood, Hugh J & Michalynuk Mitchell G (2009). Saltspring Island Geology. BC Geologic Survey Open File 2009-11.

GW Solutions (2019). Salt Spring Island Groundwater Recharge Potential. Prepared for Islands Trust, May 2019.

GW Solutions (2021). Islands Trust Area Groundwater Availability Assessment. Prepared for Islands Trust, October 2021.

GW Solutions (2021). Islands Trust Area Groundwater Recharge Potential Mapping. Prepared for Islands Trust, October 2021

Hausfather, Z. (2019, August 21). *Explainer: The high-emissions 'RCP8.5' global warming scenario*. Carbon Brief. <https://www.carbonbrief.org/explainer-the-high-emissions-rcp8-5-global-warming-scenario>

Howe, K. and Allen, D.M. (2020) Linkages between Stream Chemistry and Groundwater Chemistry, Salt Spring Island, British Columbia: Technical Report. Simon Fraser University, August 2020, 94 pp.

Kerr Wood Leidal Associates Ltd, NORTH SALT SPRING WATERWORKS DISTRICT. Maxwell Lake, Rippon Creek and Larmour Creek Watersheds Water Availability and Demand Climate Change Assessment – 2020 Update May 2021

Kerr Wood Leidal Associates Ltd, NORTH SALT SPRING WATERWORKS. St. Mary Lake Watershed - Water Availability and Demand. Climate Change Assessment 2017 Update – FINAL. May 16, 2018

Mahony, C. R., Wang, T., Hamann, A., & Cannon, A. J. (2021). A CMIP6 ensemble for downscaled monthly climate normals over North America. *EarthArXiv*. <https://doi.org/10.31223/X5CK6Z>

Mahony, C. R., Wang, T., Hamann, A., & Cannon, A. J. (2022). A global climate model ensemble for downscaled monthly climate normals over North America. *International Journal of Climatology*. <https://doi.org/10.1002/joc.7566>

McSweeney, R., & Hausfather, Z. (2018, January 15). Q&A: *How do climate models work?* Carbon Brief. <https://www.carbonbrief.org/qa-how-do-climate-models-work>

Millson, J. A., 2020., SSI Foundation Spring 2019 Grant, S2019-11 Water Preservation Society (WPS), SSI FreshWater Catalogue (SSIFWC) 2019-2020 Grant Report.

Nordin, Richard N. (1986) The Water Quality of Lake Weston Saltspring Island. Water Quality Unit, Resource Quality Section, Water Management Branch, BC Ministry of Environment.

PCIC, (2020). Pacific Climate Impact Consortium. <https://pacificclimate.org>

Riahi, K., Rao, S., Krey, V., Cho, C., Chirkov, V., Fischer, G., Kindermann, G., Nakicenovic, N., & Rafaj, P. (2011). RCP 8.5—A scenario of comparatively high greenhouse gas emissions. *Climatic Change*, 109(1), 33. <https://doi.org/10.1007/s10584-011-0149-y>

Riahi, K., van Vuuren, D. P., Kriegler, E., Edmonds, J., O'Neill, B. C., Fujimori, S., Bauer, N., Calvin, K., Dellink, R., Fricko, O., Lutz, W., Popp, A., Cuaresma, J. C., Kc, S., Leimbach, M., Jiang, L., Kram, T., Rao, S., Emmerling, J., Tavoni, M. (2017). The Shared Socioeconomic Pathways and their energy, land use, and greenhouse gas emissions implications: An overview. *Global Environmental Change*, 42, 153–168. <https://doi.org/10.1016/j.gloenvcha.2016.05.009>

Surette, M., Allen, D.M. and Journeay, M. (2008) Regional evaluation of hydraulic properties in variably fractured rock using a hydrostructural domain approach. *Hydrogeology Journal* 16(1): 11-30.

Tebaldi, C., & Knutti, R. (2007). The use of the multi-model ensemble in probabilistic climate projections. *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences*, 365(1857), 2053–2075.

<https://doi.org/10.1098/rsta.2007.2076>

Tennant, Donald Leroy. (1976). Instream Flow Regimens for Fish, Wildlife, Recreation and Related Environmental Resources, Fisheries, 1:4, 6-10, DOI: [10.1577/1548-8446\(1976\)001<0006:IFRFFW>2.0.CO;2](https://doi.org/10.1577/1548-8446(1976)001<0006:IFRFFW>2.0.CO;2)

Thornthwaite, C.W. & Mather, Jr. (1955). The Water Balance. Laboratory of Climatology, Centerton, NJ, USA.

Wang, T., Hamann, A., Spittlehouse, D., & Carroll, C. (2016). Locally Downscaled and Spatially Customizable Climate Data for Historical and Future Periods for North America. *PLOS ONE*, 11(6), e0156720. <https://doi.org/10.1371/journal.pone.0156720>

WorldClim, (2020). Solar Radiation Digital Data at 30 arc-seconds (~1 km²) resolution. URL: <http://worldclim.org/version2>.



APPENDIX 1

GW SOLUTIONS INC. GENERAL CONDITIONS AND LIMITATIONS

This report incorporates and is subject to these "General Conditions and Limitations".

1.0 USE OF REPORT

This report pertains to a specific area, a specific site, a specific development, and a specific scope of work. It is not applicable to any other sites, nor should it be relied upon for types of development other than those to which it refers. Any variation from the site or proposed development would necessitate a supplementary investigation and assessment. This report and the assessments and recommendations contained in it are intended for the sole use of GW SOLUTIONS's client. GW SOLUTIONS does not accept any responsibility for the accuracy of any of the data, the analysis or the recommendations contained or referenced in the report when the report is used or relied upon by any party other than GW SOLUTIONS's client unless otherwise authorized in writing by GW SOLUTIONS. Any unauthorized use of the report is at the sole risk of the user. This report is subject to copyright and shall not be reproduced either wholly or in part without the prior, written permission of GW SOLUTIONS. Additional copies of the report, if required, may be obtained upon request.

2.0 LIMITATIONS OF REPORT

This report is based solely on the conditions which existed within the study area or on site at the time of GW SOLUTIONS's investigation. The client, and any other parties using this report with the express written consent of the client and GW SOLUTIONS, acknowledge that conditions affecting the environmental assessment of the site can vary with time and that the conclusions and recommendations set out in this report are time sensitive. The client, and any other party using this report with the express written consent of the client and GW SOLUTIONS, also acknowledge that the conclusions and recommendations set out in this report are based on limited observations and testing on the area or subject site and that conditions may vary across the site which, in turn, could affect the conclusions and recommendations made. The client acknowledges that GW SOLUTIONS is neither qualified to, nor is it making, any recommendations with respect to the purchase, sale, investment or development of the property, the decisions on which are the sole responsibility of the client.

2.1 INFORMATION PROVIDED TO GW SOLUTIONS BY OTHERS

During the performance of the work and the preparation of this report, GW SOLUTIONS may

have relied on information provided by persons other than the client. While GW SOLUTIONS endeavours to verify the accuracy of such information when instructed to do so by the client, GW SOLUTIONS accepts no responsibility for the accuracy or the reliability of such information which may affect the report.

3.0 LIMITATION OF LIABILITY

The client recognizes that property containing contaminants and hazardous wastes creates a high risk of claims brought by third parties arising out of the presence of those materials. In consideration of these risks, and in consideration of GW SOLUTIONS providing the services requested, the client agrees that GW SOLUTIONS's liability to the client, with respect to any issues relating to contaminants or other hazardous wastes located on the subject site shall be limited as follows:

(1) With respect to any claims brought against GW SOLUTIONS by the client arising out of the provision or failure to provide services hereunder shall be limited to the amount of fees paid by the client to GW SOLUTIONS under this Agreement, whether the action is based on breach of contract or tort;

(2) With respect to claims brought by third parties arising out of the presence of contaminants or hazardous wastes on the subject site, the client agrees to indemnify, defend and hold harmless GW SOLUTIONS from and against any and all claim or claims, action or actions, demands, damages, penalties, fines, losses, costs and expenses of every nature and kind whatsoever, including solicitor-client costs, arising or alleged to arise either in whole or part out of services provided by GW SOLUTIONS, whether the claim be brought against GW SOLUTIONS for breach of contract or tort.

4.0 JOB SITE SAFETY

GW SOLUTIONS is only responsible for the activities of its employees on the job site and is not responsible for the supervision

of any other persons whatsoever. The presence of GW SOLUTIONS personnel on site shall not be construed in any way to relieve the client or any other persons on site from their responsibility for job site safety.

5.0 DISCLOSURE OF INFORMATION BY CLIENT

The client agrees to fully cooperate with GW SOLUTIONS with respect to the provision of all available information on the past, present, and

proposed conditions on the site, including historical information respecting the use of the site. The client acknowledges that in order for GW SOLUTIONS to properly provide the service, GW SOLUTIONS is relying upon the full disclosure and accuracy of any such information.

6.0 STANDARD OF CARE

Services performed by GW SOLUTIONS for this report have been conducted in a manner consistent with the level of skill ordinarily exercised by members of the profession currently practicing under similar conditions in the jurisdiction in which the services are provided. Engineering judgement has been applied in developing the conclusions and/or recommendations provided in this report. No warranty or guarantee, express or implied, is made concerning the test results, comments, recommendations, or any other portion of this report.

7.0 EMERGENCY PROCEDURES

The client undertakes to inform GW SOLUTIONS of all hazardous conditions, or possible hazardous conditions which are known to it. The client recognizes that the activities of GW SOLUTIONS may uncover previously unknown hazardous materials or conditions and that such discovery may result in the necessity to undertake emergency procedures to protect GW SOLUTIONS employees, other persons and the environment. These procedures may involve additional costs outside of any budgets previously agreed upon. The client agrees to pay GW SOLUTIONS for any expenses incurred as a result of such discoveries and to compensate GW SOLUTIONS through payment of additional fees and expenses for time spent by GW SOLUTIONS to deal with the consequences of such discoveries.

8.0 NOTIFICATION OF AUTHORITIES

The client acknowledges that in certain instances the discovery of hazardous substances or conditions and materials may require that regulatory agencies and other persons be informed and the client agrees that notification to such bodies or persons as required may be done by GW SOLUTIONS in its reasonably exercised discretion.

9.0 OWNERSHIP OF INSTRUMENTS OF SERVICE

The client acknowledges that all reports, plans, and data generated by GW SOLUTIONS during the performance of the work and other documents prepared by GW SOLUTIONS are considered its professional work product and shall remain the copyright property of GW SOLUTIONS.

10.0 ALTERNATE REPORT FORMAT

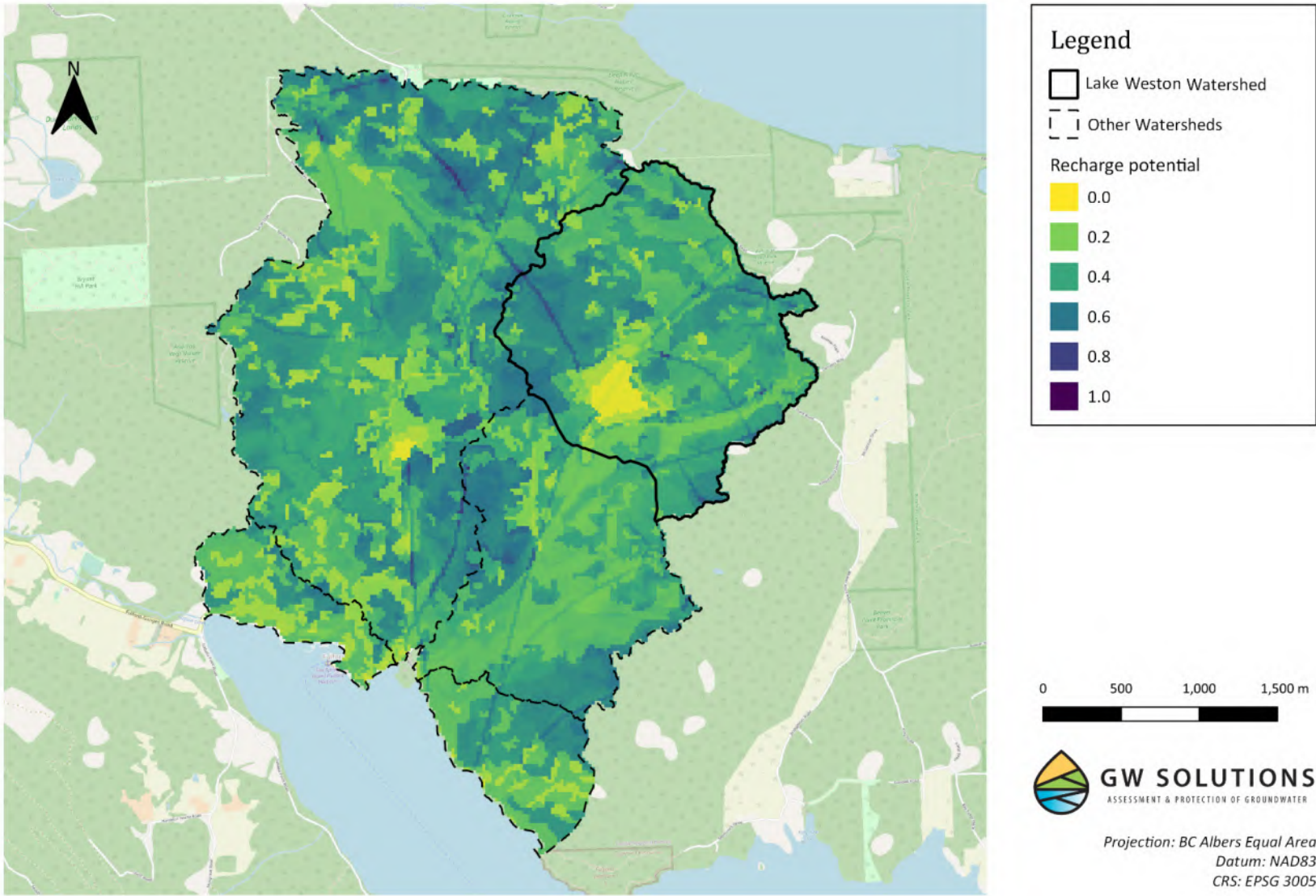
Where GW SOLUTIONS submits both electronic file and hard copy versions of reports, drawings and other project-related documents and deliverables (collectively termed GW SOLUTIONS's instruments of professional service), the Client agrees that only the signed and sealed hard copy versions shall be considered final and legally binding. The hard copy versions submitted by GW SOLUTIONS shall be the original documents for record and working purposes, and, in the event of a dispute or discrepancies, the hard copy versions shall govern over the electronic versions. Furthermore, the Client agrees and waives all future right of dispute that the original hard copy signed version archived by GW SOLUTIONS shall be deemed to be the overall original for the Project. The Client agrees that both electronic file and hard copy versions of GW SOLUTIONS's instruments of professional service shall not, under any circumstances, no matter who owns or uses them, be altered by any party except GW SOLUTIONS. The Client warrants that GW SOLUTIONS's instruments of professional service will be used only and exactly as submitted by GW SOLUTIONS. The Client recognizes and agrees that electronic files submitted by GW SOLUTIONS have been prepared and submitted using specific software and hardware systems. GW SOLUTIONS makes no representation about the compatibility of these files with the Client's current or future software and hardware systems.

APPENDIX 2

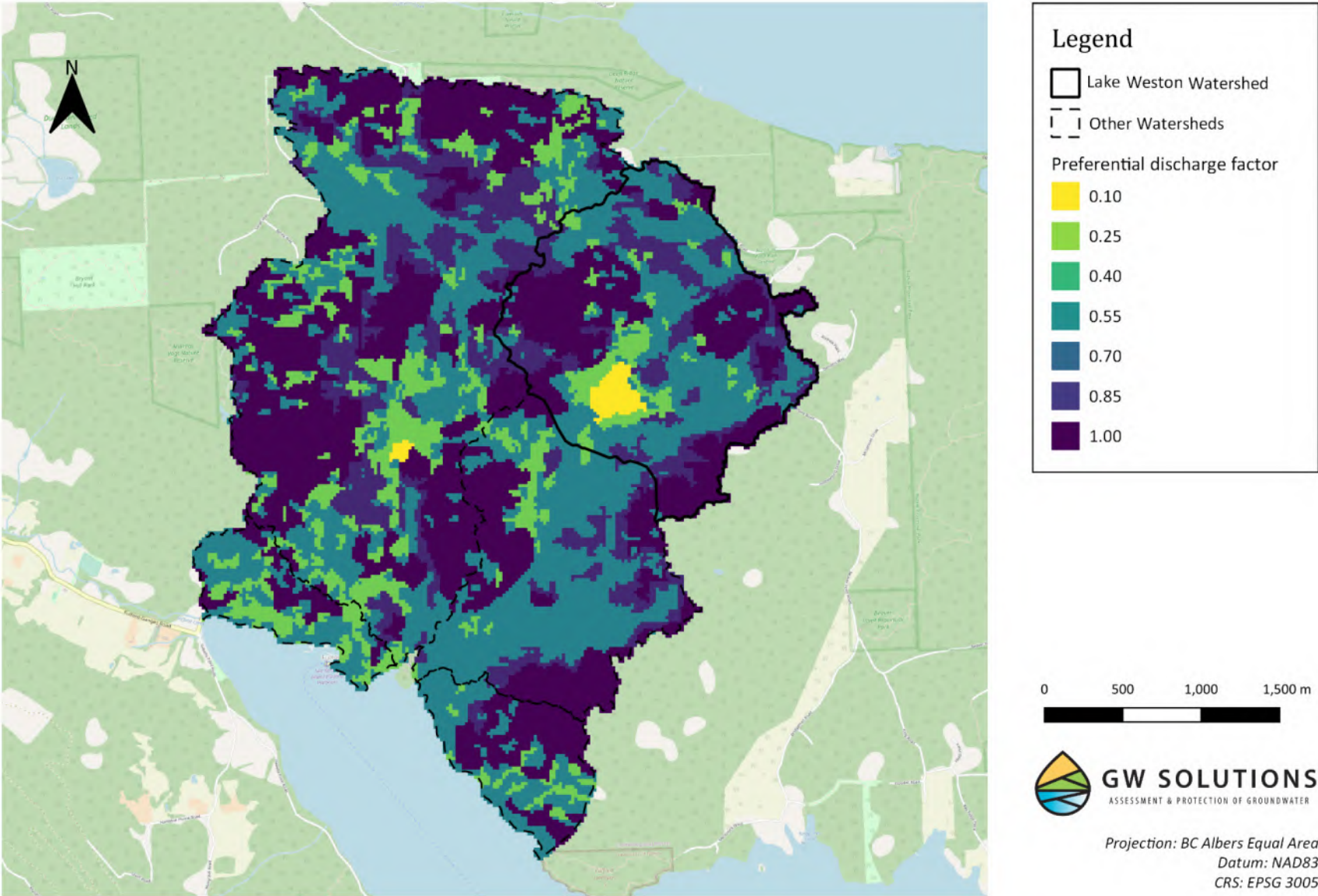
Groundwater Recharge Coefficients and Groundwater Recharge Potential and Recharge Coefficients

APPENDIX 2: MAPS OF GROUNDWATER RECHARGE POTENTIAL INPUTS

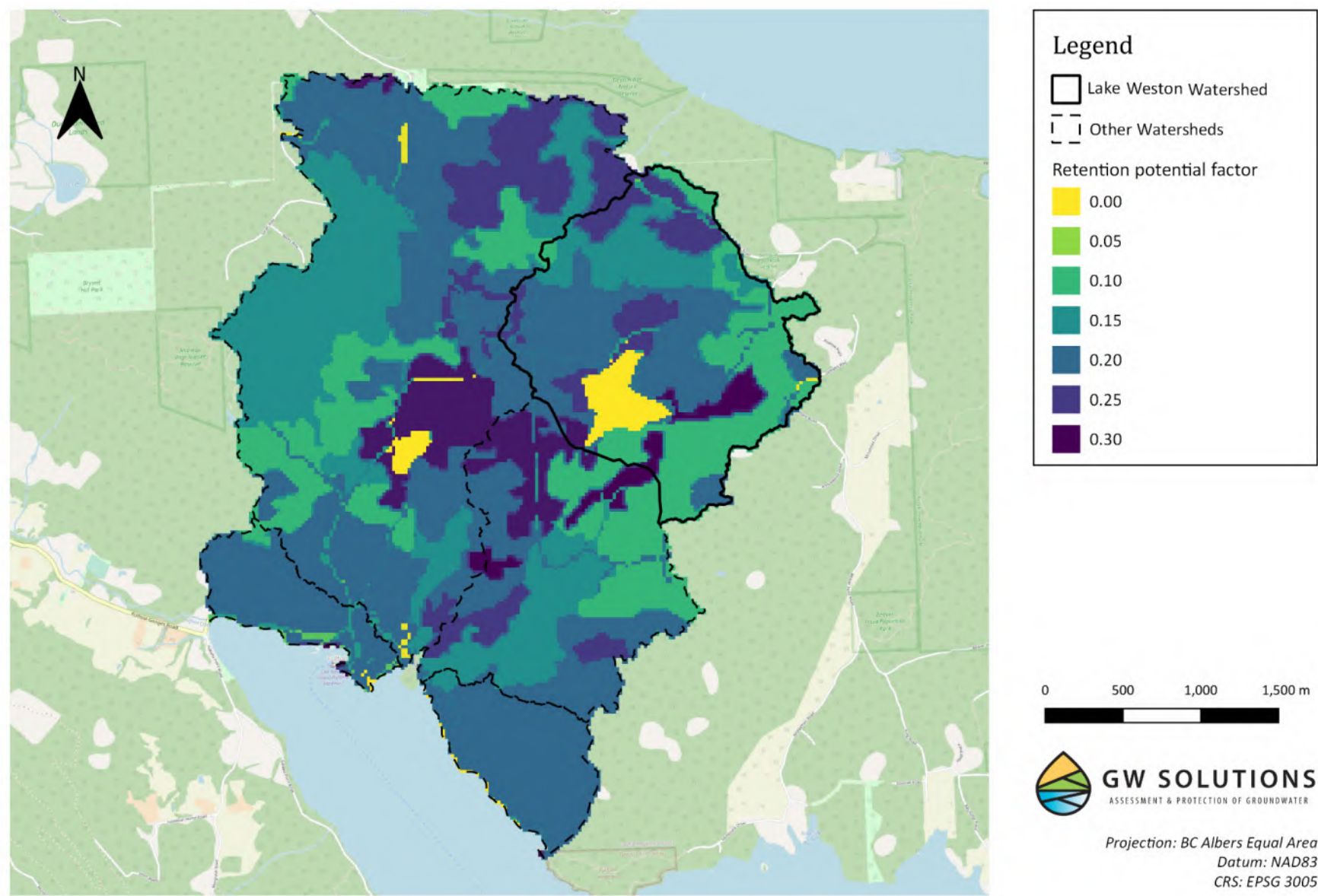
1.1 Groundwater recharge potential



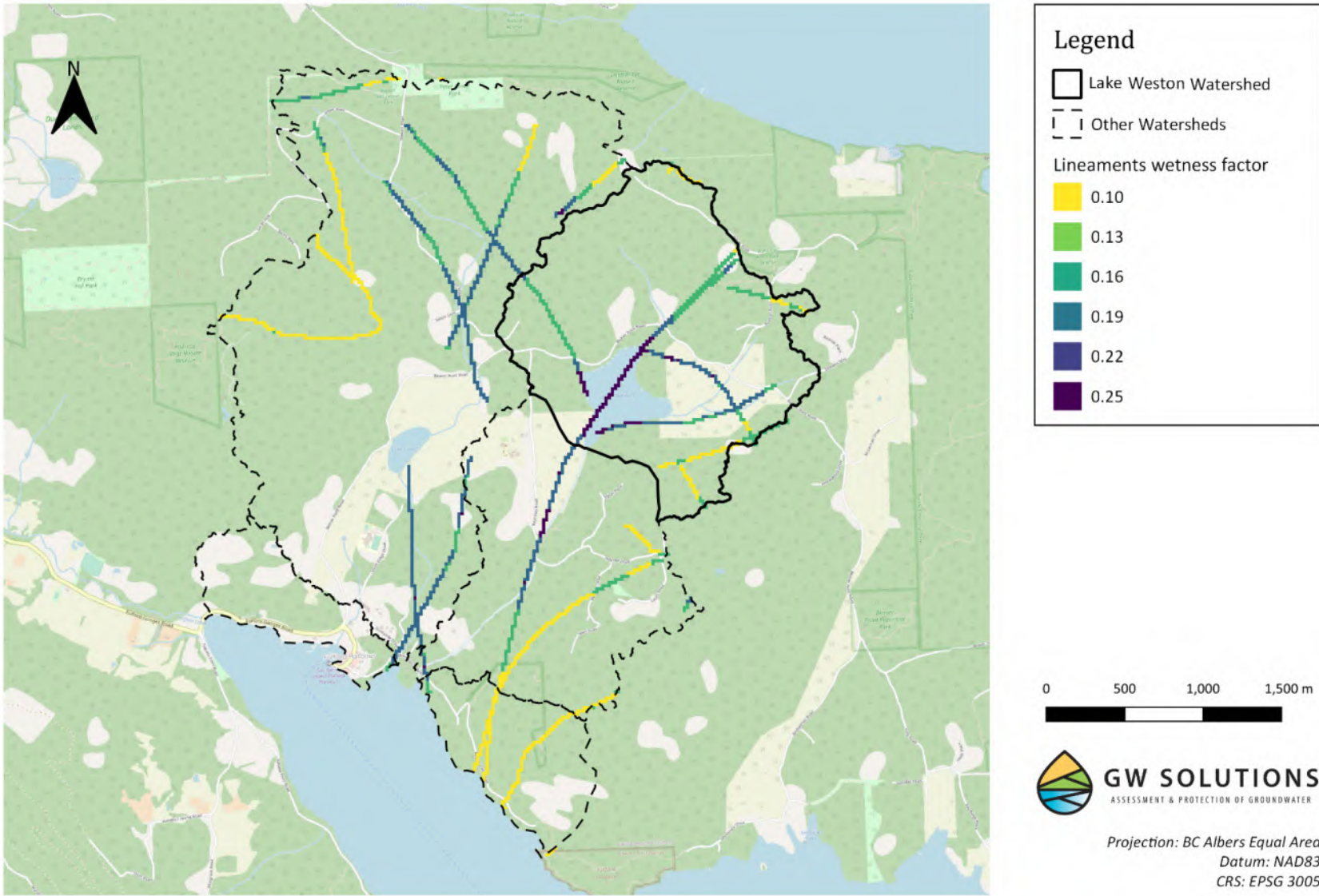
1.2 Preferential recharge/discharge factor



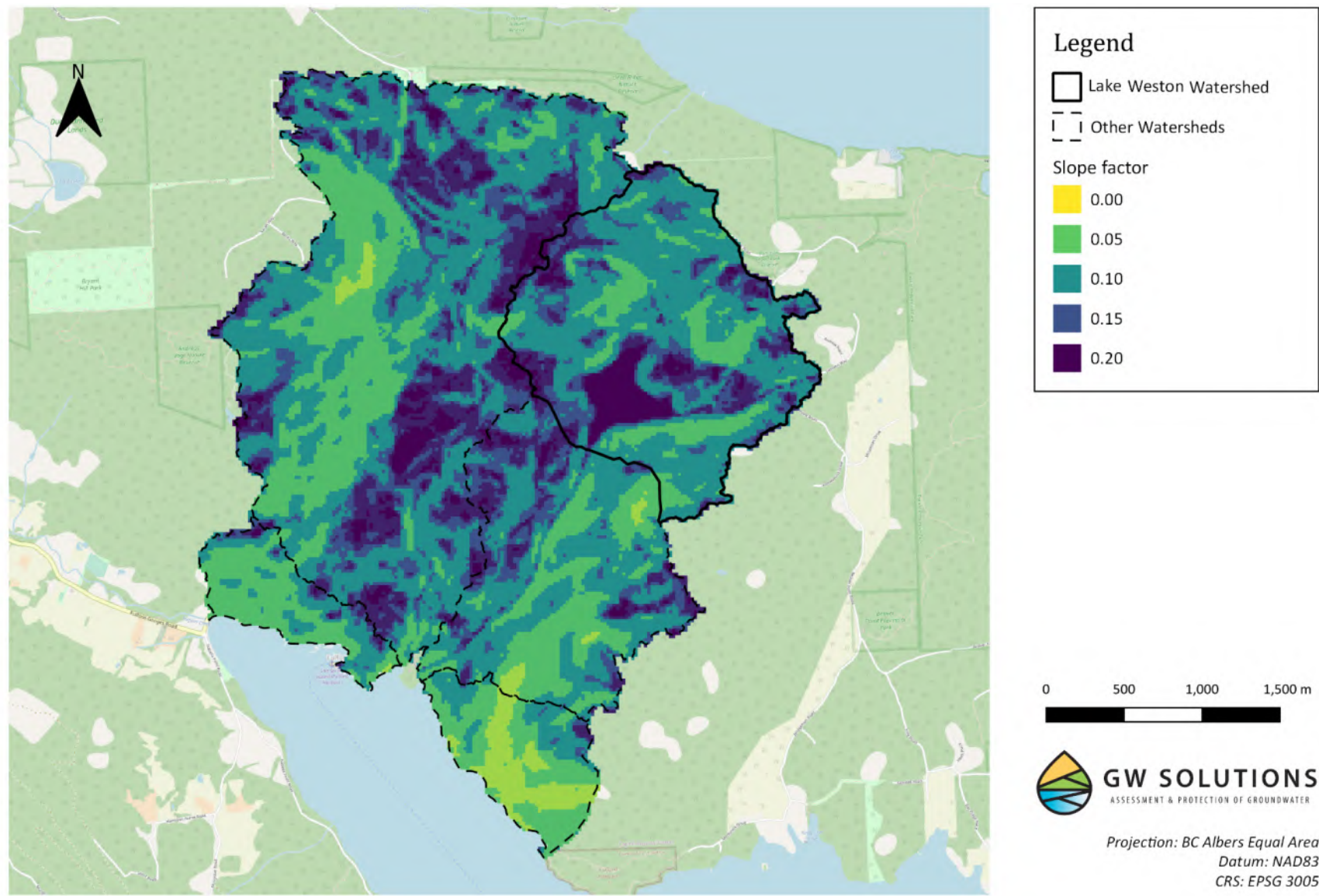
1.3 Water retention potential factor



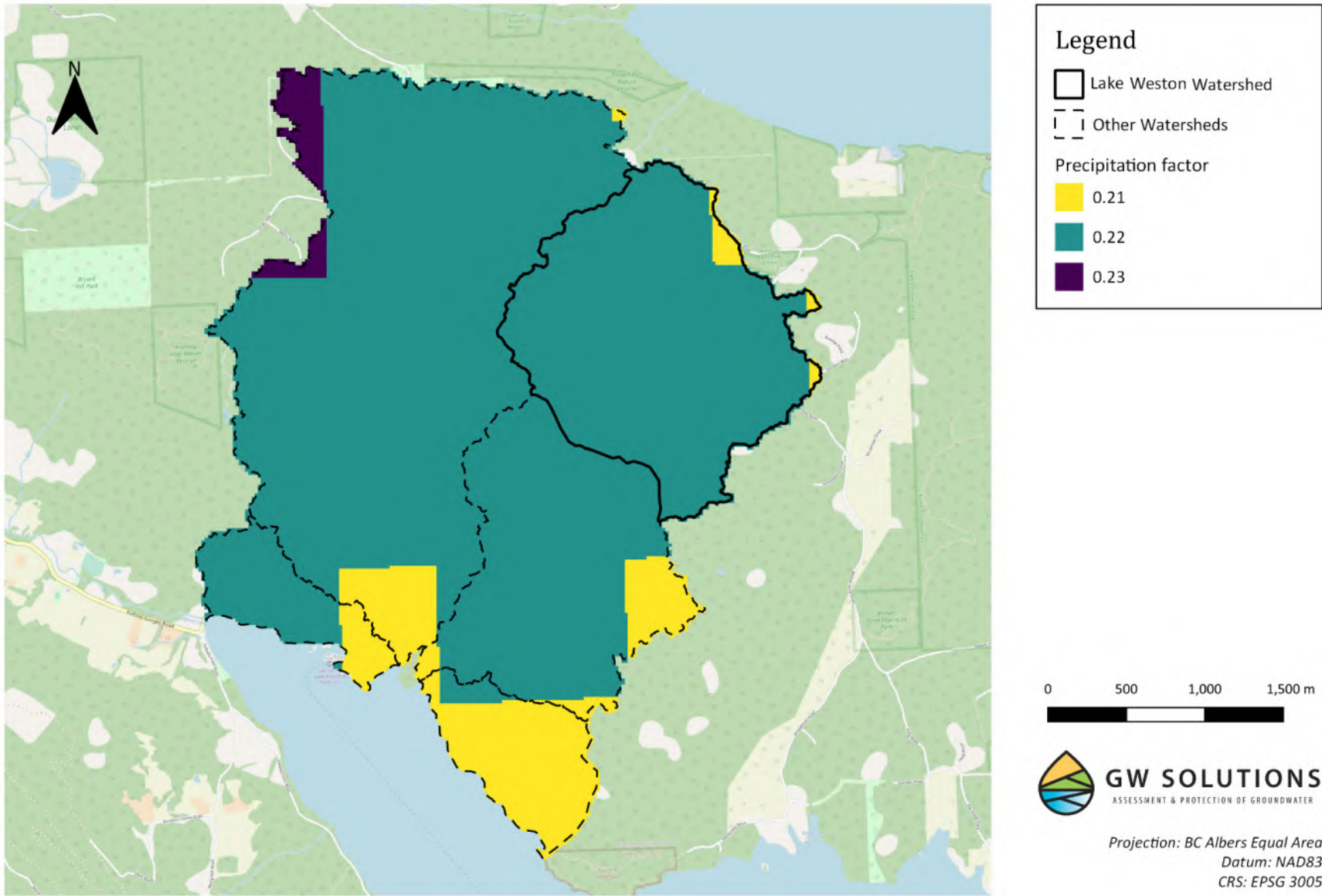
1.4 Bedrock lineament wetness factor



1.5 Slope factor



1.6 Precipitation factor



APPENDIX 3

Water Balance Inputs and Outputs

APPENDIX 3: WATER BALANCE OUTPUTS FOR LAKE WESTON

1.1 Summary of Water Balance Parameters

The water balance model used by GW solutions requires four primary inputs: precipitation, average temperature, total solar radiation, and soil available moisture capacity (AWC). All inputs are obtained as monthly raster layers at a 20m resolution, with exception of AWC, which does not vary over an annual timescale and thus is only a single layer.

Using these as inputs, the water balance model used by GW solutions produces several outputs. These are described as follows:

Output name	Short Name	Description
Potential evapotranspiration	PET	The evaporative water loss from a vegetated surface in which <i>water is not a limiting factor</i> . It represents moisture demand, and is calculated using the Turc method, depending mainly on temperature and radiation.
Soil storage	ST	The amount of moisture stored in the soil in any given month. It depends on the soil AWC as well as PET. When soil storage is full, it is equal to the AWC. When soil storage is 0, any precipitation input must first restore soil moisture capacity to be equal to AWC before it can contribute to runoff or groundwater recharge.
Actual evapotranspiration	AET	The evaporative water loss from a vegetated surface <i>given water availability</i> (where water availability is combination of both precipitation and current soil moisture storage). If water is not limiting (that is, soil storage is full and precipitation exceeds PET), actual evapotranspiration is equal to potential evapotranspiration.
Surplus	S	The excess water not evaporated or transpired, thereby contributing to runoff or subsurface flow. There can be no surplus if storage is not full.
Deficit	D	A theoretical value representing moisture stress. It occurs when evaporative demand is not met by available water. In effect, it is the difference between potential and actual evapotranspiration.

Following the calculation of the water balance output for Lake Weston and its surrounding watersheds, GW solutions combined the available moisture surplus output with the recharge potential layer created through the enhanced recharge potential mapping process. The combined results thus allow the calculation of two additional outputs:

Output name	Short Name	Description
Groundwater recharge	GWR	The amount of surplus that is estimated to contribute to subsurface flow, or groundwater recharge. This is a proportion of the total moisture surplus, and it depends on the landscape's recharge potential.
Surface runoff	RO	The amount of surplus that is estimated to contribute to overland flow, through surface runoff. This is a proportion of the total moisture surplus, and it depends on the landscape's recharge potential.

1.2 Water Balance Model Outputs

Outputs from the water balance model for Lake Weston and the surrounding watersheds are summarized in the following plots. The maps show the spatial pattern for each variable by month. The boxplots summarize the overall distribution of values by month, helping emphasize any seasonal patterns present for each variable.

1.2.1 Precipitation

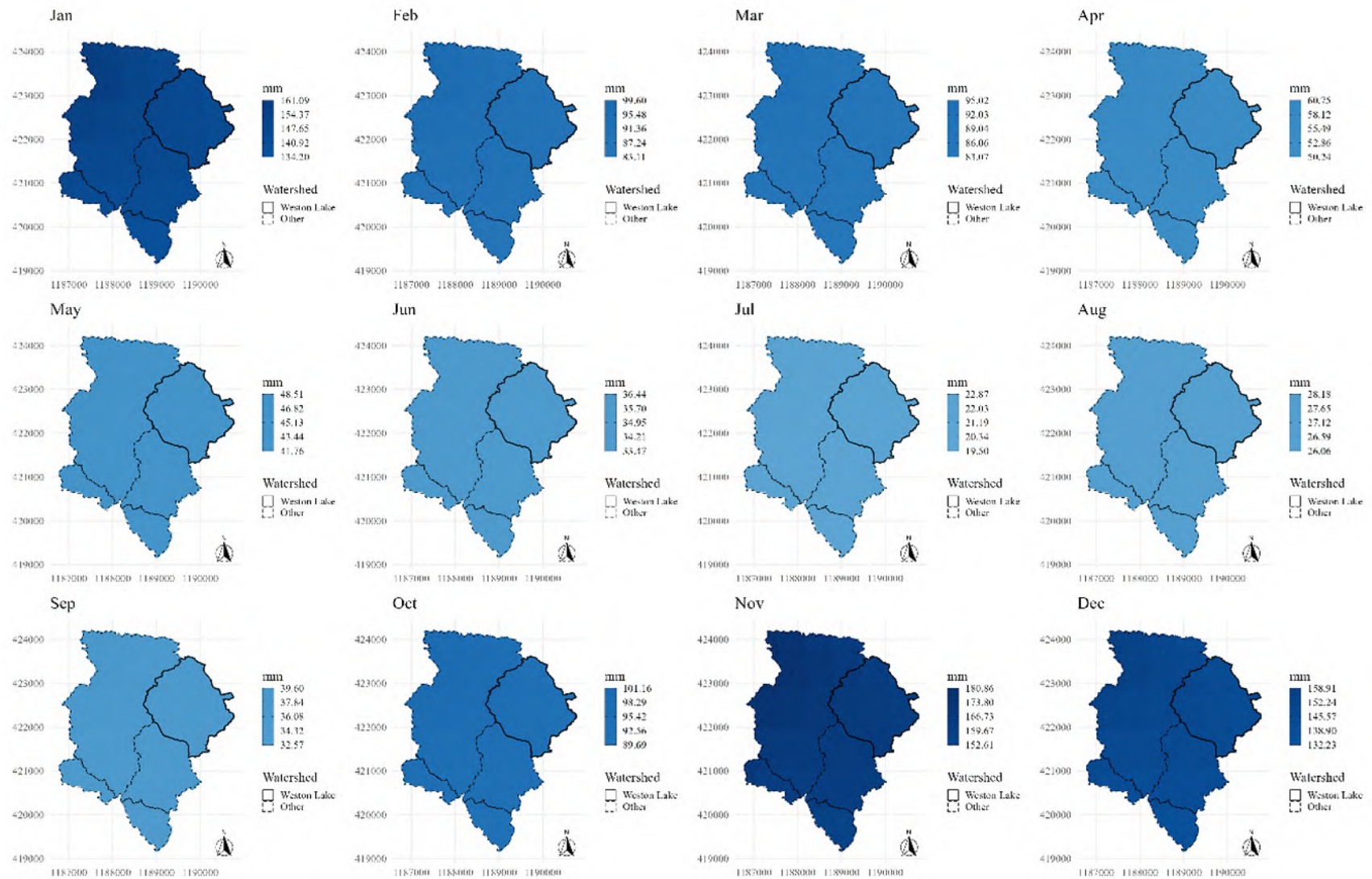


Figure 1: Precipitation by month over Lake Weston and its surrounding watersheds

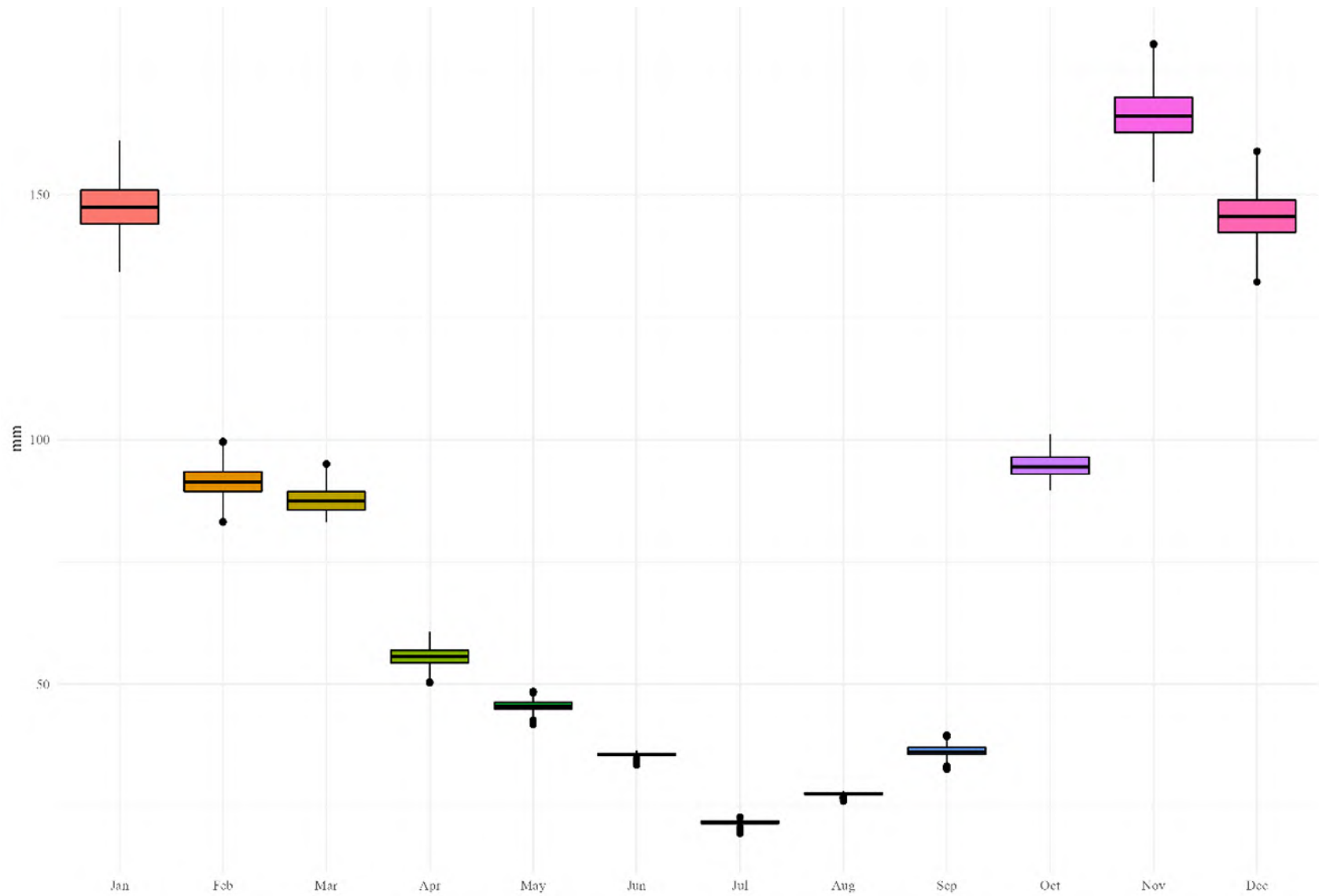


Figure 2: Monthly spread in precipitation over Lake Weston and its surrounding watersheds

1.2.2 Temperature

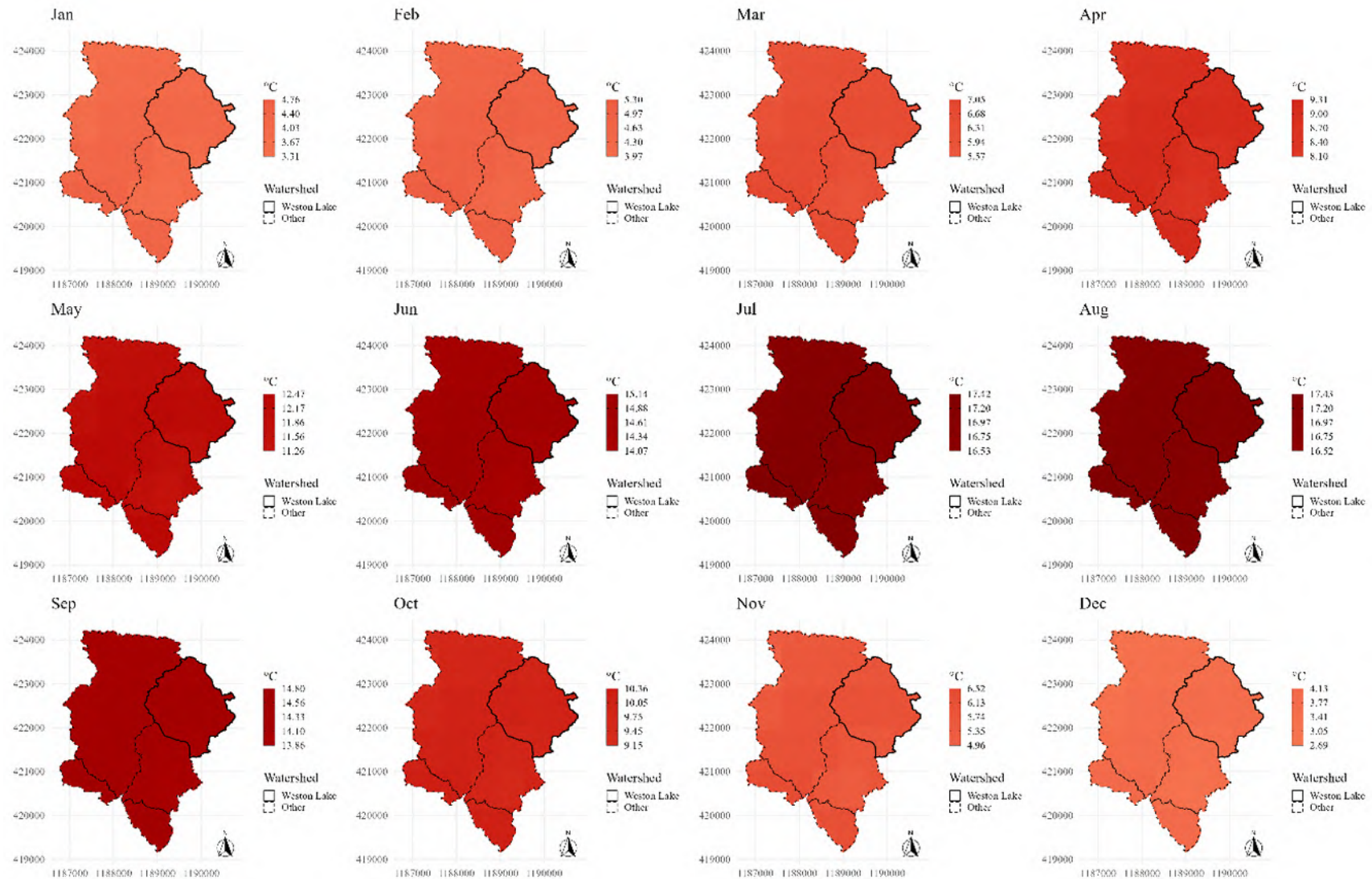


Figure 3: Temperature by month over Lake Weston and its surrounding watersheds

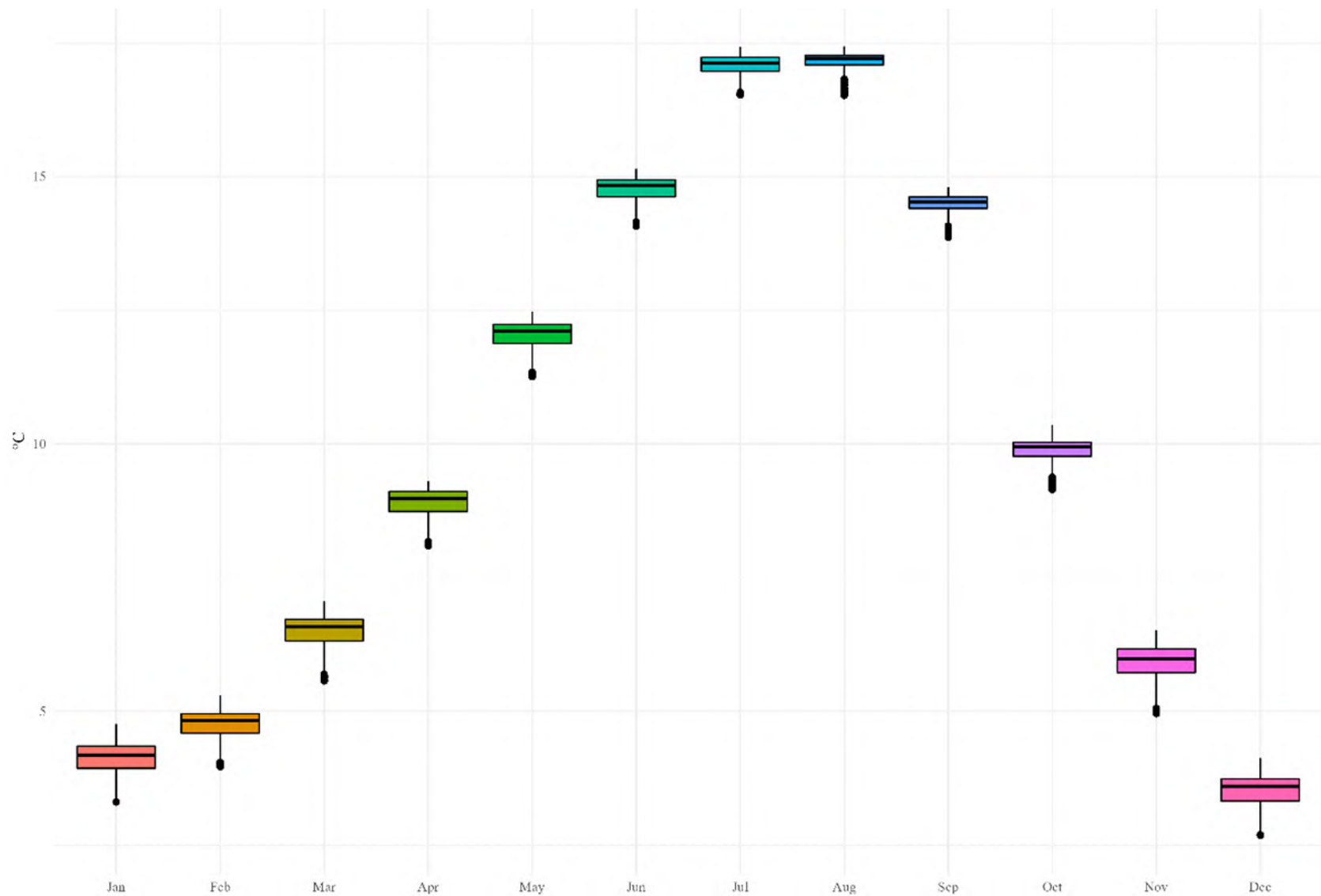


Figure 4: Monthly spread in temperature over Lake Weston and its surrounding watersheds

1.2.3 Radiation

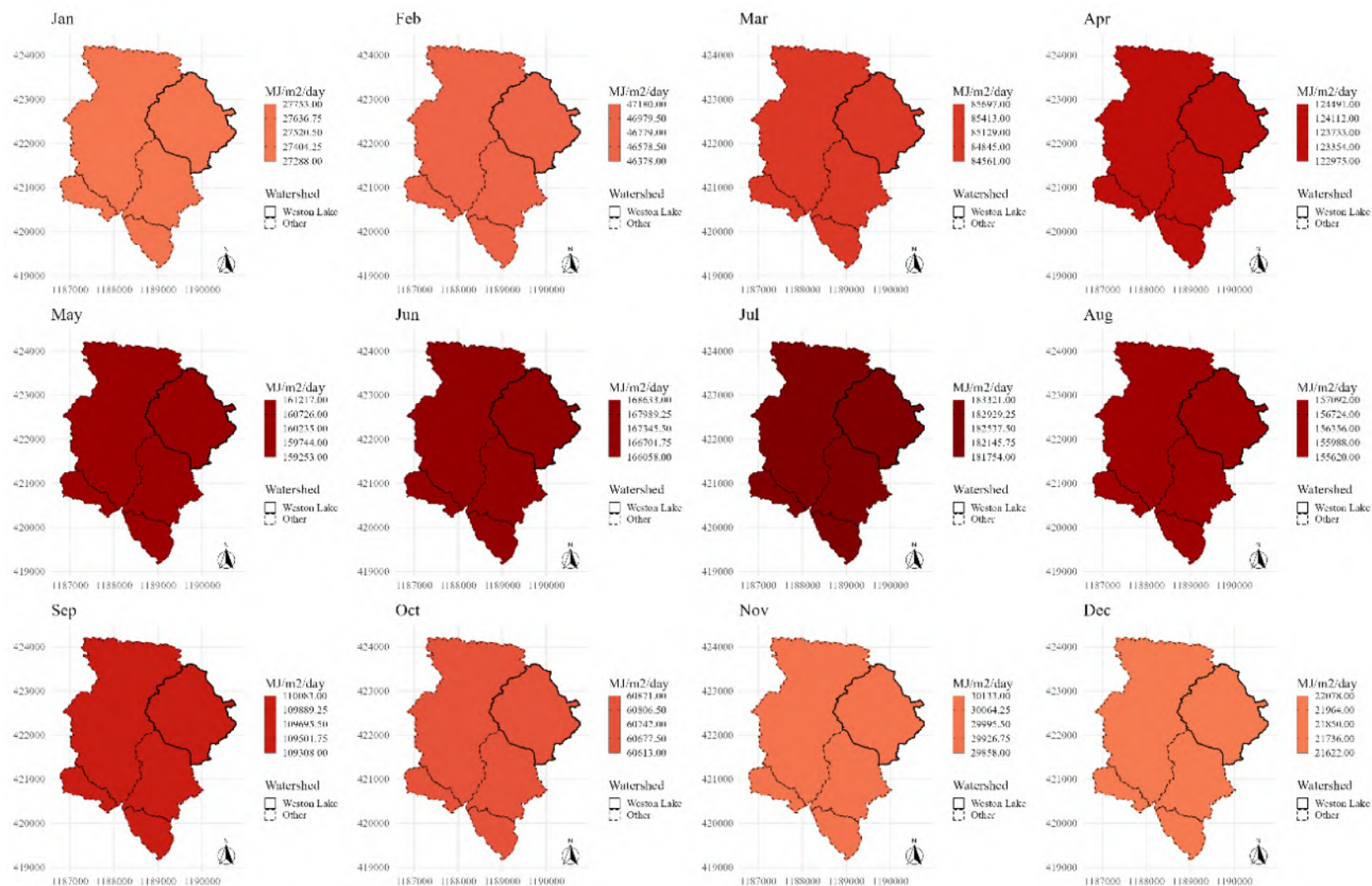


Figure 5: Radiation by month over Lake Weston and its surrounding watersheds

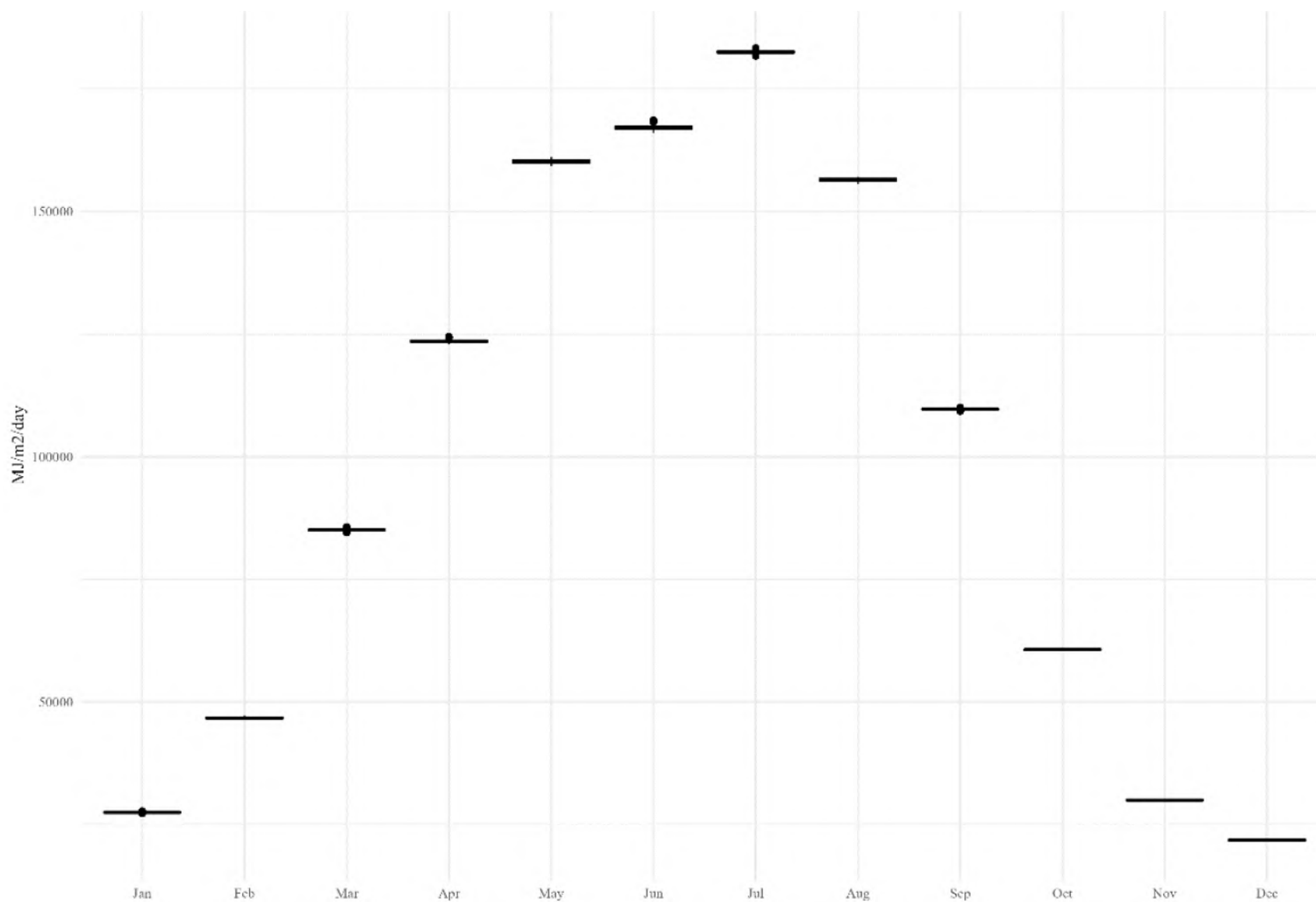


Figure 6: Monthly spread in radiation over Lake Weston and its surrounding watersheds

1.2.4 Potential Evapo-transpiration

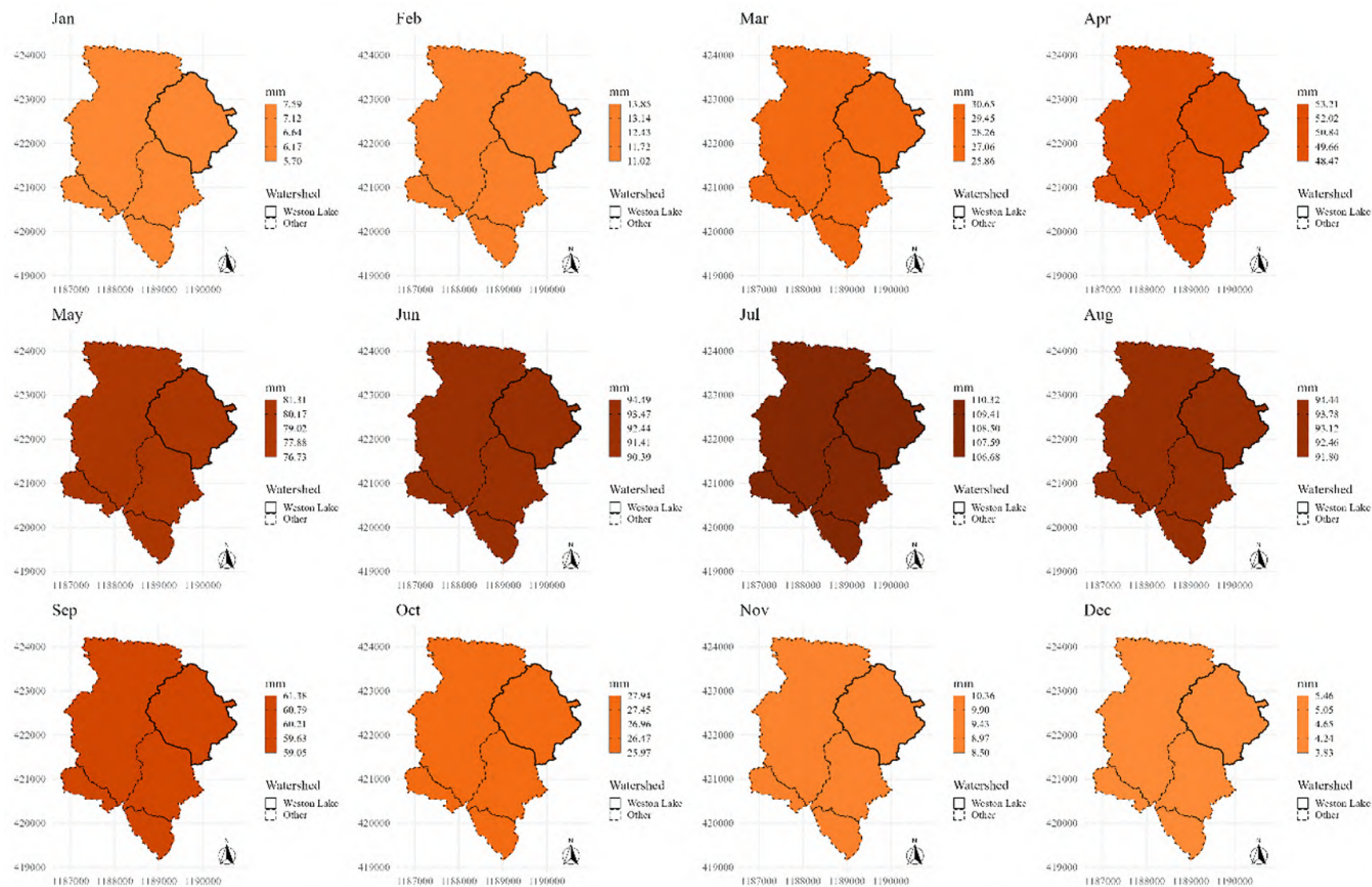


Figure 7: Potential evapo-transpiration by month over Lake Weston and its surrounding watersheds

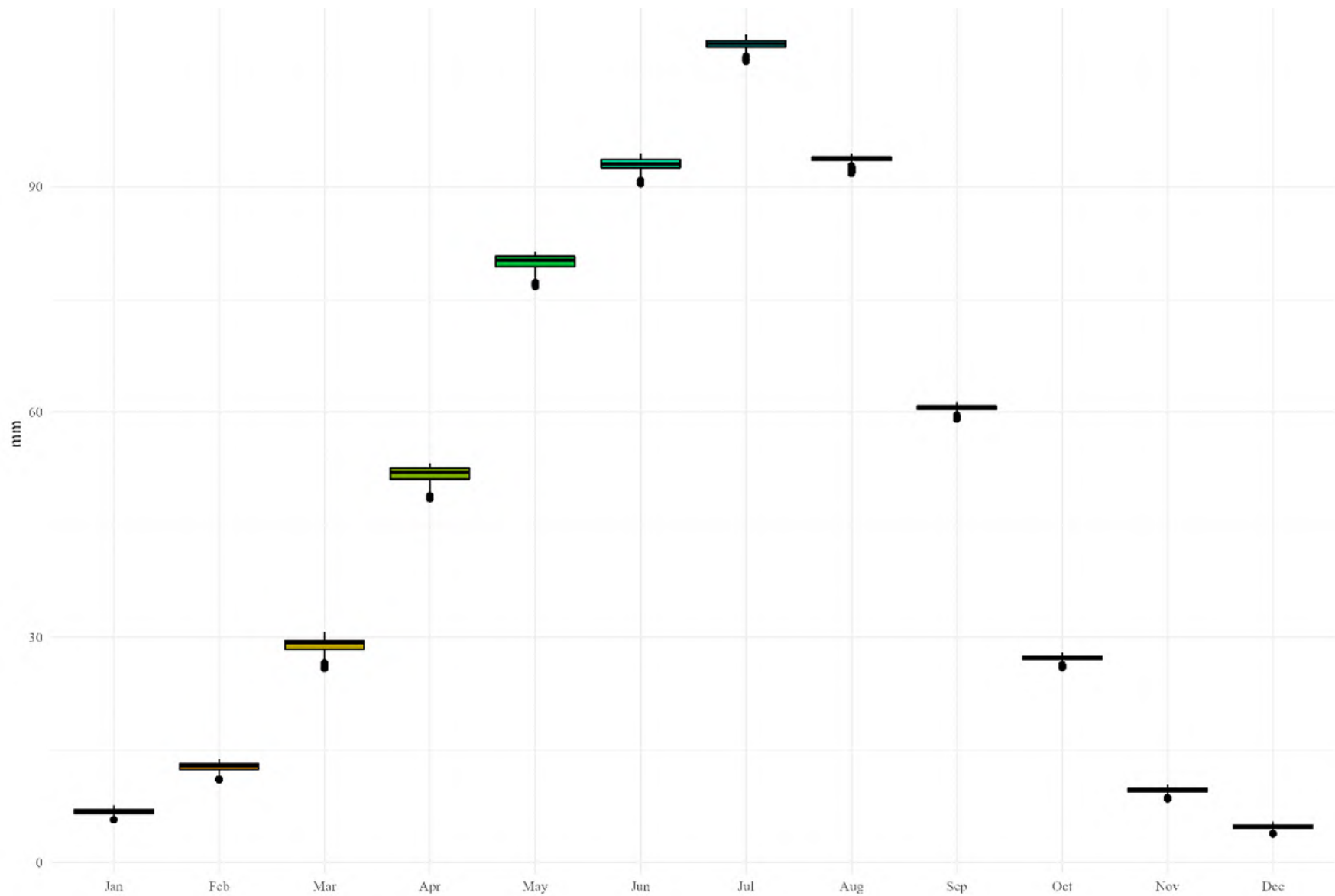


Figure 8: Monthly spread in potential evapo-transpiration over Lake Weston and its surrounding watersheds

1.2.5 Actual Evapo-transpiration

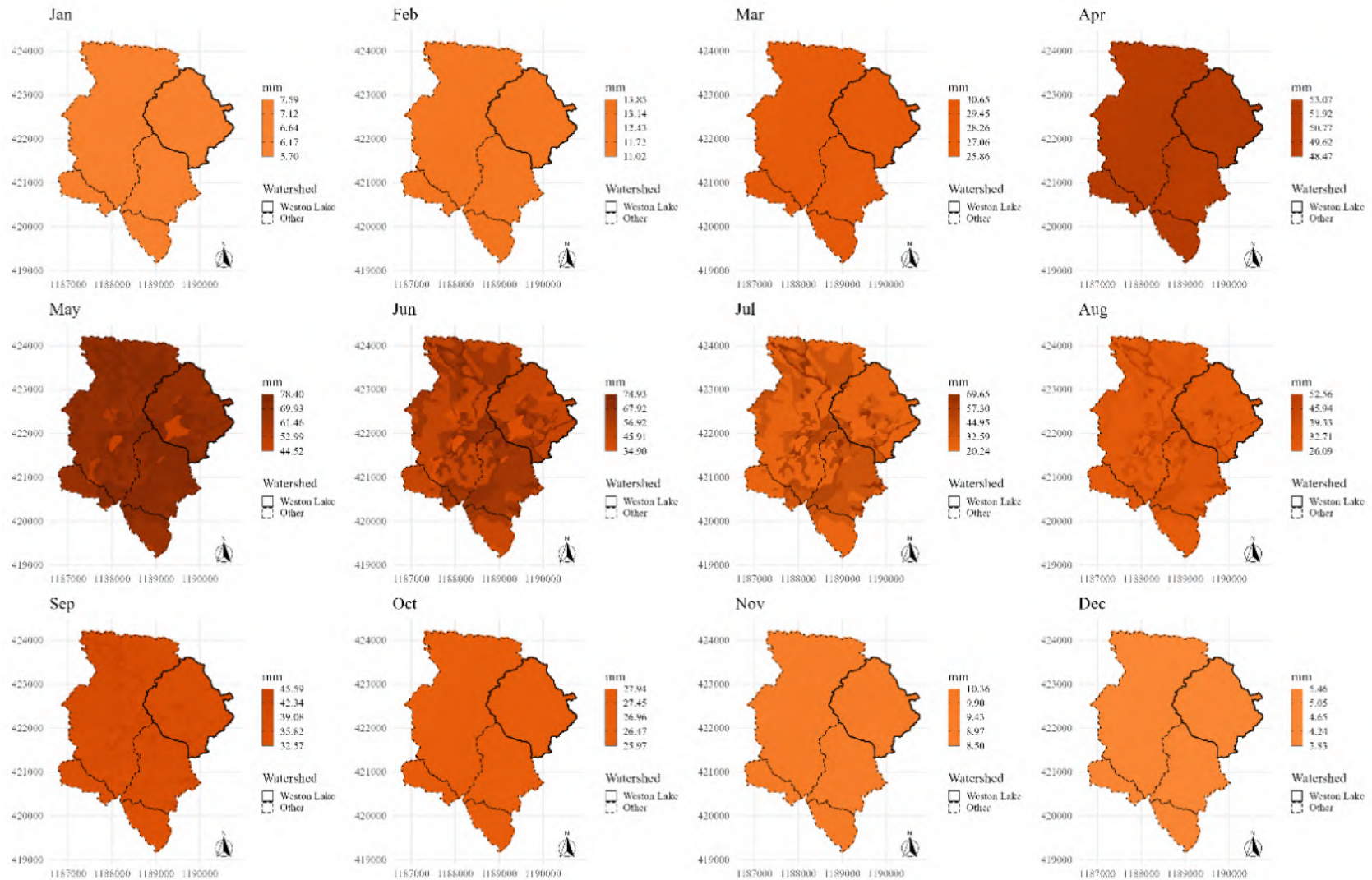


Figure 9: Actual evapo-transpiration by month over Lake Weston and its surrounding watersheds

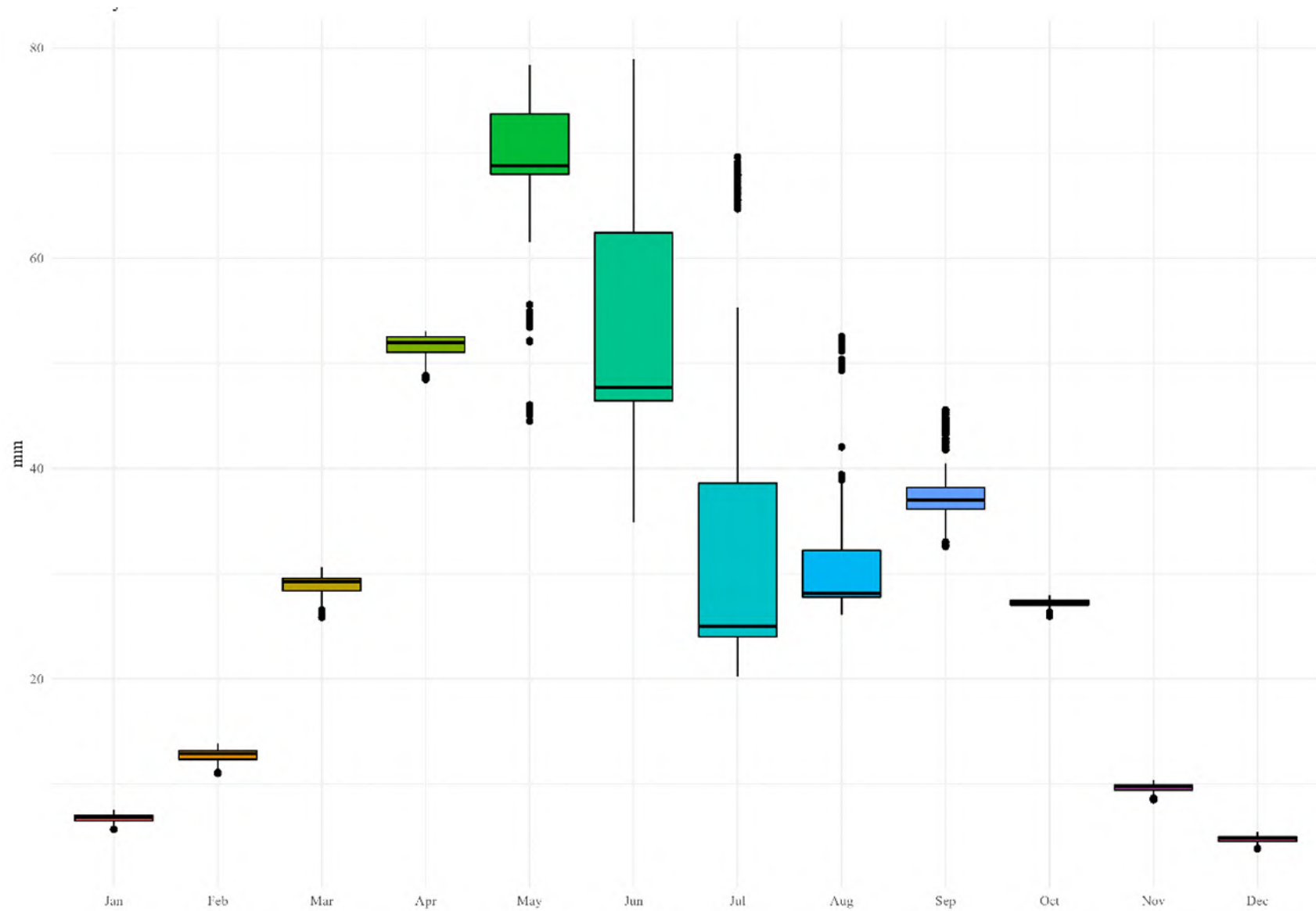


Figure 10: Monthly spread in actual evapo-transpiration over Lake Weston and its surrounding watersheds

1.2.6 Soil Storage

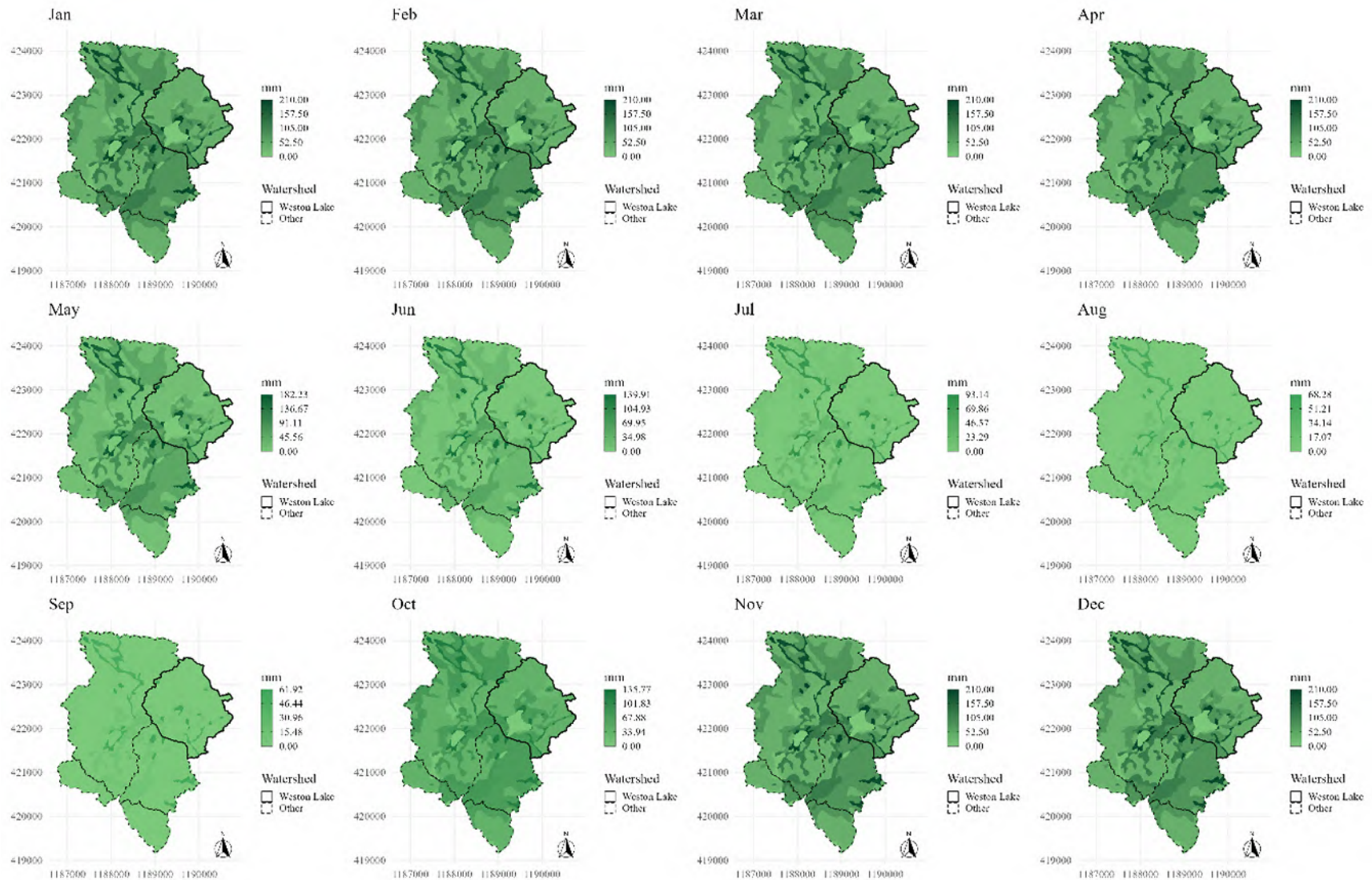


Figure 11: Soil storage by month over Lake Weston and its surrounding watersheds

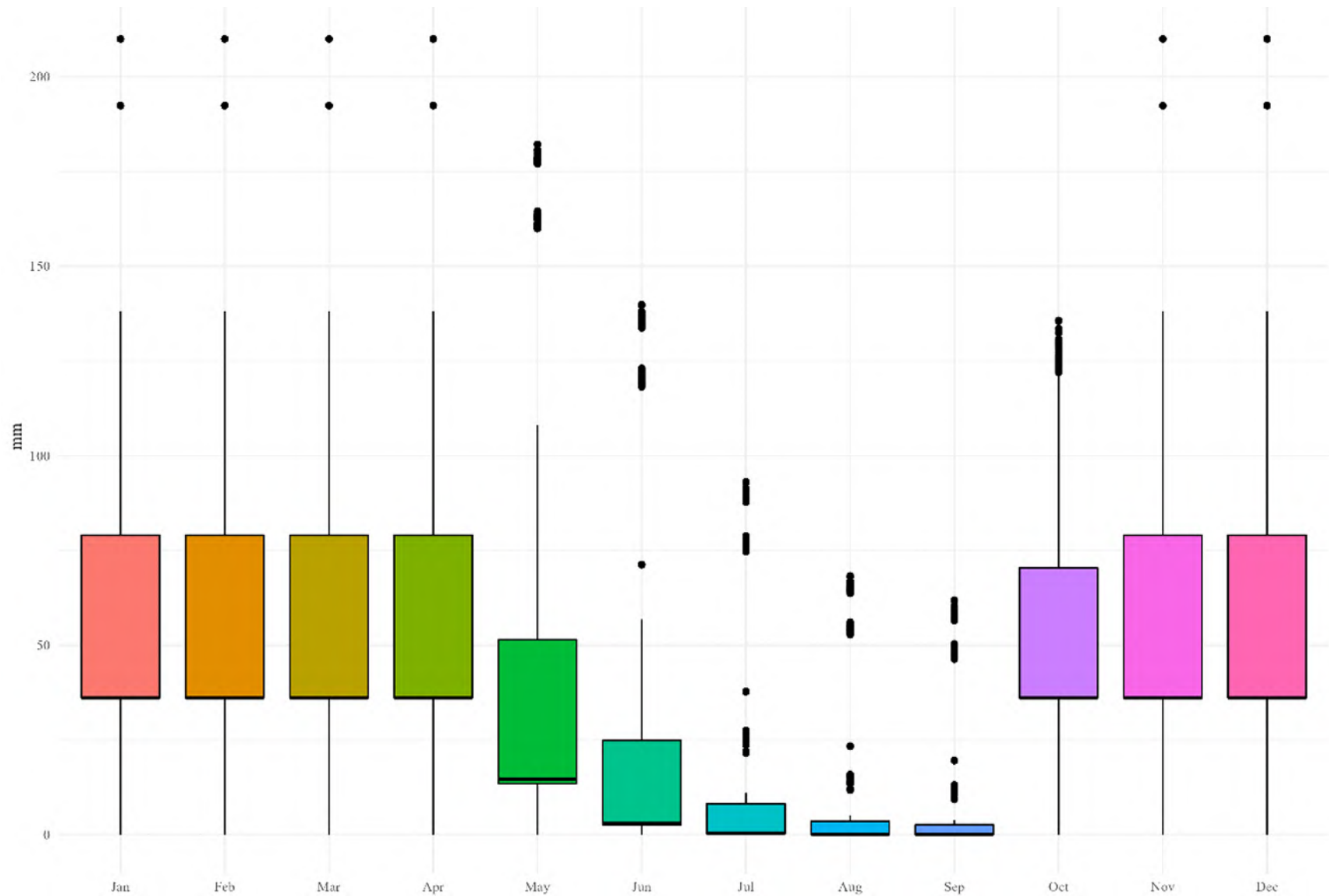


Figure 12: Monthly spread in soil storage over Lake Weston and its surrounding watersheds

1.2.7 Moisture Deficit

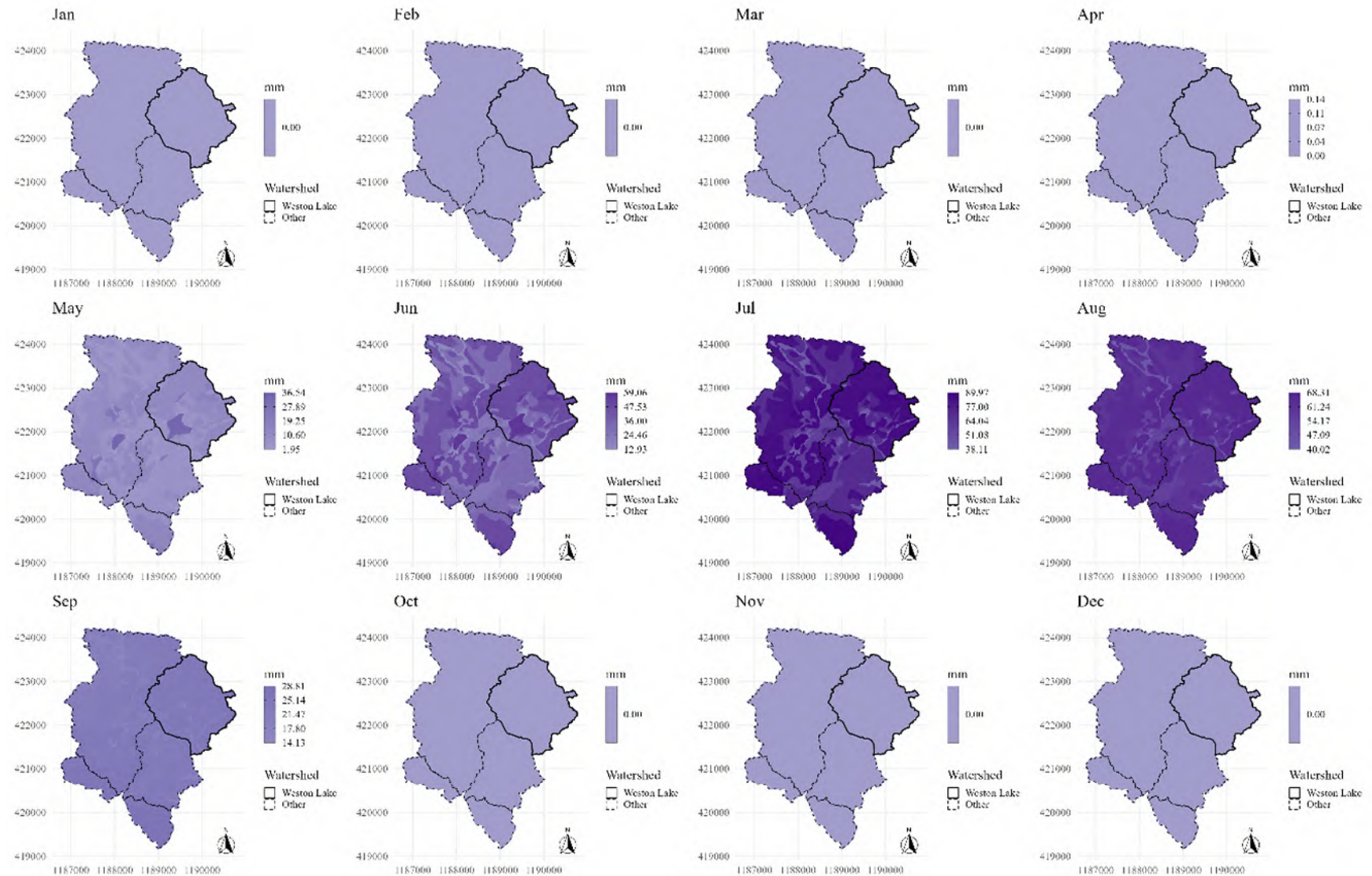


Figure 13: Moisture deficit by month over Lake Weston and its surrounding watersheds

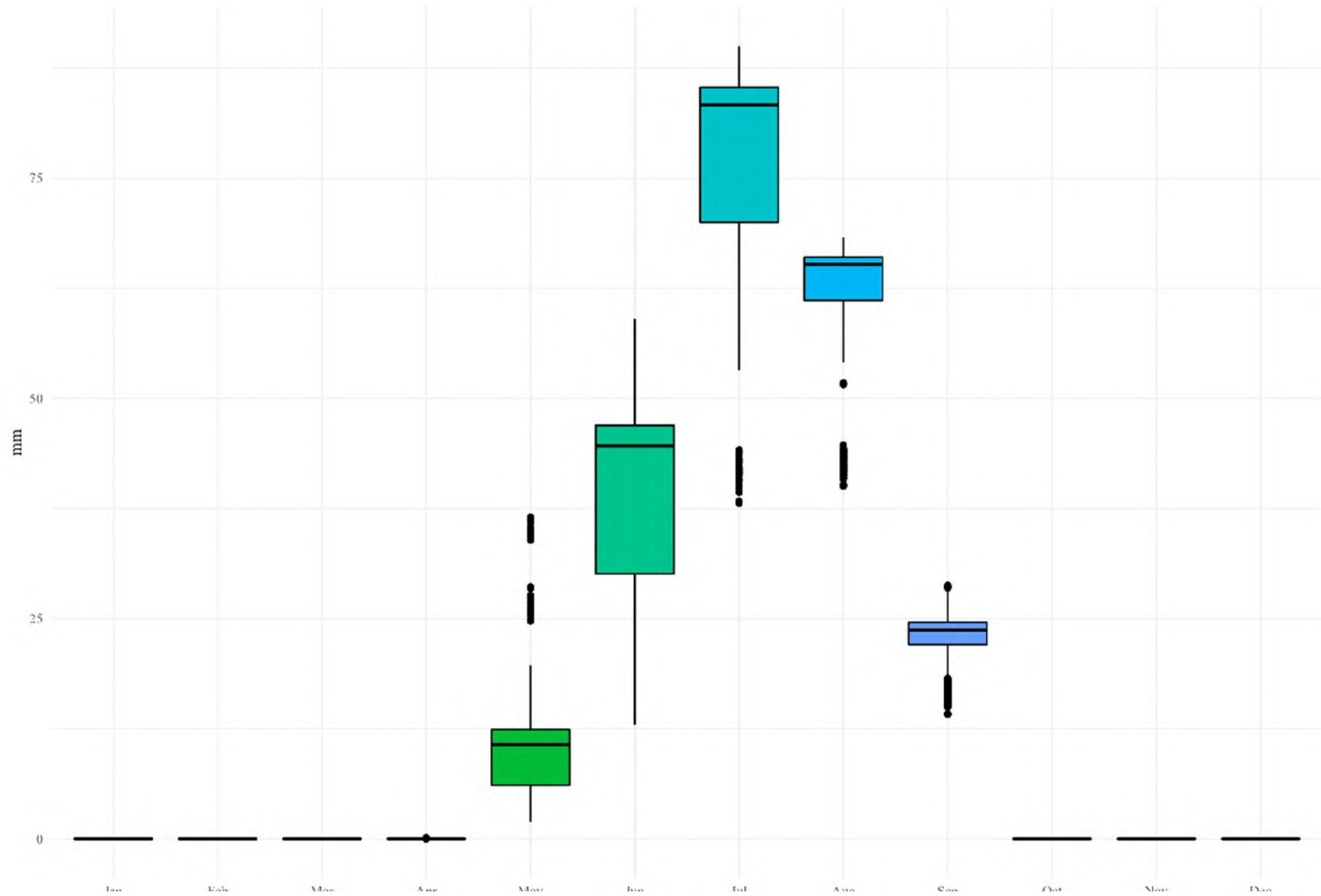


Figure 14: Monthly spread in moisture deficit over Lake Weston and its surrounding watersheds

1.2.8 Moisture Surplus

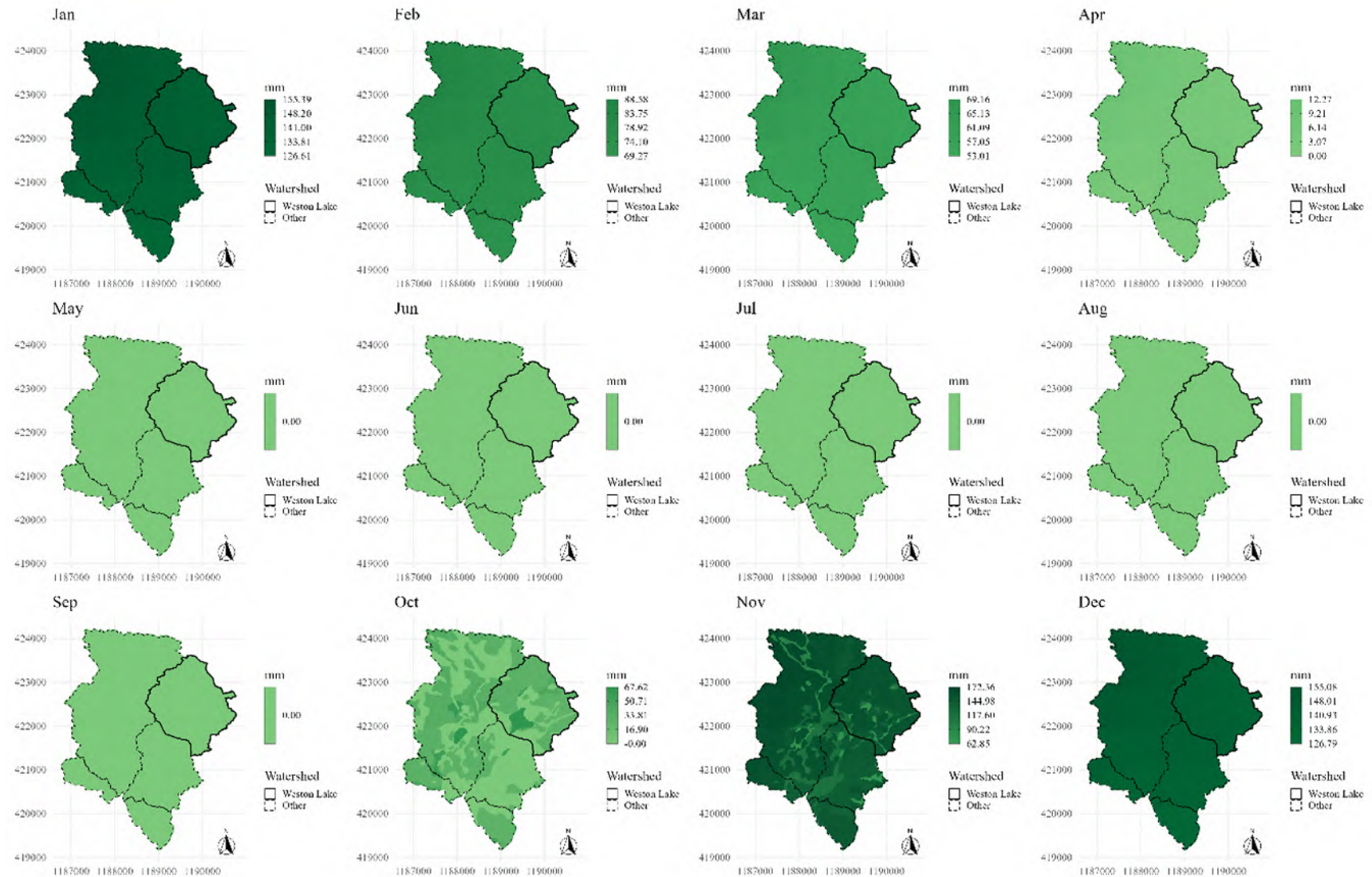


Figure 15: Moisture surplus by month over Lake Weston and its surrounding watersheds

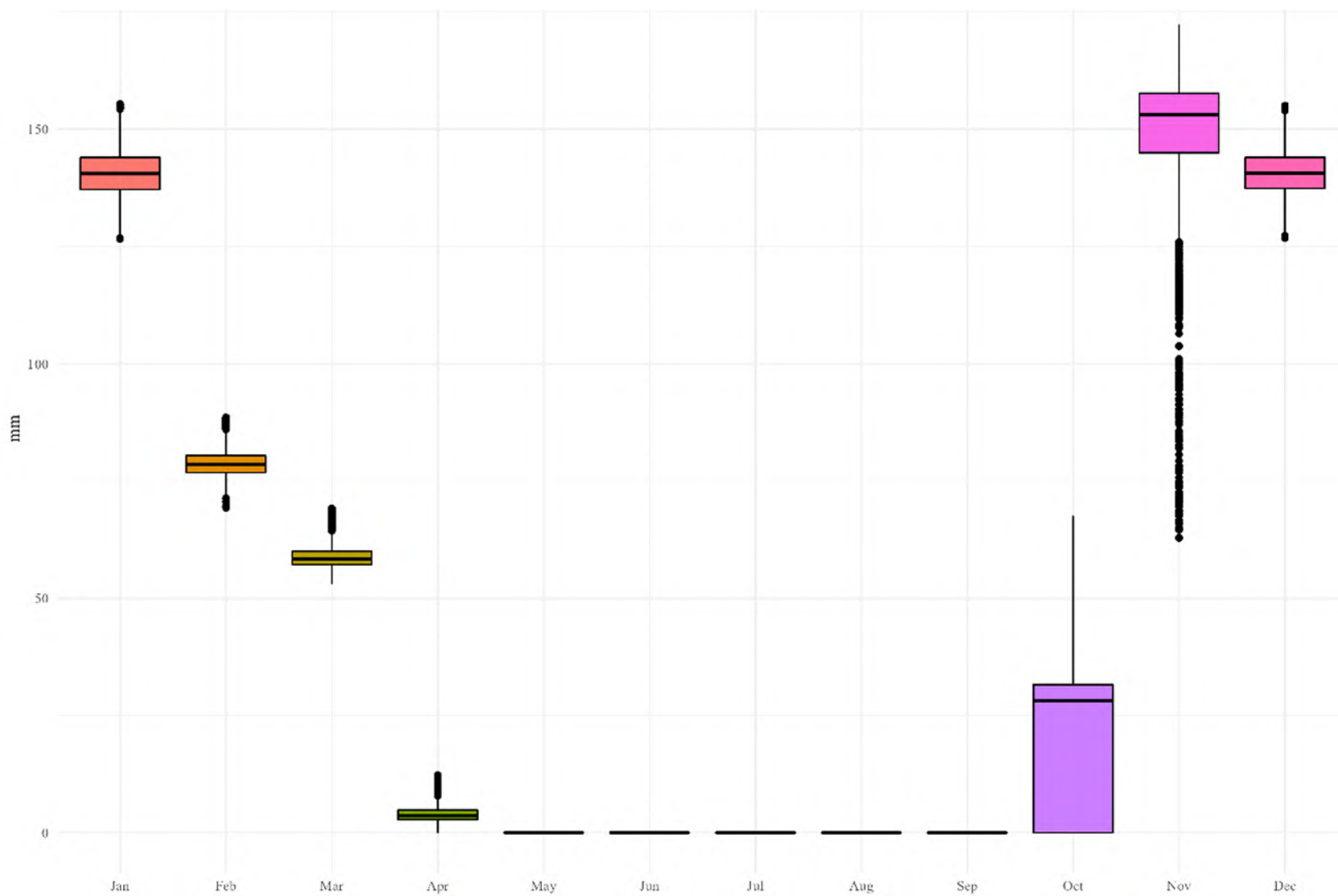


Figure 16: Monthly surplus in moisture deficit over Lake Weston and its surrounding watersheds

1.2.9 Groundwater recharge



Figure 17: Groundwater recharge by month over Lake Weston and its surrounding watersheds

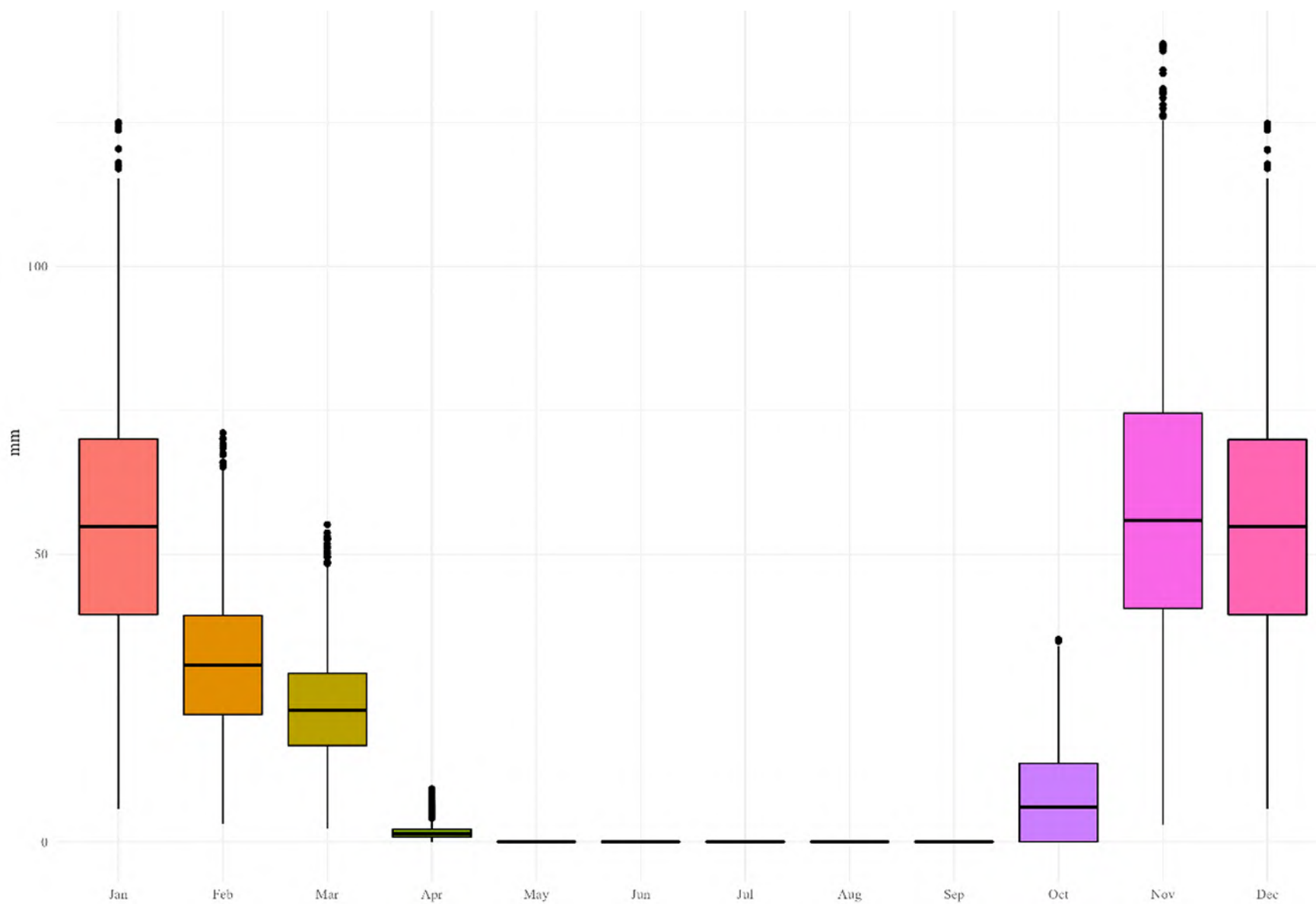


Figure 18: Monthly spread in groundwater recharge over Lake Weston and its surrounding watersheds

1.2.10 Surface runoff

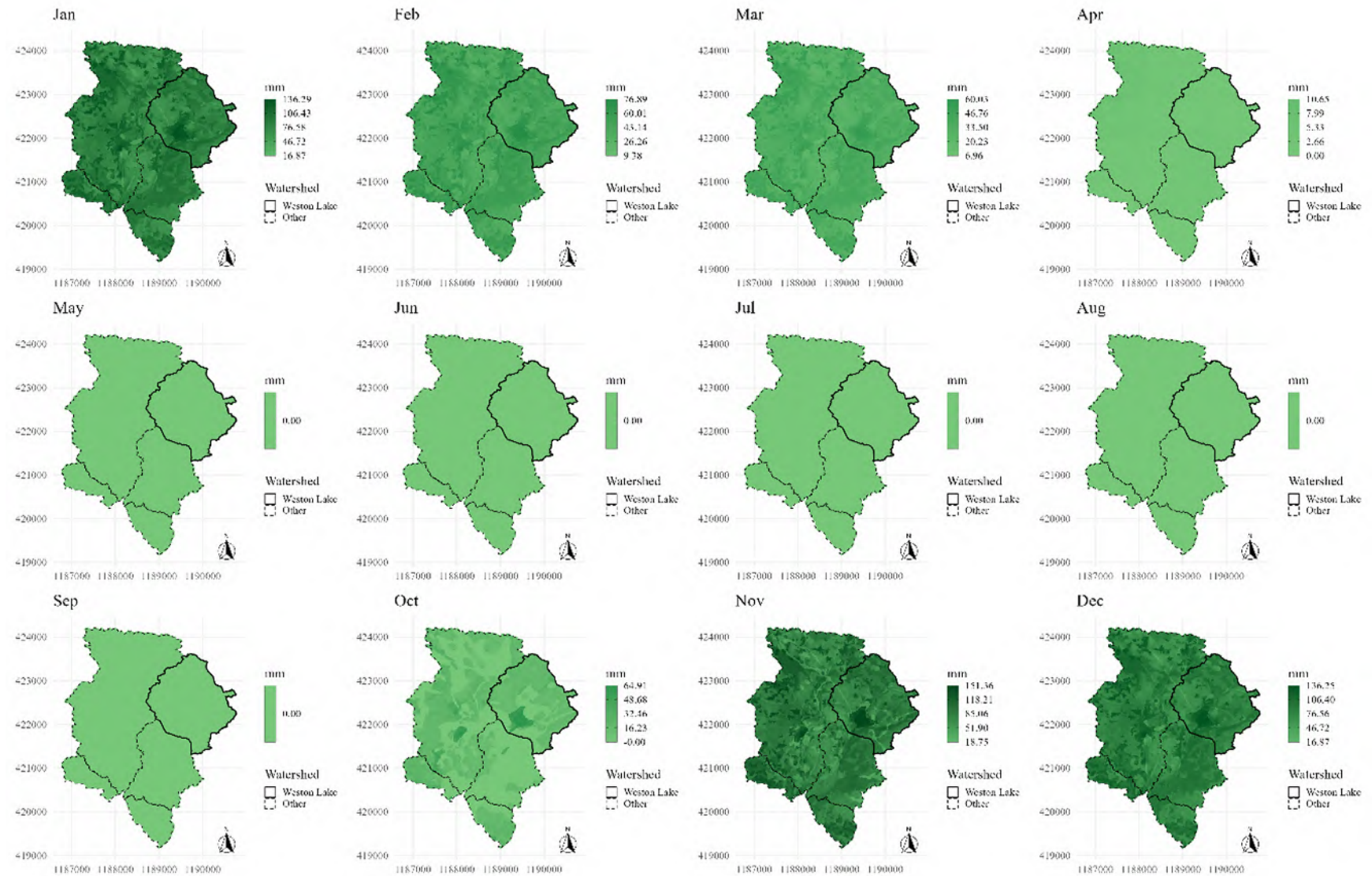


Figure 19: Surface runoff by month over Lake Weston and its surrounding watersheds

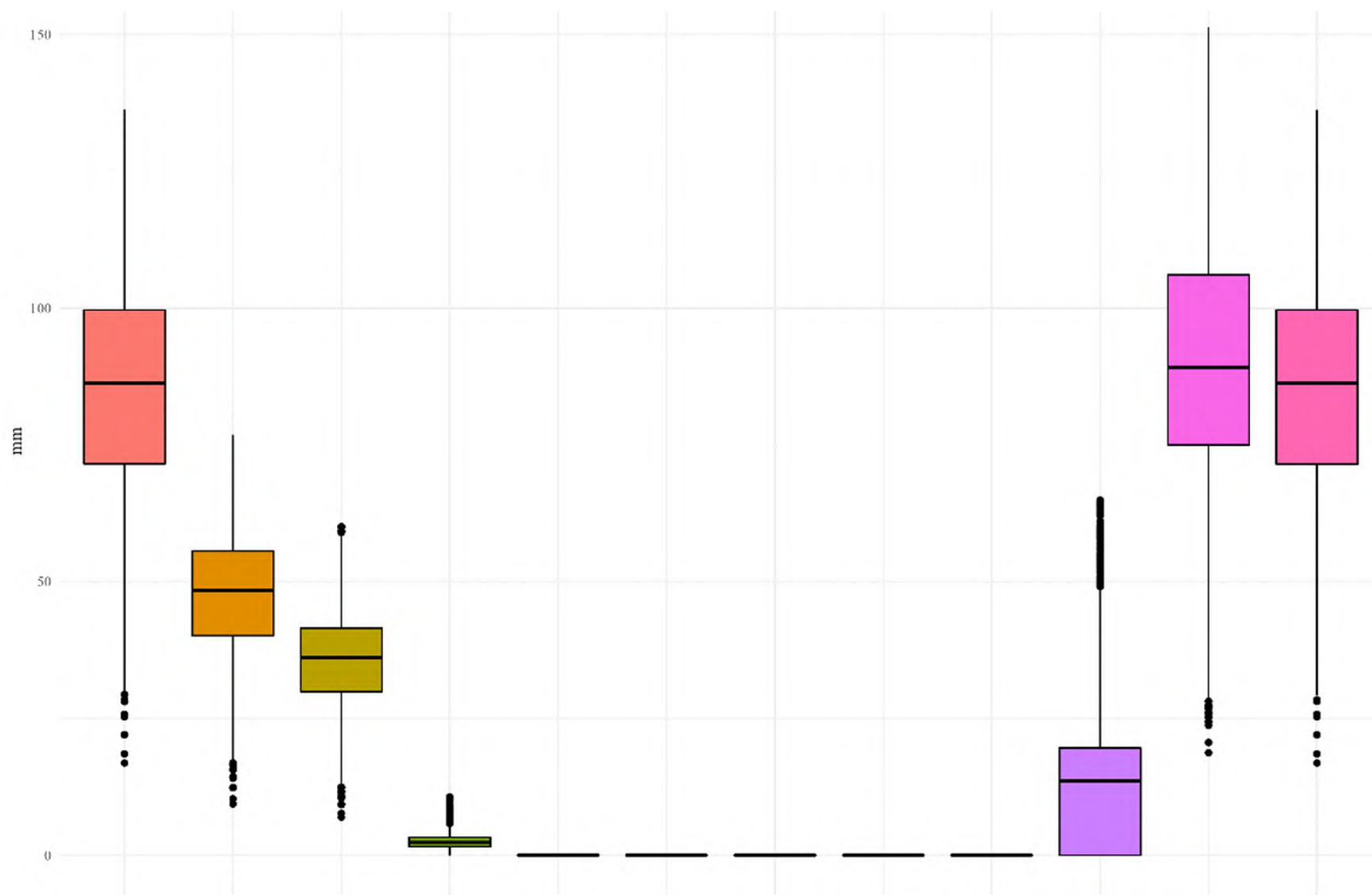


Figure 20: Monthly spread in surface runoff over Lake Weston and its surrounding watersheds

APPENDIX 4

Climate Change Analysis

APPENDIX 4: CLIMATE CHANGE ANALYSIS

1.1 Introduction to Climate Models and their Evolution

Mathematical models that simulate climate, known as climate models, are commonly used to understand the Earth's climate. These climate models are a conceptualization of the physics of the atmosphere, oceans, and the cycling of chemicals between living things and their environment. These models have increased in complexity over time, with different components affecting the Earth's climate being integrated to form coupled systems. The coupled General Circulation Models (GCMs), also called Global Climate Models simulate climate variables considering the circulation of air and water in the atmosphere and oceans, as well as the transfer of heat.

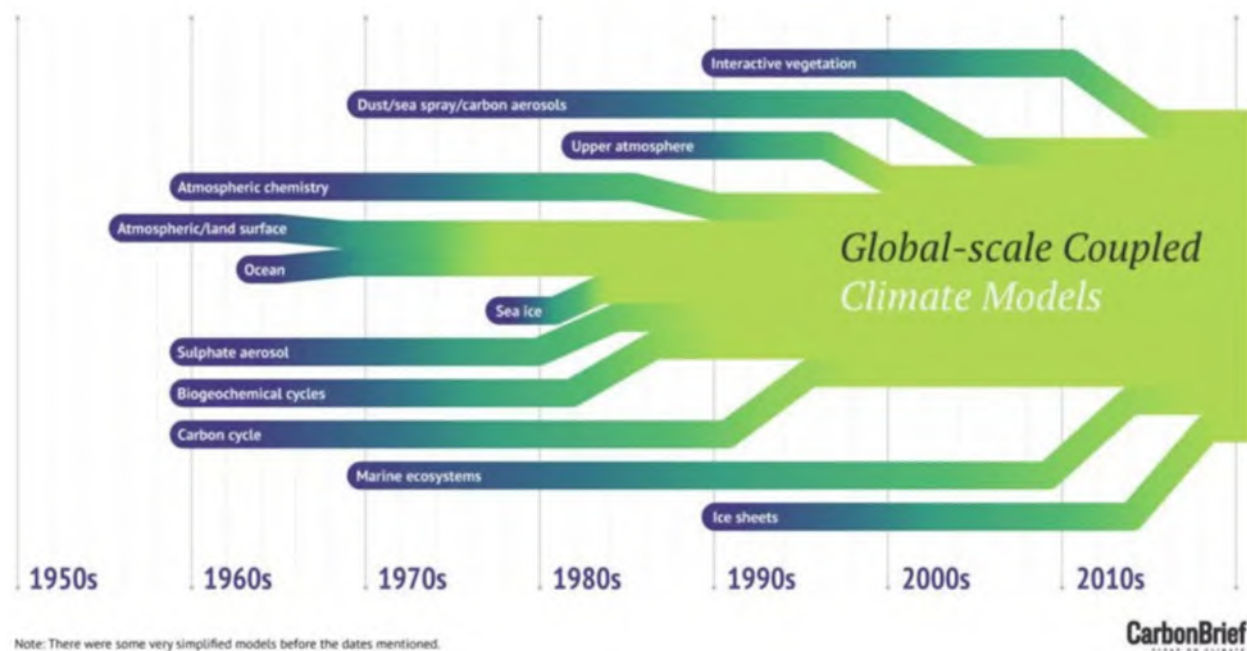


Figure 1: Improvement of climate change models over time (source: McSweeney and Hausfather, 2018)

Processes that affect climate change are challenging to estimate and model. Additionally, human responses to climate change, through decisions regarding policy, land-use and climate mitigation add uncertainty as they affect how future climate change mitigation will unfold. When modelling climate, then, it is useful to consider multiple greenhouse gas emission scenarios, ranging from low to high emissions. As there is no single climate future, such projection scenarios can be used to illustrate a range of possible futures, depending on how human and natural systems respond to climate forcing.

Integrated Assessment Models (IAMs) are tools that model emissions scenarios by analyzing how various kinds of social and economic decisions will impact climate change. Combining insights from GCMs and IAMs, the climate research community has developed a set of 4 “shared socio-economic pathways” (SSPs) – models of climate forcing that each represent different projected human responses to climate change. These SSPs are named SSP 2.6, SSP 4.5, SSP 7.0 and SSP 8.5. Each SSP serves as a representation of future climate forcing under certain conditions of mitigation, thereby reflecting different degrees of optimism regarding the human response to climate change. SSP1- 2.6 considers aggressive mitigation measures, which ensure that climate warming by 2100 does not exceed the 2-degree mark. In contrast, SSP5 - 8.5 reflects a status quo scenario with no mitigation measures. The other scenarios fall in between these two extremes. The SSPs thus enable the GCMs to model a range of possible climate change scenarios, offering greater insight into the breadth of potential impacts that climate change can have on the earth system.

1.2 Defining Applicable Models and Scale

GCMs undertake the momentous task of modelling the climate across the entire earth. Large volumes of climate data, usually in gridded raster form, have become available in recent years, including interpolated historical data from weather stations and future predictions from General and Regional Circulation Models. However, the spatial resolution of global climate model outputs is often too coarse to provide sufficient local detail on climate. To analyze climate impacts locally thus requires a process of “downscaling” projected climate data.

One way this is achieved is through Regional Climate Models (RCMs), which are similar to GCMs, but aim to model the climate over a limited area of the Earth, leading to greater spatial detail. Since RCMs are not available for most parts of the earth, however, another common process is to use “statistical downscaling”. This involves establishing an empirical relationship between locally observed and globally modelled climate. This relationship is then used to further downscale projected climate data to model local changes.

Two tools that offer statistically downscaled climate data are ClimateNA and ClimateBC (Wang et al., 2016), encompassing western North America and British Columbia, respectively. Both are stand-alone software packages that provide monthly historic and climate change data, downscaled to any grid scale through a combination of bilinear interpolation, elevation adjustment, and application of the PRISM high-resolution 1971-2000 baseline climatology. The scale-free downscaling method employed can better account for local variations in elevation, as well as considerably improve statistical accuracy compared to downscaling using regular climate grids (Wang et al., 2016). The program was updated with historical monthly data for the years 1901- 2018 in June 2019 to improve its accuracy.

The software includes the option to downscale climate data from 13 GCMs, all of which were part of the Coupled Model Intercomparison Project 6 (CMIP6), included in the IPCC Sixth Assessment Report (IPCC, 2014). The tool offers data from a subset of 13 models including in CMIP6 which were selected following an evaluation of all 44 CMIP6 GCMs, using a number of criteria to select only those models that best characterized climatic patterns across North America (Mahony et al., 2022). The tool provides projection data from each individual model, as well as an aggregate of climate data across all 13 models – a useful reference dataset, as there is evidence that combining knowledge across multiple models can improve accuracy over single-model forecasts (Tebaldi and Knutti, 2007). We chose to use the entire 13-model ensemble rather than a single model subset since we were interested in a single representative projection that could characterize the entire possible range of project climate change in the study area (Mahony et al., 2021).

The variables for ClimateBC provides include temperature, precipitation, solar radiation, as well as several derived climate variables for historic and future periods. Projected climate data are available for four future periods: 2030s (2021-2040), 2050s (2041-2060), 2070s (2061-2080), and 2090s (2081-2100). These projected years are available for all four SSP scenarios – SSP 2.6, SSP 4.5, SSP 7.0 and SSP 8.5.

1.3 Study Area and Data Selection

GW Solutions used ClimateBC version 7.21 (Wang et al, 2016, updated in 2022) to gather statistically downscaled, monthly, climate variables for 2030, 2050 and 2070. To estimate the climate of these time-periods, GW Solutions gathered projected data averaged across all 13 GCMs in the ClimateBC tool – a 13-model ensemble¹.

ClimateBC reads a digital elevation model (DEM) to interpolate monthly, seasonal, or annual climate variables. The climate data are then downscaled to the resolution of the provided DEM. GW Solutions used a 20m-by-20m resolution DEM raster file (*.asc) of the Lake Weston watershed study area as the input. The outputs were raster files of monthly climate variables, clipped to the boundaries of the study area. The monthly climate variables for which data were gathered include:

Variable Name	Description
Tave01 – Tave12	January - December mean temperatures (°C)
PPT01 – PPT12	January - December precipitation (mm)
Rad01 – Rad12	January - December solar radiation (MJ m ⁻² d ⁻¹)

1.4 Data Analysis Methodology

Once gathered, all the climate data for each projection year (2030, 2050 and 2070) were compared against averages of current observed climate data, or “climate normals”, for the period 1981-2010. The comparison process involved the creation of raster files that showed the cell-by-cell change between the observed “normal” period and climate projections

¹ The models included in this ensemble average are ACCESS-ESM1.5, BCC-CSM2, CanESM5, CNRM-ESM2-1, EC-Earth3, GFDL-ESM4, GISS-E2.1, INM-CM5.0, IPSL-CM6A-LR, MIROC6, MPI-ESM1.2-HR, MRI-ESM2.0, and UKESM1 (Mahony et al., 2022)

for all three time-periods. These changes were then mapped to show the spatial variation in the projected changes for all the climate variables.

Additionally, water budget calculations were performed using inputs from each climate change scenario and were also compared to the water budget outputs from the normal periods. This allowed a comparison of not just raw input climate data, but also an estimation of how important water balance variables – like monthly available moisture surplus – are projected to change with climate change.

Comparisons between projected future data and climate normals were performed for all four SSP scenarios under consideration – SSP 2.6, 4.5, 7.0 and 8.5. Maps showing the results of these comparisons for each SSP, and each year were generated to examine the spatial variation of change for each climate variable. Moreover, summary charts showing average changes across the Lake Weston watershed were also calculated for all climate variables. These summary charts depict changes by month and included data from all SSPs to illustrate how the magnitude of impact changes under each SSP.

All the analysis and visualization were completed in the R programming language. The maps and charts produced during this analysis are presented in section 1.6.

1.5 Generalized Interpretation of Climate Change Results

The projected data from the 13-model ensemble predict a significant increase in precipitation during the winter, and a smaller yet still considerable increase in spring and fall precipitation. The magnitude of increase is greatest during the December to February period. The data also predict a decrease in summer precipitation. These patterns are consistent across all the SSP scenarios, and indeed the magnitude of these changes is higher the more pessimistic the SSP is.

Solar radiation is projected to increase during the summer months and decrease during the fall and spring periods, remaining relatively unchanged during the rest of the winter. Interestingly, the magnitude of change is projected to be the strongest within the 2030s period, suggesting that the most meaningful shifts in radiation patterns will happen within the next 2 decades. As with precipitation, the magnitude of change is higher with more pessimistic SSPs. Additionally, all SSPs and year periods seem to project a slight increase in radiation during March alone, amid an otherwise reduced-radiation Spring.

Average temperatures are projected to increase in all months for 2030, 2050 and 2070 across all SSP scenarios, with the highest increases being in July and August. Even under the most optimistic scenario (SSP 2.6), temperatures are projected to rise by nearly 2 degrees Celsius in July and August by 2070. In contrast, under SSP 8.5 the projected increase in July and August is nearly 5 degrees.

Finally, available moisture surplus is projected to increase considerably during the winter months of December to February, while also increasingly slightly during the fall months of October and November. Additionally, surplus is projected to decrease during the spring period, especially in March. As with the others, the magnitude of these patterns is exacerbated under less optimistic SSPs.

These patterns are consistent with changes expected under climate change globally. Increasing temperatures, particularly during the summer months, combined with higher solar radiation and lower summer precipitation will mean a reduced potential for groundwater recharge during the summer. The current hydrological regime, however, already operates within a pattern of excess water during the winter months and low precipitation during the summer. The impact of climate change on this system appears to be a reduction in the available window or annual time period for groundwater recharge.

Precipitation is projected to occur in higher magnitudes within a smaller time period (primarily December to February). This combined with reduced solar radiation during months leads to an excess of moisture surplus during the winter, increasing the possibility of flash flooding since the capacity for groundwater infiltration at any given time cannot be exceeded upon saturation. Furthermore, reduced precipitation and higher temperatures during the summer reduces the potential for groundwater recharge during the months when groundwater uptake is greatest. The projected decline in moisture surplus during March illustrates a reducing temporal window within which moisture surplus can recharge aquifers. Overall, these patterns will adversely affect the sustainability of the groundwater system by leading to a pattern of excess water when it is not needed and water deficits during periods when it is necessary.

1.6 Analysis Results

Figures 2 to 57 present the model-predicted changes between climate normals (1981-2010) and the predicted climate variables for 2030, 2050 and 2070. While maps and charts were calculated for all climate and water budget variables, only the most important variables have been shown here, namely: average temperature, precipitation, radiation, and available

moisture surplus. These were selected since temperature, precipitation and radiation are the three primary inputs that have the greatest impact on the water cycle, as they affect the availability of water as well as the rate of water loss through evapotranspiration. Moisture surplus was selected from among the water budget variables as it is the primary parameter of interest that can enable the calculation of available surface runoff and groundwater recharge.

1.6.1 SSP 2.6

1.6.1.1 Average Temperature

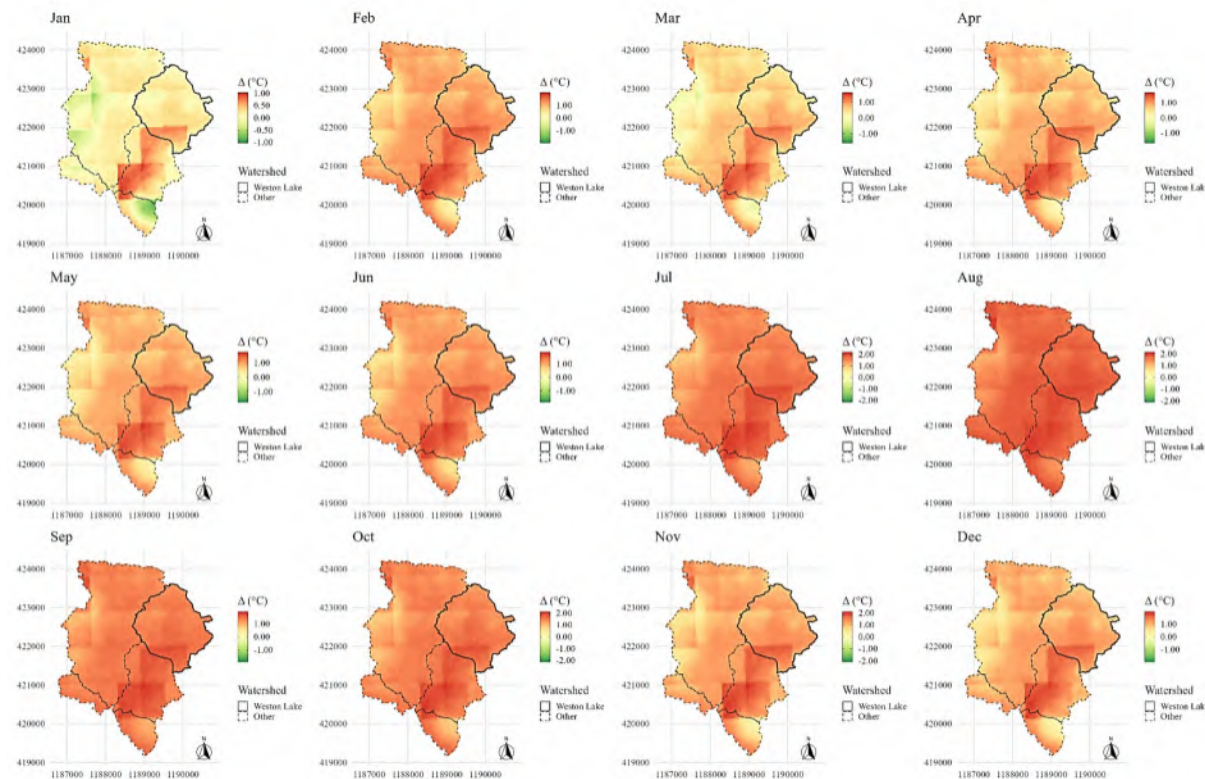


Figure 1: Monthly change in average temperature between year 2030 and present normals, SSP 2.6

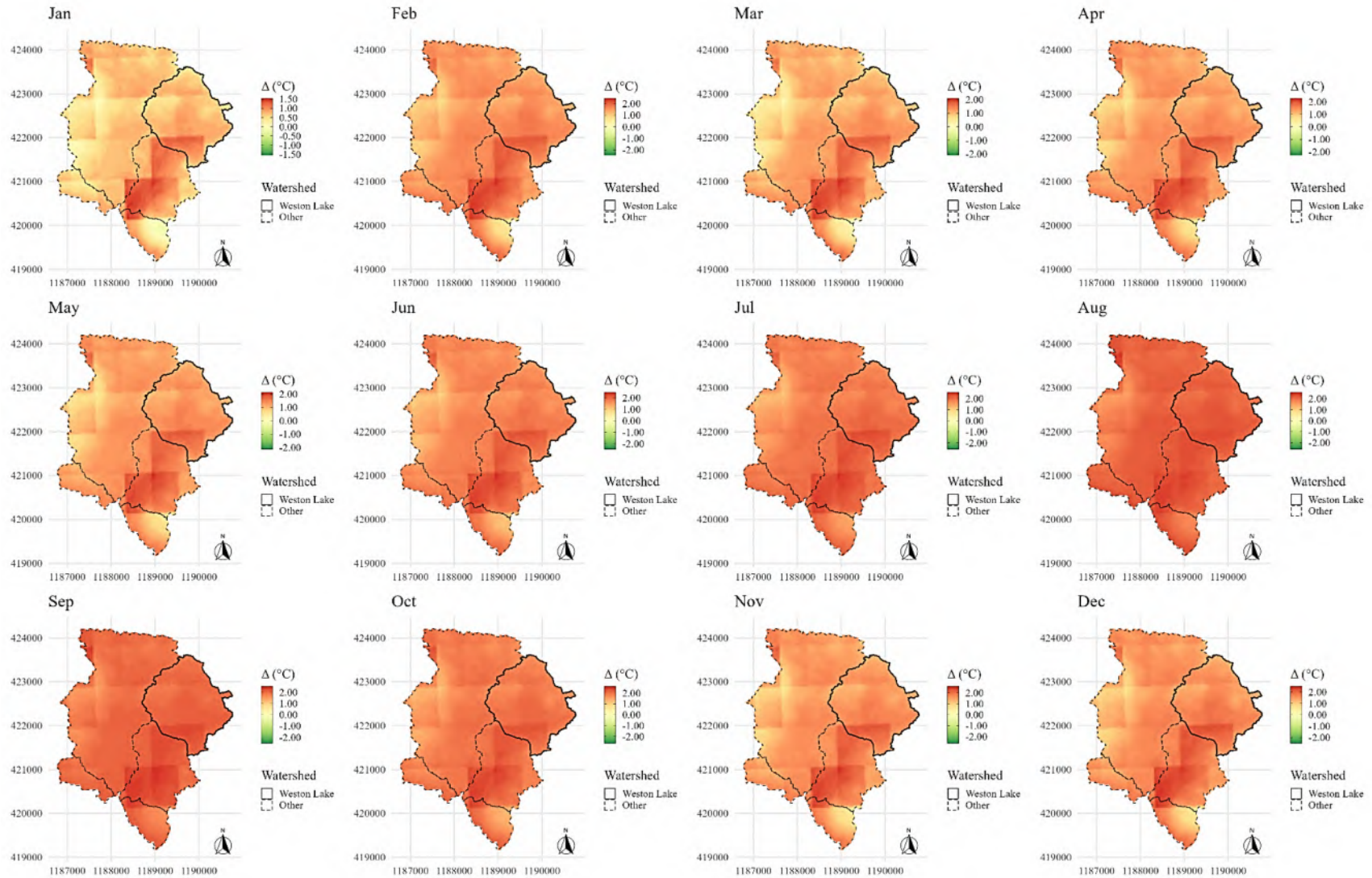


Figure 2: Monthly change in average temperature between year 2050 and present normals, SSP 2.6

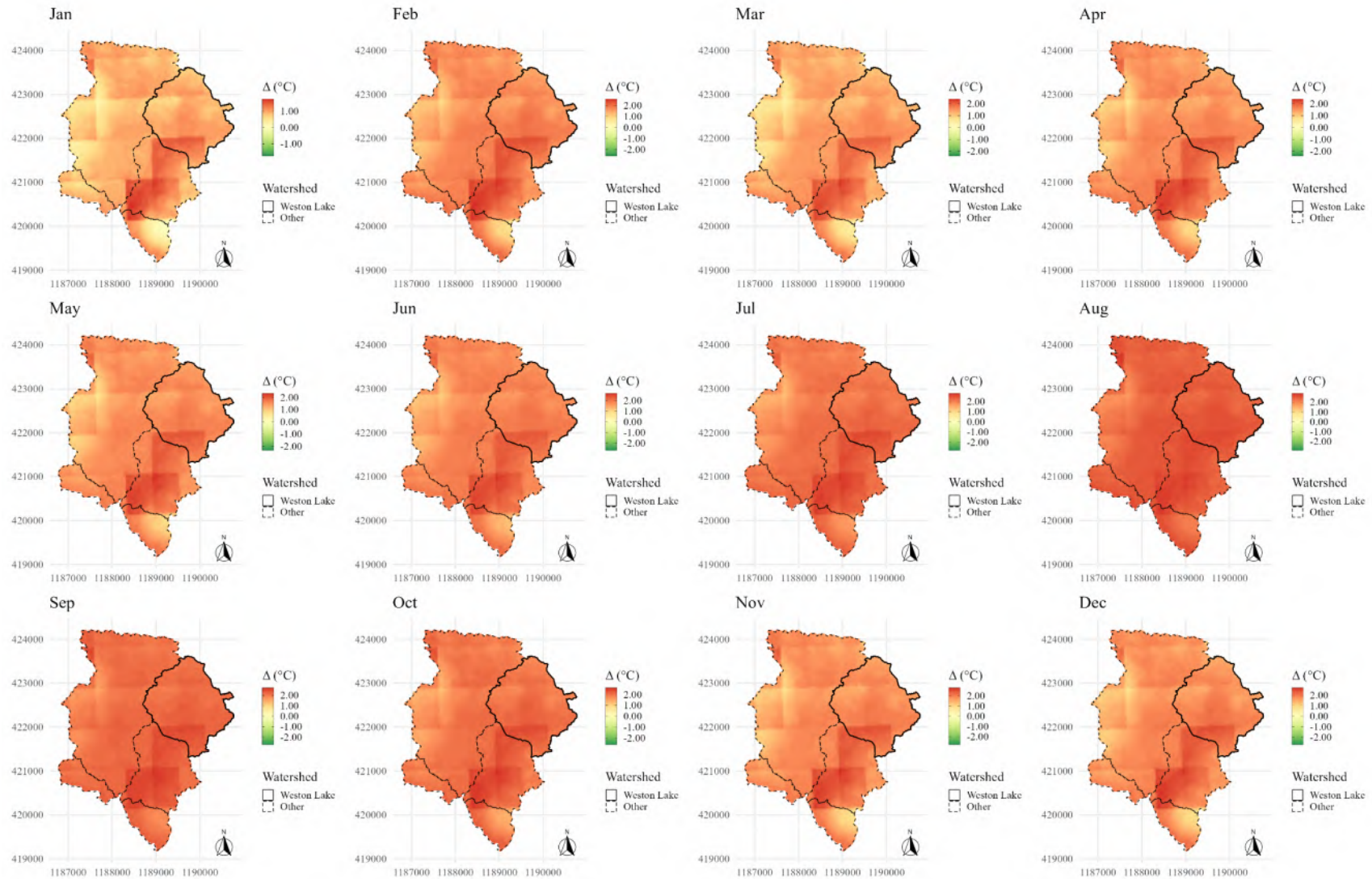


Figure 3: Monthly change in average temperature between year 2070 and present normals, SSP 2.6

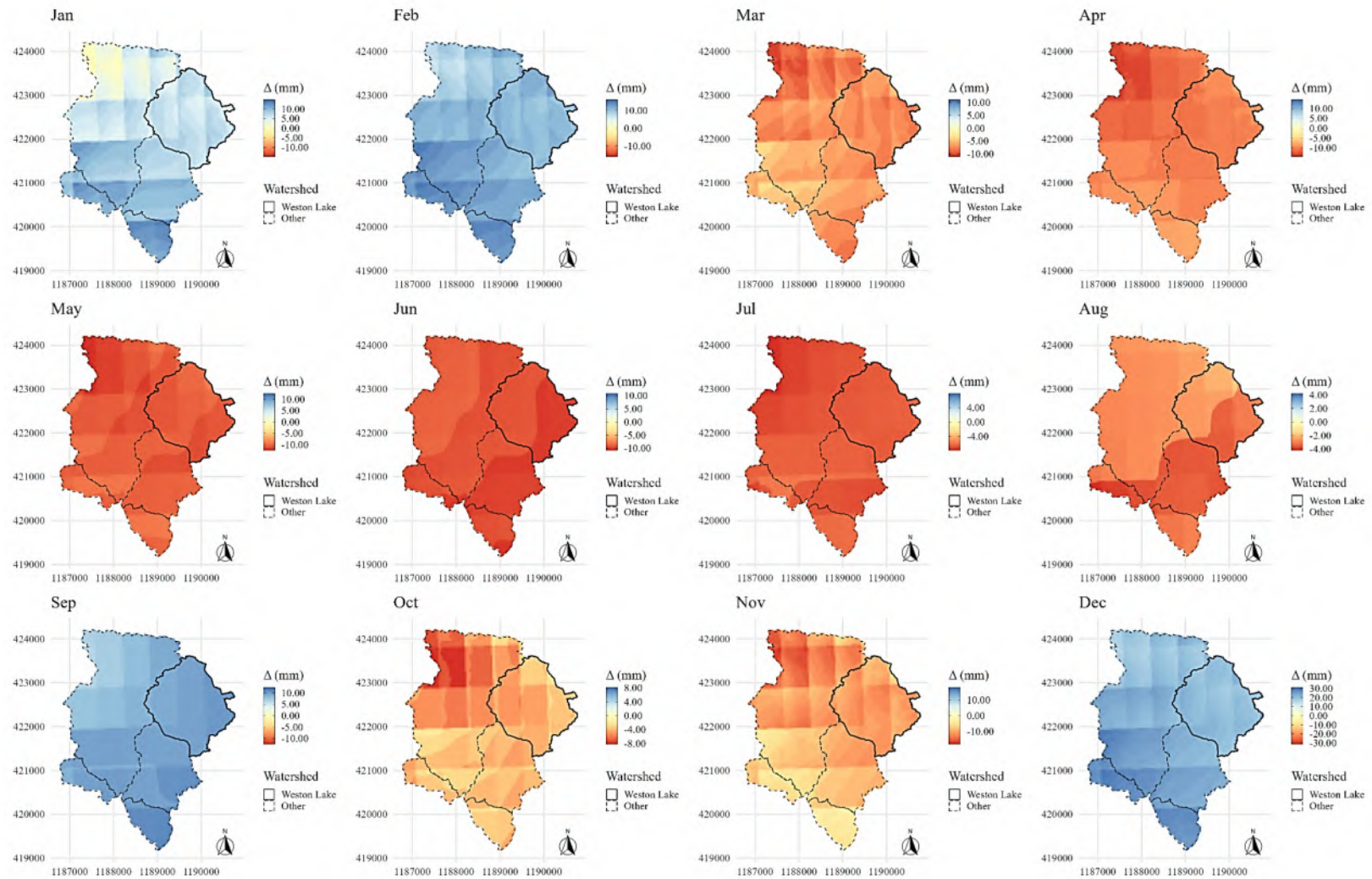
1.6.1.2 *Precipitation*

Figure 4: Monthly change in precipitation between year 2030 and present normals, SSP 2.6

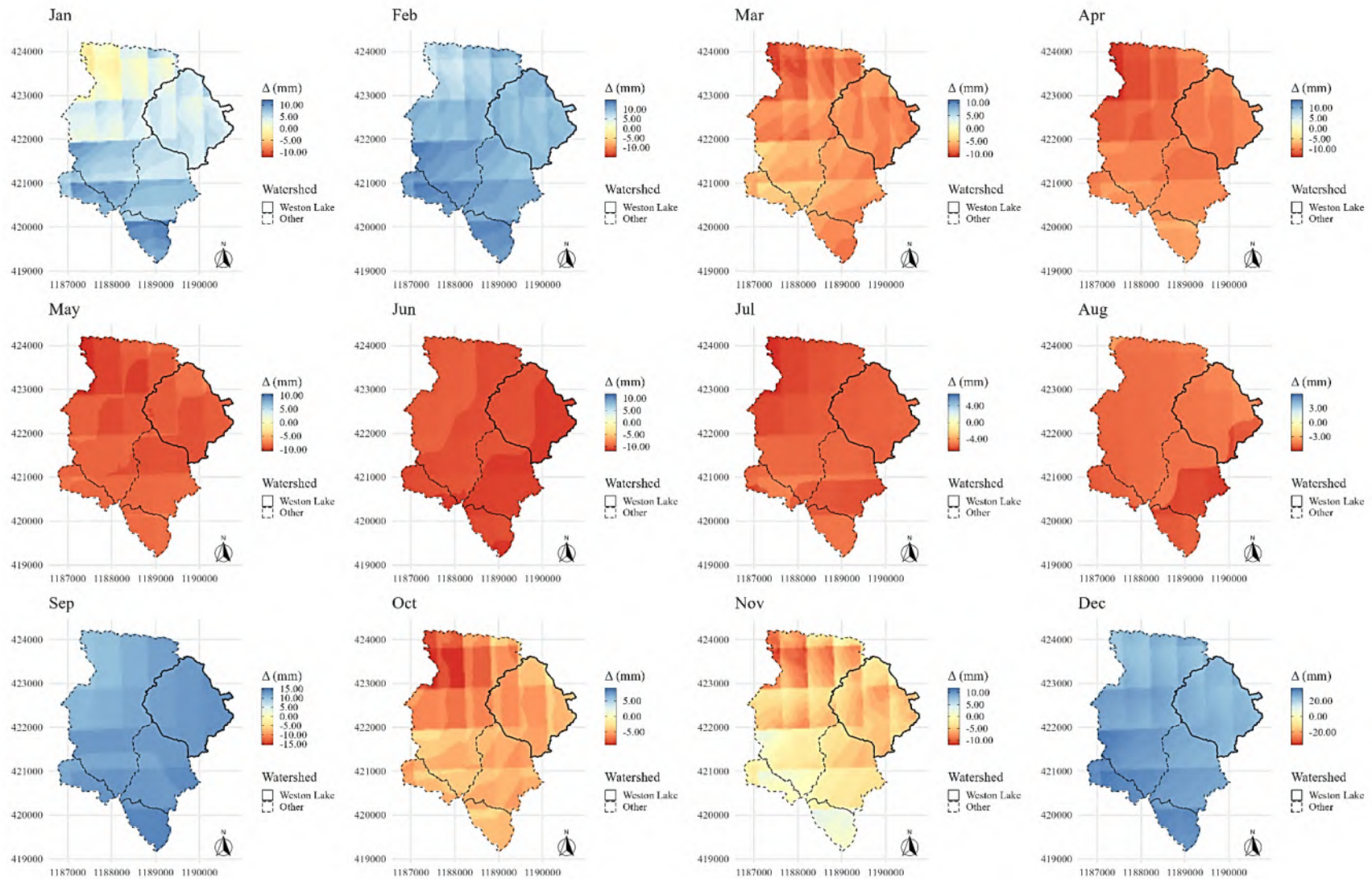


Figure 5: Monthly change in precipitation between year 2050 and present normals, SSP 2.6

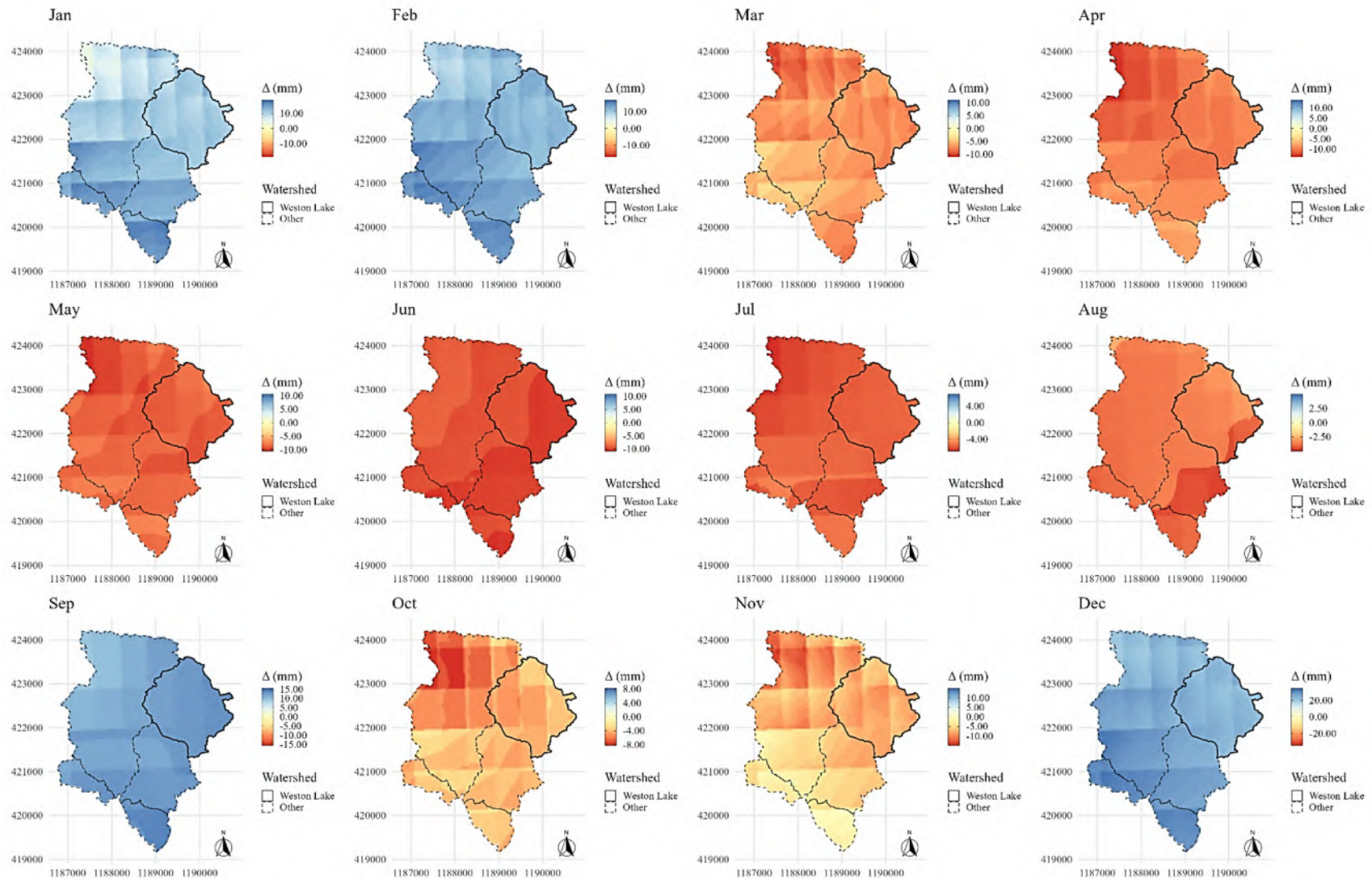


Figure 6: Monthly change in precipitation between year 2070 and present normals, SSP 2.6

1.6.1.3 Solar Radiation

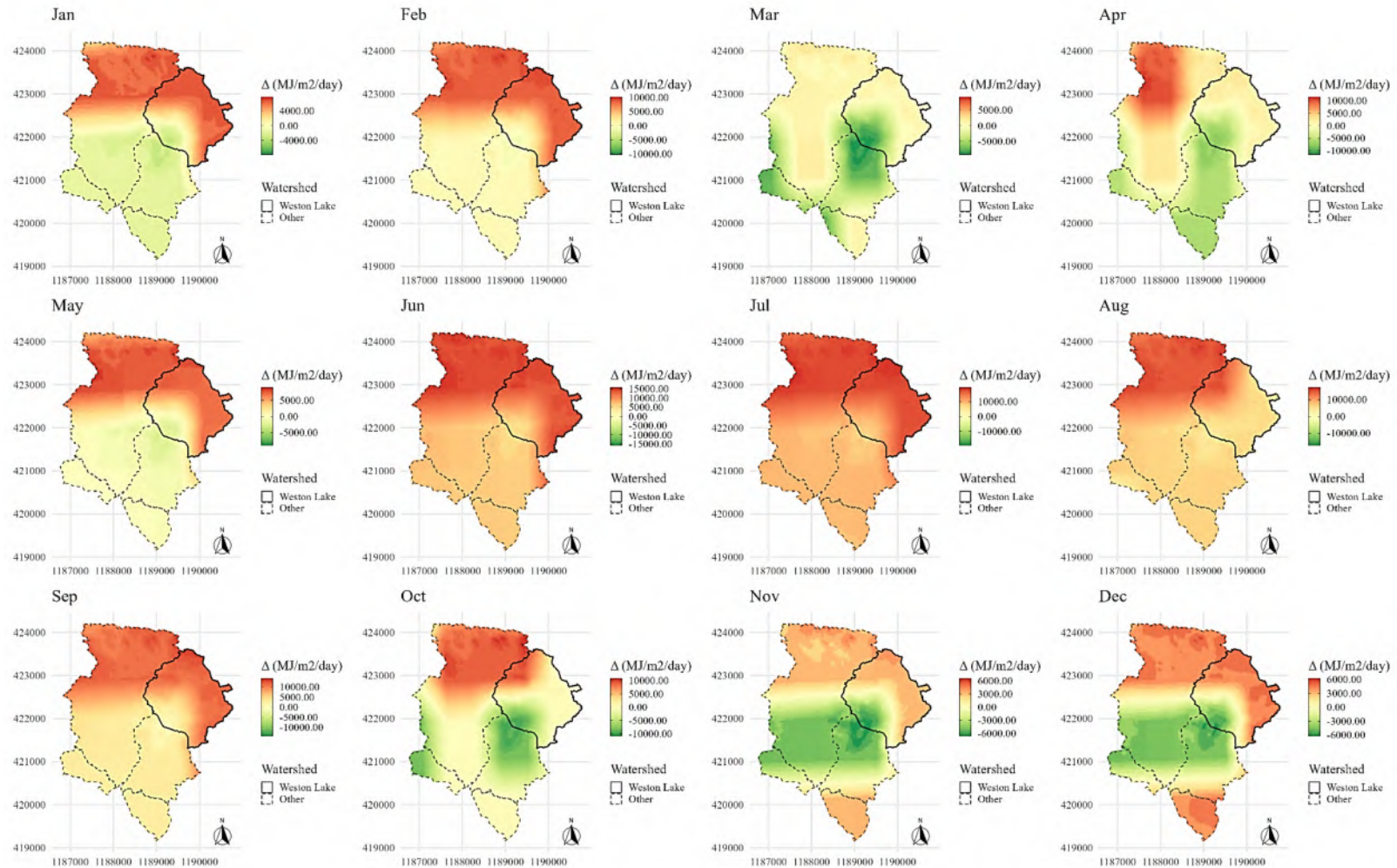


Figure 7: Monthly change in radiation between year 2030 and present normals, SSP 2.6

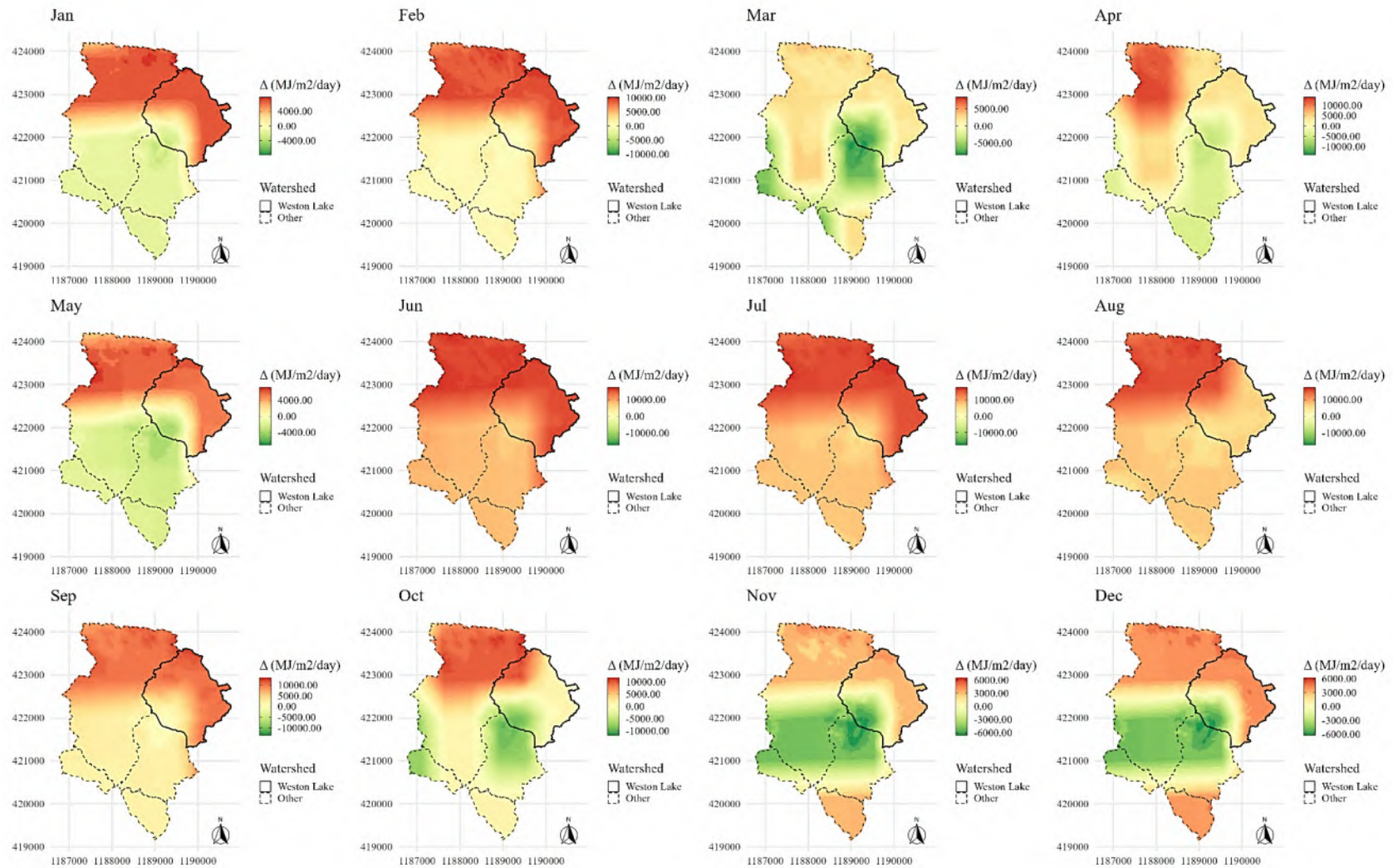


Figure 8: Monthly change in radiation between year 2050 and present normals, SSP 2.6

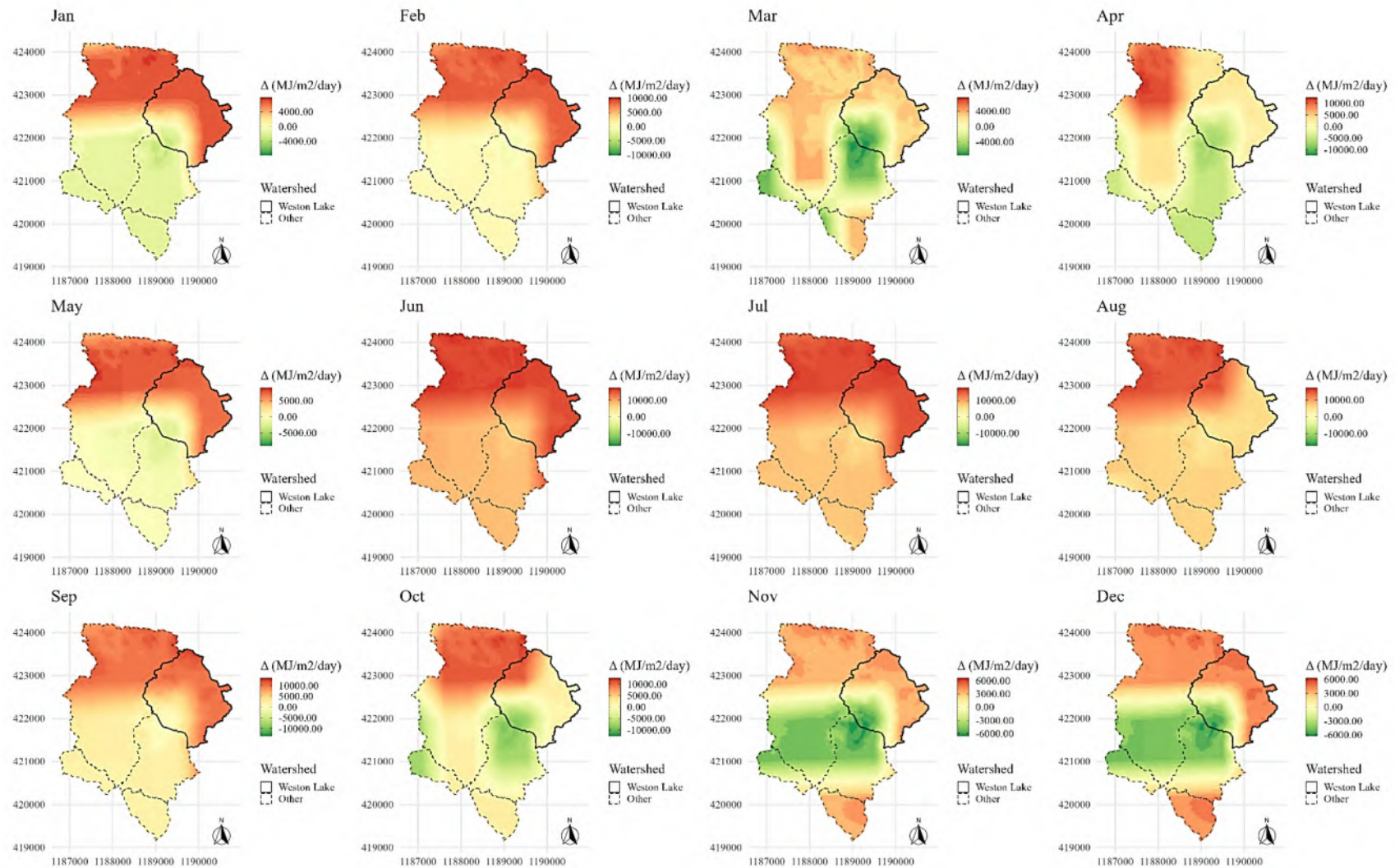


Figure 9: Monthly change in radiation between year 2070 and present normals, SSP 2.6

1.6.1.4 Available Moisture Surplus

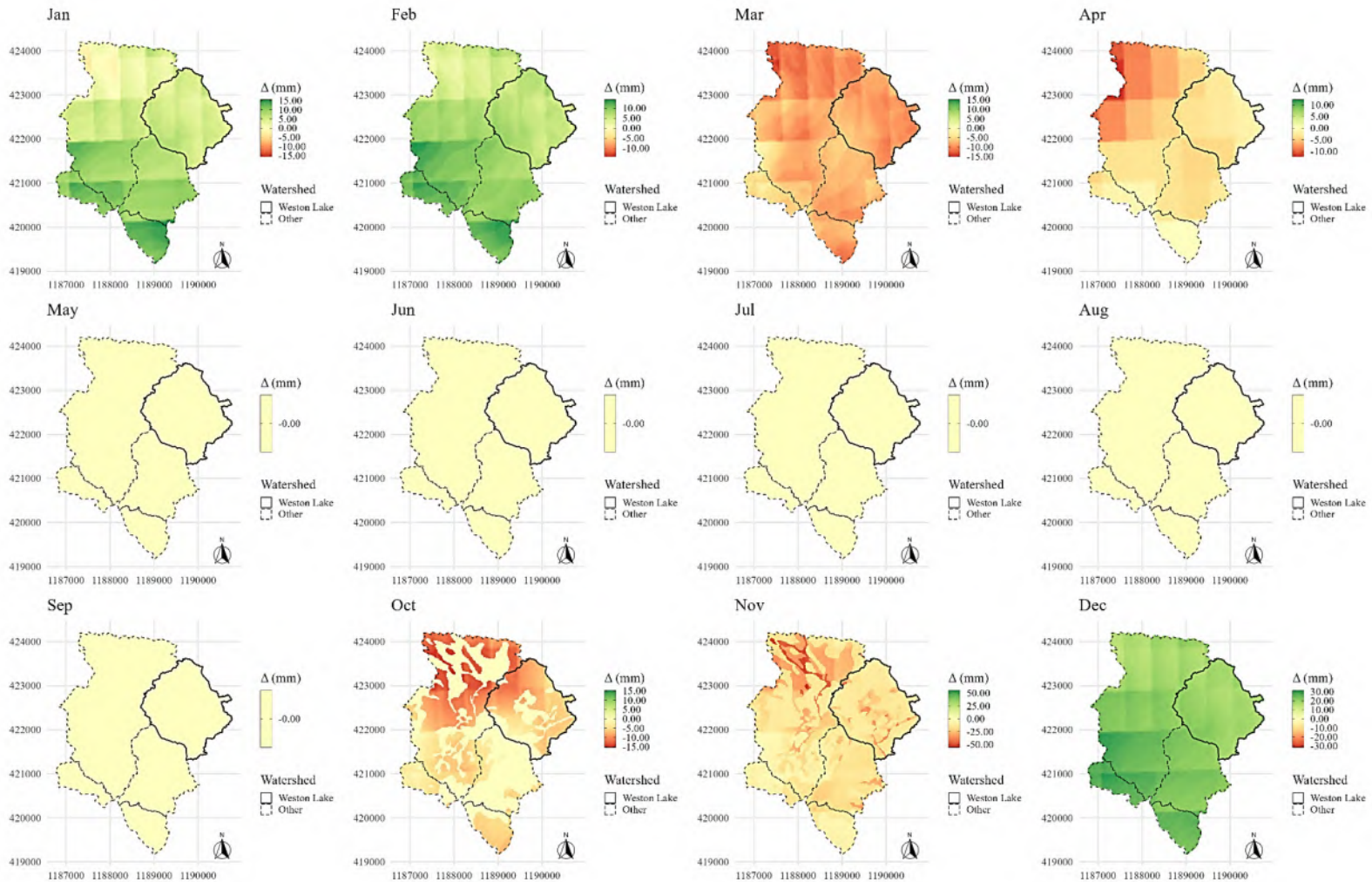


Figure 10: Monthly change in available moisture surplus between year 2030 and present normals, SSP 2.6

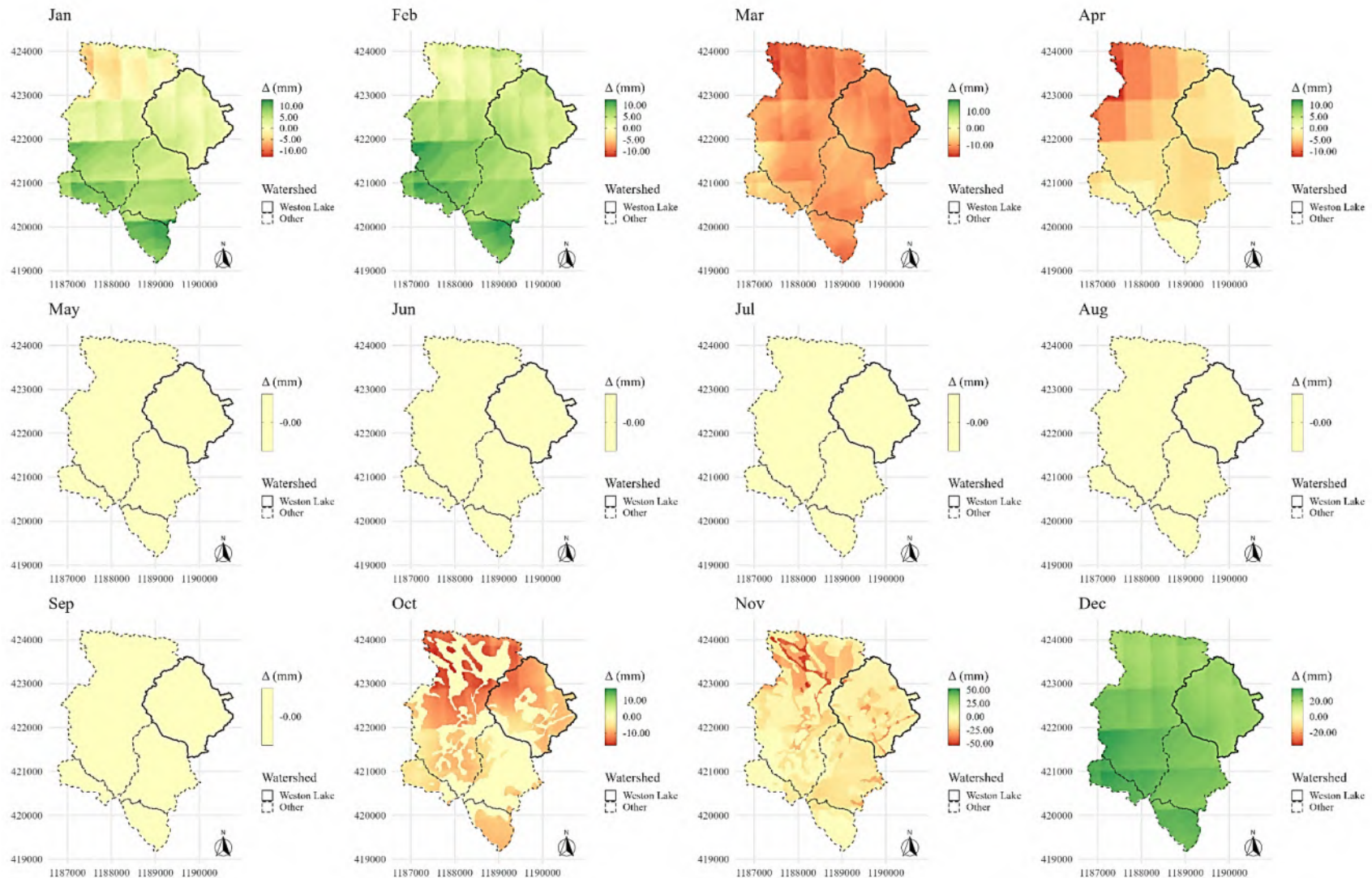


Figure 11: Monthly change in available moisture surplus between year 2050 and present normals, SSP 2.6

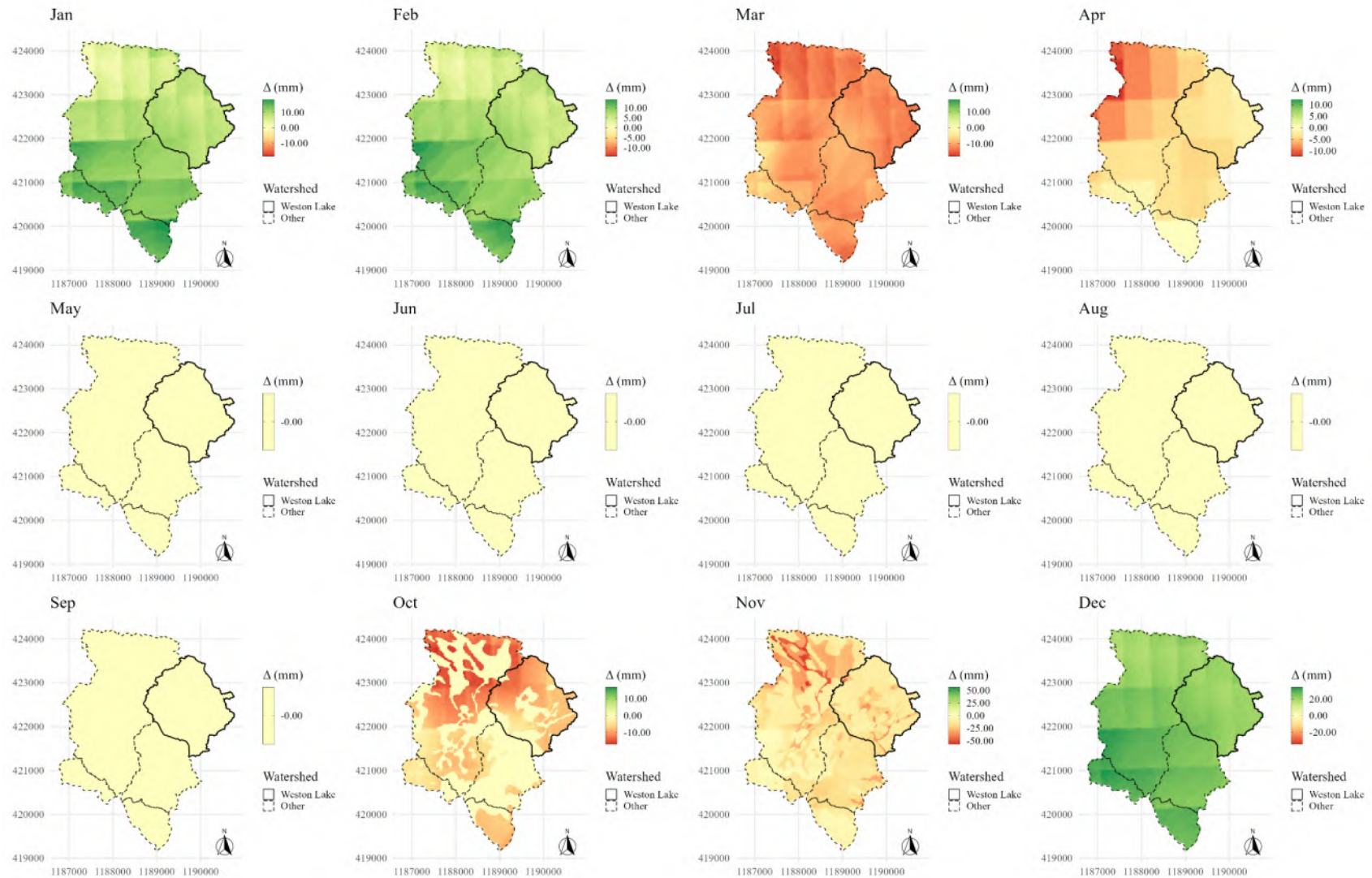


Figure 12: Monthly change in available moisture surplus between year 2070 and present normals, SSP 2.6

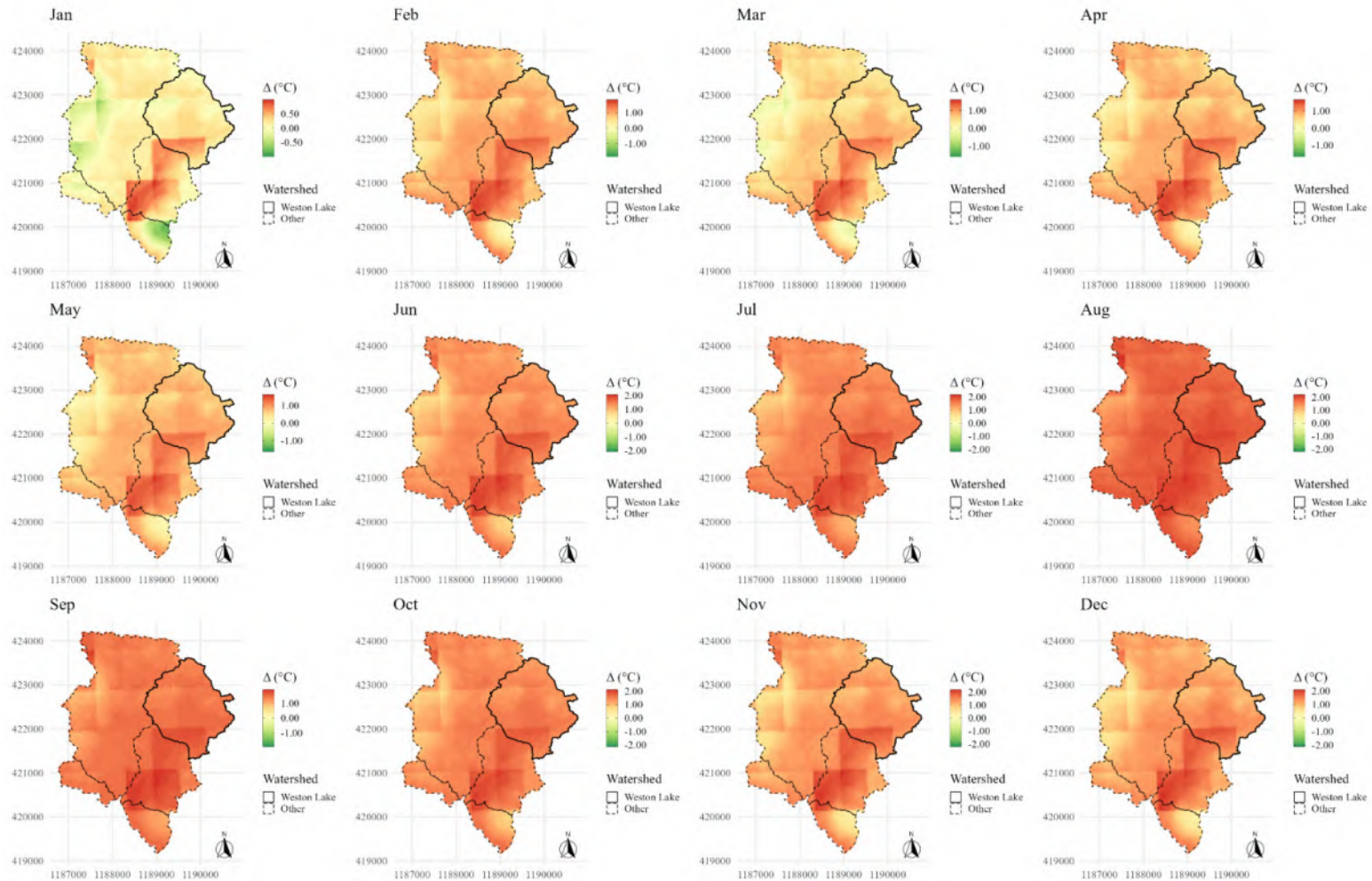
1.6.2 SSP 4.5**1.6.2.1 Average Temperature**

Figure 13: Monthly change in average temperature between year 2030 and present normals, SSP 4.5

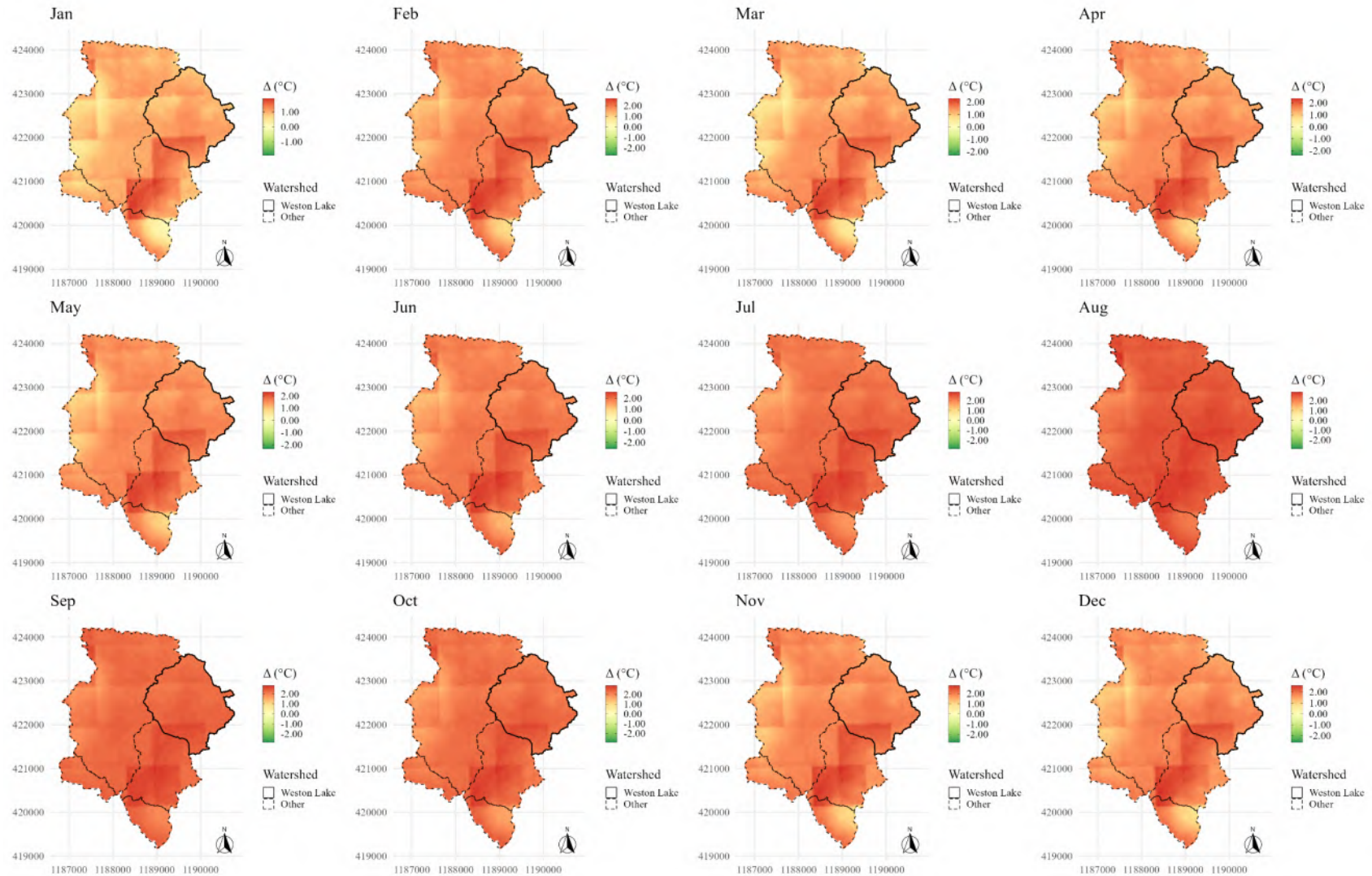


Figure 14: Monthly change in average temperature between year 2050 and present normals, SSP 4.5

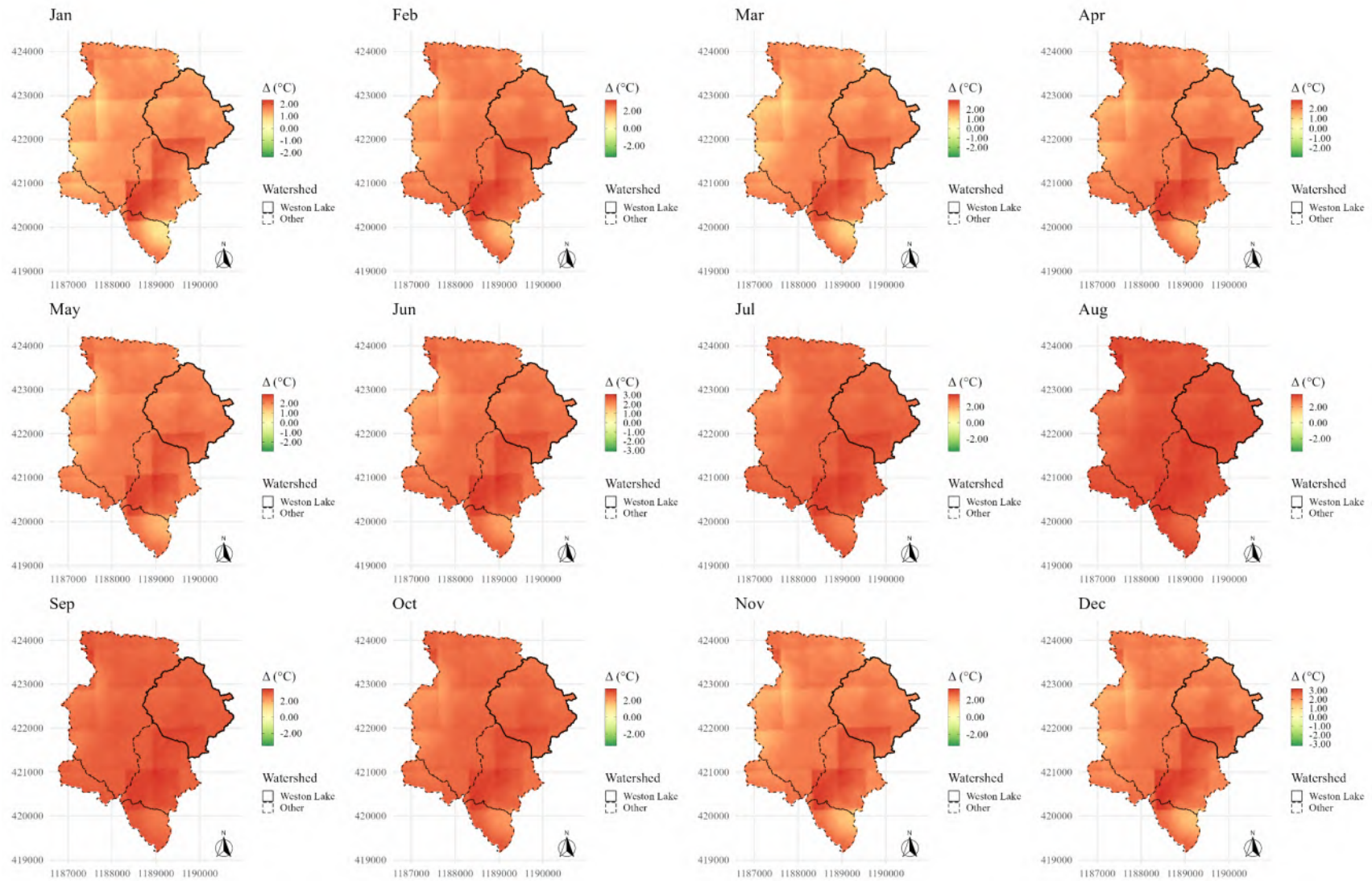


Figure 15: Monthly change in average temperature between year 2070 and present normals, SSP 4.5

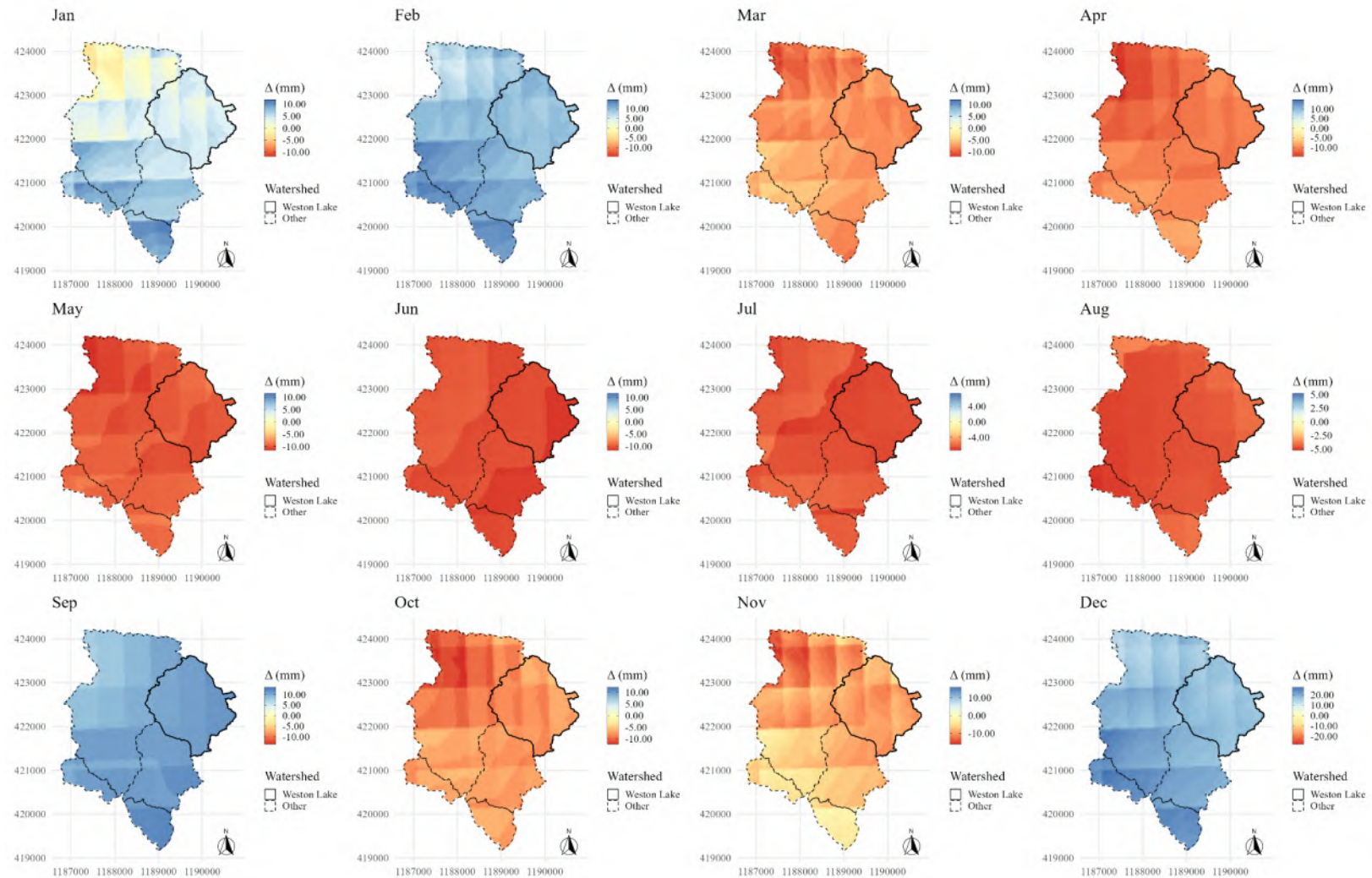
1.6.2.2 *Precipitation*

Figure 16: Monthly change in precipitation between year 2030 and present normals, SSP 4.5

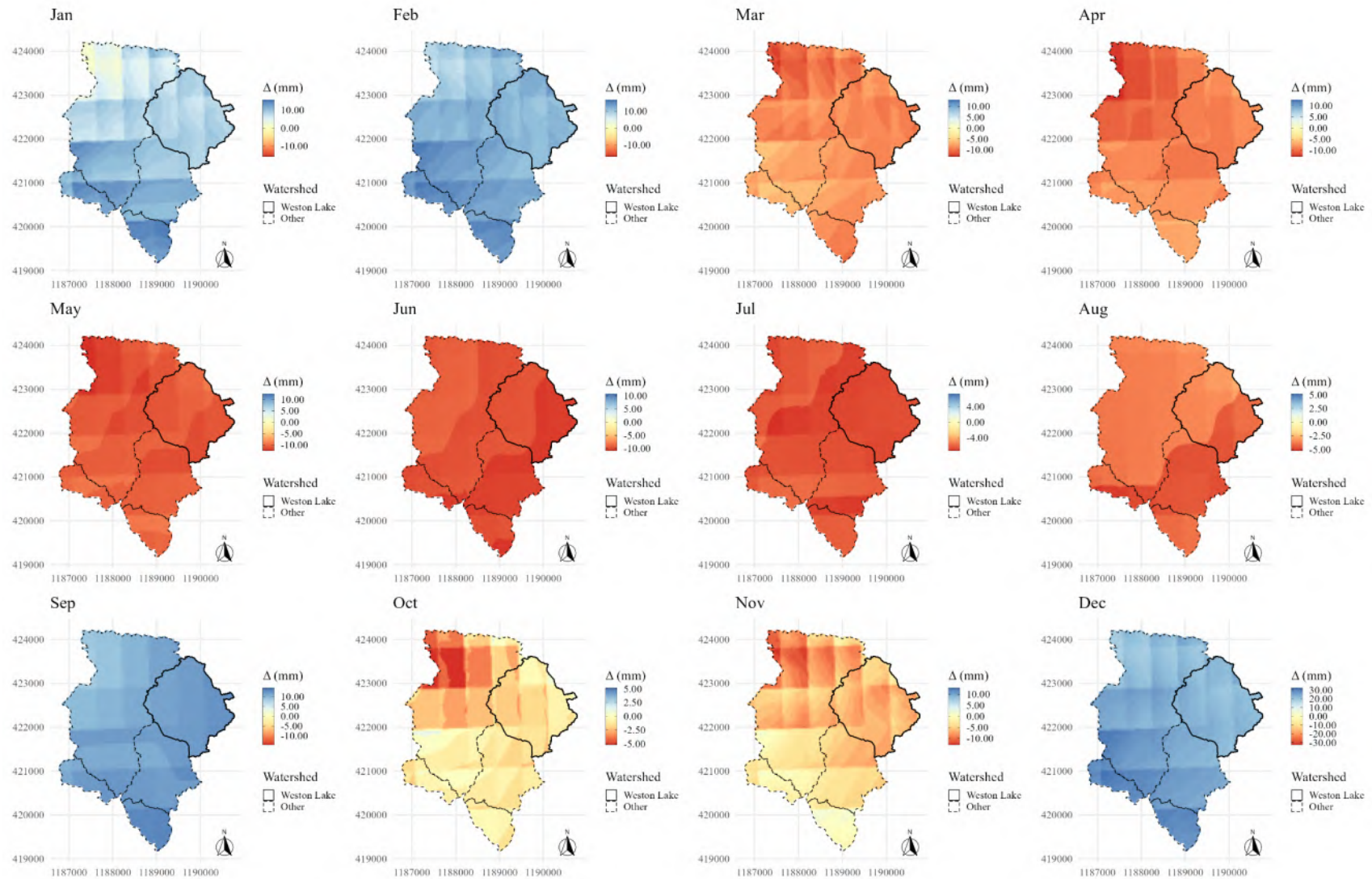


Figure 17: Monthly change in precipitation between year 2050 and present normals, SSP 4.5

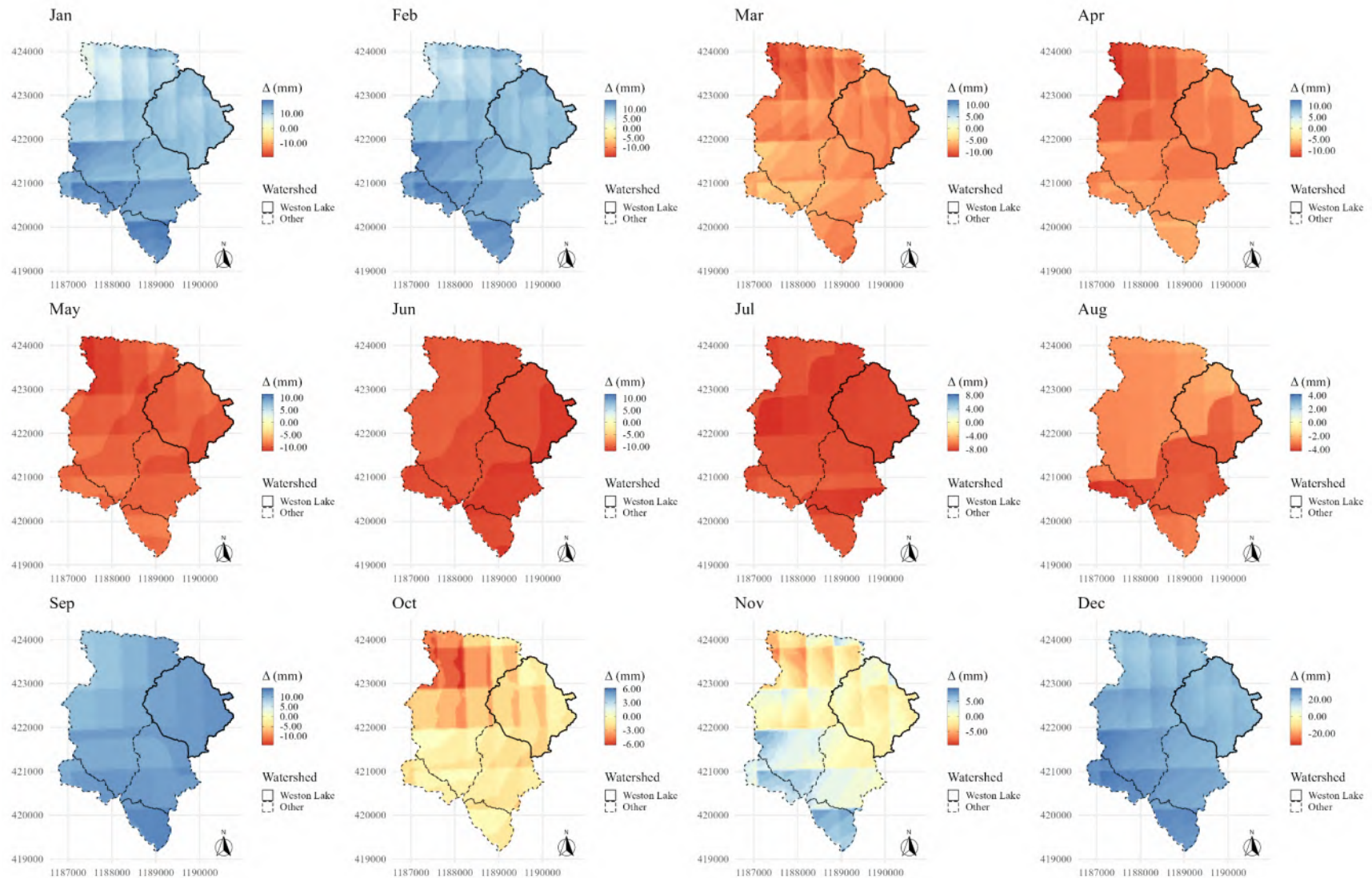


Figure 18: Monthly change in precipitation between year 2070 and present normals, SSP 4.5

1.6.2.3 Solar Radiation

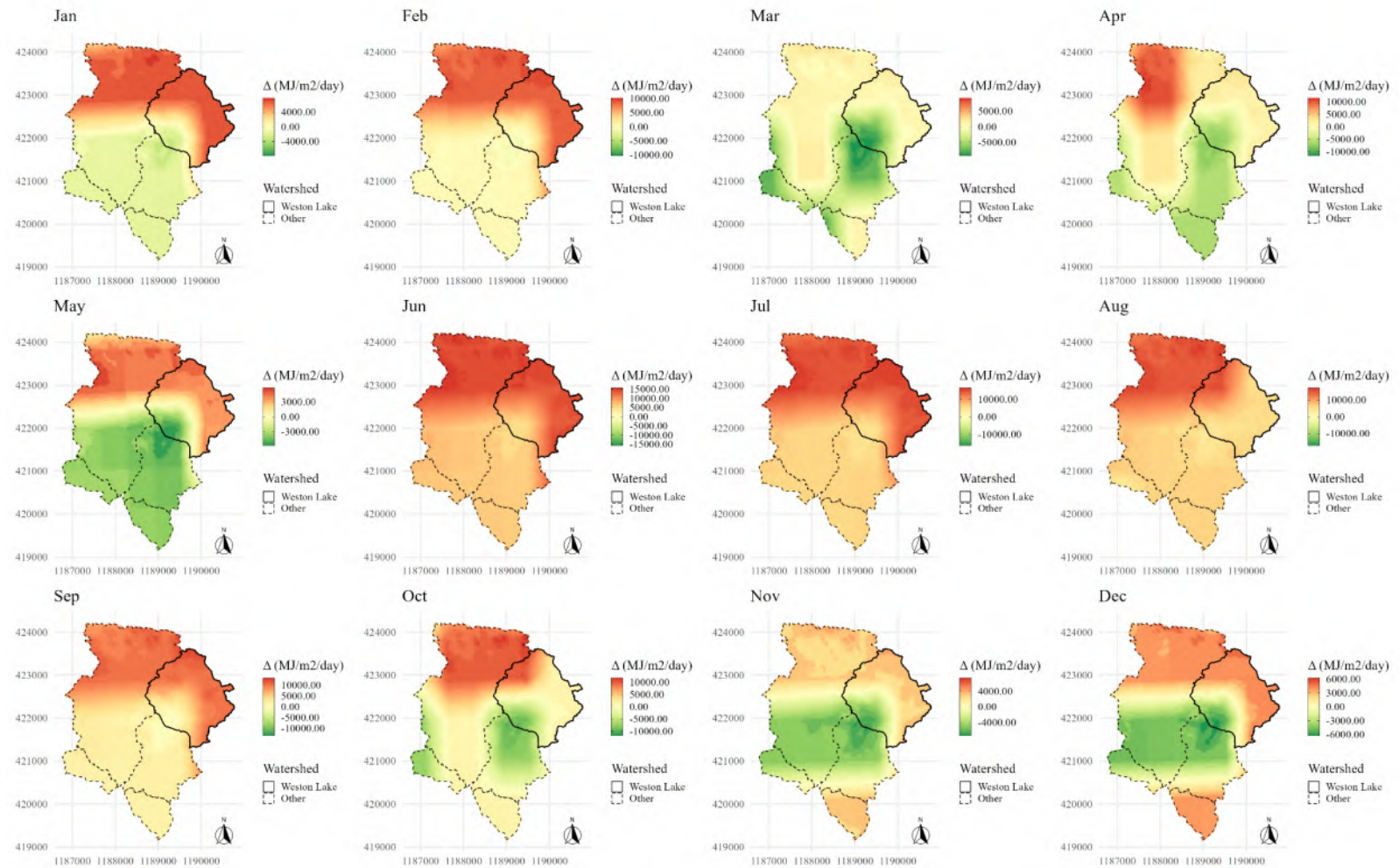


Figure 19: Monthly change in radiation between year 2030 and present normals, SSP 4.5

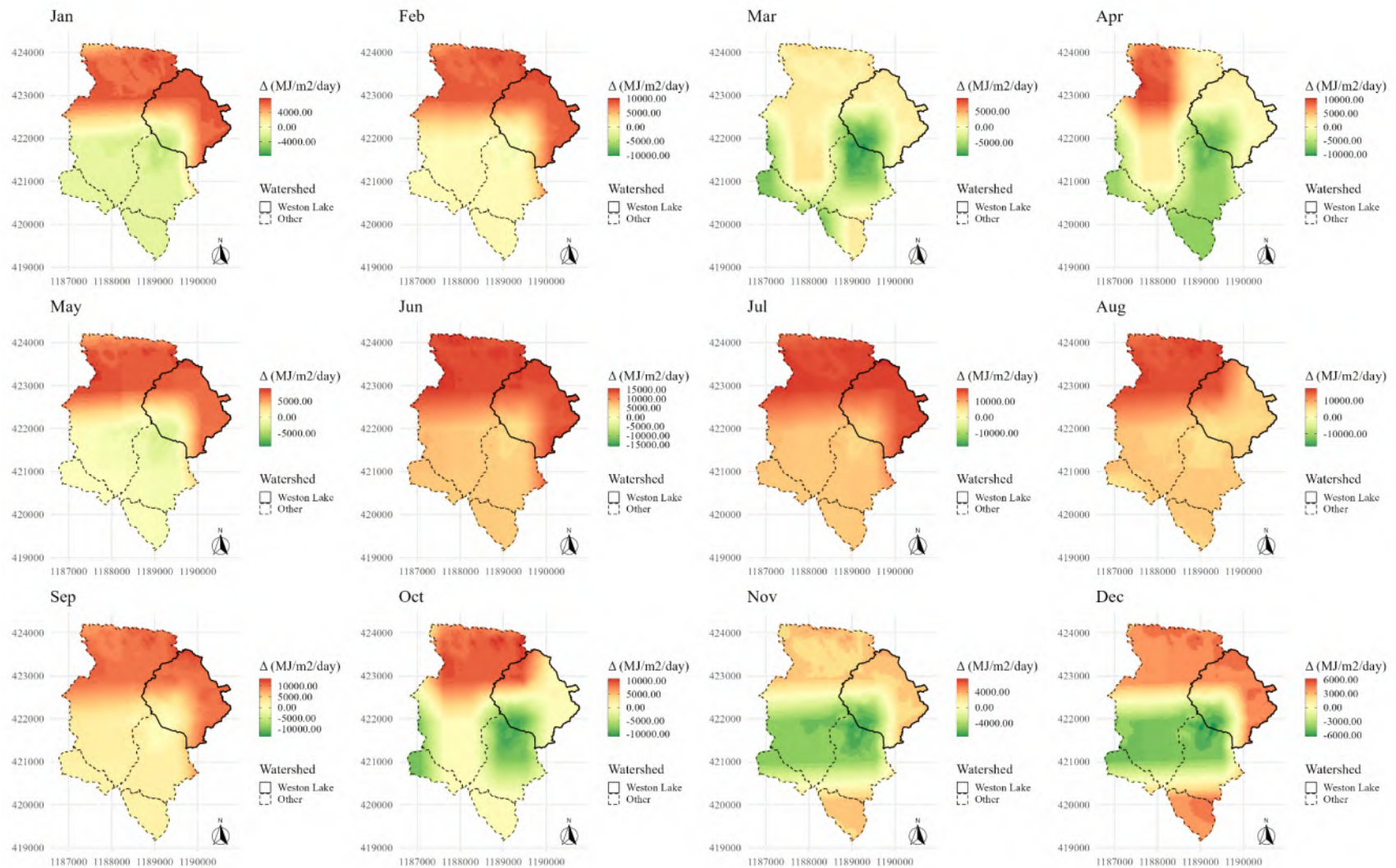


Figure 20: Monthly change in radiation between year 2050 and present normals, SSP 4.5

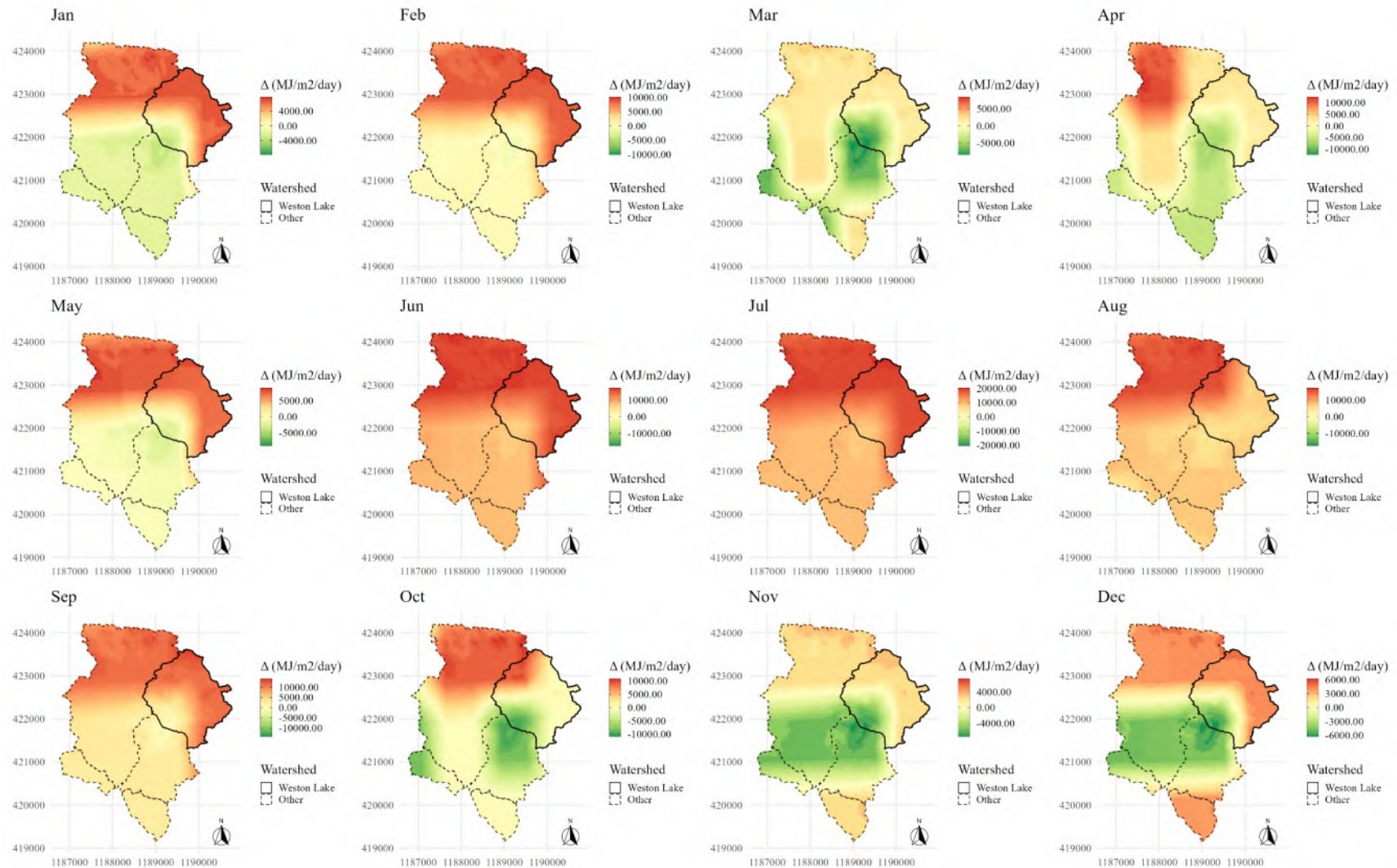


Figure 21: Monthly change in radiation between year 2070 and present normals, SSP 4.5

1.6.2.4 Available Moisture Surplus

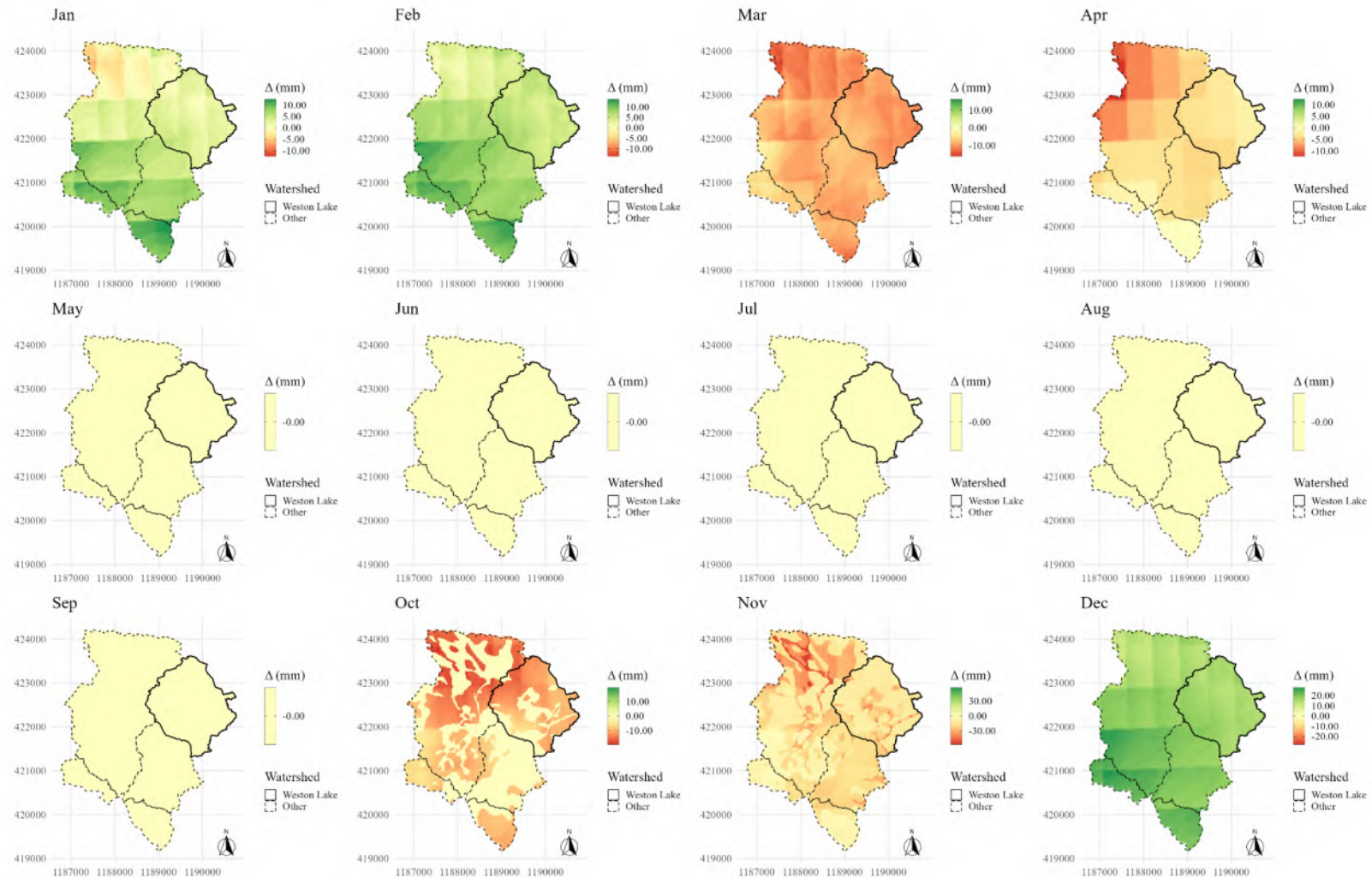


Figure 22: Monthly change in available moisture surplus between year 2030 and present normals, SSP 4.5

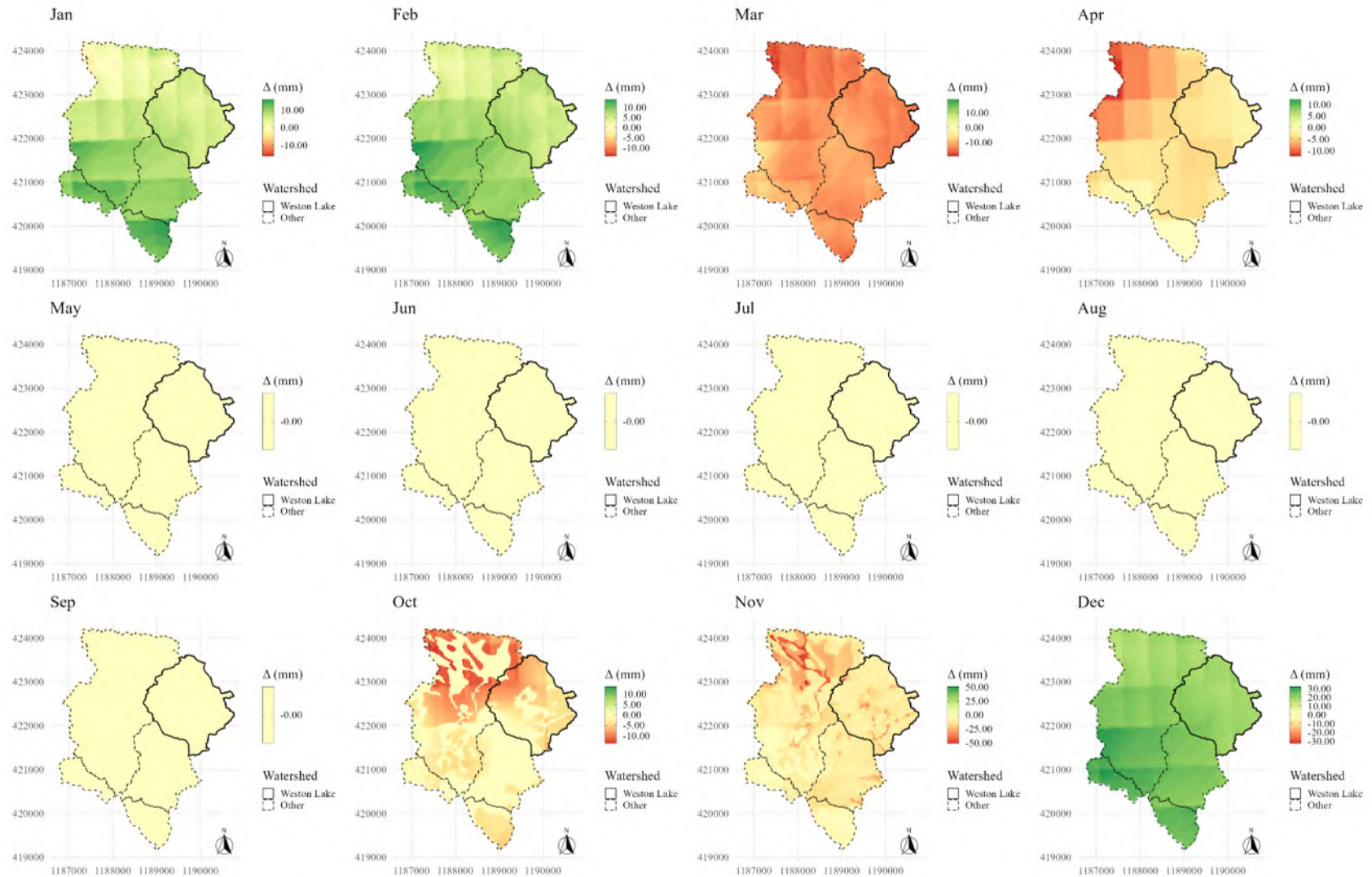


Figure 23: Monthly change in available moisture surplus between year 2050 and present normals, SSP 4.5

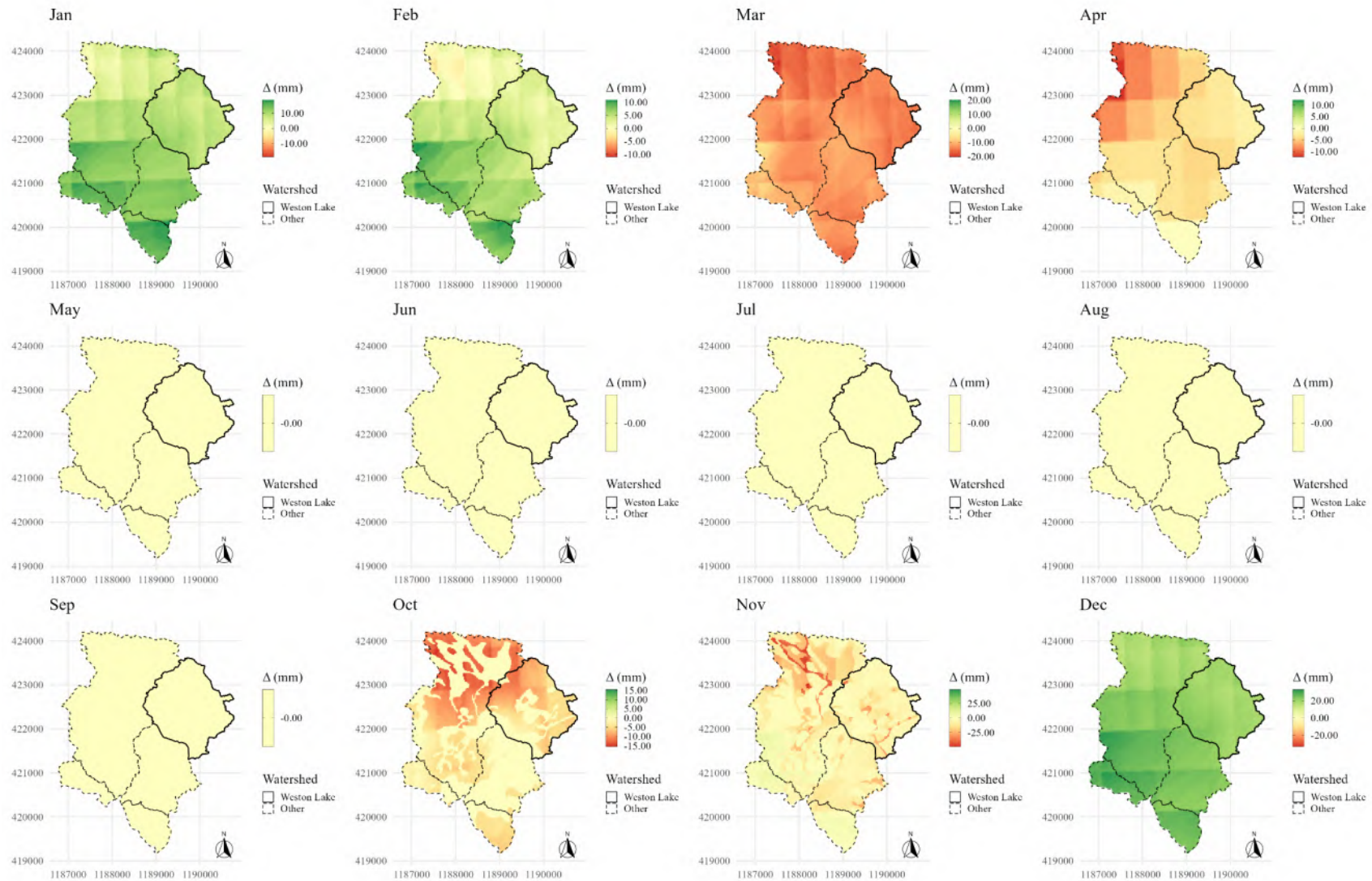


Figure 24: Monthly change in available moisture surplus between year 2070 and present normals, SSP 4.5

1.6.3 SSP 7.0

1.6.3.1 Average Temperature

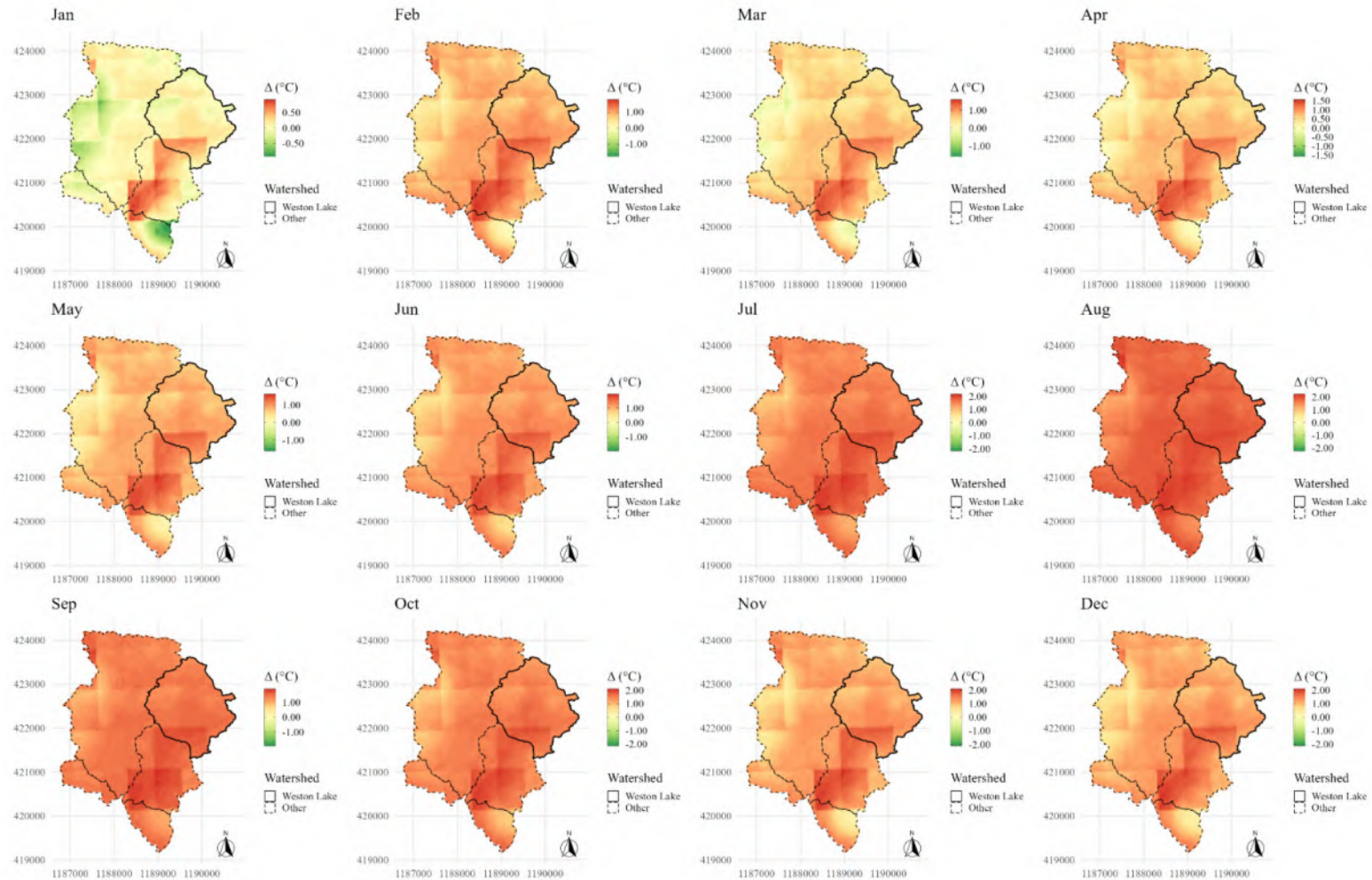


Figure 25: Monthly change in average temperature between year 2030 and present normals, SSP 7.0

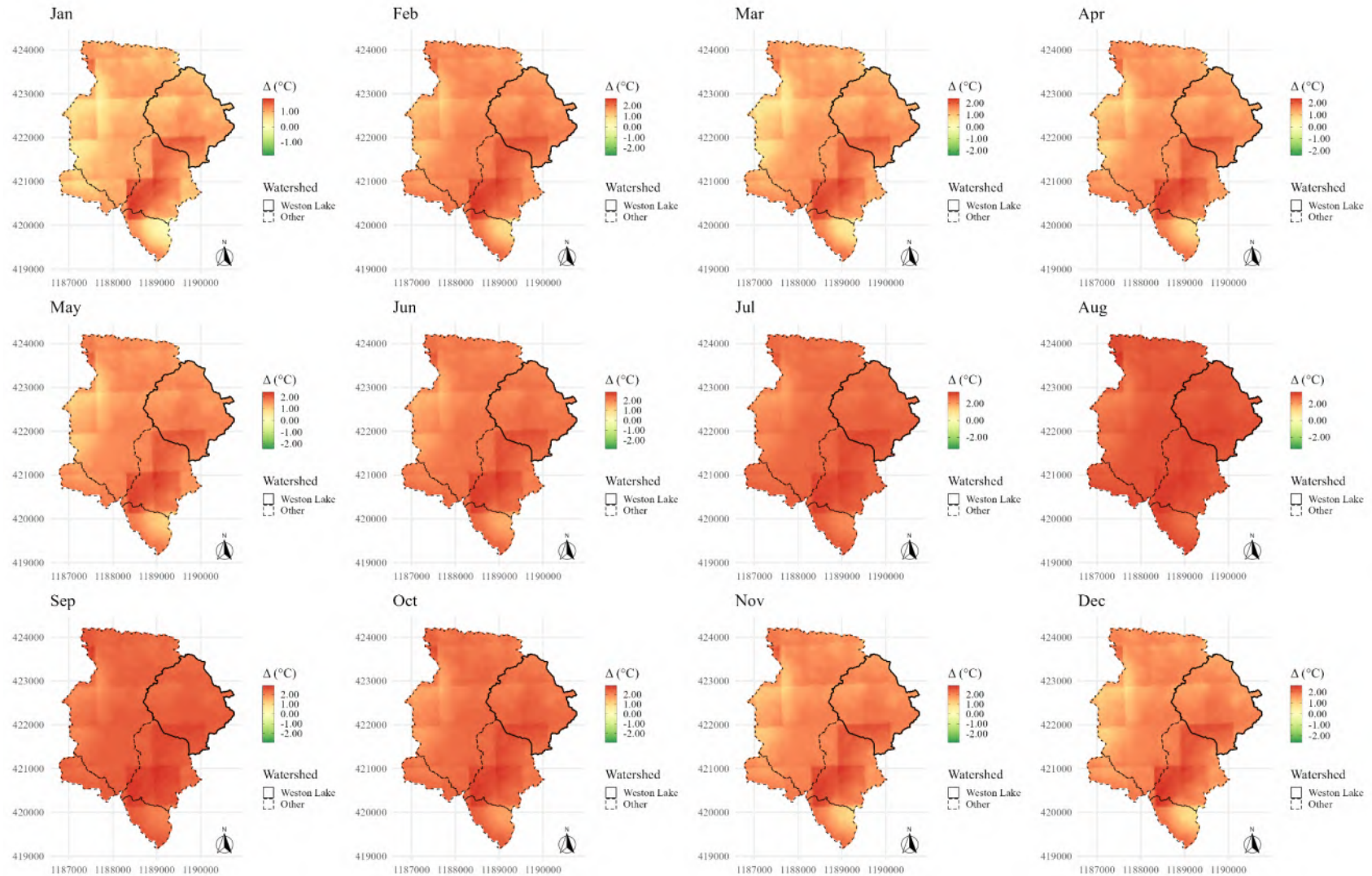


Figure 26: Monthly change in average temperature between year 2050 and present normals, SSP 7.0

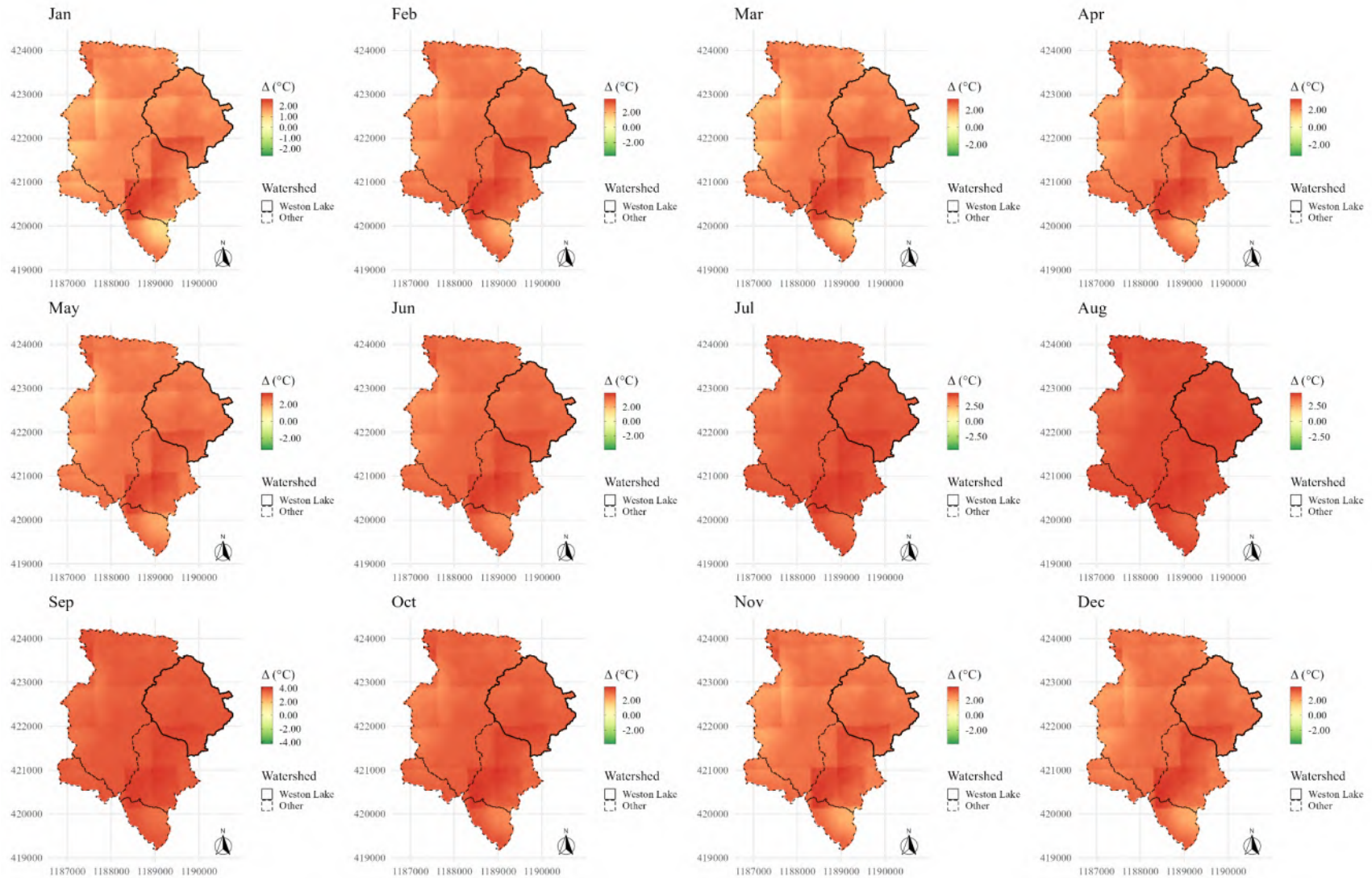


Figure 27: Monthly change in average temperature between year 2070 and present normals, SSP 7.0

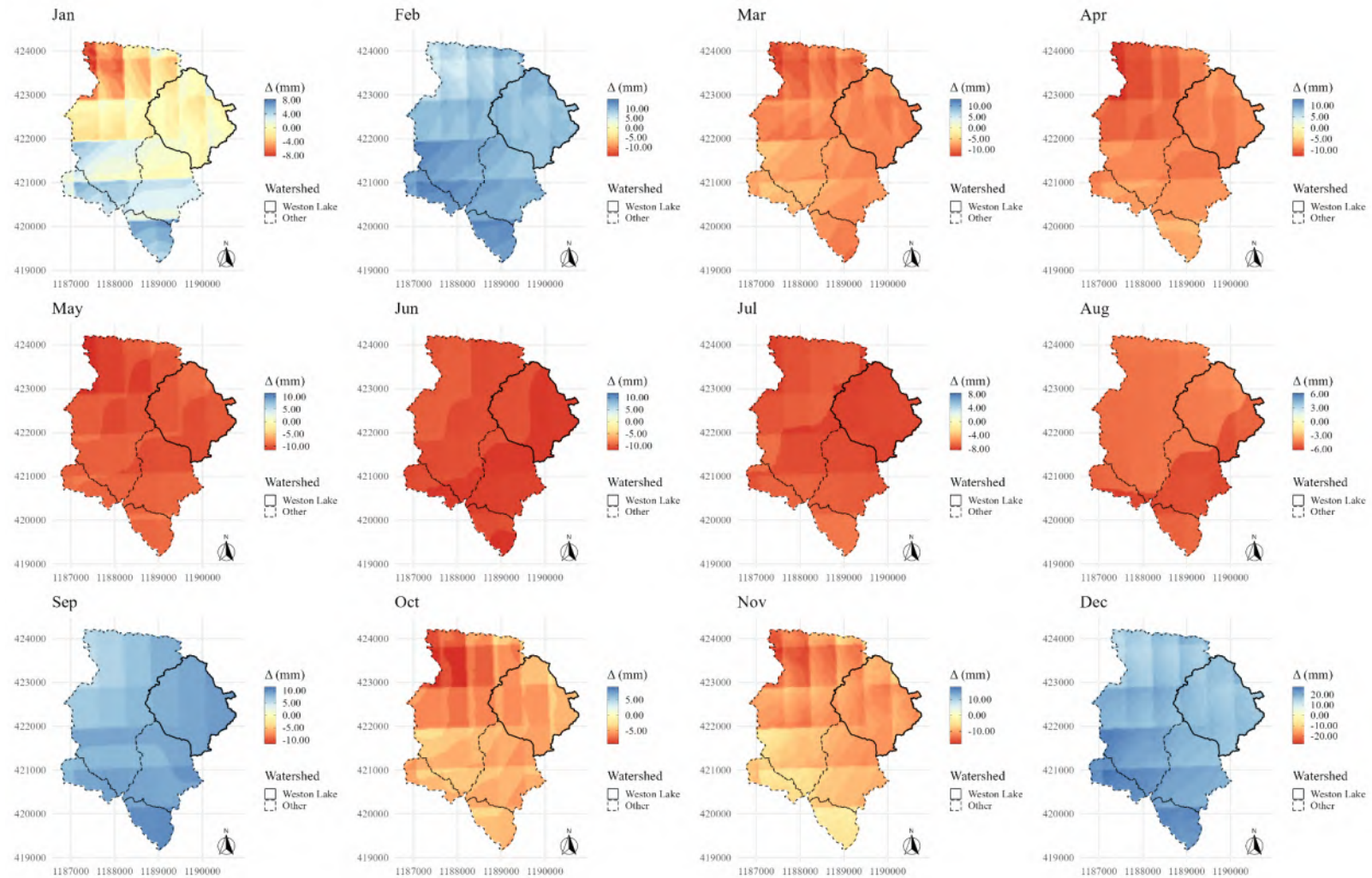
1.6.3.2 *Precipitation*

Figure 28: Monthly change in precipitation between year 2030 and present normals, SSP 7.0

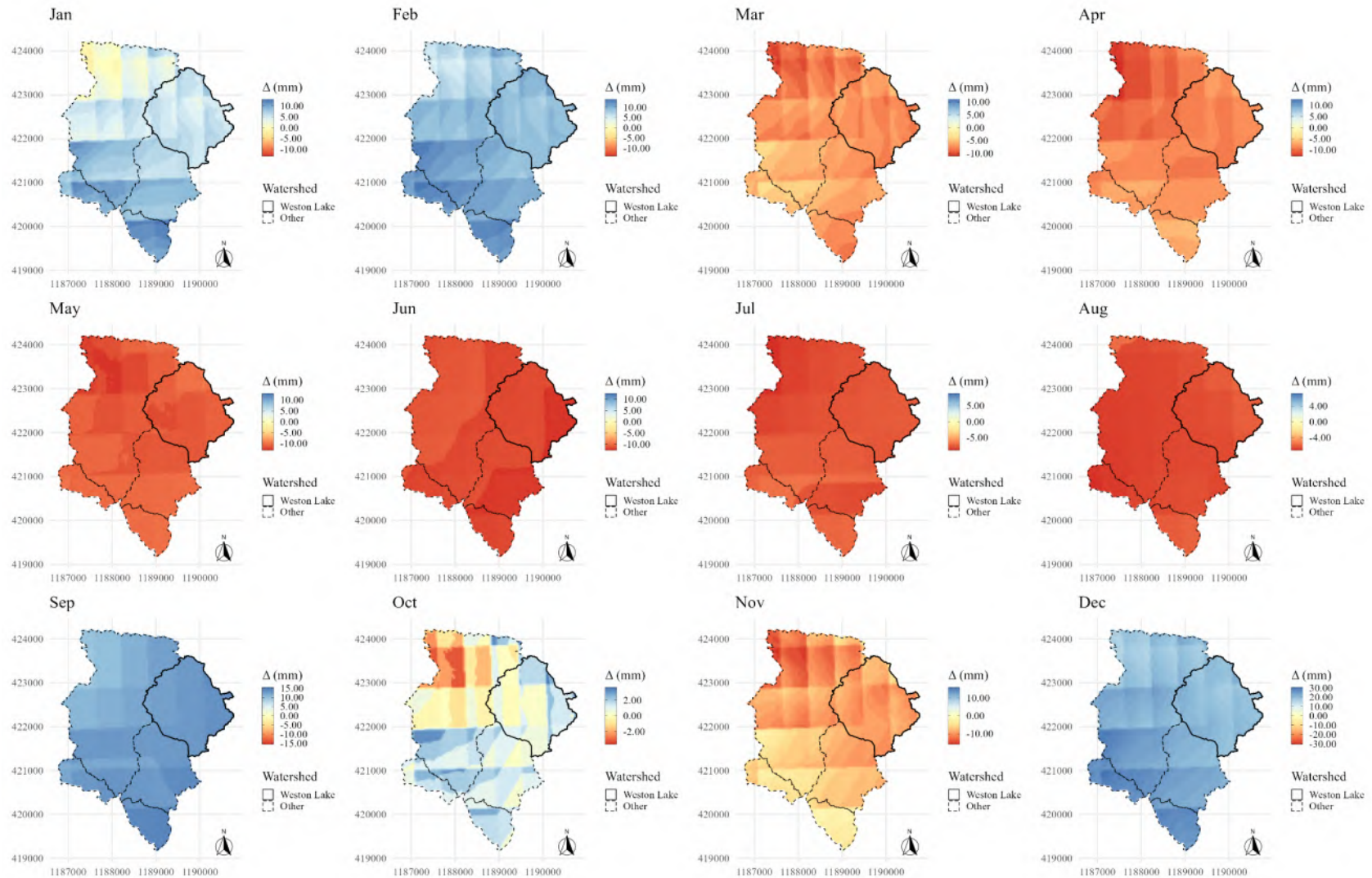


Figure 29: Monthly change in precipitation between year 2050 and present normals, SSP 7.0

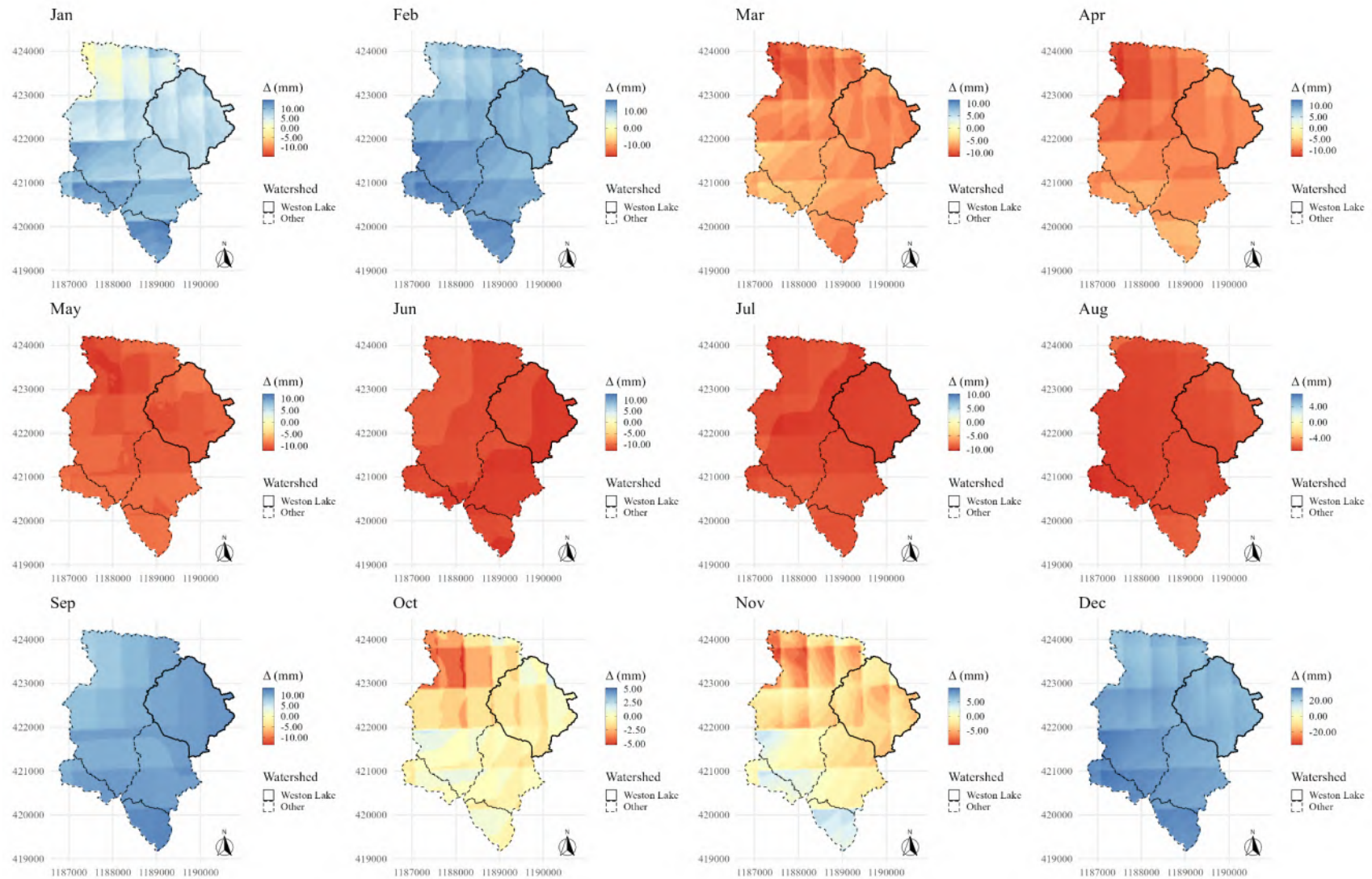


Figure 30: Monthly change in precipitation between year 2070 and present normals, SSP 7.0

1.6.3.3 Solar Radiation

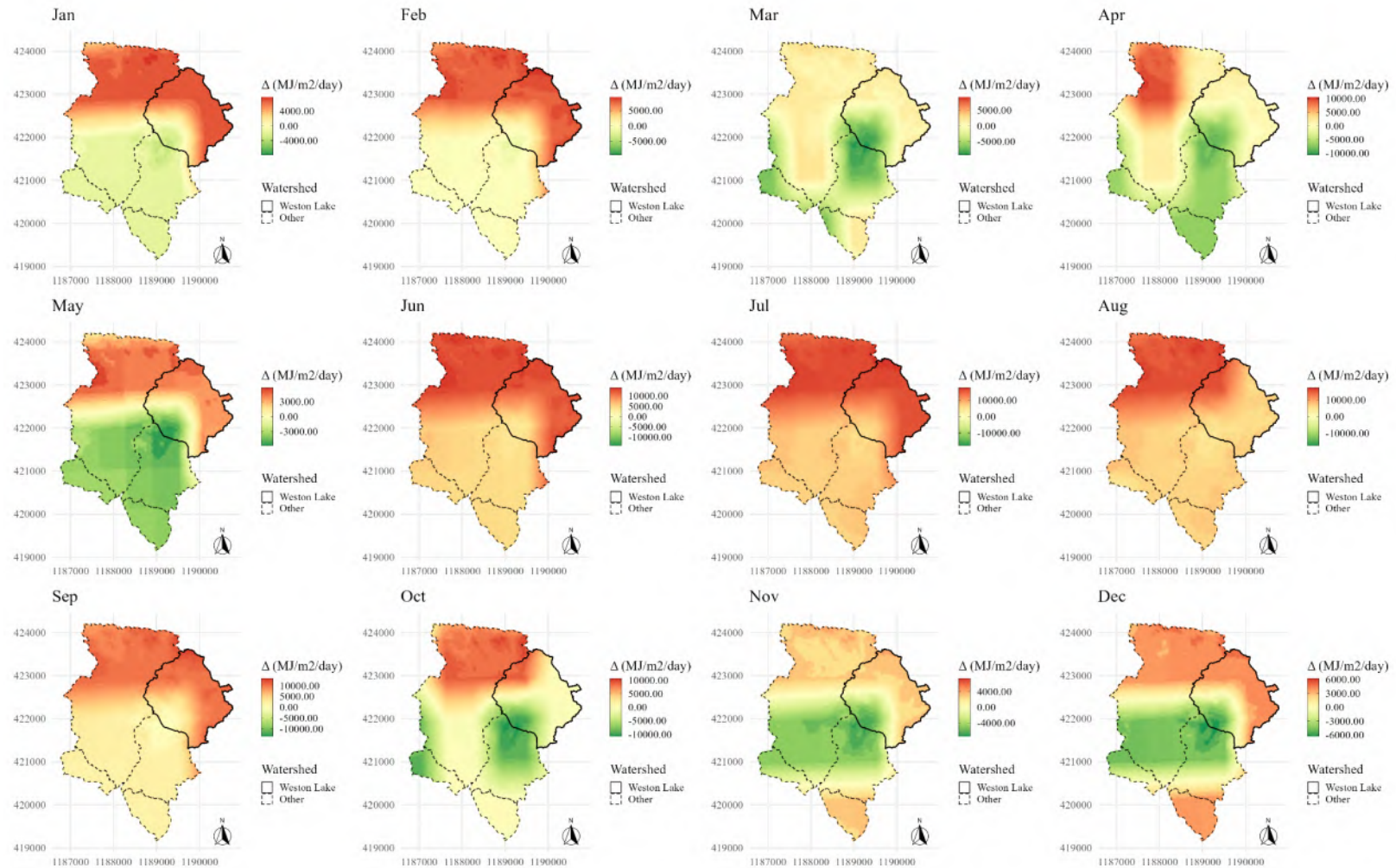


Figure 31: Monthly change in radiation between year 2030 and present normals, SSP 7.0

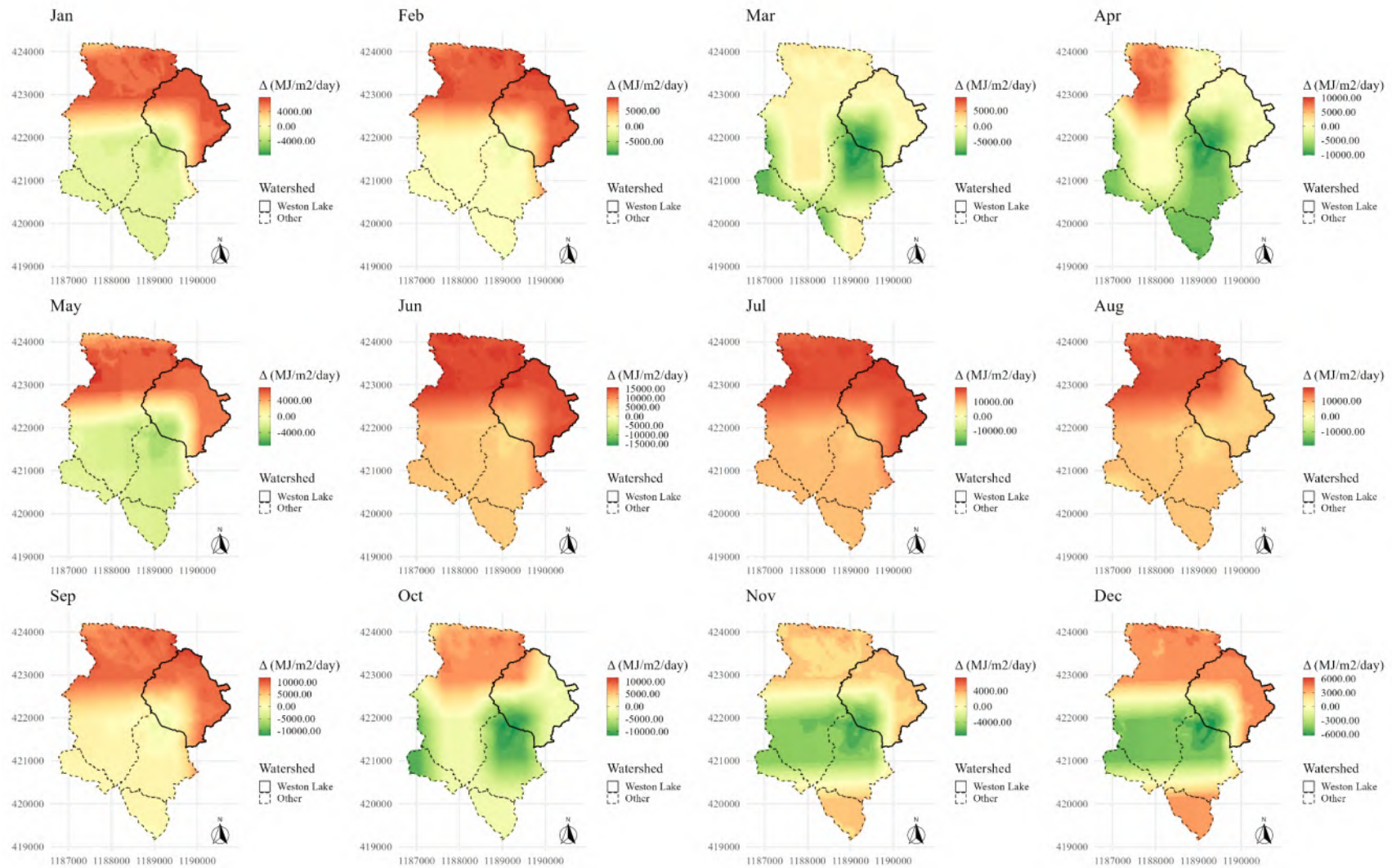


Figure 32: Monthly change in radiation between year 2050 and present normals, SSP 7.0

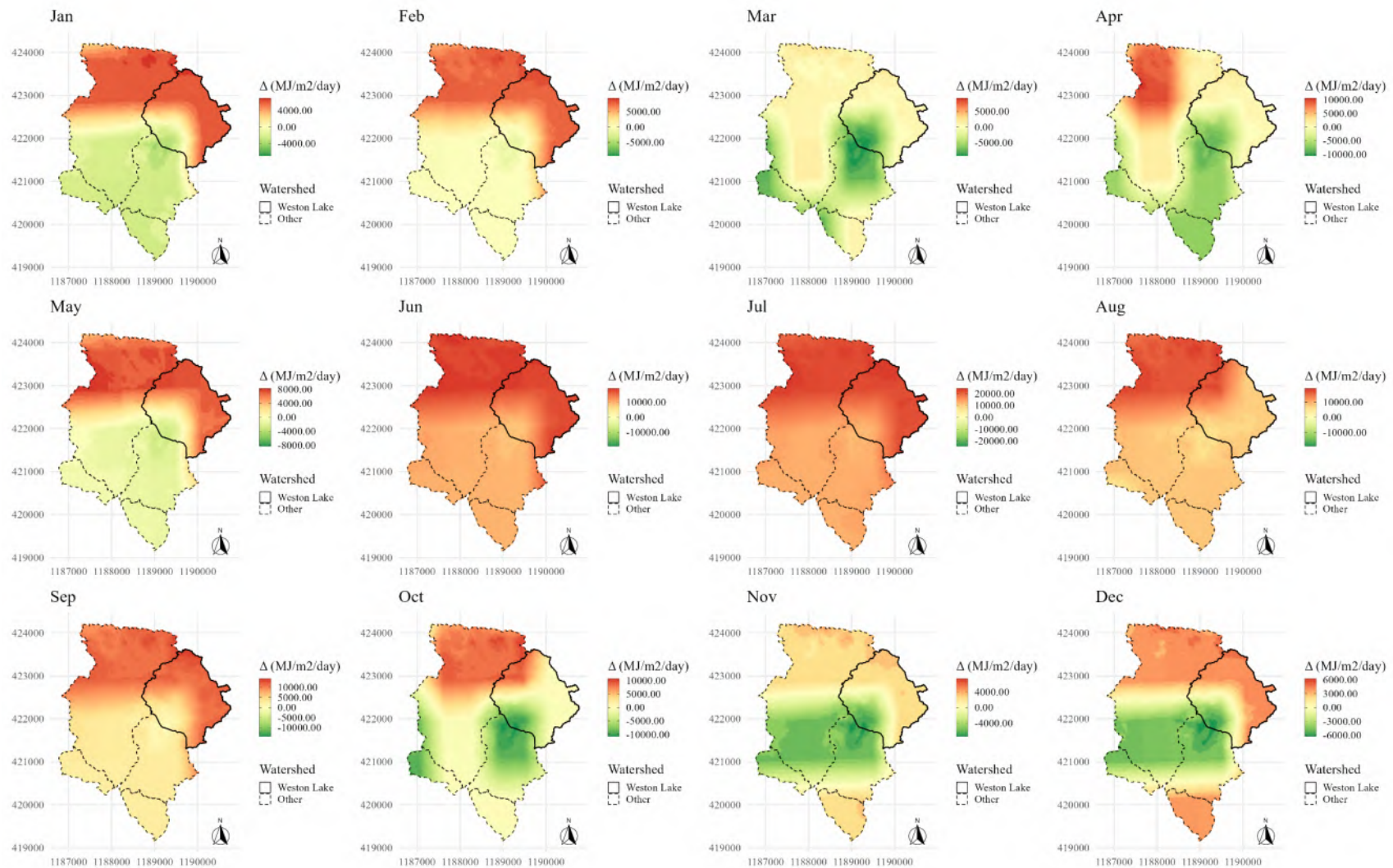


Figure 33: Monthly change in radiation between year 2070 and present normals, SSP 7.0

1.6.3.4 Available Moisture Surplus

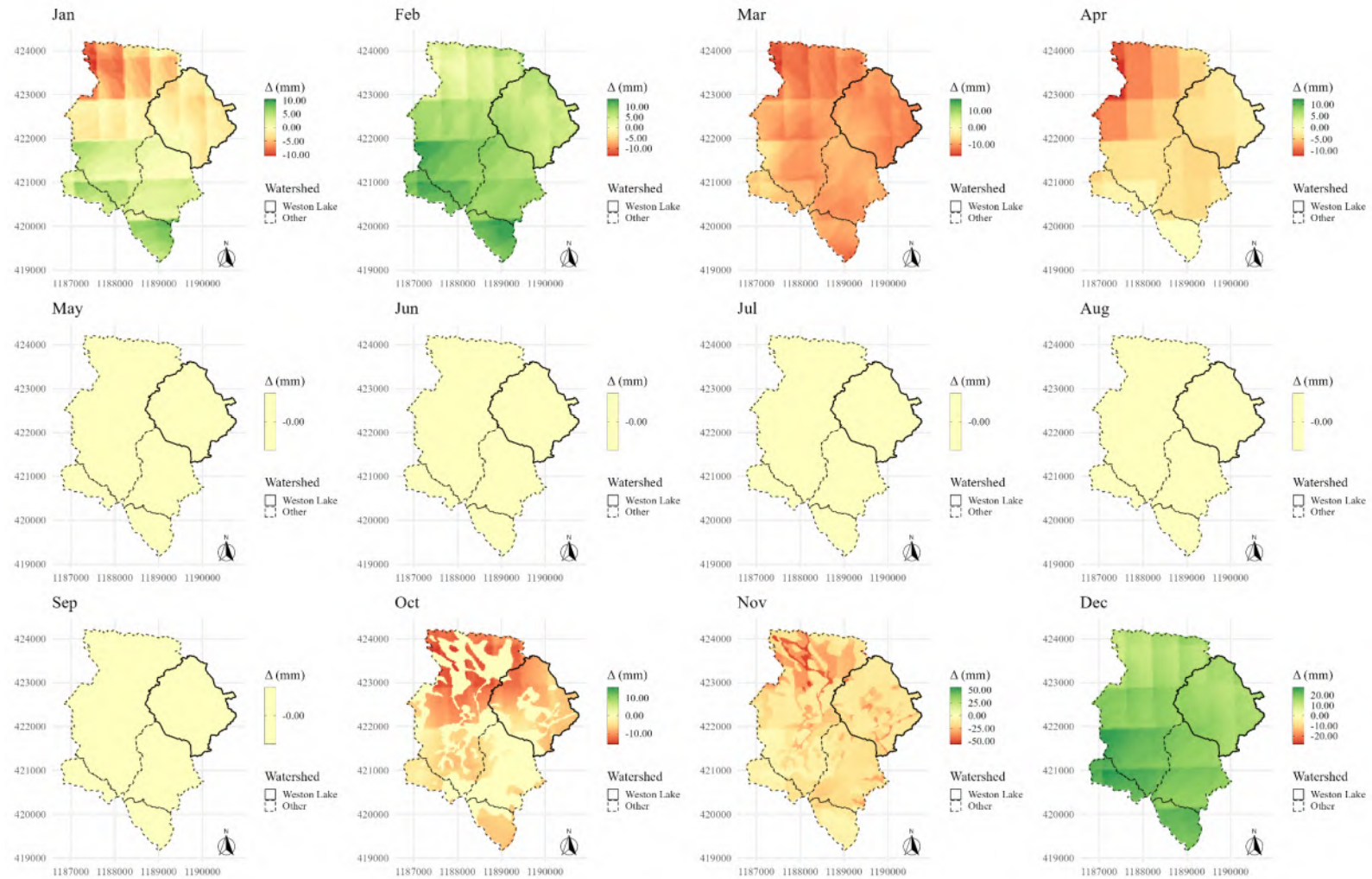


Figure 34: Monthly change in available water surplus between year 2030 and present normals, SSP 7.0

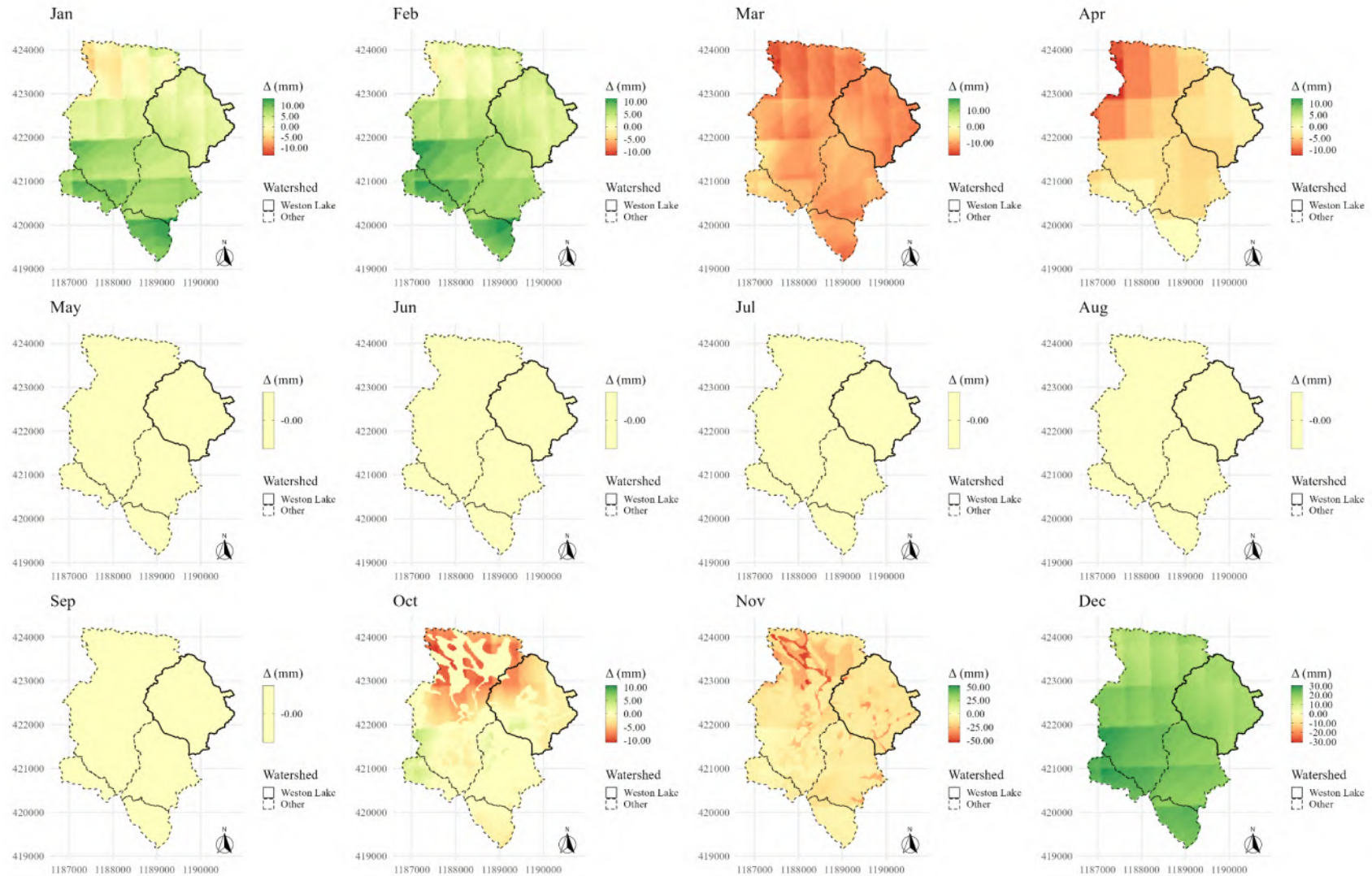


Figure 35: Monthly change in available water surplus between year 2050 and present normals, SSP 7.0

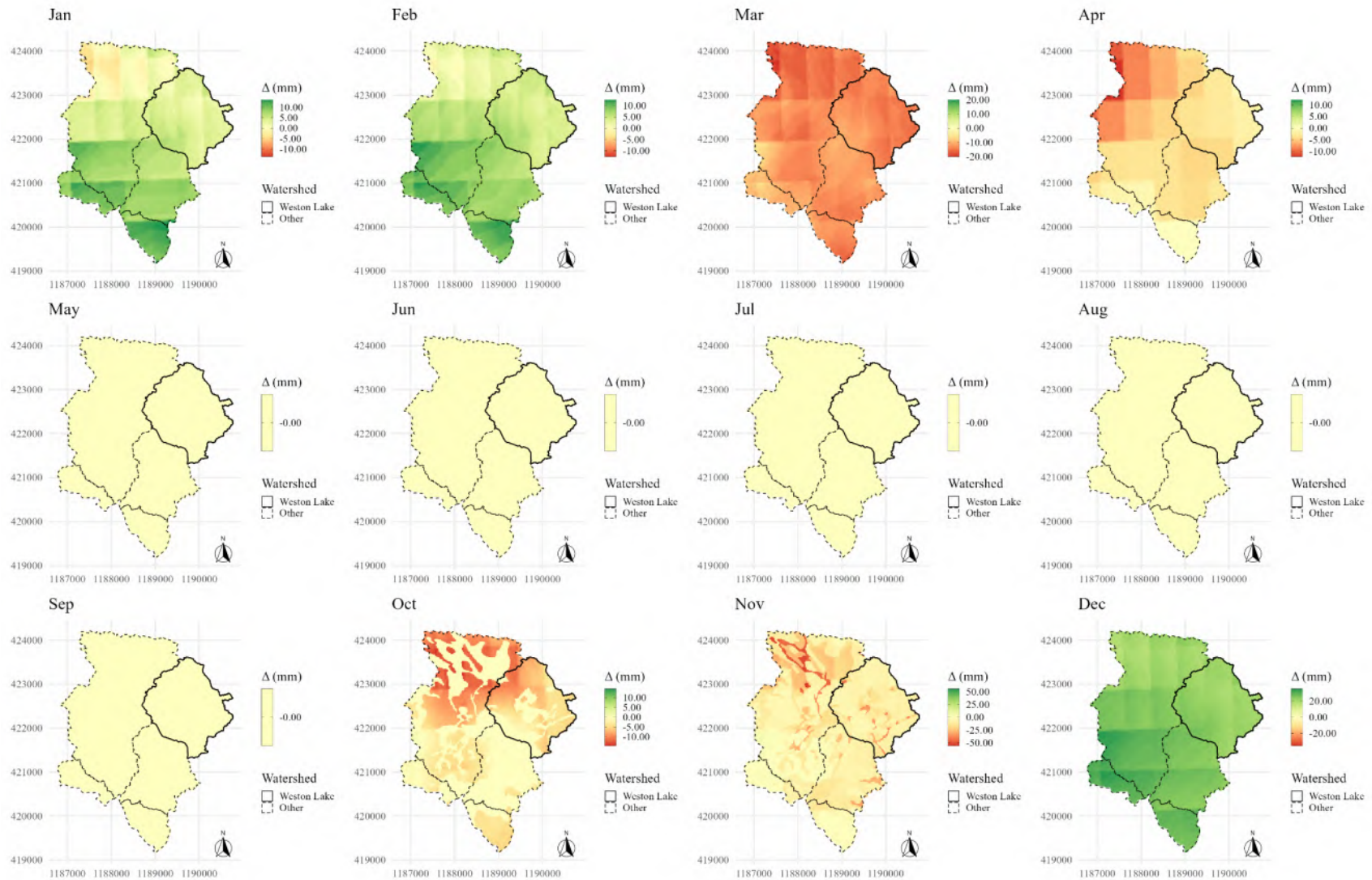


Figure 36: Monthly change in available water surplus between year 2070 and present normals, SSP 7.0

1.6.4 SSP 8.5

1.6.4.1 Average Temperature

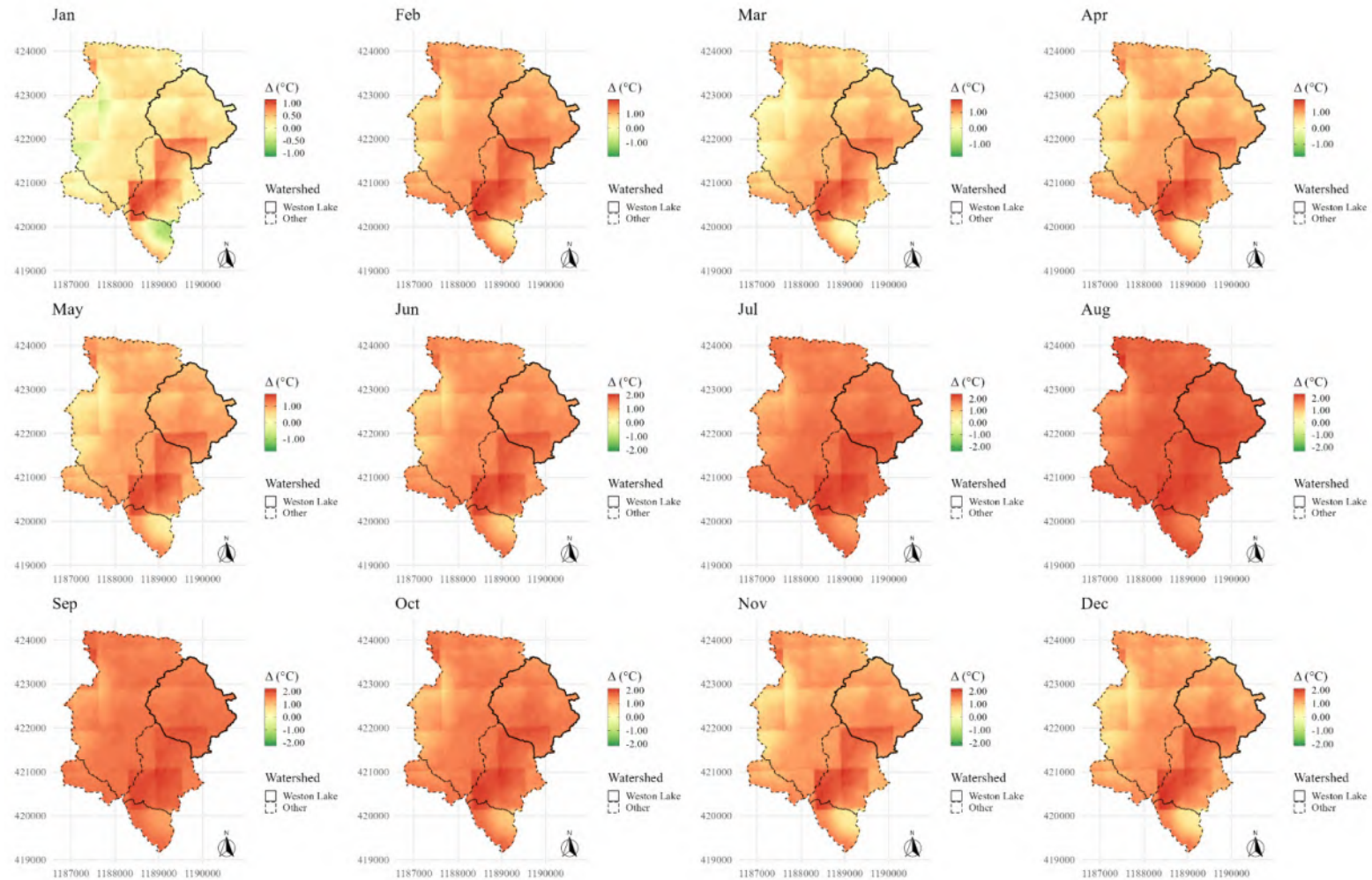


Figure 37: Monthly change in average temperature between year 2030 and present normals, SSP 8.5

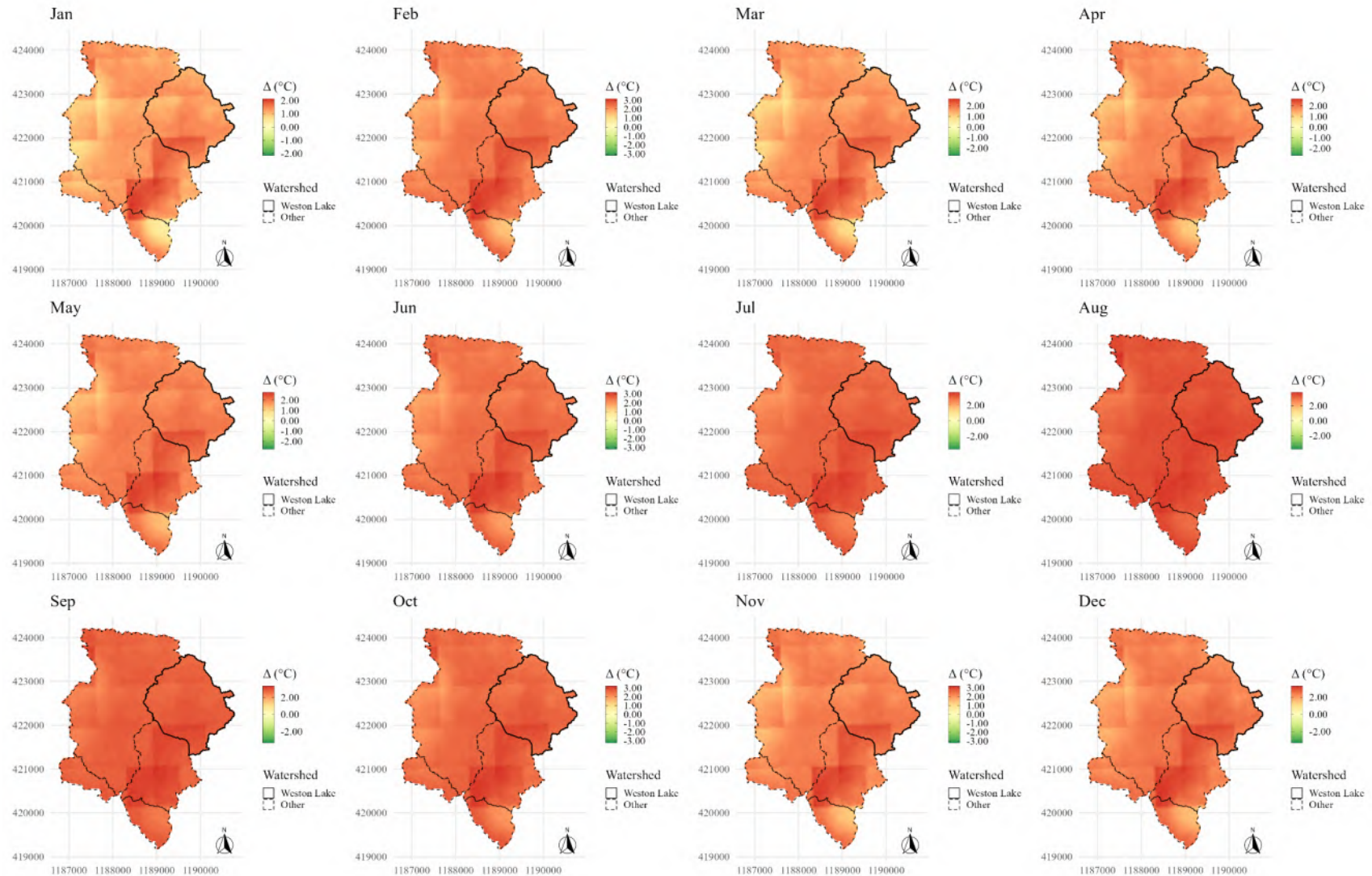


Figure 38: Monthly change in average temperature between year 2050 and present normals, SSP 8.5

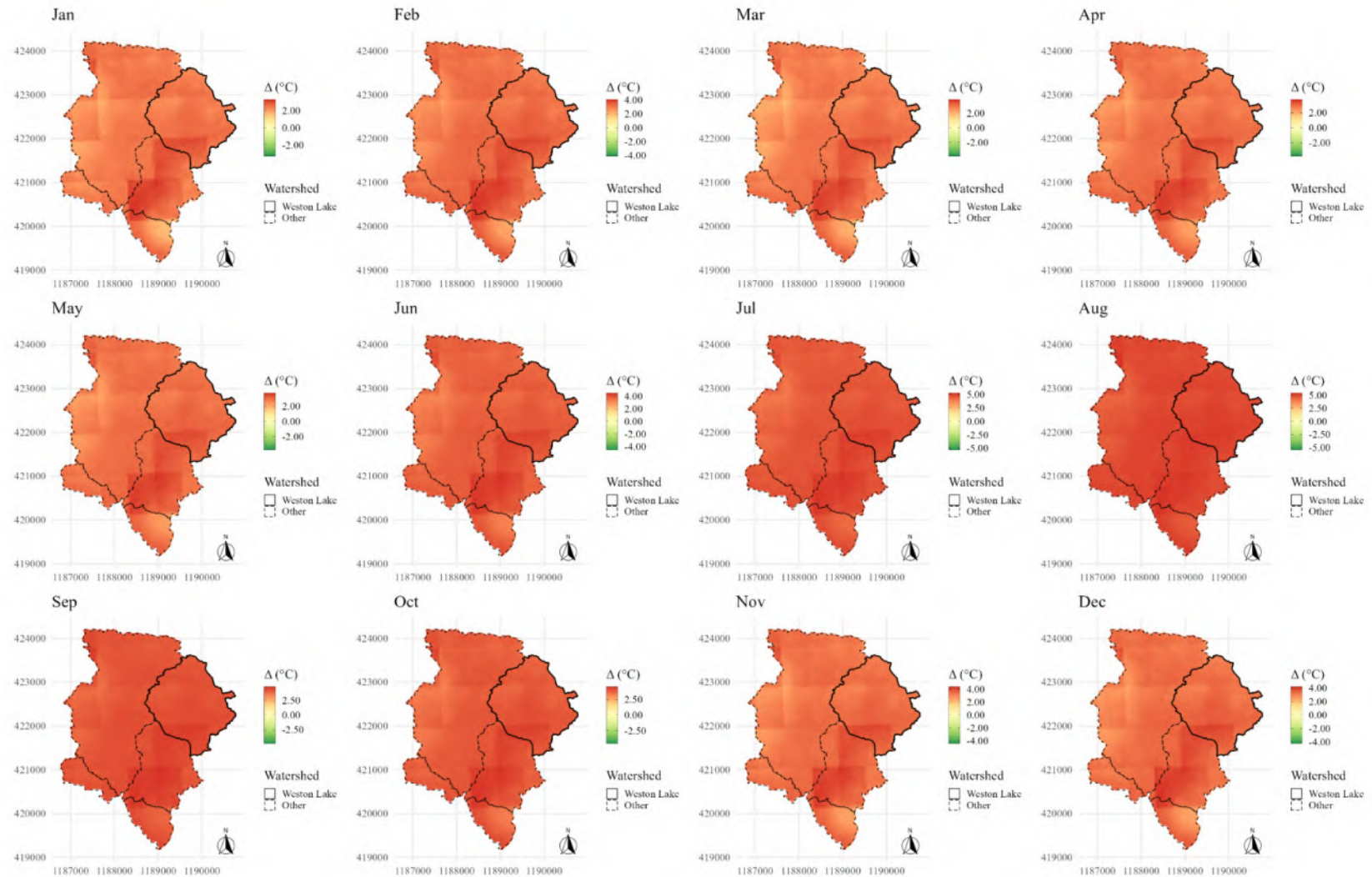


Figure 39: Monthly change in average temperature between year 2070 and present normals, SSP 8.5

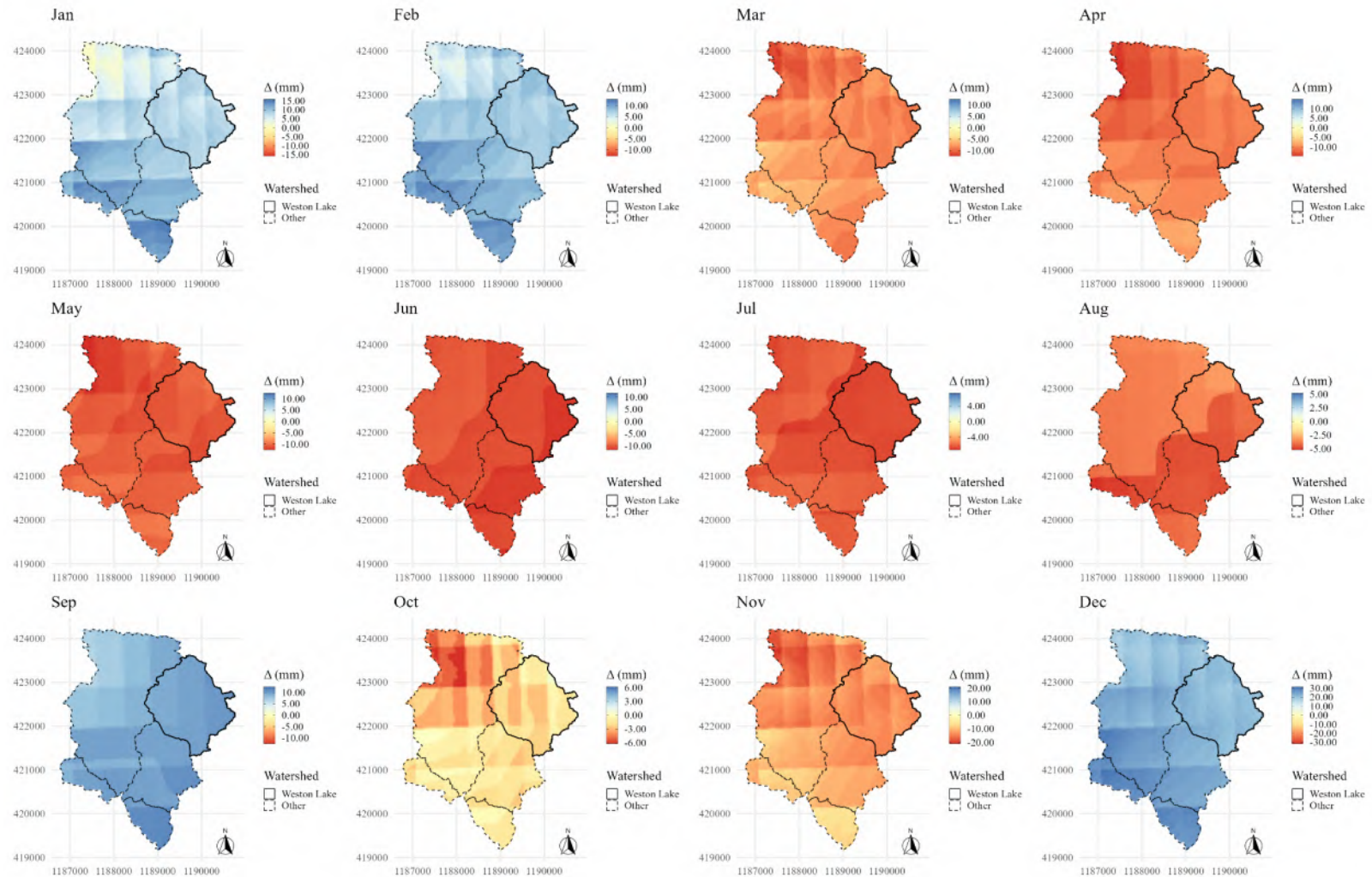
1.6.4.2 *Precipitation*

Figure 40: Monthly change in precipitation between year 2030 and present normals, SSP 8.5

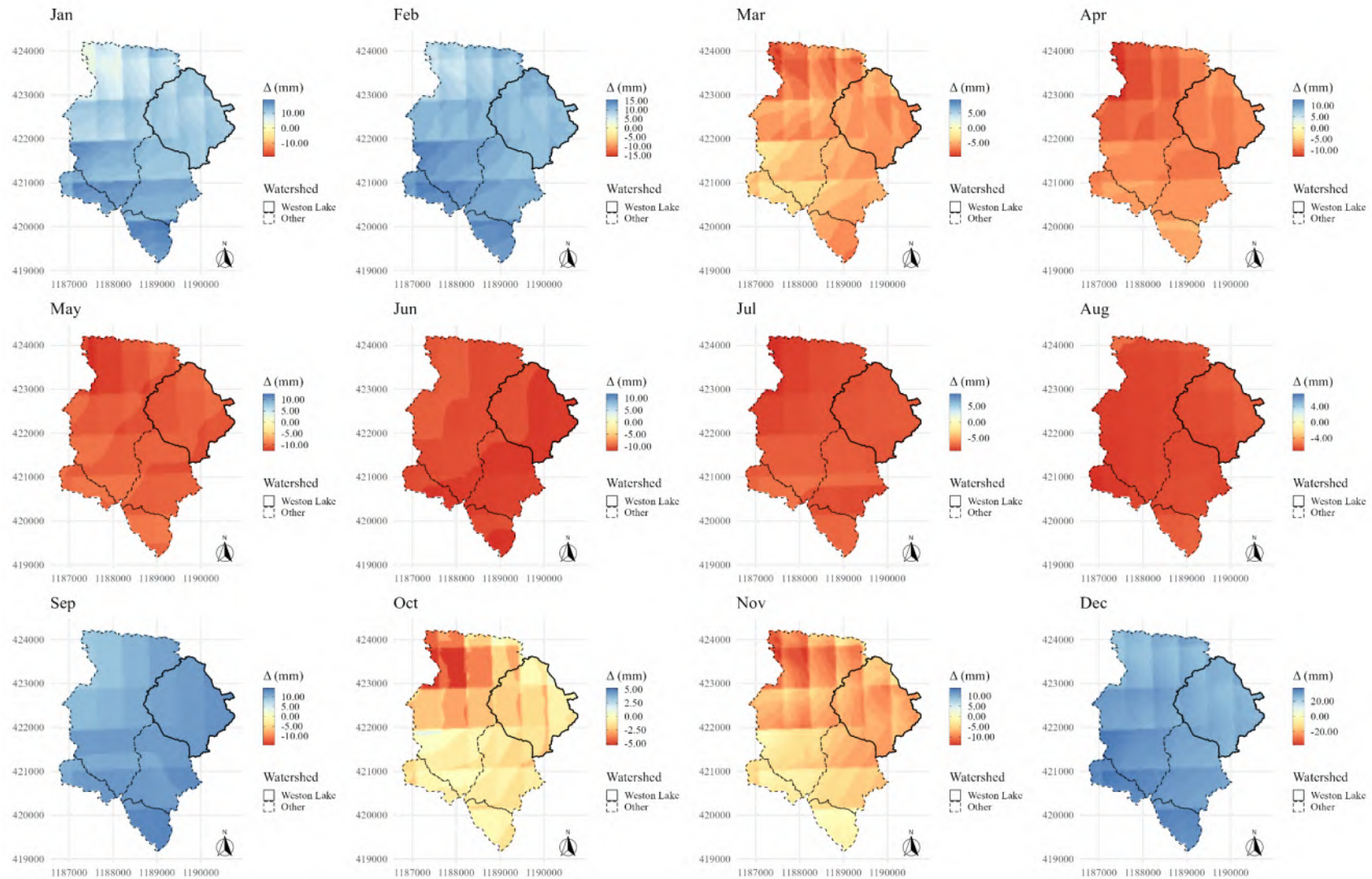


Figure 41: Monthly change in precipitation between year 2050 and present normals, SSP 8.5

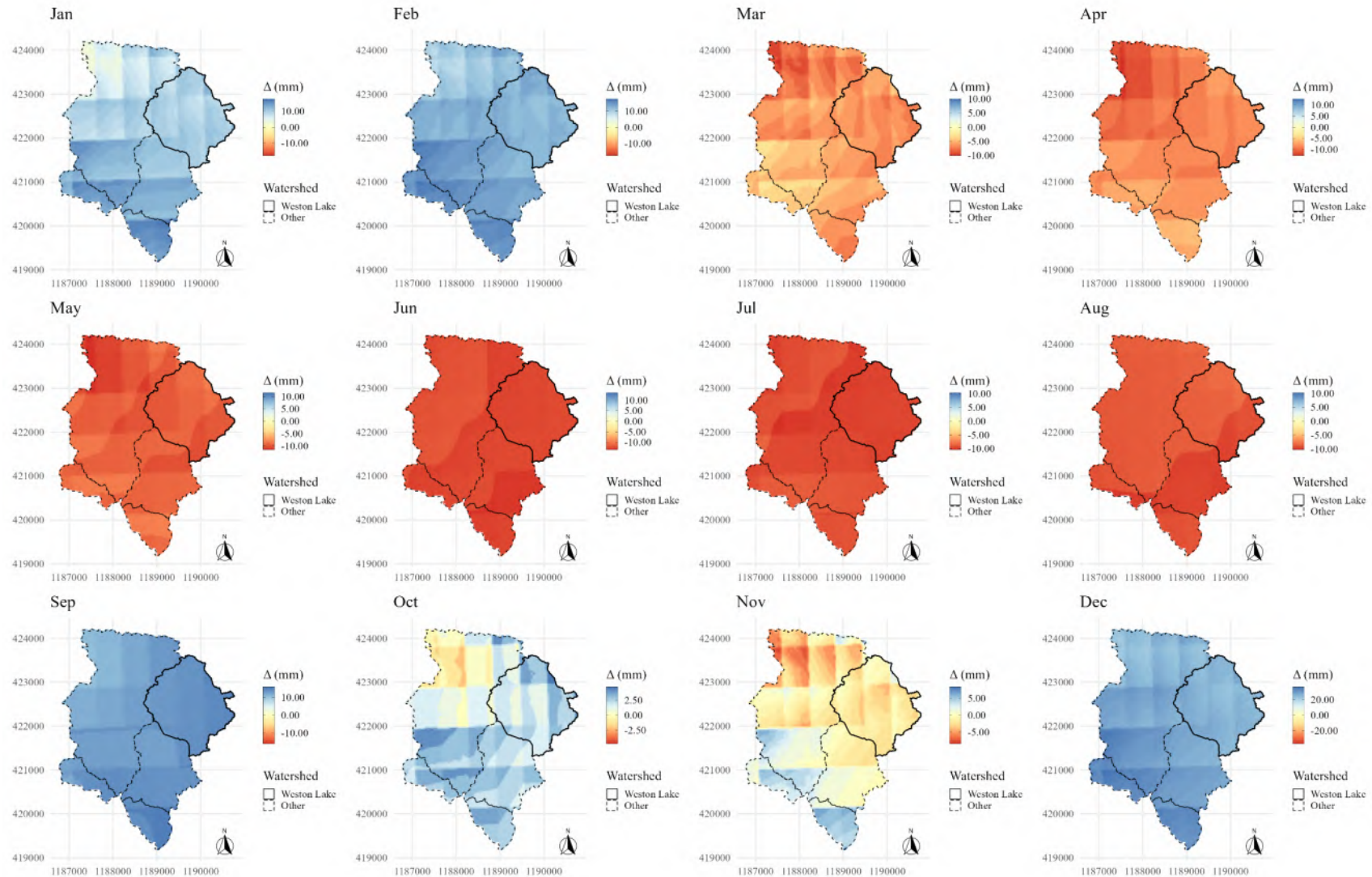


Figure 42: Monthly change in precipitation between year 2070 and present normals, SSP 8.5

1.6.4.3 Solar Radiation

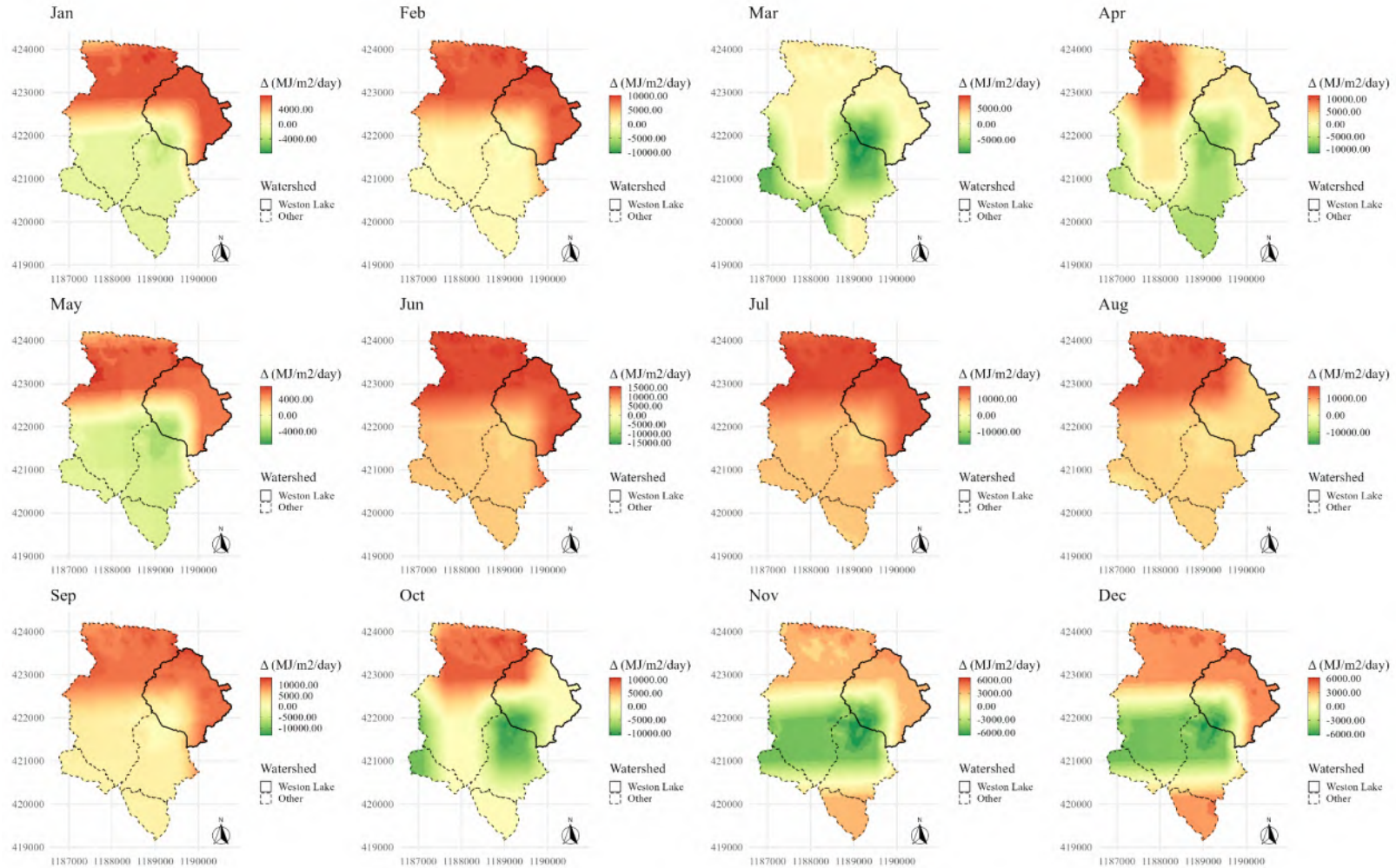


Figure 43: Monthly change in radiation between year 2030 and present normals, SSP 8.5

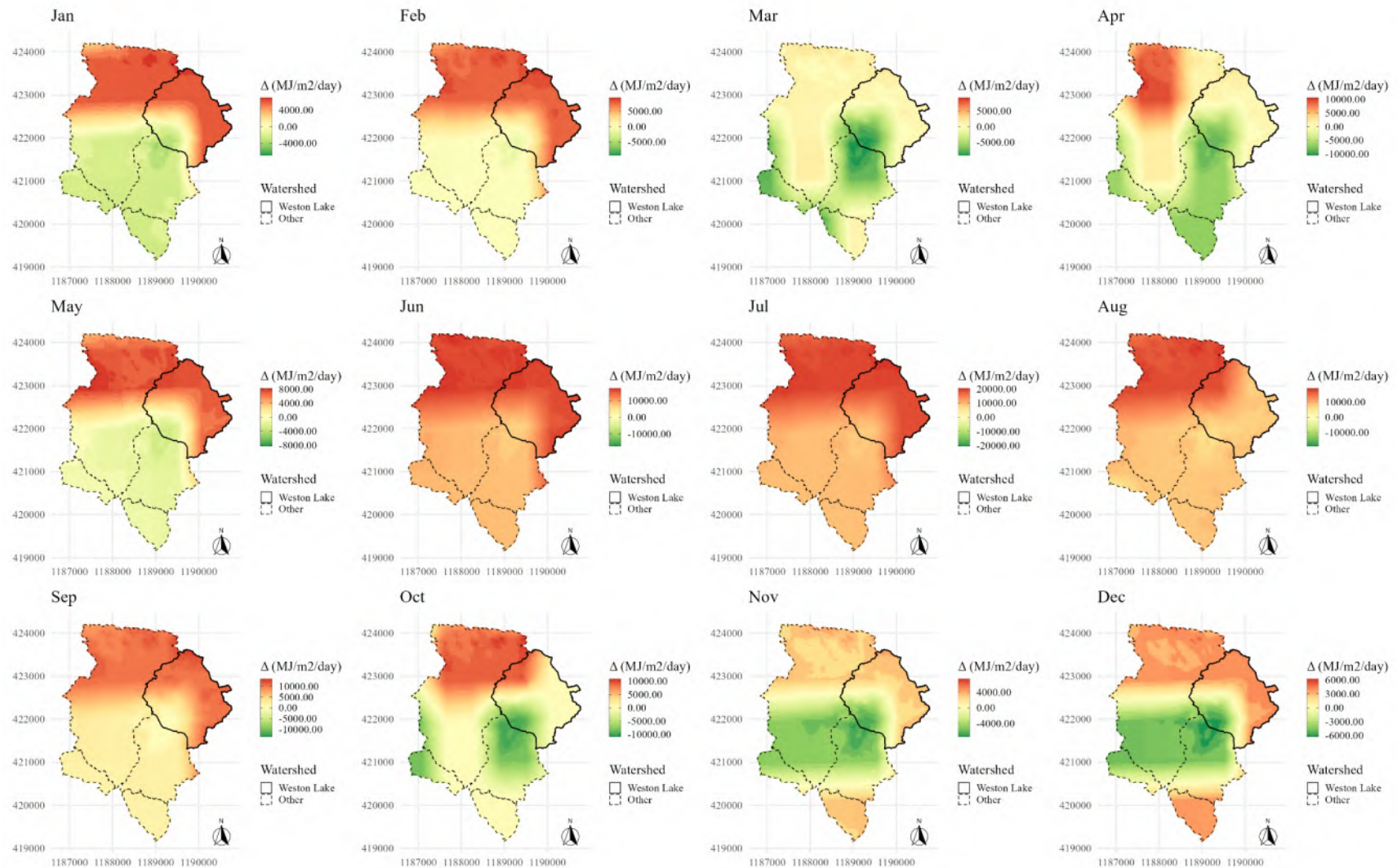


Figure 44: Monthly change in radiation between year 2050 and present normals, SSP 8.5

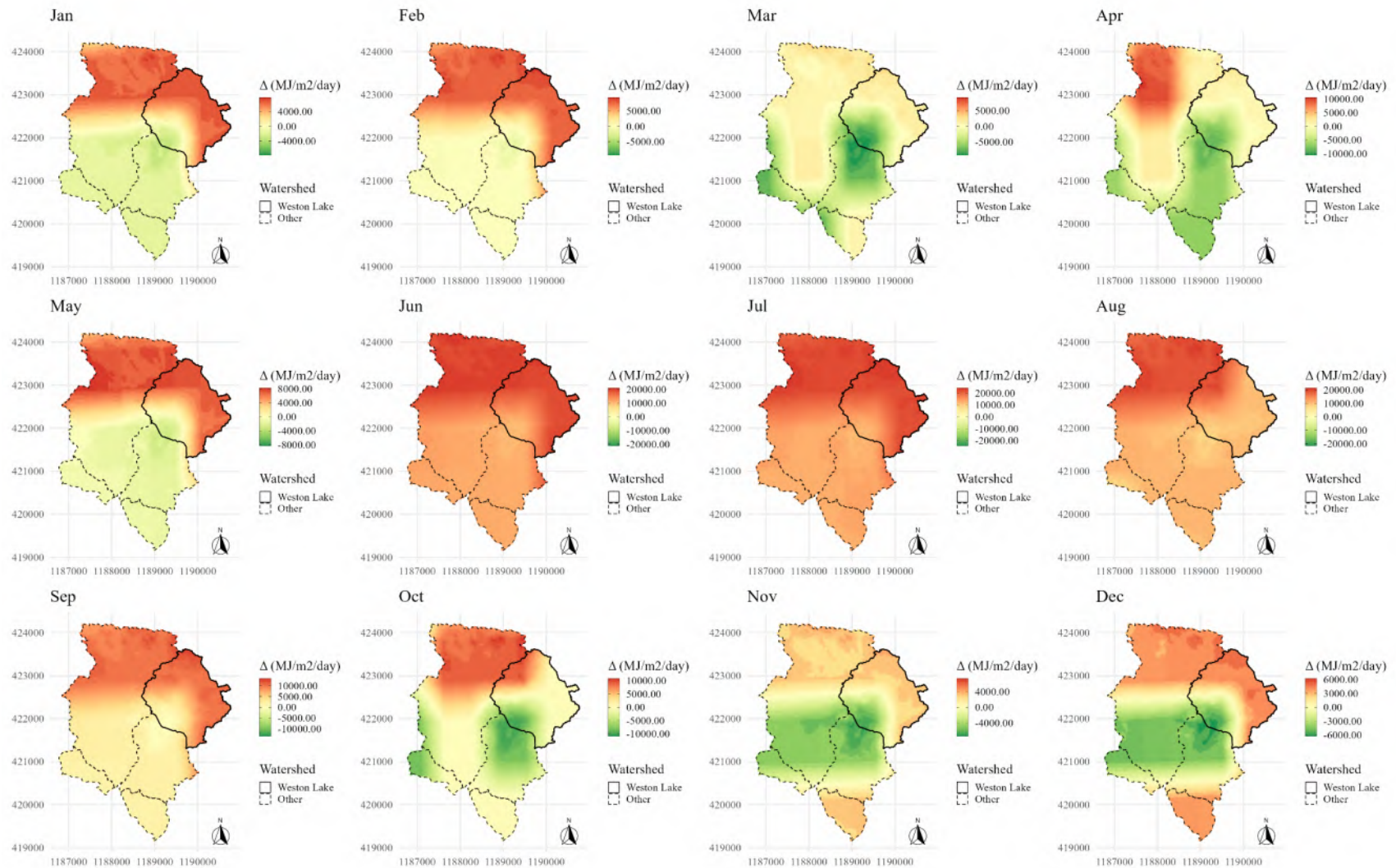


Figure 45: Monthly change in radiation between year 2070 and present normals, SSP 8.5

1.6.4.4 Available Moisture Surplus

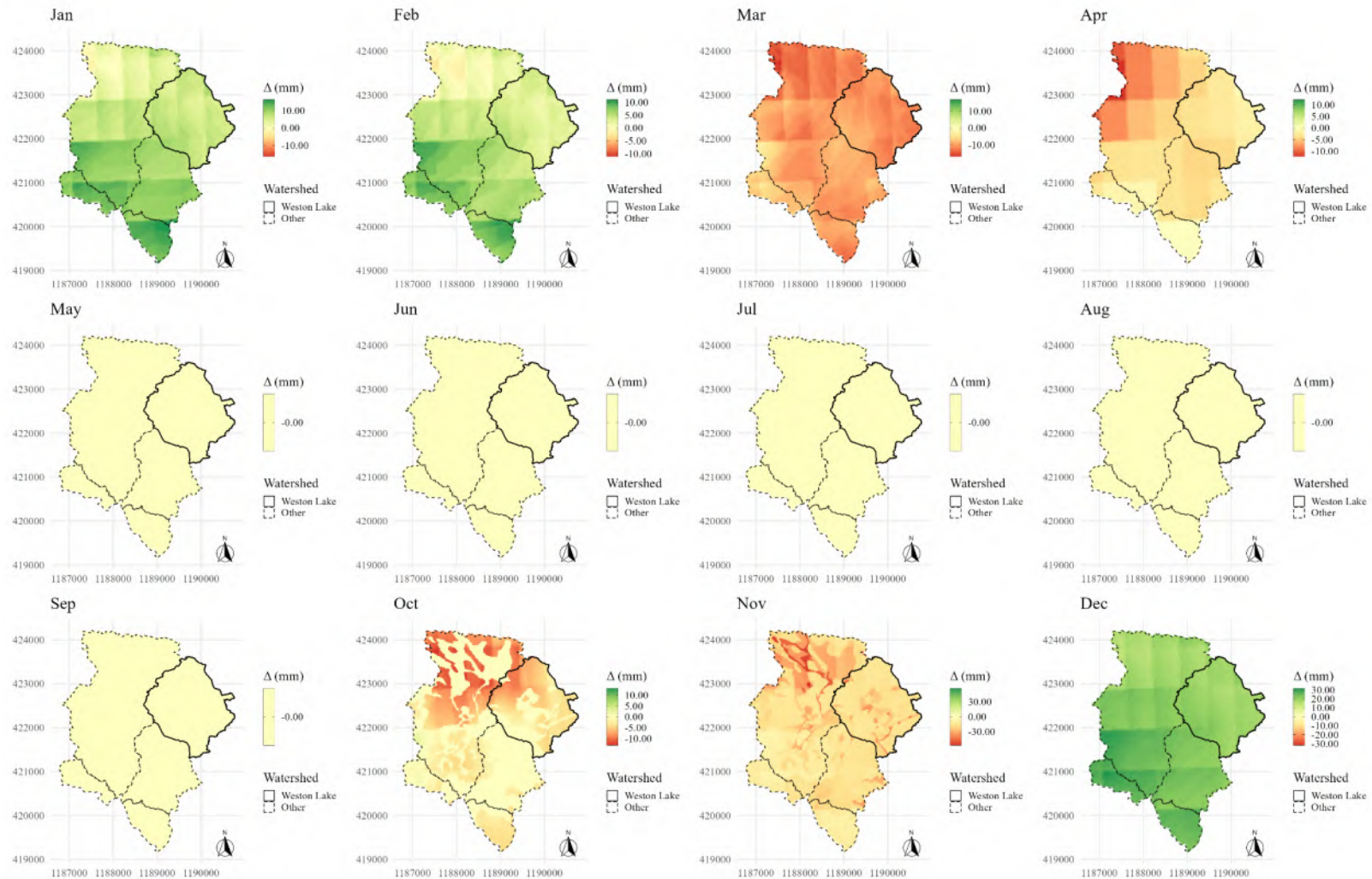


Figure 46: Monthly change in available moisture surplus between year 2030 and present normals, SSP 8.5

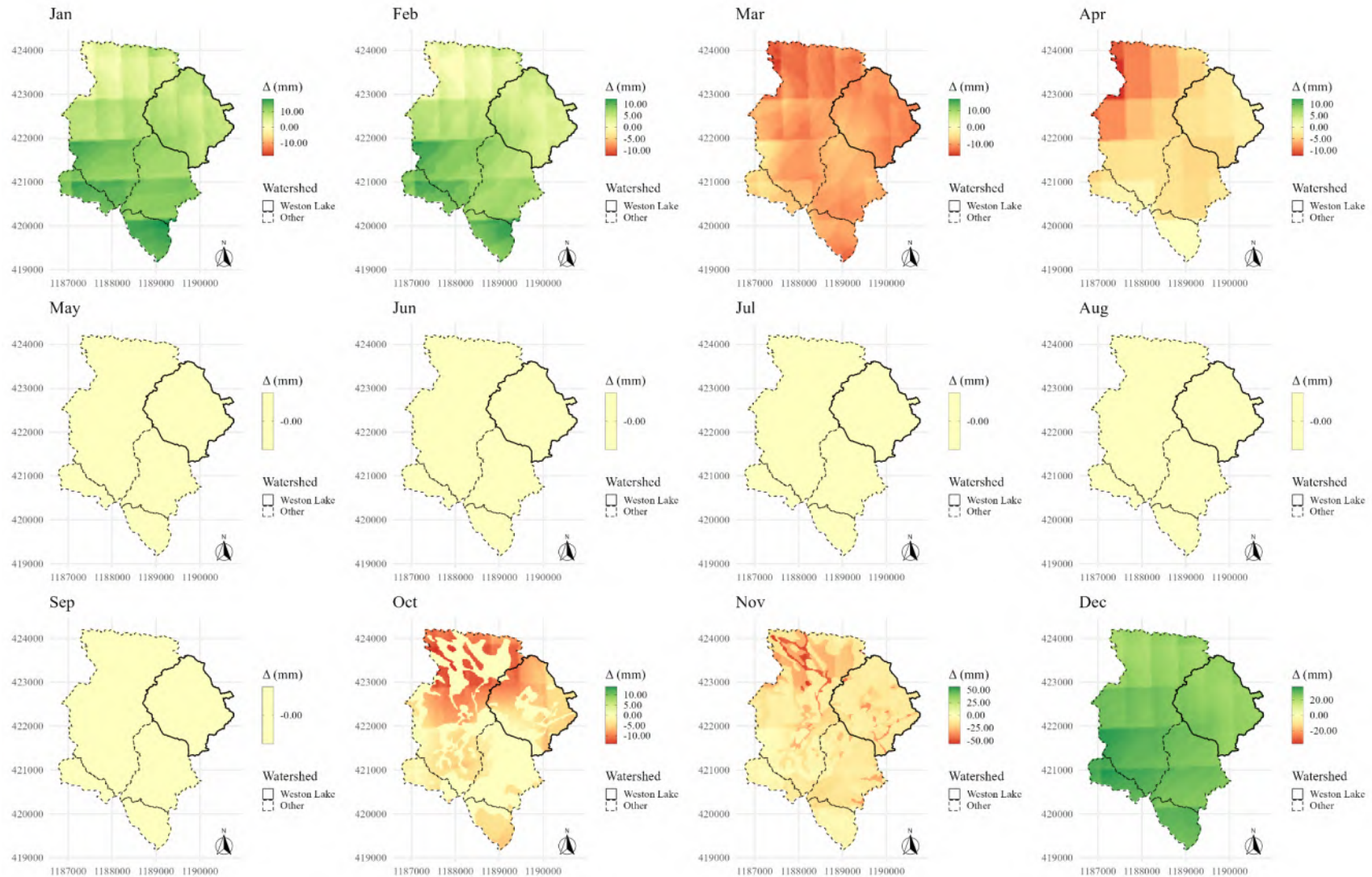


Figure 47: Monthly change in available moisture surplus between year 2050 and present normals, SSP 8.5

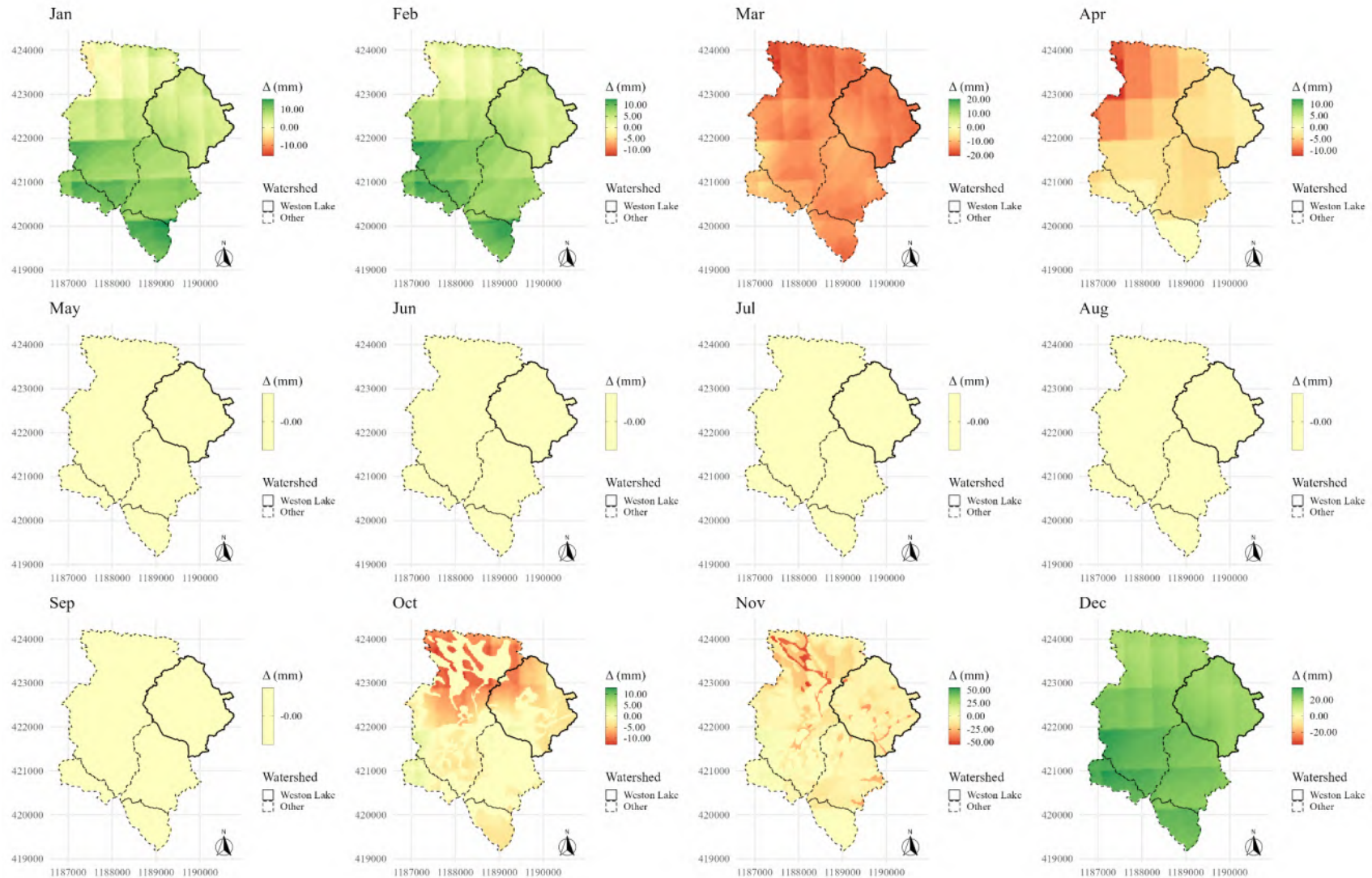


Figure 48: Monthly change in available moisture surplus between year 2070 and present normals, SSP 8.5

1.6.5 Lake Weston Watershed Summary Charts

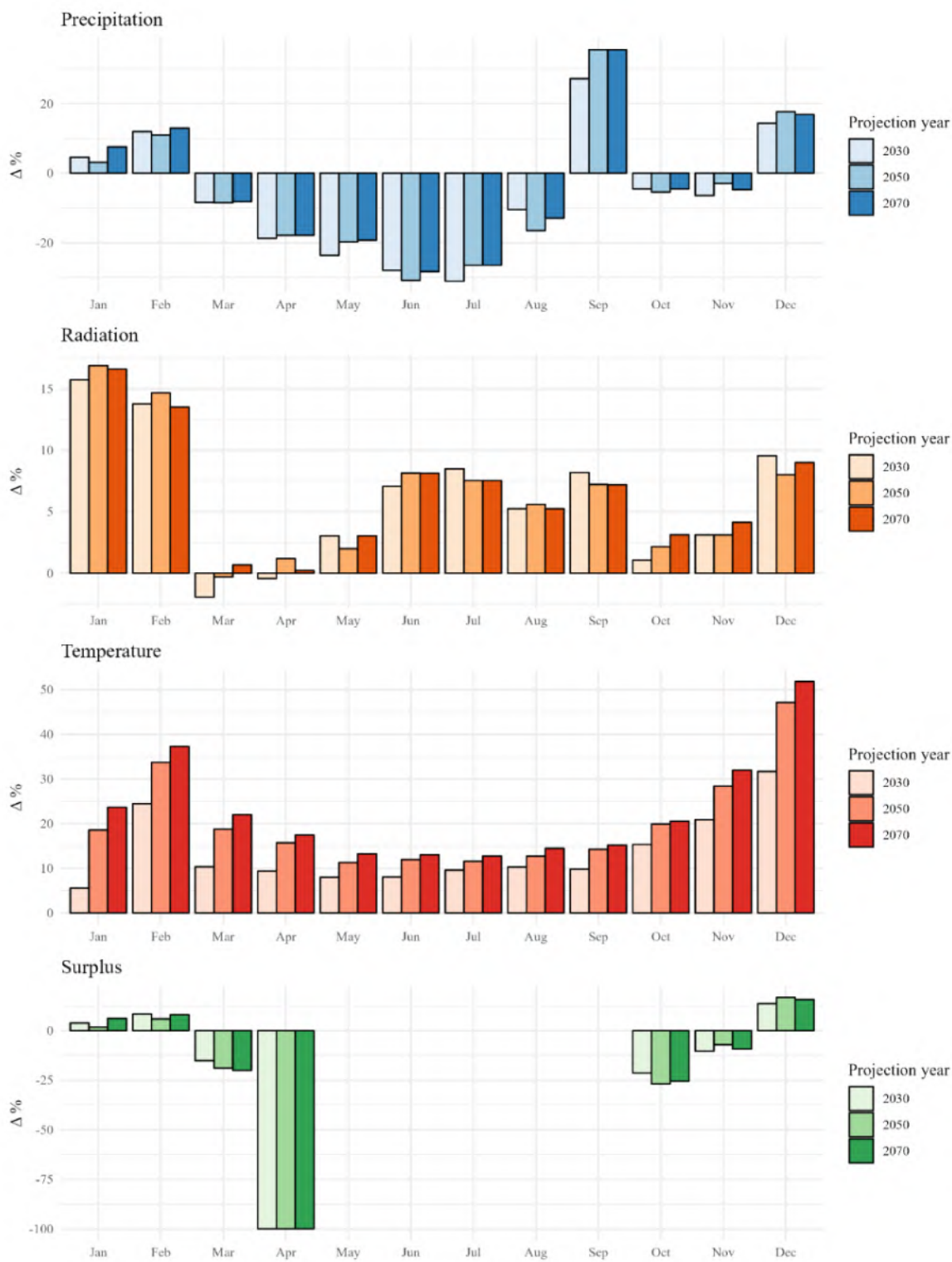


Figure 49: Percentage change relative to climate normal, summarized by month for the Lake Weston watershed, SSP 2.6

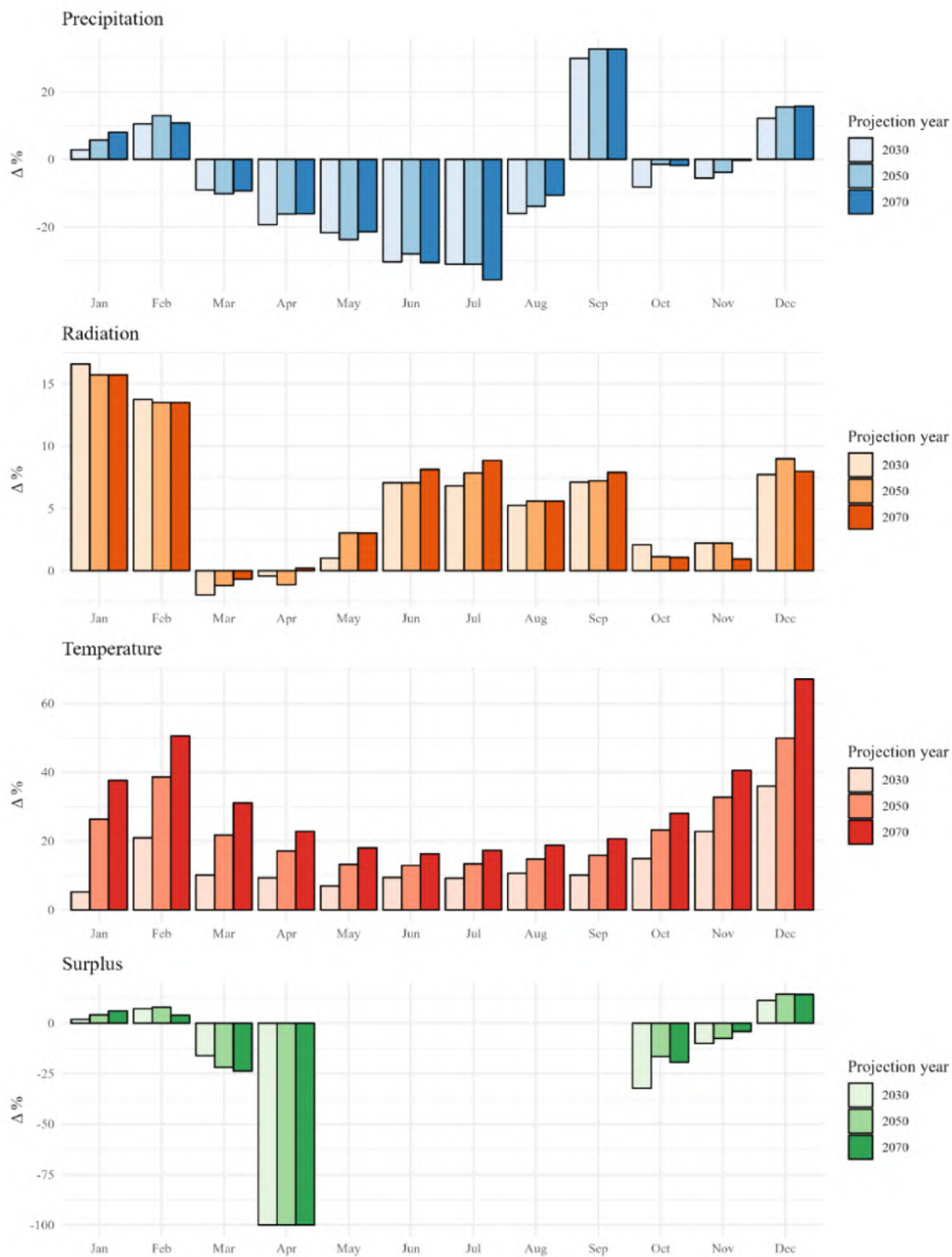


Figure 50: Percentage change relative to climate normal, summarized by month for the Lake Weston watershed, SSP 4.5



Figure 51: Percentage change relative to climate normal, summarized by month for the Lake Weston watershed, SSP 7.0

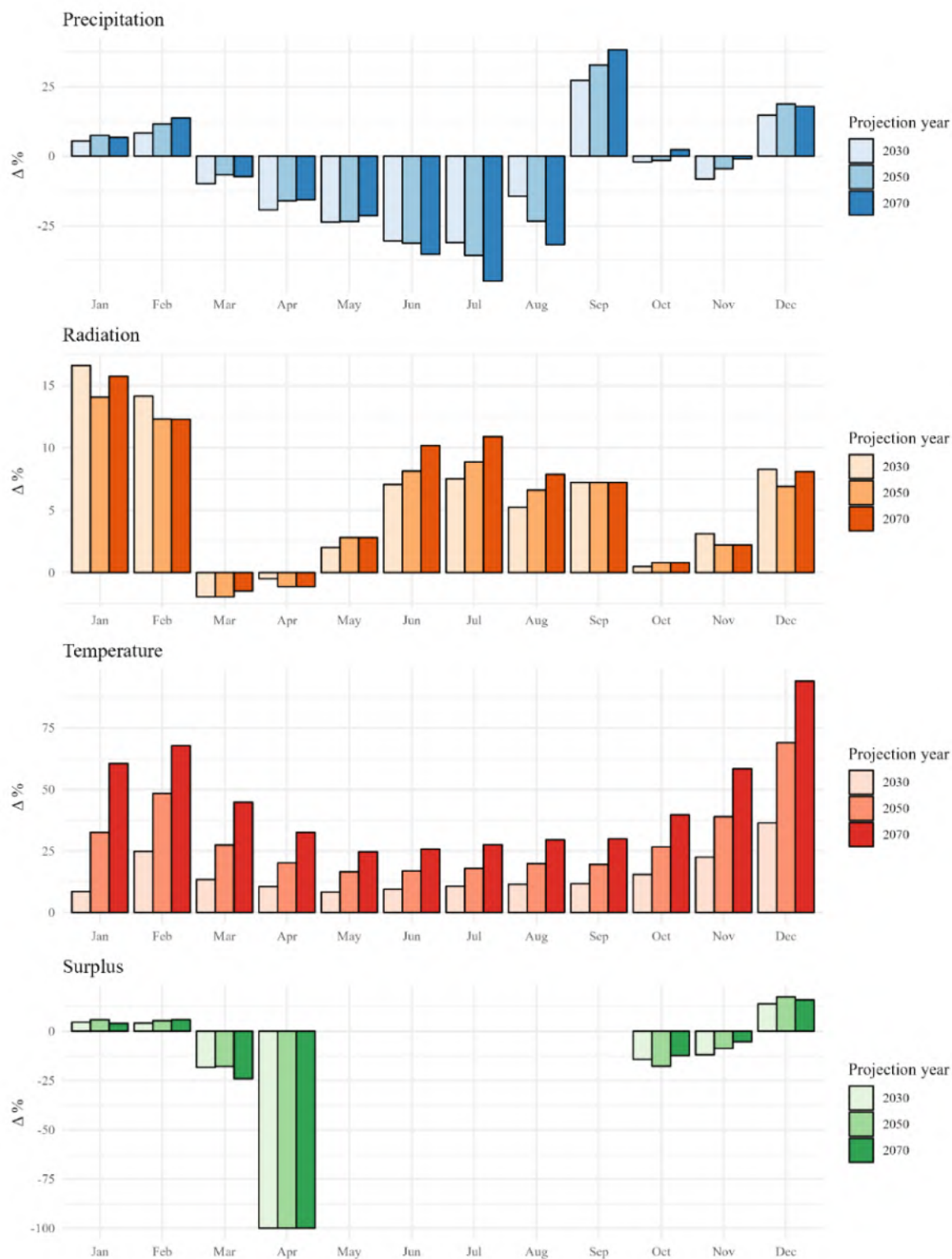


Figure 52: Percentage change relative to climate normal, summarized by month for the Lake Weston watershed, SSP 8.5

1.7 References

- Hausfather, Z. (2019, August 21). *Explainer: The high-emissions 'RCP8.5' global warming scenario*. Carbon Brief. <https://www.carbonbrief.org/explainer-the-high-emissions-rcp8-5-global-warming-scenario>
- Mahony, C. R., Wang, T., Hamann, A., & Cannon, A. J. (2021). A CMIP6 ensemble for downscaled monthly climate normals over North America. *EarthArXiv*. <https://doi.org/10.31223/X5CK6Z>
- Mahony, C. R., Wang, T., Hamann, A., & Cannon, A. J. (2022). A global climate model ensemble for downscaled monthly climate normals over North America. *International Journal of Climatology*. <https://doi.org/10.1002/joc.7566>
- McSweeney, R., & Hausfather, Z. (2018, January 15). *Q&A: How do climate models work?* Carbon Brief. <https://www.carbonbrief.org/qa-how-do-climate-models-work>
- Riahi, K., Rao, S., Krey, V., Cho, C., Chirkov, V., Fischer, G., Kindermann, G., Nakicenovic, N., & Rafaj, P. (2011). RCP 8.5—A scenario of comparatively high greenhouse gas emissions. *Climatic Change*, 109(1), 33. <https://doi.org/10.1007/s10584-011-0149-y>
- Tebaldi, C., & Knutti, R. (2007). The use of the multi-model ensemble in probabilistic climate projections. *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences*, 365(1857), 2053–2075. <https://doi.org/10.1098/rsta.2007.2076>
- Wang, T., Hamann, A., Spittlehouse, D., & Carroll, C. (2016). Locally Downscaled and Spatially Customizable Climate Data for Historical and Future Periods for North America. *PLOS ONE*, 11(6), e0156720. <https://doi.org/10.1371/journal.pone.0156720>

APPENDIX 5

Water Rights Licences: Points of diversions (accessed February 2022)

APPENDIX 5: WATER RIGHTS LICENCES: POINTS OF DIVERSIONS

POD NUMBER	STATUS	FILE NUMBER	LICENCE NUMBER	PRIORITY DATE	PURPOSE	SOURCE	QUANTITY	UNIT	QUANTITY DESCRIPTION	PRIMARY LICENSE NAME
PD33584	Active	300787	C037411	2/22/1971	01A - Domestic	Lake Weston	2.27305	m3/day	Total demand for purpose, one POD.	PRIVATE INDIVIDUAL NAME
PD33586	Active	250393	F041199	6/24/1963	01A - Domestic	Lake Weston	2.27305	m3/day	Total demand for purpose, one POD.	PRIVATE INDIVIDUAL NAME
PD33592	Active	277651	F047416	2/29/1968	01A - Domestic	Lake Weston	4.54609	m3/day	Maximum licensed demand for purpose, multiple PODs, quantity at each POD unknown	PRIVATE INDIVIDUAL NAME
PD33593	Active	277651	F047416	2/29/1968	01A - Domestic	Lake Weston	4.54609	m3/day	Maximum licensed demand for purpose, multiple PODs, quantity at each POD unknown	PRIVATE INDIVIDUAL NAME
PD33592	Active	277651	F047416	2/29/1968	03B - Irrigation: Private	Lake Weston	5303.964	m3/year	Maximum licensed demand for purpose, multiple PODs, quantity at each POD unknown	PRIVATE INDIVIDUAL NAME
PD33593	Active	277651	F047416	2/29/1968	03B - Irrigation: Private	Lake Weston	5303.964	m3/year	Maximum licensed demand for purpose, multiple PODs, quantity at each POD unknown	PRIVATE INDIVIDUAL NAME
PD33589	Active	290081	F045514	8/1/1969	01A - Domestic	Lake Weston	2.27305	m3/day	Total demand for purpose, one POD.	PRIVATE INDIVIDUAL NAME
PD33585	Active	237701	F041041	7/27/1961	01A - Domestic	Lake Weston	2.27305	m3/day	Total demand for purpose, one POD.	PRIVATE INDIVIDUAL NAME
PD33591	Active	305544	F047419	6/22/1971	01A - Domestic	Lake Weston	2.27305	m3/day	Total demand for purpose, one POD.	PRIVATE INDIVIDUAL NAME
PD33589	Active	290081	F045514	8/1/1969	01A - Domestic	Lake Weston	2.27305	m3/day	Total demand for purpose, one POD.	PRIVATE INDIVIDUAL NAME
PD78964	Active	1002434	C120550	3/17/2005	02I12 - Misc Ind'l: Fire Protection	Lake Weston	0.08014	m3/sec	Total demand for purpose, one POD.	PRIVATE INDIVIDUAL NAME
PD33594	Active	346455	C120382	1/18/1946	00A - Waterworks: Local Provider	Lake Weston	58076.2998	m3/year	Total demand for purpose, one POD.	Capital Regional District (12780)

POD NUMBER	STATUS	FILE NUMBER	LICENCE NUMBER	PRIORITY DATE	PURPOSE	SOURCE	QUANTITY	UNIT	QUANTITY DESCRIPTION	PRIMARY LICENSE NAME
PD33597	Active	305338	C059393	4/26/1971	01A - Domestic	Garvey Spring	2.27305	m3/day	Total demand for purpose, one POD.	PRIVATE INDIVIDUAL NAME
PD33599	Active	285911	C035832	7/14/1969	01A - Domestic	Spencer Spring	2.27305	m3/day	Total demand for purpose, one POD.	PRIVATE INDIVIDUAL NAME
PD33594	Active	226409	C120292	7/2/1959	00A - Waterworks: Local Provider	Lake Weston	58076.2998	m3/year	Total demand for purpose, one POD.	Capital Regional District (12780)
PD33596	Active	226409	C120292	7/2/1959	00A - Waterworks: Local Provider	Lake Weston	0	m3/year		Capital Regional District (12780)
PD33599	Active	269377	F042626	5/31/1966	01A - Domestic	Spencer Spring	2.27305	m3/day	Total demand for purpose, one POD.	PRIVATE INDIVIDUAL NAME
PD33596	Active	226409	C120292	7/2/1959	08A - Stream Storage: Non-Power	Lake Weston	49339.2	m3/year	Total demand for purpose, one POD.	Capital Regional District (12780)
PD33594	Active	226409	C120292	7/2/1959	08A - Stream Storage: Non-Power	Lake Weston	0	m3/year		Capital Regional District (12780)
PD33595	Active	159262	F103906	1/25/1946	01A - Domestic	Lake Weston	4.54609	m3/day	Total demand for purpose, one POD.	PRIVATE INDIVIDUAL NAME
PD33595	Active	231119	F103907	5/31/1960	03B - Irrigation: Private	Lake Weston	10114.536	m3/year	Total demand for purpose, one POD.	PRIVATE INDIVIDUAL NAME
PD33583	Active	310389	C040375	6/27/1972	01A - Domestic	Lake Weston	2.27305	m3/day	Total demand for purpose, one POD.	PRIVATE INDIVIDUAL NAME
PD33587	Active	305153	F047418	4/21/1971	01A - Domestic	Lake Weston	2.27305	m3/day	Total demand for purpose, one POD.	PRIVATE INDIVIDUAL NAME
PD33590	Active	267198	F040731	2/10/1966	01A - Domestic	Lake Weston	2.27305	m3/day	Total demand for purpose, one POD.	PRIVATE INDIVIDUAL NAME
PD33599	Active	285910	F047417	7/14/1969	01A - Domestic	Spencer Spring	2.27305	m3/day	Total demand for purpose, one POD.	PRIVATE INDIVIDUAL NAME
PD33589	Active	290081	F045514	8/1/1969	01A - Domestic	Lake Weston	2.27305	m3/day	Total demand for purpose, one POD.	PRIVATE INDIVIDUAL NAME
PD70355	Active	1001808	C109036	11/24/1994	01A - Domestic	Lake Weston	2.27305	m3/day	Total demand for purpose, one POD.	PRIVATE INDIVIDUAL NAME
PD33589	Active	285885	F045515	7/8/1969	01A - Domestic	Lake Weston	2.27305	m3/day	Total demand for purpose, one POD.	PRIVATE INDIVIDUAL NAME

APPENDIX 6

Glossary

APPENDIX 6: GLOSSARY

Term	Definition
<i>Aquifer</i>	An underground layer of water-bearing permeable rock, rock fractures or unconsolidated materials (gravel, sand) from which groundwater can be extracted using a water well.
<i>Aquitard</i>	An aquitard is a zone in the ground or bedrock that restricts the flow of groundwater from one aquifer to another, or from the surface to the subsurface. Aquitards are usually comprised of silt, clay, or non-porous (aka solid) rock of low hydraulic conductivity.
<i>Bedrock Aquifer</i>	In solid rock, groundwater is stored in the fractures, joints, bedding planes and cavities of the rock mass. Despite the potential for having voids, a rock can only act as an aquifer if those voids are saturated and connected via conduits such as fractures and faults.
<i>Elevation</i>	Elevation is given in meters above sea level. Ground elevations were projected/interpolated from a 1m Digital Elevation Model (DEM) provided by the Island Trust (ITC) for the current project.
<i>Evaporation</i>	Evaporation is the process by which water is transferred from surface water bodies (i.e.: lakes and rivers) to the atmosphere. The rate of evaporation is driven by air temperature, water temperature, wind speed and solar radiation. For this study, monthly average air temperature and maximum daylight hours per month have been used as indices for lake evaporation.
<i>Evapotranspiration</i>	Evapotranspiration is the process by which water is transferred from soil moisture to the atmosphere through either <u>transpiration</u> by plants or direct <u>evaporation</u> from leaves, standing

Term	Definition
	water on the ground or surface water bodies. The rate of evapotranspiration is driven by air temperature, wind speed, solar radiation and plant species or land cover.
<i>Groundwater</i>	Groundwater is water found in the soil or rock below the land surface where the pores and openings are filled entirely with water. The upper boundary of the groundwater zone is called the water table which is equivalent to the water level in shallow well.
<i>Groundwater Recharge</i>	Groundwater recharge is the process by which water flows from shallow soil moisture storage into groundwater in the subsoil.
<i>Groundwater Storage</i>	Groundwater storage is the capacity of subsoil (i.e.: below the root zone) to store water. This water is available to flow into surface water bodies through groundwater seepage (i.e.: springs or seeps).
<i>Licensed Withdrawal Limit</i>	The Licensed Withdrawal Limit is the maximum volume of water permitted to be withdrawn by water licence holders from surface water sources.
<i>Precipitation</i>	Precipitation is the total volume of rainfall and snowfall over a given time period. Precipitation is recorded as a depth, the total volume of precipitation falling across the watershed over a given time period is then calculated by multiplying the depth of precipitation by the watershed area.

Term	Definition
<i>Soil Moisture Capacity And Soil Moisture Storage</i>	The capacity of soil within the root zone of plants and trees to store water. The soil moisture capacity defines the total volume of water that can be stored in the soil while storage moisture storage is the amount of water in soil moisture at any given time. The soil moisture can transferred back to atmosphere via evapotranspiration and can pass into groundwater storage through groundwater recharge. When soil moisture storage is at the maximum soil moisture capacity all excess precipitation is surface runoff.
<i>Surface Water</i>	Surface water is water that can be seen on land and is usually freshwater. It includes lakes, rivers, streams, creeks, ponds, and wetlands. Surface waters are most often at least partially fed by groundwater.
<i>Surface Water Runoff</i>	Surface Water Runoff is the water available to flow into surface water bodies across the land surface and through shallow horizontal flow through soils (known as interflow) over a given time period. It is the excess water available from precipitation after all other hydrological processes are accounted for including evapotranspiration and replenishment of soil moisture storage. A portion of surface water runoff includes Direct Runoff which includes precipitation that runs off directly to surface water bodies. This is usually represented by a percentage of precipitation in a given period and is typically based on an estimate of the impervious area within a watershed.
<i>Unconfined Aquifer</i>	Where no aquitards overlie the aquifer, the aquifer is said to be “unconfined” and is vulnerable to impacts from human activities at the land surface, particularly if the water table is shallow.
<i>Water Balance</i>	The water balance is based on the law of conservation of mass in a closed system such that the volume of water entering the system must be equal to the amount of water leaving the system plus change of volume of water stored within the system. The water balance for this study considers precipitation as the only input to the closed system with lake outflow,

Term	Definition
	deep aquifer loss, evaporation and transpiration as outputs. Storage in the system includes lake storage, soil moisture storage and groundwater storage.
<i>Water Budget</i>	Comparison of the amount of surface water available in the watershed over-time (supply) and the amount of water required for use over time (demand). When the volume of water for demand is greater than the volume of water available in supply over a given time period, for this study a monthly time period is used, then the difference must be provided by storage.
<i>Water Surplus</i>	This term refers to a combination of surface water runoff and groundwater recharge which are the surplus or remaining water budget components following evapotranspiration.
<i>Watershed</i>	A watershed is the area of land that, due to its topography, collects water from precipitation and drains into a receiving surface water body (a river, a lake, a foreshore). Every piece of land is part of a watershed.
<i>Well</i>	A well is an excavation or structure created in the ground by digging, driving, or drilling to access liquid resources, usually water.

Water Sustainability Project: Land Use Management for Watershed Protection

Weston Lake Water Availability and Climate Change Impact Assessment - Charter v.1.1

Appendix 2

Salt Spring Island Local Trust Committee

Date: March 23, 2021

Purpose: The purpose of this project and associated charter is to define the Salt Spring Island Local Trust Committee's role in the commission of a study to quantify the volume of water in Weston Lake available for human use and the impacts that climate change is anticipated to have on that volume.

Background: Weston Lake on Salt Spring Island provides potable water to the Fulford Water System in Fulford Village. The Salt Spring Island Official Community Plan identifies the Island's villages as areas of potential residential and commercial growth. Islands Trust and the Capital Regional District, which manages the Fulford Water System, want to better understand the volume of water available for human use from Weston Lake and the impacts that climate change may have on that water availability.

This project was identified in the 2020/21 work plan of the Salt Spring Island Watershed Protection Alliance (SSIWPA) and the Capital Regional District electoral area director has requested up to \$30,000 from the Salt Spring Island Local Trust Committee to fund such a study. At its January 19, 2021 meeting the LTC endorsed this funding request using accumulated funds from its annual special property tax requisition to fund the coordination of freshwater policy on Salt Spring Island.

Objectives

- A sustainable potential yield and storage analysis for Weston Lake that accounts for:
 - License allocations;
 - environmental flow needs; and
 - Climate change impacts

In Scope

- Provide up to \$30,000 in funding;
- Assist CRD staff to:
 - Draft a cost-sharing agreement with CRD
 - Draft a Request for Proposals for qualified consultant to undertake the study;
 - Draft a Terms of Reference for the study;
- Provide relevant data to qualified consultant;
- Provide completed study to the LTC with implications for land use planning and options for next steps; and
- Manage communications related to release of project deliverables

Out of Scope

- Procurement process management;
- Contract management;

Workplan Overview

Deliverable/Milestone	Date
Project charter endorsement	March 23, 2021
RFP distributed	Spring 2021
Qualified consultant selected	Spring 2021
Draft study provided for staff review	August 1, 2021
Final study released to LTC and general public	September 1, 2021

Project Team	
Dale Green, CRD	Project Manager
Jason Youmans, IT	Project Liaison
William Shulba, IT	Technical Advisor
Barb Dashwood, IT	GIS Tech
Shannon Cowan, SSIWPA	Project Assistant

Budget		
Budget Sources: - Unspent special property tax requisition funds 2017 SSIWPA Constituency Grant		
Fiscal	Item	Cost
2021/22	Weston Lake Water Availability and Climate Change Impact Study	\$30,000
2021/22	Total	\$30,000

Water Sustainability Project: Land Use Management for Watershed Protection

Weston Lake Water Availability and Climate Change Impact Assessment - Charter v.1.1

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Out of Scope

- Procurement process management;
- Contract management;

Workplan Overview

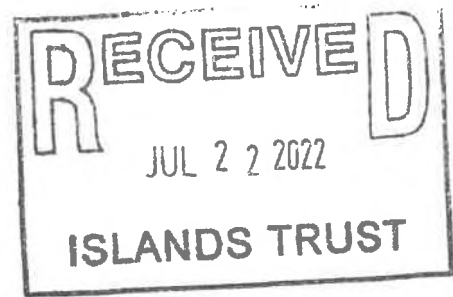
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2021/22	Total	\$30,000

Hello

From: Larry M. Bergholz [REDACTED]
To: lpatrick@islandtrust.bc.ca
Date: Monday, July 4, 2022, 11:02 p.m. PDT



Re: Walter Bay, by the Hassi Marina building, near the park.

My concern for years has been the flotila of homes, abandoned boats, tarps, docks, liveaboards, dogs that have taken over the Bay. I have written to Hassi, but they say it is not their jurisdiction.

Could you help - this needs to be addressed. There is so much pollution going into the Bay, and it has just increased in the many years my husband and I have gone to Salt Spring Island.

Thank you.

Donna Bergholz [REDACTED]
[REDACTED]
[REDACTED]

** The email did not go through.*

On Jul 28, 2022, at 3:57 PM, Murray Reiss <[REDACTED]> wrote:

Dear Trustees –

I'm confused by the news release I received from you July 26. It gives notice that the Salt Spring LTC authorizes "annual proactive bylaw enforcement for Short Term Vacation Rentals." It then goes on to say that the LTC initiated just such proactive enforcement measures in August 2019. So what's the news in this release? Would it not be more informative and helpful to let us know how many complaints have been received since August 2019, what actions have been taken as a result, how many of these illegal STVRs no longer operate, how many are still in operation, and of those that are no longer STVRs, how many are now full-time rentals? I look forward to receiving such detailed information in an upcoming news release.

Yours,
Murray Reiss

[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]

From: Karen Olsson <[REDACTED]>
Sent: Thursday, August 4, 2022 1:39 PM
To: SSInfo
Subject: Speculation and Vacancy Tax

Hi!

I am writing to express my deep concern regarding Salt Spring Island beginning excluded from the speculation and vacancy tax. Ridiculous! Salt Spring Island has a severe housing problem. Service people are leaving or refusing to come because of both the unavailability of housing and extremely high over price of the housing that is available.

Something has to be done. Please look into what regulations can be enforced as well as how we can come up with more affordable housing options.

Thank you for your attention to this matter.

Karen Olsson
Salt Spring Island

On Aug 4, 2022, at 9:45 AM, Rick Schnurr <[REDACTED]> wrote:

Dear Peter

The Piers Island Association is requesting support of the Islands Trust for its application for fibre optic internet service, as per our letter to CityWest below. Please cc myself on your email to Stefan Woloszyn, CEO of CityWest (Stefan.woloszyn@cwct.ca)

Thank you

Rick Schnurr

Director, PIA

The Directors of the Piers Island Association, on behalf of the 128 properties on Piers island, are hereby applying to CityWest to install and supply fibre optic internet service to the homeowners of our southern Gulf Island community. PIA Directors understand that this proposed fibre optic service will be delivered with internet speeds of 100 Mb (up & down) minimum and no caps on data usage. This information has been made available to all lot owners on the island and 87 of the 128 lot owners on the island have expressed an interest in acquiring service from CityWest (as per a recent survey of all lot owners). Eleven (11) other lot owners are uncertain at this time but may be interested later in the process.

The Directors (PIA) understand that this fibre optic hardware and service will be financed, in part, through grants from the Government of Canada and the Provincial Government of British Columbia. These grant applications will be made on behalf of Piers Island by CityWest. Once installed on the island, this fibre optic service will be available to individual homeowners to apply for a variety of service levels and will enter into contracts with CityWest to supply internet service.

The PIA are also of the understanding that the installation of fibre optic cable and the availability of internet service is of a timely nature and will be undertaken by CityWest within the next two years. The PIA will undertake actions that may facilitate and assist CityWest such as supplying transportation to CityWest employees, to accomplish this timeline.

Thank you,

Rick Schnurr

Director. Piers Island Association

-----Original Message-----

From: TRISH FAUROT <[REDACTED]>

Sent: Friday, August 5, 2022 12:42 PM

To: SSIInfo <ssiinfo@islandstrust.bc.ca>

Cc: adam MLA <adam.olsen.MLA@leg.bc.ca>; Elizabeth May <Elizabeth.May@parl.gc.ca>

Subject: Rogers/Crest Cell Tower on Channel Ridge

Subject: Rogers/Crest Cell Tower on Channel Ridge

To all concerned,

I am dismayed to learn that the Islands Trust has been overruled by Innovation, Science and Economic Development Canada and that construction of a 5G cell tower has begun with absolutely no consultation with nearby residents, some of whom live within 50 meters of the tower site. I have been following scientific studies regarding the ill effects of electromagnetic radiation for many years and have learned that all studies declaring emf to be safe only cite that the emf waves do not heat up any tissue they come in contact with and are therefore safe. Great, but what about non thermal health effects? I am forwarding two lengthy, but comprehensive articles which caution the deployment of 5G technology based on thousands of scientific studies and current lack of safety testing of 5G technology. I sincerely hope that Islands Trust will fight this decision by ISED as cell tower radiation has also been shown to have adverse effects on honeybee colonies. Saltspring currently has an abundance of healthy honeybees which our ecosystems and farmers depend on for pollination. Honeybees are an integral part of our local biosphere, which is still relatively intact, unlike in many other areas of our planet where honeybee populations have been decimated by a number of factors: factory farming pollution, mass expansion of genetically modified uncrops and the consequent increase of toxic herbicides, electromagnetic radiation from cell towers , etc. Is there anything that can be done to stop the construction of the Rogers/Crest 5G tower? Please share this letter and accompanying links with our Trustees. Also I would appreciate a reponse and a contact email for ISED. Thank you.

Sincerely,

Patricia Faurot,

[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]

From: Theodore Lowry <[REDACTED]>
Sent: Friday, August 5, 2022 5:34 PM
To: SSInfo
Subject: 5G concern

Hello,

I hope you're well, and thanks for your service here on salt spring.

I'm writing to express concern about the possible installation of 5G transmitters here on the island. You've probably heard a lot about potential health risks; if not, there's real cause to be concerned.

Here's a link to an interview with a prominent scientist, president of the Environmental Health Trust.

[REDACTED]

A quick look at the [comments section in this article](#) also shows much local concern about this issue, to the point that some people may feel forced to move away.

I ask you to help put a pause on this, or a stop.

Thanks

--

Theodore Lowry
Creative

[REDACTED]
[REDACTED]

From: Darin Wick <[REDACTED]>
Sent: Monday, August 8, 2022 3:28 PM
To: SSInfo
Subject: 154 Kings Lane

Dear Island's Trust,

154 Kings Lane is a unique site on Salt Spring Island due to the short walking distance to local amenities at Upper Ganges village, quiet neighborhood and proximity to medical services. These attributes make it uniquely suited for housing for seniors. Please ensure that use of this land be protected for seniors housing.

Additionally, when considering any modifications to the land use for 154 Kings Lane please consider and protect the established safe activities of residents on Kings Lane and surrounding neighbourhood:

- There is a large number of elderly from Greenwoods Eldercare Society and Braehaven Assisted Living that walk slowly, often with the assistance of a wheeled walker, along Kings Lane (in front of the site) and back on a regular basis.
- Neighbourhood children walk, play and ride their bicycles and scooters daily up and down Kings Lane directly in front of and through the site.
- Neighbourhood children have a well worn path through the site providing a safe cut through to avoid Blain Road.
- During school months, children walk to and from the corner of Blain Road and Kings Lane to board and depart from the school bus.
- The greater neighbourhood consists of families with children and seniors. Many of whom regularly walk Kings Lane in front of the proposed site to access the mailboxes and continue on to the nearby amenities of the Upper Ganges Village Shopping Center.
- Neighbours, walking groups and running groups, dog walkers and more use Kings Lane as a corridor to the Upper Ganges Village Shopping Center and as part of the Scarf Lane- Norton Rd loop and Leisure Lane corridor.
- The neighbourhood is always very quiet, especially in the evening.

Sincerely,

Darin Wick
[REDACTED]

August 08, 2022

Islands Trust
500 Lower Ganges Rd #1,
Salt Spring Island, BC V8K 2N8

RE: Information regarding the Rainbow Recreation Centre Site Master Plan

We are writing to the Islands Trust – Salt Spring Island to share information regarding the final plan with the final report for the Rainbow Recreation Centre Site Master Plan.

The Salt Spring Island Parks and Recreation Commission (PARC) recently approved the Rainbow Recreation Centre Site Master Plan. The development of Rainbow Recreation Centre Site Master Plan was identified as a priority in the 2019 Salt Spring Island Parks and Recreation Strategic Plan, in response to the community's desire for increased access to indoor recreation facilities for residents and visitors.

The master plan will assess current and future capacity needs to identify suitable expansion opportunities. This plan will inform a phased capital planning approach for new facilities and program amenities based on inputs from key stakeholders and the public.

Staff and stakeholder workshops were organized in the Fall of 2021 followed by the first public survey that recorded over 900 responses. Survey responses were presented to the Salt Spring Island Parks and Recreation Commission (PARC) in November 2021 where additional comments from PARC were incorporated into three draft conceptual designs. From March 7th to April 4th 2022, the draft conceptual designs were posted online and in the lobby of the Rainbow Recreation Centre, along with a second survey to gather public feedback. The second round of public engagement has concluded with 763 responses.

The feedback received has been used to develop one draft design incorporating what features and amenities we heard that the community would like to see in the future development on the Rainbow site.

Responses from Islands Trust Staff on the Conceptual drafts were considered while planning the final design. The final report with the final master plan (Attachment 1 and 2) is attached for your information.



Sincerely,
Dan Ovington

cc: Karla Campbell, Salt Spring Island Electoral Area Senior Manager
Gary Holman, Salt Spring Island Area Director



Attachments:

- 1) 2022 Rainbow Recreation Centre Site Master Plan Report
- 2) 2022 Rainbow Recreation Centre Site Master Plan





Rainbow Recreation Site Master Plan

2022 FINAL REPORT

Prepared by: Dan Ovington

CAPITAL REGIONAL DISTRICT | MANAGER, SALT SPRING ISLAND PARKS AND RECREATION

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1.0 Introduction

1.1 Context

The Capital Regional District's (CRD), Salt Spring Island Parks and Recreation Commission (PARC) identified the development of a 20 year master plan for the Rainbow Road Recreation Centre site as a top priority in the 2019 Salt Spring Island Parks and Recreation Strategic Plan. This priority is in response to the community's desire for increased access to indoor and outdoor recreation facilities and amenities for residents and visitors.



Located on 3.24 ha at 262 Rainbow Road on Salt Spring Island the Rainbow Road Aquatic Centre was built in 2008 with a six-lane, 25 metre lap multi-purpose pool and 12-person whirlpool. In a typical year, the pool sees over 50,000 visits and over 400 aquatic program registrations. The rainbow site also included a dog park, community gardens and informal trails.

The site is zoned Community Land Use Facility 1 (CF1 (B)) with the approved use being "institutional" and "recreation facility and child daycare." This site is the Salt Spring Island Parks and Recreation Commission's (PARC) only property zoned for indoor recreation with the stipulation that only 25% of the land can be covered for indoor space. The site currently has 5% coverage. The property is located in the Agricultural Land Reserve with approved non-farm status for community facilities and recreational uses.

In 2018, the CRD assumed responsibility for pool operations and management from a private contractor and has expanded the facility to include a 650 sq. ft. modular classroom, a 1,550 sq. ft. multipurpose room and two outdoor fenced play areas. With the expansion of the aquatic centre to include indoor spaces for dryland recreation the centre is now referred to as the Rainbow Recreation Centre.



Visitors of the Recreation Centre engage in a range of activities, including: aquafit, lap swim, leisure swim, swim club, swim lessons, hot tub, dryland recreation programs, dog park, trail walkers, community garden and/or facility renters.



1.2 Objective

The objective of the Rainbow Recreation Site Master Plan (Master Plan) is to develop a community supported high level guide for the development of future recreation facilities, programs and services on the recreation site.

The Master Plan has been developed by assessing current and future capacity needs to identify suitability and expansion opportunities. This plan will inform a phased capital planning approach for new facilities and programs based on information and input gathered through public engagement.

2.0 Site History and Ecology

2.1 Location and Environment

Located on 3.24 ha at 262 Rainbow Road the property is located west of Ganges Harbour on the central portion of Salt Spring Island. This area lies in the rain shadow of Vancouver Island and the Olympic Mountains, within the Coastal Douglas-fir moist maritime biogeoclimatic zone. Summers are warm and dry, and winters are wet and mild. (LGL environmental report, 2020)



2.2 Ethnographic Review

The project area falls within the traditional territory of the Hul'qumi'num or Island Halkomelem-speaking people and the SENCOTEN-speaking people. The Central Coast Salish encompasses five distinct language groups known as the Halkomelem, Squamish, Nooksack, Northern Straits and Clallam. Three different dialects of the Halkomelem language have been distinguished, separating the group further into the Island Halkomelem and the Downriver Halkomelem. The Island Halkomelem occupied winter villages on eastern Vancouver Island. The southern portion of Salt Spring falls within the home of SENCOTEN-speaking people represented by several Wsa'nec' (Saanich) groups presently located on the Saanich Peninsula as well as the Semiahmoo who reside in the area of White Rock. SENCOTEN-speaking groups have traditional territory along the eastern shorelines of Salt Spring and once had a named settlement at Ganges Harbour 750 m east of the study area. It is possible that the Ganges settlement may have been a permanent village for Saanich people before Saanichton village was established. The Cowichan also traditionally used Salt Spring Island as part of their annual subsistence strategies that took them from winter villages on Vancouver Island through the Gulf Island to the Fraser River salmon runs and back again. The water surrounding Salt Spring Island were traditionally used for fishing by the Tsawwassen. (Madrone, Archaeological Report 2021).

2.3 Archaeological Review

Preliminary Field Reconnaissances were conducted by Madrone archaeologist Kira Kristensen and Cowichan Tribes Cultural Monitor Shaun Canute on January 4th 2021 and by Kira Kristensen and Tsawout Cultural Monitor Adrian Underwood on February 4th 2021 to assess the potential for archeological resources within the site. No archaeological features were observed and the project area was assessed as having low potential for subsurface archeological resources. (Madrone, Archaeological Report 2021).

2.4 Current Land Use

The current land use designation of the property is CF1(b) [i.e. Community Facility 1 zone variant (b)], which allows for indoor recreation and active outdoor recreation facilities (Islands Trust, 2019). The recreation centre property is 3.24 ha, which contains the recreation facility, modular classroom outdoor recreation area, community gardens, dog park and parking lot. Neighboring properties include residential and agricultural lots, some with small farming practices.

2.5 Topography, Drainage and Soils

Topography does not vary significantly across the property; the terrain gently slopes from northeast to southwest. The elevation of the proposed expansion area is about 20 m above sea level. The primary soil type for the majority of the property is Mexicana, which is a moderately well-drained soil with gravelly sandy loam and morainal deposits and unweathered till found within 100 cm of the surface. Cowichan soil type is found in the southwest corner of the property, which is characterized as a poorly drained soil with silty clay loam and silty clay marine deposits. Most of the property is comprised of mudstone and sandstone and the southwest corner comprised of sandstone and conglomerate (Islands Trust 2020).



2.6 Vegetation

Vegetation on the property varies depending upon the level of activity and type of use. The area south of the building around the retention ponds, drainages, and manicured field is mostly comprised of exotic herbs and shrubs, aquatic plants and deciduous and coniferous trees. The section west of the community gardens appears to be a vegetated disturbed area that mainly contains exotic herbs and shrubs with sparse patches of deciduous and coniferous trees. A small patch (~0.01 km²) of mature forest is present at the northern extent of the property and contains large deciduous and coniferous trees with little to no understory cover. (LGL environmental report, 2020)



2.7 Wildlife and Wildlife Habitat

The only evidence of large mammal use on the property was Columbian black-tailed deer (*Odocoileus hemionus columbianus*) tracks. Other wildlife documented during the site visit included Northern Pacific Treefrog (*Pseudacris regilla*) and several common bird species. The main wildlife habitat features on the property were the retention ponds, shrub patches, forested areas and wildlife trees. These features potentially provide habitat for many species of birds (e.g., songbirds, waterfowl, raptors), pond-breeding amphibians, mammals and invertebrates. (LGL environmental report, 2020)

2.8 Species and Ecosystems at Risk

No current records of occurrences for at-risk species within the study area were found using online databases (e.g., EFLORA/EFAUNA, iNaturalist, VASCAN Explorer, BryophytePortal, LichenPortal, MyCoPortal, PNW Herbaria and BC Habitat Wizard). A historical Great Blue Heron, fanninisubspecies (*Ardea herodias fannini*) colony was documented in the forest stand at

the northern edge of the property from 1986 to 1994, with up to 25 nests recorded in 1989. This colony has been inactive for a number of years and a new colony exists 1.2 km west of the property (BC Conservation Data Centre 2020). During the site visit there was no evidence of heron or raptor breeding on the property. (LGL environmental report, 2020)

2.9 Aquatic and Riparian

There were multiple aquatic and riparian features on the property including two constructed retention ponds and multiple drainages directing water in and out of the ponds. The ponds and drainages are captured by DPA4 and DPA7 of the OCP. Drainages connected to the ponds were flowing at the time of survey and while they were densely vegetated, there did not appear to be any blockages preventing the flow of water into the Okano Creek system. These ponds would be filled by surface water runoff and were likely constructed to reduce seasonal flooding on the property and to support existing drainage into Okano Creek. The ponds have possibly developed into breeding habitat for amphibians. (LGL environmental report, 2020)



3.0 Hierarchy of Planning



The planning process for the Rainbow Recreation Centre included several steps:

- 1) Project initiation was the first step and included gathering background information, completing site assessments and preparing for engagement.
- 2) Initial engagement included stakeholder workshops and a public survey posted on the CRDs engagement webpage and available for in hard copy at the Salt Spring Island Public Library and the Rainbow Recreation Centre.
- 3) Feedback from the first public survey was presented to PARC for additional comments before preparing three draft conceptual designs for additional consultation and feedback.
- 4) The next round of public engagement included posting the three conceptual designs online and on display at the Rainbow Recreation Centre with a second public survey. The responses were used to gather additional information about the desired facilities and amenities for the recreation centre site which were used to form a final draft design.
- 5) Feedback from the second public survey along with the final draft design was presented to PARC for additional comment and approval.
- 6) The final design and final report were referred to the Agricultural Land Commission for approval and referred to the Islands Trust for information.
- 7) The final master plan was then posted on the CRD webpage along with the final report. It was also displayed in the lobby of the Rainbow Recreation Centre.
- 8) Implementation of the plan will require including site additions in the Salt Spring Island Parks and Recreation capital plan and exploring multiple funding options including: Capital Reserves, Grants, Community Works Funds, Funding Partners and Donations.

3.1 Research and Field Review

Recommendations from Archaeological and Environmental Assessment that were considered in planning process and to be considered during future construction.

- No archaeological resources were observed, and no further archaeological assessment is recommended. However, it is suggested to stress that unanticipated archaeological resources may nonetheless be encountered during future development. In this event, work must stop immediately, and the Archaeology Branch must be notified. The further recommendations are given that an archeologist be engaged to assess the resources and that the resource be managed as per the direction of the Archaeology Branch and all the affected First Nations.
- Drainages – The drainages and ponds should be assessed by a hydrologist to determine the risk to the areas downstream of the property (e.g., sedimentation, changes in water quality) and to recommend suitable options for reducing impacts to the area due to the likely increase in traffic within the riparian area.
- Erosion and Sediment Control – Install temporary erosion and sediment control structures (i.e., silt fencing) to prevent sediment transport and inspect erosion control devices and storage areas regularly during construction.
- Exposed soil – Cover stockpiles of topsoil and/or overburden with polyethylene sheeting. Stabilize and revegetate exposed soils as soon as possible after construction is completed.
- Staging locations – Place construction materials away from the retention ponds and drainages.
- Spill Contingency – Have spill kits on site at locations designated for fuel or chemical storage.
- Environmental sensitive areas – If possible, the seasonally flooded south field should be permitted to remain intact to the extent feasible as it is classified as a secondary sensitive ecosystem. Changes that may alter the seasonal flooding of the field should be avoided to ensure that this area continues to support migratory and breeding birds and provides habitat connectivity for pond-breeding amphibians.
- Development Permit Areas and Critical habitat – To minimize disturbance in Development Permit Area and critical habitat, these areas should be avoided if practical. A detailed land survey of the respective boundaries should be completed and clearly marked (e.g., flagged) prior to construction. Marked areas should be considered no-go zones during the construction activities.
- Least risk timing windows – In general, construction timing is recommended to coincide with periods of reduced breeding bird activity (early September to early March). Rainbow Recreation Centre Expansion EA4137 8

- Special care should be taken to ensure that construction does not disturb breeding birds, especially nesting herons or raptors. Although there were no signs indicating such, historical occurrence records of Great Blue Herons exist in the mature forest stand at the north end of the property. This indicates that suitable habitat exists within ~150 m of the proposed expansion area.



Map 1: Overview of the site with the various environmental constraints

3.2 Community Consultation

Consultation was completed by the Manager of Salt Spring Island Parks and Recreation and the Recreation Project Technician with information compiled and provided to LADR Landscape Architects to develop conceptual designs.

Community consultation began in August 2021 and included roundtable discussions with staff, public survey, key stakeholder workshop and input from PARC to develop three conceptual designs. The conceptual designs were posted online and at the Rainbow Recreation Centre with a second survey to inform a final draft design that was presented to PARC on May 24, 2022.



3.2.1 Roundtable Discussions with Staff

The roundtable provided an opportunity for recreation and maintenance staff to share information about the site, existing amenities and future opportunities. The first session took place with maintenance staff on August 17, 2021 and the second session took place on August 19, 2021 with recreation staff. Staff were asked a number of questions and responses were recorded and compiled for the landscape architect (Attachment 1). Some of the questions for discussion included:

- What would you like to see added to the site?
- What is your preferred location for the parks maintenance facility and why?
- What do you think is currently missing from the site?

Key themes that emerged:

- Maintenance staff see a maintenance facility as a top priority.
- Recreation staff see proper office space in the pool reception as a priority.

3.2.2 Public Survey #1

The survey was available online and hard copies were available at the Rainbow Recreation Centre and the Salt Spring Island Library between September 27 and October 18, 2021. There were a total of 966 responses, 664 complete and 300 incomplete.

The majority of survey respondents were between the ages of 35 and 64 and approximately 27% were over 64. Most respondents indicated that they currently visit the recreation centre one to two times per week and their primary reason for visiting was to go swimming.

Key themes that emerged when we asked “what would you like to see included in the future expansion of the site in the next 5 to 20 years”:

- Need for a leisure/therapy/kids pool with warmer
- Playground / picnic area for families
- Sauna /steam room / waterslide



3.2.3 Stakeholder Workshop

A stakeholder workshop was held on October 8, 2021 at the Salt Spring Island Public Library with 15+ participants representing a variety of community and user groups. Stakeholders were asked a number of questions and responses were recorded and compiled for the landscape architect (Attachment 1). Some of the questions included:

- Do you think there is a need to develop more recreation opportunities on the site?
- What is your preferred location for the maintenance facility and why?
- What do you think is the most enjoyable aspect of the Recreation Centre for the Community?

Key themes that emerged:

- All respondents felt that there is a need to develop more recreation opportunities on site.
- All respondents felt that the maintenance facility should not be located on the Rainbow Road site.
- Mixed responses when it was proposed to split the maintenance facility between the two sites.



3.2.4 Public Survey #2

The three conceptual designs were drafted based on the feedback from the first round of public engagement with key stakeholders and the public survey.

From March 07, 2022 to April 04, 2022, they were posted online and in the lobby of the Rainbow Recreation Centre, along with a second survey to gather public feedback.



A total number of 763 responses were recorded, 33.6% preferred Option 3 whereas the preference percentage for other two remained slightly less but nearly similar range (Option1 - 21.3% and Option 2 – 26.1%)

Public shared their viewpoint about what featured they would like to see added or removed from their preferred option.

What features would they like to see ADDED?

- An ice arena
- A gym, with weight room/cardio equipment
- Indoor fitness/dance/seniors programs
- Additional parking
- Pickleball
- Steam room and sauna
- Larger playground
- A splash pad for little ones

What features would they like to see REMOVED?

- Disc golf
- Dog park
- Maintenance facility
- Tennis courts
- Gym/multipurpose facility

3.3 Design and Drafting

3.3.1 Draft Conceptual Plans

Information gathered from August to November 2021 was then reviewed, analyzed and compiled for the landscape architects to develop into three distinctly different draft plan options. The draft plans were then posted online and put on display at the Rainbow Recreation Centre with a second survey to solicit feedback from the public.

Proposed Facilities in Conceptual Designs:

1. Aquatic centre (existing)
2. Therapy/leisure/kids pool/lazy river
3. Daycare (existing)
4. Fence play area (existing)
5. Preschool (existing)
6. Water slide
7. Multi-purpose room (existing)
8. Gym multi-purpose facility
9. Indoor fitness / dance/ senior programs
10. Playground – toddlers (nature themed)
11. Playground – school age kids
12. Pet park
13. Covered picnic area
14. Covered multi-purpose court (15M X 30M) – 1 unit
15. Pickleball courts (18M X 9M) (60' X 30') – 4 units
16. Tennis courts (26M X 16M) (85' X 50') – 2 units
17. Lawn area for informal gathering
18. Community garden (expansion)
19. Community garden (existing)
20. Maintenance facility on Rainbow Road
21. Maintenance facility on 210 Kanaka
22. Natural trail along the tree covered area
23. Disc golf course along trail
24. Parking (existing)

3.3.2 Three Conceptual Designs

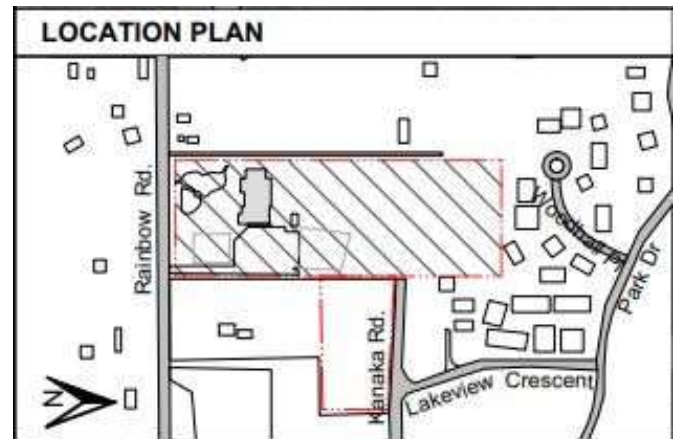
Existing Facilities Plan

The site is rectangular in shape and oriented in north-south direction.

It can be approached through two roads, Rainbow Road on the south end running parallel to the site boundary whereas Kanaka road is intersecting perpendicularly on the north-east side.

All three options were planned keeping the existing facilities intact - the Aquatic Centre, Daycare/Multipurpose Room, Fence Play area, Preschool, Community Garden, and Parking.

In all three conceptual layouts, PARC requested that a pool facility space expansion was proposed to include a therapy/leisure pool and lazy river. It was also requested that only a natural trail be planned in the Northern region of the site which is densely covered with trees.



Existing Facilities

LEGEND	
1	AQUATIC CENTRE
2	PRESCHOOL
3	PET PARK
4	COMMUNITY GARDEN
5	PARKING
6	MULTIPURPOSE ROOM
7	FENCE PLAY AREA

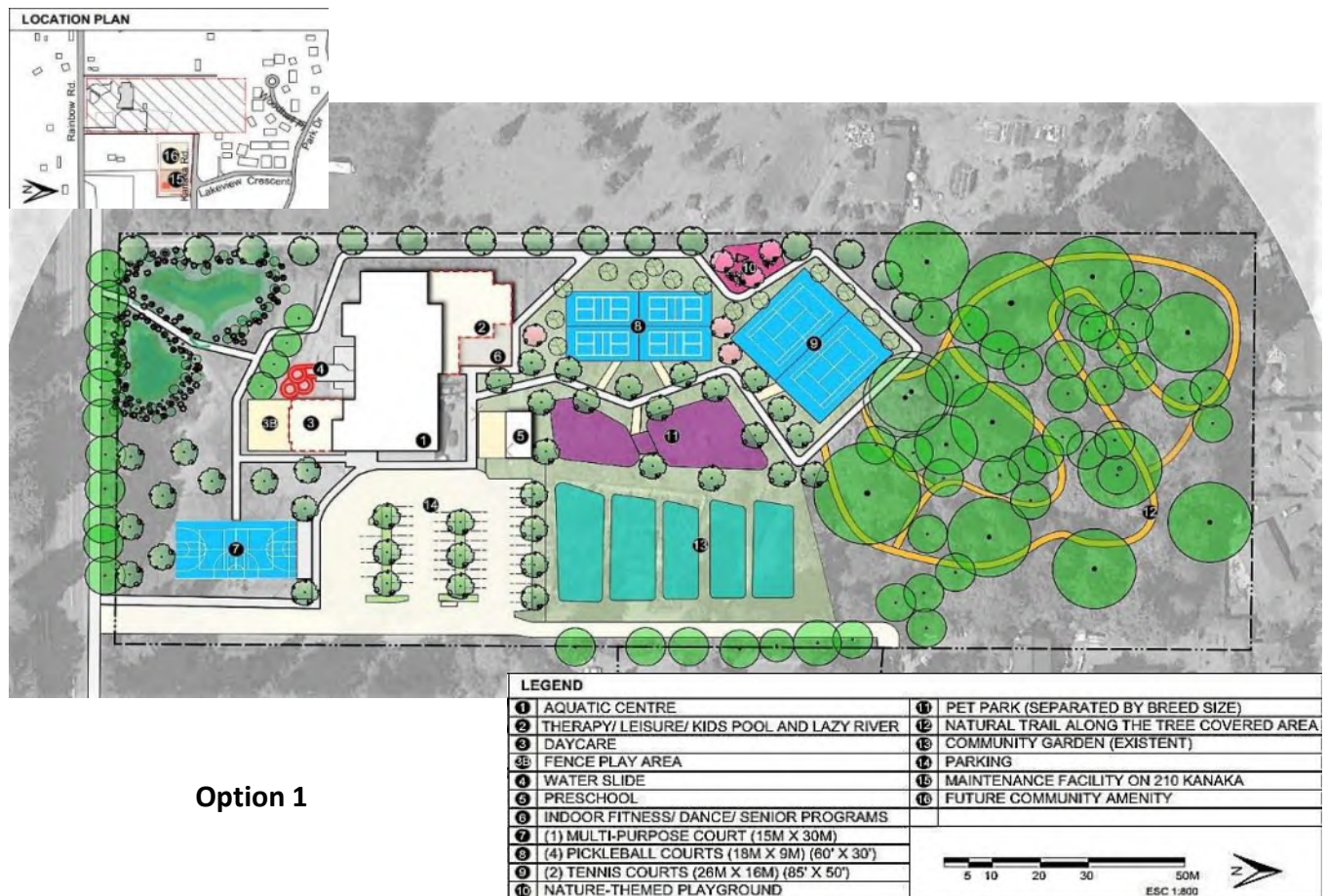
Draft Plan Option 1

Option 1 envisioned to provide space for Tennis, Pickleball and a Multipurpose Court. The multipurpose court captured the south-east corner with a green setback on all sides. The Tennis and Pickleball were located centrally more towards the west edge, the niche between the two on the extreme west side was marked as Nature-Themed Playground.

A big area at the centre of the site bridging between the courts and the existing community gardens is provided to plan a pet park with separation by breed size. Parallel to it, the community gardens were also extended towards the north side.

Water Slide feature holds a perfect spot next to the Aquatic Centre on the southern end and daycare on the east end.

A placeholder is kept at the Kanaka Road property for the maintenance facility and future community amenity.



Draft Plan Option 2

Option 2 has the base plan similar to Option 1 with change in function of some areas and excluding some facilities to create space for others. This option provides additional tennis courts by replacing the pickleball court space with an intention to have 4 tennis courts and two of them would serve dual purpose and be used for pickleball as and when needed. The pet park was omitted in this option and the space is used to accommodate the picnic area and a larger playground for school-age kids.

The maintenance facility has been kept on the site itself at the location between the community gardens and the natural trail. It has a direct access from the Kanaka Road and also the driveway connects through the entrance from Rainbow Road which makes it the most accessible and ideal place for the maintenance facility.



Draft Plan Option 3

Option 3 was comprehensive as it provides room for majority of the facilities.

It consists of only one multi-purpose court which is accommodating multiple sports. No space allocated for the tennis and pickleball courts, considering the use of existing tennis courts at Portlock Park. The space is then used for the pet park near the natural trail and the playgrounds for toddlers and school age kids at the centre of the site.

The open lawn area with a picnic table is framed out in the central space between the preschool and the natural trail. There is an extension to community gardens which is proposed next to the lawn area and adjacent to the existing gardens on their west end.

The water slide feature kept intact as in Option 1 whereas the space for the multi-purpose court is used for gym/ indoor multi-purpose facility.

The maintenance facility is kept as it was in the Option 2 at the best accessible location from the approaching roads.



Option 3

3.4 PARC Approval

Results from the second public survey were presented to PARC for information on April 26, 2022. The final draft of Rainbow Recreation Centre Site Master Plan was approved on May 24, 2022.

The final detailed plan and report for the Master Plan development have been finalized and are available online and on display in the Rainbow Recreation Centre lobby.



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**262 Rainbow Road
RECREATION SITE MASTER PLAN**

Rainbow Master Plan Concept Gets PARC Approval

By: Gail Spalberg — Last updated: Jun 29, 2022

The future of the Rainbow Recreation Centre site became more clear on Tuesday after the Salt Spring Parks and Recreation Commission approved a final conceptual design to guide development of the 7.82-acre recreational property on Rainbow Road.

The 20-year master plan includes relocating four outdoor tennis court facilities from Portlock Park to Rainbow Road, as well as adding four pickleball courts as part of a larger covered multi-court structure in another area. Space by the existing pool is allocated for addition of a leisure/therapy pool with a steamroom and sauna, waterslide and indoor activity space. Two playground areas (one for toddlers and another for older kids) would be added, along with a nature trail and a lawn area for informal gatherings. The allotment gardens will remain in their current spot, while the existing dog park would be eliminated in future and possibly moved to another spot on the property. Additional parking spots are also planned.

While some discussion arose about whether or not pickleball lines could be added to one of the tennis courts to increase capacity for that growing-in-popularity sport, no change to the draft plan was suggested.

"I think keeping the tennis and pickleball people separated as much as possible would do nothing but good because good fences make for good neighbours," commented commission member Drew Takahashi at the PARC meeting.

"I like what we've done here," summarized commissioner Sean Norgard. "I like the plan. And I think it gives us maximum flexibility for what we can do at Portlock Park," referencing the space that will be freed up once tennis courts are no longer at Portlock.

Next steps are to obtain approval from the Agricultural Land Commission, as the site falls within the Agricultural Land Reserve, and the Islands Trust. A final master plan and report is expected to be published in September.

None of the changes outlined in the plan will be acted on immediately and some, like a leisure pool, would require public approval to borrow funds to build the amenity.

The final draft design was created following PARC/CRD staff and community stakeholder workshops held in the fall of 2021, and two public surveys that followed. The first survey received 900 responses and the second, where three different conceptual designs were presented, attracted 763 responses. That feedback was used to develop the design approved by PARC.

4.0 Masterplan Recommendations

4.1 Plan Overview

The final design brief consists of the following facilities:

1. Aquatic centre (existing)
2. Daycare/ multi-purpose room (existing)
3. Fenced play area (existing)
4. Preschool (existing)
5. Community garden (existing)
6. Parking (existing)
7. Therapy/leisure/kids pool/lazy river
8. Indoor programs (senior/fitness/dance)
9. Steam and sauna
10. Covered multi-purpose court (21.35M X 36.60M) – 1 unit
11. Pickleball courts (9.14M X 18.29M) – 4 units (accommodated in the multipurpose court)
12. Tennis courts (17.07M X 34.75M) – 4 units
13. Playground – toddlers (nature themed)
14. Playground – school age kids
15. Natural trail along the tree covered area
16. Pet park (placeholder for maintenance facility/additional parking)
17. Additional parking
18. Lawn area for informal gathering
19. Covered picnic area
20. Water slide
21. Maintenance facility on 210 Kanaka
22. Placeholders to display local artworks

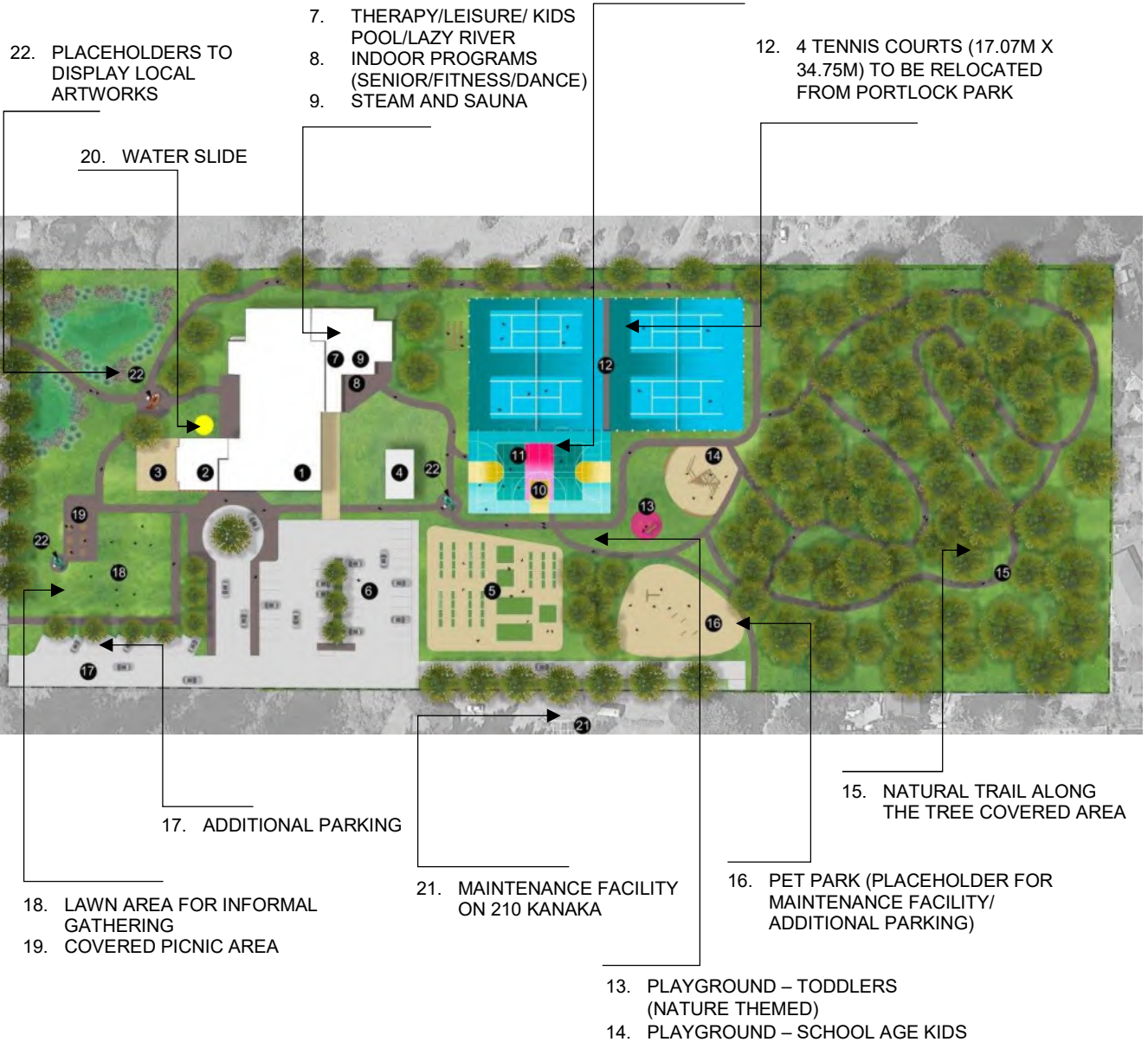
4.2 Key Masterplan Components and Recommendations

EXISTING FACILITIES

1. AQUATIC CENTRE (EXISTING)
2. DAY CARE/ MULTIPURPOSE ROOM (EXISTING)
3. FENCED PLAY AREA (EXISTING)
4. PRESCHOOL
5. COMMUNITY GARDEN
6. PARKING

PROPOSED FACILITIES

10. COVERED MULTI-PURPOSE COURT (21.35M X 36.6M)
11. 4 PICKLEBALL COURTS ACCOMMODATED IN THE MULTI-PURPOSE COURT (9.14M X 18.29M)



5.0 Appendices

5.1 Attachment 1: Stakeholder Workshops Summary of Responses

Stakeholder Workshop – Rainbow Road Recreation Centre Master Plan (262 Rainbow Road, SSI)

The following questions were presented at the Friday, October 8, 2021 Stakeholder Workshop for the 262 Rainbow Road Pool Site Master Plan. The information below is a summary of the responses received from those who participated:

1.

Do you think there is a need to develop more recreation opportunities on the site?	
Yes	No
15/15	0/15



2.

What would you like to see added?			
Leisure/Therapy Pool	7/15	Walk Track	3/15
Dog Park Improvement Relocation	3/15	Walking Trails	3/15
Lazy River	4/15	Community Garden Expansion	4/15
Improved Outdoor Space	1/15	Water Slide	4/15
Ice Arena	9/15	Indoor Racket Facility	3/15
Steam Room	5/15	Mini Golf	0/15
Tennis Court	0/15	Sauna	6/15
Playground	2/15	Pickleball	1/15
Multipurpose Court Covered Outdoor	1/15	Covered Picnic Area	4/15
Climbing Wall	6/15	Multi-purpose Sports Facility (Gym)	10/15

3.

What is your preferred location and why?	
210/220 Kanaka Road	8/15
262 Rainbow Road	0/15
Other: Office at Rainbow Road and Workshop at Kanaka Road	9/15

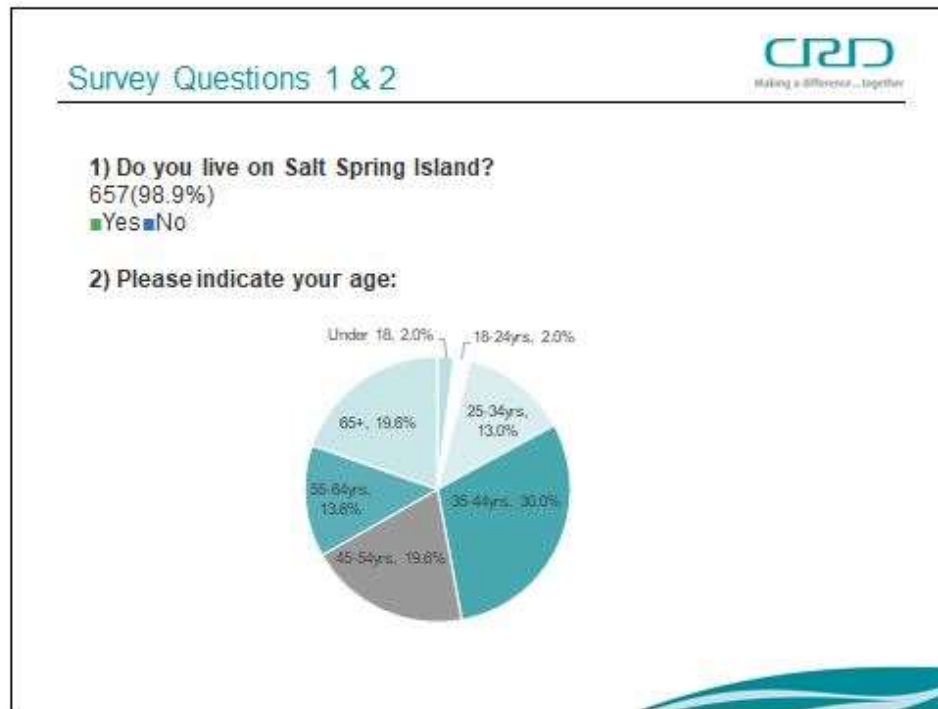
4.

What do you think is the most enjoyable aspect of the Recreation Centre for the Community?	
Lap Swimming	Community Garden Expansion
Hot Tub	Dog Park
Pool	

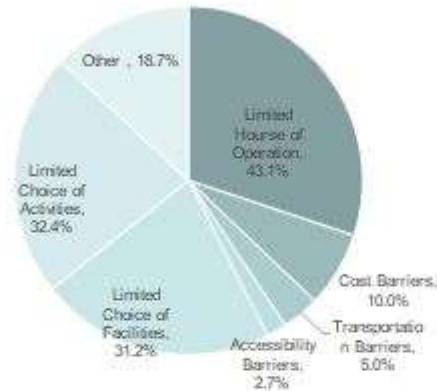
5.

What would you like to see included in the future expansion of the Recreation Centre in the next 5-20 years?	
Fun additions to the existing pool	Leisure pool with zero entry for all users
Drop in childcare while parents use facility 0-12 years of age	Community Garden expansion <i>(request was made to keep the current gardens)</i>
Picnic area outside	Coffee shop/cafeteria
Outdoor pool	Larger pool facility
Clothing/equipment store	Permanent gymnastics equipment
Permanent gymnastics facility <i>(not having to put away equipment between uses/classes)</i>	Trampoline park
Silks classes	Observation area for the pool (inside facility for viewing)
Childcare drop off for all ages	Splash pad
Wheel chair access (ramp into the pool)	Programs for children with special needs

5.2 Attachment 2: Public Survey #1 Summary of Responses



Survey Question 4

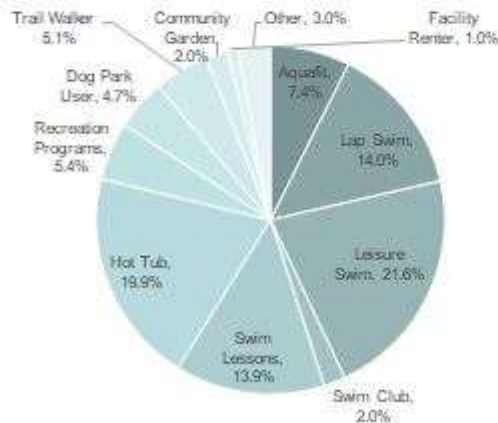


If you do not use the Recreation Centre, why not?

Other:

- Pool is too cold
- Not interested in what is offered.
- Shallow end is too deep for small children
- Chlorine
- No Gym or Sauna
- Difficult to use with my kids
- Pool is too small
- Would rather swim at a lake or ocean
- No amateur roller rink
- Lack of interest
- Covid
- No mandatory vaccine policy

Survey Question 5

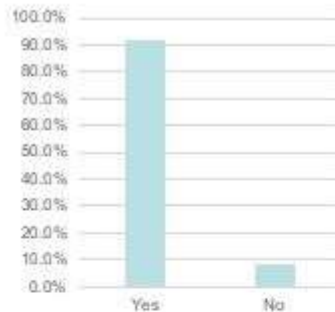


What is your primary reason for visiting the Recreation Centre?

Other:

- Swimming:
 - with family
 - with kids
 - with grandkids
 - with friends
- Aquafit
- Summer camps
- Herron's nest preschool
- Low impact exercise
- School programs
- Wibit (pool inflatable)
- Hot shower

Survey Question 6



Would you visit more often if the Recreation Centre expanded the features offered?

Survey Question 7



What are the main aspects of the current Recreation Centre that you enjoy the most?

Survey Question 8



What is the main thing missing from the Recreation Centre?

- Leisure / Therapeutic Pool
- Kid pool with slides, warmer water and
- kids in lessons being able to touch
- More recreation than just swimming
- Indoor multiuse recreation space
- Playground/ picnic area for families
- Fitness classes and gym space
- Warmer pool
- Mini golf
- trampoline park
- Sauna
- A fun and playful toddler zone
- Gym and ice rink/skating arena
- A proper room for birthday parties
- Specialty classes (arts, crafts, cooking, dryland fitness, weight room
- Nature programs, First Nations programming, more family events
- Steam room, outdoor movie nights, rock climbing,
- Diving boards including a high dive
- Ping pong table / badminton



Survey Question 9



What would you like to see included in the future expansion of the Recreation Centre in the next 5-20 years?

Top Ten of Options to Select:

- 1) Multi-Purpose Sports Facility (gym)
- 2) Ice Arena
- 3) Sauna
- 4) Leisure / Therapy Pool
- 5) Lazy River
- 6) Steam Room
- 7) Climbing Wall
- 8) Playground
- 9) Water Slide
- 10) Covered Multi-Sport Court

"Other":

- Children's/toddler pool 10
- Weight room
- Diving Board
- Disc golf
- Table tennis
- Indoor skateboard
- Outdoor pool
- Bowling
- Basketball
- Splash pad
- Day care for babies
- Community rooms for rent
- Curling rink
- Roller rink.....

Survey Question 10



Is there anything else that you would like to share about the Recreation Centre Site Master Plan?

I think an ice rink is really important

Please consider kids this time around

We don't need a fancy rec centre

This survey indicates good things.. That's exciting

It's a well run facility and I am excited to see how it is improved

The staff is great at the pool

Very excited to see what happens

Mini golf would be great!

5.3 Attachment 3: Public Survey #2 Summary of Responses

SURVEY at a GLANCE

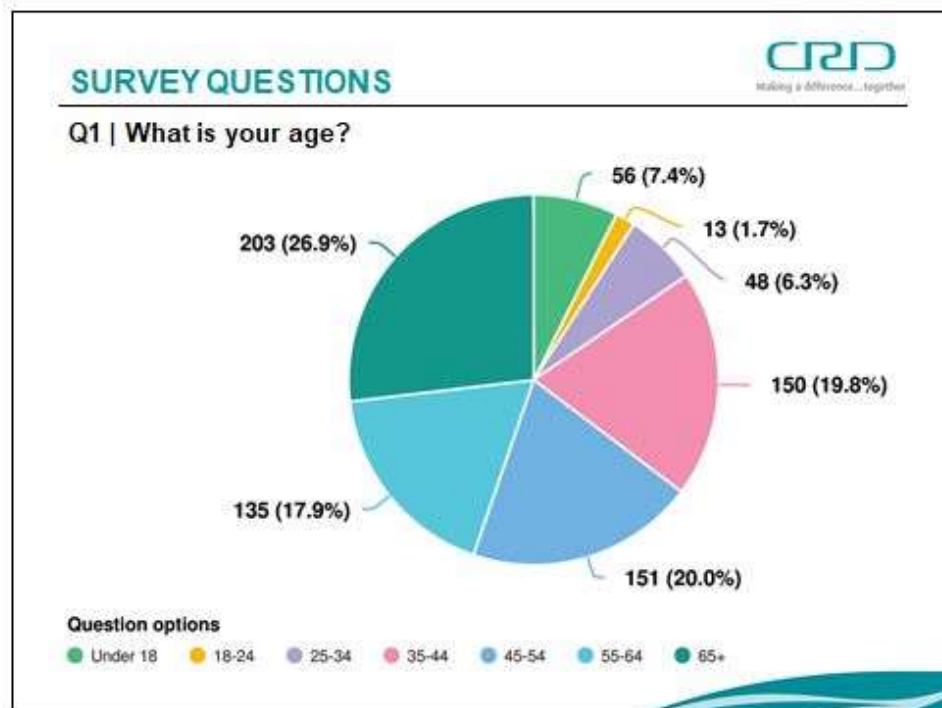


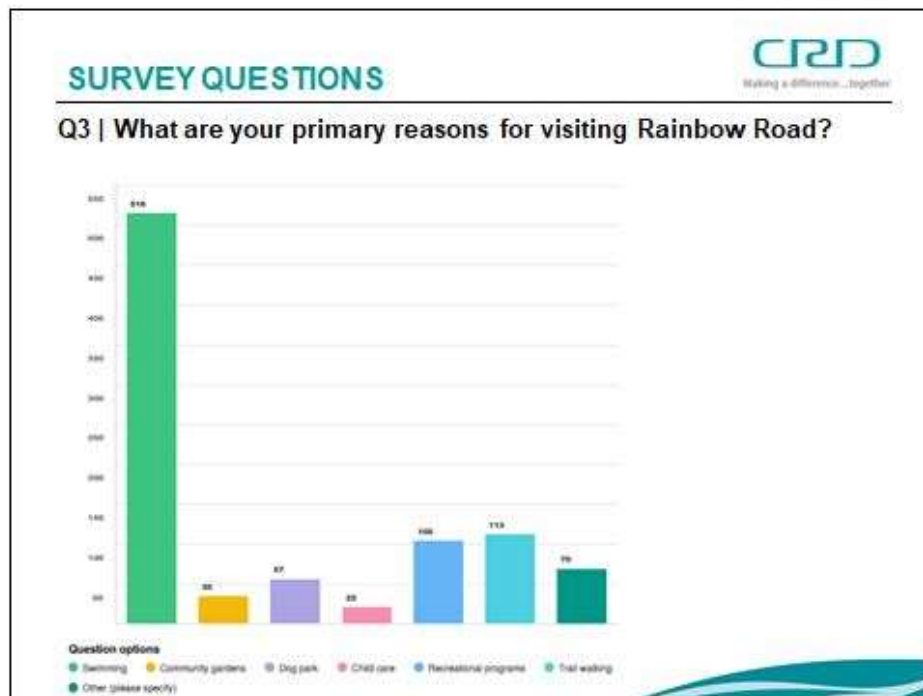
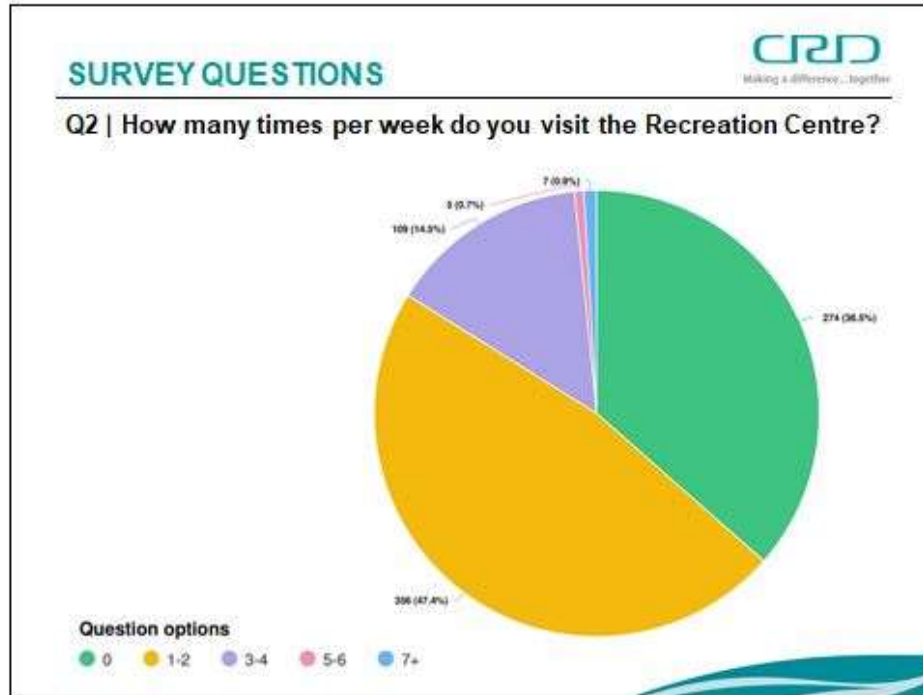
What we Asked?

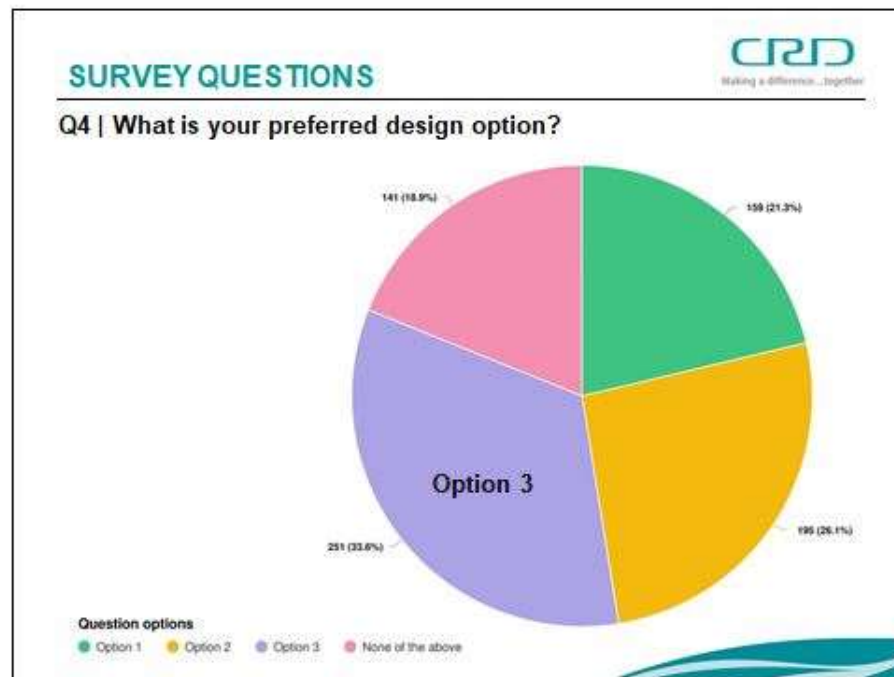
- **Survey Questions:**
 - What is your age?
 - How many times per week do you visit the recreation centre?
 - What are your primary reasons for visiting rainbow recreation centre?
 - What is your preferred option?
 - What features, if any, would you like to see added to your preferred option?
 - What features, if any, would you like to see removed from your preferred option?
 - Please provide any additional comments.

How'd it go?

- The survey was available online for public feedback along with the hard copy survey at the Rainbow Road Aquatic Centre from March 7th to April 4th 2022.
- There were a total of 763 responses.







Suggested Additions and Deletions

 Making a difference...together

What features would you like to see

ADDED?

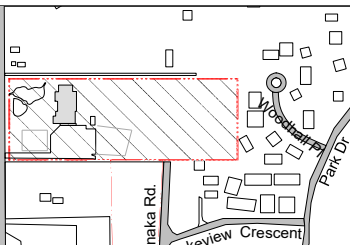
- ☐ An ice arena
- ☐ A gym, with weight room/cardio equipment
- ☐ Indoor fitness/dance/seniors programs
- ☐ Additional parking
- ☐ Pickleball
- ☐ Steam room and sauna
- ☐ Larger playground
- ☐ A splash pad for little ones

What features would you like to see

REMOVED?

- ☐ Disc golf
- ☐ Dog park
- ☐ Maintenance facility
- ☐ No more tennis courts
- ☐ Gym/multipurpose facility



LOCATION PLAN		LEGEND		262 Rainbow Recreation Centre	
	❶	AQUATIC CENTRE (EXISTING)	❷	4 TENNIS COURTS (17.07M X 34.75M) TO BE RELOCATED FROM PORTLOCK PARK	SITE MASTER PLAN
	❷	DAYCARE/MULTI-PURPOSE ROOM (EXISTING)	❸	NATURE-THEMED PLAYGROUND FOR TODDLERS	
	❸	FENCED PLAY AREA (EXISTING)	❹	PLAYGROUND FOR SCHOOL-AGE KIDS	Final Design
	❹	PRESCHOOL (EXISTING)	❺	NATURAL TRAIL ALONG THE TREE COVERED AREA	
	❺	COMMUNITY GARDEN (EXISTING)	❻	PET PARK (PLACEHOLDER FOR MAINTENANCE FACILITY/ADDITIONAL PARKING)	
	❻	PARKING (EXISTING, 38 STALLS)	❼	ADDITIONAL PARKING (15 STALLS)	
	❼	THERAPY/LEISURE/KIDS POOL/LAZY RIVER	❽	LAWN AREA FOR INFORMAL GATHERING	
	❽	INDOOR PROGRAMS (SENIOR/FITNESS/DANCE)	❾	COVERED PICNIC AREA	
	❾	STEAM AND SAUNA	❿	WATERSLIDE	
	❿	COVERED MULTI-PURPOSE COURT (21.35M X 36.60M)	⓫	MAINTENANCE FACILITY AT 210 KANAKA ROAD	
	⓫	4 PICKLEBALL COURTS ACCOMODATED IN THE MULTIPURPOSE COURT (9.14M X 18.29M)	⓬	PLACEHOLDERS TO DISPLAY LOCAL ARTWORKS	
				 Making a difference...together	

August 10, 2022

Islands Trust
Attention: Peter Luckham, Chair, Salt Spring Island Local Trust Committee

By email ssiinfo@islandstruct.bc.ca

Dear Peter Luckham

This will acknowledge receipt of your letter of July 20, 2022 requesting suspension of activities at Channel Ridge.

After some consideration Rogers has decided to proceed with construction of the telecommunications tower in Channel Ridge. It has taken several months since concurrence was issued to arrange for contractors to complete this work and any delays will increase costs to Rogers. This is also an important site for CREST to expand their emergency dispatch network to create adequate communication for public safety.

Rogers do value inputs from Islands Trust Saltspring Island Local Trust Committee and we look forward to working with you on any future projects. Rogers values the high-quality wireless service we offer Canadians and we recognized the importance of working with local government.

Please contact Michael Krenz at 672-515-9534 or Michael.Krenz@rci.rogers.ca for further information.

Regards,



Michael Krenz
Government Relations, Real Estate and Municipal Affairs BC

- c. Sam Sugita, Rogers
- Ken Pungente, ISED Canada
- Gordon Horth, CREST Emergency Communications

From: Oona McOuat <[REDACTED]>
Sent: Thursday, August 11, 2022 12:27 PM
To: Ken.Pungente@ised-isde.gc.ca
Cc: Peter Grove; Peter Luckham; Laura Patrick; SSInfo;
gsjuberg@driftwoodgimedia.com; Elizabeth - M.P. May; Elizabeth -
M.P. May; ELizabeth May; francois-philippe.champagne@parl.gc.ca;
ministerofisi-ministredeisi@ised-isde.gc.ca; Simon.Kennedy@ised-
isde.gc.ca; Carmen Thiel; Sue Ellen Fast; Dan Rogers
Subject: Serious Procedural Error in Rogers tower siting on Salt Spring Island
Attachments: Letter from Ken Pungente ISED to SS LTC May17, 2022.pdf; Cellular
Antennae Procedural Guideline & Proposal Form.pdf

Dear Mr. Pungente,

I am writing in regards to the proposed Rogers telecommunications tower in Channel Ridge Estates on Salt Spring Island.

In your letter of May 17, 2022 (attached) written to Peter Luckman, Chair of the Salt Spring Local Trust Committee, you state:

"Since the issuance of concurrence, by the Salt Spring Island Local Trust Committee (SS LTC), the only change in circumstances is the SS LTC's November 9, 2021 adoption of a new antenna siting protocol. Given the date of the policy adoption, it is not to be retroactively applied."

And, that the "SS LTC did not provide any other valid rationale to support the rescindment."

I am writing to provide this valid rationale for rescindment and to report a serious procedural error, which, I believe, renders the original siting process null and void.

Section 4 of ISED's CPC 2-0-03 states: *"Proponents must follow the land-use consultation process for the siting of antenna systems, established by the land-use authority, **where one exists.**"*

Section 122 (4) of BC's Community Charter states: *"An act or proceeding of a council is not valid unless it is authorized or adopted by bylaw or resolution at a council meeting."*

Timeline

- o On **April 26, 2001**, the Salt Spring Local Trust Committee (the "**LTC**") adopted by resolution the attached *Cellular Antenna Procedural Guideline* for the siting of telecommunications towers.
- o On **July 27, 2021**, the LTC issued a concurrence decision related to the proposed siting of the Rogers Channel Ridge tower. To the best of my knowledge, the April 2001 resolution noted above had not been amended or repealed by the LTC by resolution on or before July 27, 2021.

o On **November 9, 2021**, the LTC adopted the “Antenna System Siting Protocol”. On that date, this new protocol replaced the 2001 policy.

Given the requirements established by ISED in the CPC 2-0-03, I strongly believe the attached *Cellular Antennae Proposal Form* and *Procedural Guideline* should have been used in the siting of the Rogers tower on Canvasback Place. Instead, ISED’s default procedure was followed. **Is this not a serious breach of federal antenna siting regulations?**

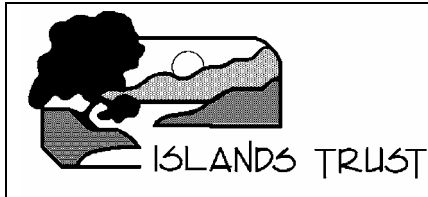
As time is of the essence, I would appreciate acknowledgement of receipt of this letter from all parties cc’ed above, as well as a response that clearly addresses my concern,

Yours Truly,

Oona McQuat
Salt Spring Island, BC

Oona McQuat

The information contained in this e-mail is intended only for the individual or entity to whom it is addressed. Its contents (including any attachments) are confidential and may contain privileged information. If you are not an intended recipient you must not use, disclose, disseminate, copy or print its contents. If you receive this e-mail in error, please notify the sender by reply e-mail and delete and destroy the message.



Procedural Guideline

Date: April 26, 2001

Date Approved: April 26, 2001

Title: Procedure for Cellular Phone Antenna Proposals

Approved By: SSI Local Trust Committee

Last Updated: _____

PURPOSE:

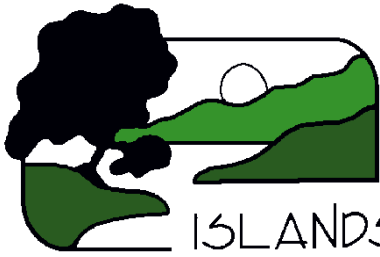
The Local Trust Committee and the Advisory Planning Commission for the Salt Spring Island Local Trust Area concluded an extensive community consultation process to obtain public input on criteria that would guide the preparation of the Local Trust Committee's comments to applicants proposing new or modified telecommunication antennas or facilities in the Salt Spring Island Trust Area. The following procedures formalize the recommendations of the Advisory Planning Commission to the Trust Committee regarding the processing of submissions. The procedures also set out the local consultation process required by Industry Canada's Environment Process, Radiofrequency Fields and Land-Use Consultation Client Procedures Circular (CPC-2-0-03).

DETAILS:

1. Cellular phone antenna providers intending to apply to Industry Canada for approval of telecommunication antenna facilities will be requested by Staff to complete a Proposal Form to provide the information necessary to start the consultation with the public and the Local Trust Committee.
2. Upon receipt of a complete submission, the applicant will be notified that the local consultation process has started and that comments will be provided to meet the timing requirements of the Letter of Understanding between Industry Canada and the Islands Trust.
3. Staff will forward a copy of the Proposal Form to the local Medical Health Officer for comments.

4. Where a proposal meets the LTC's guidelines, Staff will prepare and post a notice of project to invite public comments on all Islands Trust notice boards. The notice will provide a minimum 30 day comment period.
5. Staff will prepare a brief screening report and recommendation for submission to the Local Trust Committee along with public comments received on the proposal.
6. Where a proposal does not meet the LTC's guidelines, the proponent should undertake a public consultation process, including public newspaper notice, notice to adjacent property owners and residents. The results of the public consultation process are to be documented and forwarded to the Islands Trust for consideration.
7. The Local Trust Committee will consider the proposal submission and consultation results and will by resolution indicate whether it recommends approval, approval with conditions or refusal of the proposal. The decision will be forwarded to the proponent with copies to Industry Canada, the local Medical Health Officer and the Capital Regional District.
8. The Local Trust Committee may determine that additional public consultation is required to properly consider the proposal and defer its recommendation until such consultation has taken place.

Cellular Antennae Proposal Form



Salt Spring Island Office:
1206-115 Fulford-Ganges Road
Salt Spring Island, BC, V8K 2T9
Ph: (250) 537-9144
Fax: (250) 537-9116

Internet: www.islandstrust.bc.ca
E-Mail: information@islandstrust.bc.ca

Be sure to include all required information indicated on the form and checklist, and ensure your site plan is accurate and complete. **CONSULTATION WILL START UPON RECEIPT OF COMPLETE INFORMATION.**

OFFICE USE ONLY

File No.: _____

PRIMARY CONTACT (PLEASE PRINT)
(Please list all owners as indicated on Certificate of Title)

Name(s) _____

Address _____ City _____

Postal Code _____ Phone _____ Fax _____ Other _____

INDUSTRY CANADA CONTACT (PLEASE PRINT)

Name(s) _____

Address _____ City _____

Postal Code _____ Phone _____ Fax _____ Other _____

DESCRIPTION OF PROPERTY (AS INDICATED ON CERTIFICATE OF TITLE)

Lot/Parcel _____ Plan _____ Block _____ District Lot/Section _____

Range _____ Other Description _____

Street Address or General Location _____

Jurisdiction and Folio Number _____ (From Property Assessment/Tax Notice)

Parcel Identifier (PID) _____ - _____ - _____ (From Certificate of Title)

GENERAL INFORMATION

Proposed Use of Antenna: _____

Antenna Type: _____

Is this a new structure? Yes ! No ! Is this a modification to an existing structure? Yes ! No !

Base Height (Geodetic): _____ Height of

Tower: _____
Colour: _____

PREDICTED EMR POWER DENSITY

It is a policy guideline of the Salt Spring Island Local Trust Committee that no telecommunication antenna or facility emitting Electromagnetic Radiation (EMR) should be installed within 500 metres of any use, building or structure where there is continuous human activity (dwellings, schools, hospitals, workplaces, parks, etc.). Proponents wishing to install or modify an antenna or facility closer than this distance should demonstrate, using an independent consultant acceptable to the Islands Trust, that the measured and/or predicted EMR power density levels of the antenna, or cumulative levels emitted from the facility, are less than 2 microwatts per square centimetre at the use, building or structure.

New or Modified Structure:

Please provide information on the predicted EMR power density levels for the new or modified structure taking into account factors such as the power of transmission (number of channels, channel power output, reach of signal), direction of transmission and height of antenna. Separate predicted and/or measured EMR levels should be provided at any use, building or structure where there is continuous human activity within 500 metres of the antenna. Include attachments if required.

Cumulative EMR Levels:

Where co-location is proposed or where there are a number of transmitters active at a site, provide information on the cumulative EMR power density levels of the site with the new or modified structure at any use, building or structure where there is continuous human activity within 500 metres. Include attachments if required.

AESTHETIC IMPACTS

It is a policy guideline of the Salt Spring Island Local Trust Committee that the aesthetic/visual impacts of antenna towers be mitigated. Site options where the antenna would be attached to existing structures should be given preference over constructing new structures. Co-location by multiple providers is encouraged provided the power density guidelines are met.

Please provide information on the height, and colour of the tower, views from public roads, parks, vista points, or residential areas, and any design considerations that have been incorporated to mitigate aesthetic impacts.

NATURAL ENVIRONMENT IMPACTS

It is a policy guideline of the Salt Spring Island Local Trust Committee that impacts to the natural environment should be mitigated. Site alternatives should be evaluated and site options where the antenna would be attached to existing structures should be given preference over constructing new structures. New antenna towers should not be constructed in wetlands, environmentally sensitive ecosystems, areas of high bio-diversity, environmentally sensitive habitat, Garry Oak habitat, fish habitat and on shorelines.

Please describe below or attach information on the potential impacts to the natural environment:

Please submit site plans to show (where applicable):

- ☐ provide 2 sets of 11" x 17" drawings
- ☐ topographical information including the location of wells, drainage areas, ponds
- ☐ existing and proposed uses, buildings and structures on the parcel
- ☐ dimensions and/or floor areas of existing and proposed buildings
- ☐ location of all site access and egress points
- ☐ location of the site, antennae structure and buildings in relation to property lines, the natural boundary of the sea, streams, wetlands, environmentally sensitive ecosystems, areas of high biodiversity, environmentally sensitive habitat, sensitive shoreline areas, fish habitat, etc. (see SSI OCP Maps)
- ☐ the presence of any high surface erosion hazards and high slope stability hazards
- ☐ location of the site, antennae structure and buildings in relation to national, provincial, regional, or local parks, ecological reserves or other protected or conservation areas
- ☐ current uses of land and buildings on adjacent properties and an indication of distances within 500 m of the antennae structure to all buildings or structures where there is continuous human activity (dwellings, schools, hospitals, workplaces, parks, etc.)

Please submit elevation plans to show (where applicable):

- ☐ elevation plans of the antenna
- ☐ height of antenna
- ☐ proposed construction materials to be used

CERTIFICATION

I HEREBY CERTIFY THAT THE ABOVE INFORMATION IS
TRUE TO THE BEST OF MY KNOWLEDGE

SIGNATURE

DATE

Freedom of Information and Protection of Privacy

Personal information contained on this form is collected under the *Municipal Act* for the purpose of responding to this application, or for purposes directly connected with this application. Information on your application form is available to the public upon request under freedom of information legislation. Please contact the Deputy Secretary, Islands Trust, Ganges Office, if you have any questions regarding the collection of personal information on this form.



Coastal British Columbia District
Lower Mainland Office
Spectrum Management Operations
1700 – 13401 108th Ave.
Surrey, BC V3T 5V6

May 17, 2022

Islands Trust
1-500 Lower Ganges Road
Salt Spring Island, BC V8K 2N8

Attention: Mr. Peter Luckman
 Chair, Salt Spring Island Trust Local Trust Committee

Dear Mr. Luckman:

**Subject: ROGERS Telecommunication Tower Proposal
 W2716 at Channel Ridge, Salt Spring Island**

I am writing to address your letter dated April 6, 2022 to Rogers Communications Inc. (Rogers) and its agent Cypress Land Services (Cypress) informing them of the decision to rescind the July 27, 2021 concurrence for the above mentioned antenna tower proposal W2716 at Channel Ridge, Salt Spring Island.

Please be informed that our office does not support your decision to rescind the concurrence.

Since the issuance of concurrence, by the Salt Spring Island Local Trust Committee (SS LTC), the only change in circumstances is the SS LTC's November 9, 2021 adoption of a new antenna siting protocol. Given the date of the policy adoption, it is not to be retroactively applied.

Our review of the conduct of the consultation process also found that Rogers was in compliance with Innovation Science and Economic Development's default process. SS LTC's July 27, 2021 concurrence also implied its satisfaction with how the process was conducted and its conclusion.

In addition, SS LTC did not provide any other valid rationale to support the rescindment.

Please reach out to the undersigned if you have any further questions.

Yours truly.

Ken Pungente
Director, Coastal Offices, STS-Western Region
Innovation, Science and Economic Development Canada / Government of Canada
Ken.Pungente@ised-isde.gc.ca / Tel: 250-470-5033

Directeur, bureaux côtiers, SST-Region de l'Ouest
Innovation, Sciences et Développement économique Canada / Gouvernement du Canada
Ken.Pungente@ised-isde.gc.ca / Tél: 250-470-5033

c.c. Rogers Communications and Cypress Land Services

From: Julian Clark <[REDACTED]>
Date: August 20, 2022 at 3:08:07 PM PDT
To: Peter Luckham <pluckham@islandstrust.bc.ca>
Cc: Elizabeth.May.C1A@parl.gc.ca, Peter Grove <pgrove@islandstrust.bc.ca>, Laura Patrick <lpattick@islandstrust.bc.ca>
Subject: RE: Your call

Thanks for your email Peter. I am quite familiar with the materials in the LTC agenda packages, and have found them to be very helpful. However, other than the motion and resolution to rescind the concurrence decision in the March 22, 2022 meeting minutes, and your April 6, 2022 letter to Cypress and Rogers, I am unable to find any information as to what ISED has been told by the LTC regarding that rescission.

This is especially important given the lack of clarity in ISED's May 17th letter from Ken Pungente. Mr. Pungente states in his May 17th letter:

"Since the issuance of concurrence, by the Salt Spring Island Local Trust Committee (SS LTC), the only change in circumstances is the SS LTC's November 9, 2021 adoption of a new antenna siting protocol."

"SS LTC did not provide any other valid rationale to support the rescindment."

A review of your April 6th letter indicates the following was shared with Rogers and ISED:

"On November 25, 2021, the SS LTC sent a letter to Cypress Land Services noting a number of parties had brought to our attention concerns regarding the public consultation process for your application including that a number of elements of the consultation process were not fulfilled to the satisfaction of the neighborhood."

"We have recently discussed the SS LTC's concerns respecting the rescinding of concurrence with representatives from Rogers (Michael Krenz and Samuel Sugita) as well as representatives from ISED (Bernie Ries and his team)."

So it would seem that Mr. Pungente doesn't consider any of the concerns highlighted in your November 25th letter, nor anything discussed with representatives from Rogers or ISED as either a change of circumstances or as valid rationale. As we don't know what you discussed with the representatives from Rogers and ISED, we wish to know if it has been made clear to ISED that:

1. Rogers opening statement in their May 31, 2021 letter requesting a concurrence decision was, after the concurrence decision was granted, found to be false?
2. In granting a concurrence decision, the SS LTC had relied on Rogers statement that they had met the protocol the SS LTC staff asked them to use as a guideline?
3. Had the protocol that was alleged to have been fulfilled actual been fulfilled, the proposed site could not have been selected?

4. Had the land title search required in the protocol actually been completed, Rogers would have found a covenant on the site that does not allow for any development?
5. The SS LTC became aware of the historical importance of the Channel Ridge site to First Nations after the concurrence decision and have since become aware that Rogers should have easily identified this had they completed the ATRIS (Aboriginal and Treaty Rights Information System) as required in the ISED regulations?

During your remarks at the August 9, 2022 LTC meeting you stated that “Counsel has advised that the LTC has completed the tasks it needs to and should do and is responsible to do, and that any further action needs to be directed directly to ISED.”

As I have previously pointed out to the LTC, ISED does not entertain complaints from the public but rather only allows telecoms and land use authorities to trigger a dispute. From Section 5 Dispute Resolution of CPC 2-0-03:

“The dispute resolution process is a formal process intended to bring about the timely resolution where the parties have reached an impasse. Upon receipt of a written request from a stakeholder other than the general public asking for ISED intervention concerning a reasonable and relevant concern, ISED may request that all involved parties provide and share all relevant information.”

Since we have no standing to go directly to ISED, it is all important that as our representative the SS LTC be crystal clear with ISED why you rescinded the concurrence decision. Until you have done so, it is our opinion that the SS LTC has not completed the tasks it needs to!

Can you please direct me to the documentation around what was discussed with ISED and if there is any other information that has been shared with them? Can you also please let us know if ISED shared a written request from Rogers to trigger the Dispute Resolution process? If Rogers didn't request a formal Dispute Resolution process, has ISED indicated the regulation that enables them to overrule the SS LTC rescission as they appear to be doing in their May 17th letter?

Our federal MP Elizabeth May has been working with us to ensure ISED aren't overstepping their bounds in their May 17th action. We have formally asked the Honourable Minister Champagne (Innovation, Science and Industry) to review what we consider to be a conflict of interest (Mr. Pungente worked for Mr. Krenz at ISED before Mr. Krenz left his position there to join Rogers) and a lack of due process in completing the dispute resolution process required in the regulations. We remain confident that if the SS LTC comprehensively shared the reasons for rescission with ISED, ISED will not be in a position to overrule your decision. Hence, I would appreciate if you could copy her on your response to this email.

Kind regards,

Julian

-----Original Message-----

From: Peter Luckham [<mailto:pluckham@islandstrust.bc.ca>]

Sent: Saturday, August 20, 2022 10:05 AM

To: Julian Clark <[REDACTED]>

Subject: Your call

Hello Julian, thank you for your call yesterday.

I do need to consult with staff as to what documents are public at this point, this will not happen until Monday based on staff availability and my meeting schedule.

Most if not all the material is in the agenda packages of the LTC and a public document with respect to the legal opinion is being prepared . I have asked this to be prioritized due o the urgency of the situation. It is my hope that we will have this next week.

I will forward it to you asap.

Peter

--

Peter Luckham, Chair Trust Council

Trustee, Thetis Island

Islands Trust

#200 1627 Fort Street

Victoria, B.C. V8R 1H8

Home Phone: (250) 210-2553

Office Fax: (250) 405-5155

www.islandstrust.bc.ca

Preserving and protecting over 450 islands and surrounding waters in the Salish Sea

From: Colin Coe <[REDACTED]>
Sent: Monday, August 22, 2022 5:11 PM
To: Laura Patrick; Peter Grove; Peter Luckham; SSInfo
Subject: Vortex Decision

Dear Trustees and Staff:

I was disappointed but not surprised at the Vortex Decision. I have been lobbying against this project as it is planned for well over three years when I first discovered that it was being proposed - and then only because of a Driftwood letter. However, it seemed clear from the start that the Trustees had made their mind up to support the project despite major design flaws and likely significant community opposition.

Many others have outlined in detail the specific objections to the project on technical grounds - I will keep my summary objections more general:

- The developer made no attempt to engage or even inform the broader south end community about the project. The developer has noted that he has received no other offers or proposals regarding the site. However, he never made it clear that he would consider any alterations to his development proposal. I don't have a clue how to contact him - since he has made no attempt to interact with the broader community. An Open House or Community Town Hall at Fulford Hall would have been the venue for this. His statement is therefore disingenuous at best. A public meeting to work with the community to come up with a project that would be an asset to the community would have been welcomed. Instead it is just a real estate asset that benefits the developer.
- The Trustees have unfortunately been complicit in keeping this project "under the radar" through the complicated, complex and near opaque Islands Trust planning process. Ms Patrick's statement to me that she had listened to my request for project signage and community negotiation but had not made any progress on this front is difficult to comprehend. In over three years she was apparently unable to get a 4 foot by 8 foot project design sign installed at the site - if not through a bylaw then at least by persuading the developer. And the Trustees were not able to persuade the developer to engage the community through a south end community public meeting - town hall is also unacceptable. The argument that the Trustees were simply passive in this permitting process - only able to rubber stamp the permit application if all the boxes were checked off is, as I understand, inaccurate. The Trustees had considerable latitude in their oversight of the permitting process and simply chose not to exercise it.
- I am confident in saying that the majority of south end residents did not support this project - or at least had serious concerns about the project size, scope and design. Many elements of the project design are inadequate and not suitable for the development of a project in a highly sensitive ecosystem. The Trustees had leverage over this project but chose not to use it. As I predicted, as more residents actually found out about this project, opposition would increase. It did and was gaining momentum. Perhaps that is why a

rushed mid summer permit approval process was scheduled. Few jurisdictions force through major projects (and fundamental changes such as Bylaw 530) in the summer period. It is inappropriate and implies that bureaucratic processes are being manipulated in order to achieve a desired result.

- With employment not being a driver (we are already beyond full employment) - and the project only benefitting the developer and serving off island tourists, one has to wonder what the motivation of the Trustees was in this case. The needs and concerns of the residents have been ignored. Is it simply to increase tax revenues? I can find no other possible reason.

The Trustees have been overtly anti democratic and have instead worked with the developer - not the community. In my opinion the Trustees have not fulfilled the "Preserve and Protect" mandate as most Salt Spring Islanders interpret it.

The process for this project is indicative of the Trustees general disregard for existing residents. I gather Mr Grove and Mr. Luckham are not running for Trustees. I am sure that it is a challenging and difficult role. I wish that I could say that you are leaving Salt Spring a better place than you found it - but that is simply not the case. Ms. Patrick is running again as Trustee. I would ask that she consider the view of existing residents as well - not just special interest groups.

As a final thought I would ask you to look at the website for the Pender Harbour Ocean Discovery Station: [REDACTED] This small community (population 3000) through public and private funding now has a first class environmental facility that works with the community and First Nations to educate and inform residents and visitors about the environment. This is what could have been at the Fulford estuary. This is what would have happened if the Trustees had worked with residents to explore options to create a vision that was aligned with community values. But you chose not to. This is perhaps the single most significant lost opportunity for Salt Spring in the past 40 years. There seems to be no vision other than unfettered development.

Colin Coe
[REDACTED]

Dear Trustees and Staff;

Re: New development at the Summerside Townhomes - Development Plan SS-DP-2020.7

Our September 6th Summerside Strata Council delegation is a follow up to email inquiries made to the Islands Trust on August 4th and August 11th (see attached). We are asking the Trust to require amendments to the development plan that will see the developer mandated to install roadway lighting and to detail plans for landscaping the already constructed lock block wall.

Our first inquiry was related to the lack of any roadway lighting in the development plan and the refusal of the development company (Atkins Street Developments - TLA Group of Holding Companies) to consider the installation of lighting similar to the existing lighting. The strata view the lack of roadway lighting as a significant safety issue and we believe that new owners will demand to have lighting installed to ensure the safety of pedestrians and vehicles. In an August 8th correspondence TLA indicated "If the Strata wishes any tasks outside of the development permit be completed, TLA Services would be more than willing to enter a paid contract to properly develop the appropriate plans and execute those tasks at the Strata's costs." Indeed, the lack of lighting in the development plan and the developer's refusal to consider installing any roadway lighting results in all owners bearing the cost. It is our hope that the Islands Trust will require amendments to the development plan that sees roadway lighting as a requirement of the permit.

Our second inquiry was related to a lock block wall constructed as a retaining wall. This wall does not appear in the development plan in any detail and is not situated as indicated by a thin line in the DP (see page 29 of DP). TLA has indicated to us only that they will "green" the wall but have declined to provide any details to the strata, indicating only "landscaping will be done at the latter stages of the project." According to a Summerside owner, a planner at the Trust told him that they "were all shocked when they visited the site and saw the constructed lock block wall and its impact on the existing homes" and that there were "serious inconsistencies and missing items on the DP regarding the wall location and details of its sized and impact on the other homes and any details on what landscaping will be completed around the wall". The owner was also told that "if the promised landscaping is not on the DP the developer is not required to complete what they promise". We also understood prior to the installation of the wall that the blocks would have a pattern but as you can see from the photo the are unattractive cement blocks. Without any guarantee of what the developer has planned we are asking the Trust to require an amendment/variance to the development plan to assure that promised landscaping is included and completed prior to sign off.

It appears to us that Development Plan SS-DP-2020.7 may have been signed off with some important details missing. This is of concern because as the new buildings are completed, they become part of our strata. Owners could potentially face thousands of dollars in costs if there are no requirements on the development plan for lighting or landscaping around the wall.

It is our hope that the Trust will approve amendments/variances that see a requirement for the developer to install roadway lighting and provided detailed plans for landscaping around the lock block wall.

Respectfully Submitted,

Summerside Strata Council

Current Roadway Lighting



Email #1 Re: Lighting

From: "Rob Pingle" <rpingle@islandstrust.bc.ca>
To: "Linda Underwood" <[REDACTED]>, "SSIinfo" <ssiinfo@islandstrust.bc.ca>
Cc: "Don James" <[REDACTED]>
Sent: Friday, August 12, 2022 3:11:19 PM
Subject: RE: Summerside Village Development Plan - Request

Hello,

I have reviewed this request with a Planner and it was determined that lighting established on the rest of the property is not required within this new development by the Development Permit Area regulations. The guidelines work to regulate proposed lighting rather than requiring it.

That said if the new development decided to establish lighting of the same form and function as the rest of the strata a Development Permit amendment may not be required. A lighting plan would need to be submitted to us for review before we could make a final decision about the need for a Development Permit amendment.

I will reply to your second email separately.

Take care, rob

Rob Pingle

Planning Team Assistant

Islands Trust

1-500 Lower Ganges Road | Salt Spring Island, BC V8K 2N8

Phone: 250-538-5600 | www.islandstrust.bc.ca

You can also reach us toll-free via Service BC 1-800-663-7867 | 604-660-2421

Preserving and protecting over 450 islands and surrounding waters in the Salish Sea

I am humbly thankful to live and work in the treaty lands and territories of the BOŖEĆEN, K'ómoks, Łək'wəḡən, Lyackson, MÁLEXEL, Qualicum, Quw'utsun Tribes, scəwəḡən məsteyəxʷ, Scia'new, səlilwətaʔt, SEMYOME, shishálh, Skwxwú7mesh, Snaw-naw-as, Snuneymuxw, Spune'luxutth, SÁÁUTW, Stz'uminus, ʔaʔəmen, toq qaymıxʷ, Ts'uubaa-asatx, Wei Wai Kum, We Wai Kai, WJOŁŁP, WSIKEM, Xeláltxw, Xwémalhkwx/ʔop qaymıxʷ, and xʷməḡkʷəḡəm.

From: Linda Underwood <[REDACTED]>
Sent: Thursday, August 4, 2022 8:53 AM
To: SSIInfo <ssiinfo@islandstrust.bc.ca>
Cc: Don James <[REDACTED]>
Subject: Summerside Village Development Plan - Request

Dear Trustees and Islands Trust Planners,

I am writing as president of the Summerside Strata Council to request that the Islands Trust inquire into the lack of roadway lighting on the current development plan for Summerside Village. Our council sees the lack of roadway lighting as a safety issue and have been in communication with the development company (TLA) regarding our concerns.

We initially approached TLA to request that lighting, similar to that which exists, be installed (see attached photo). We were told they had no plans to install lighting. We are continuing to work with the development company but to date there has been no alteration on their stand.

It is our hope that an amendment to the development plan can be made based on safety that will see TLA obligated to install lighting similar to that which already exists at Summerside.

Please don't hesitate to be in contact with me () or vice president Don James () should you have any questions.

Sincerely,
Linda Underwood

Information Related to the Development Permit that the strata council has on file includes:

DEVELOPMENT PERMIT SS-DP-2020.7

ATKINS STREET DEVELOPMENTS INC. 1. This Development Permit (the "Permit") applies to the land described below: PID: 025-671-481 LEGAL DESCRIPTION: Lot 1 Sections 3 and 4 Range 3 East North Salt Spring Island Cowichan District Plan VIP75338

Except Part in Strata Plan VIS5366 (Phases 1, 2, 3, 4, 5 and 6)

Lock Block Wall



Email #2 Re: Lock Block Wall

From: Rob Pingle
Sent: Friday, August 12, 2022 3:23 PM
To: 'Linda Underwood' <[REDACTED]>;
SSIInfo <ssiinfo@islandstrust.bc.ca>
Cc: Don James <[REDACTED]>
Subject: RE: Summerside Development Plan SS-DP-2020.7 - Request #2

Hello,

I have reviewed this request with a Planner and the files we have in our database. Although there may be a variance between the lock block wall on the Development Permit and the lock block wall established through the building permit process. This variance was reviewed by the Regional Planning Manager at the time and it is considered to be in substantial accordance.

The Development Permit is attached and shows the landscaping plan for this area on page 29. Please note, as stated in section 3 of the permit, that the Trust holds a \$200,000 security with the land owner to ensure that landscaping as a condition of this Permit is satisfied.

These requests have been viewed as enquiries with staff rather than public correspondence for trustees.

Let me know if you have any other questions.

Take care, rob

Rob Pingle

Planning Team Assistant | Salt Spring Island
Islands Trust | 250-538-5600

From: Linda Underwood <[REDACTED]>
Sent: Thursday, August 11, 2022 3:36 PM
To: SSIInfo <ssiinfo@islandstrust.bc.ca>
Cc: Don James <[REDACTED]>
Subject: Summerside Development Plan SS-DP-2020.7 - Request #2

Dear Trustees and Islands Trust Planners,

I am writing to you again as president of the Summerside Strata Council to request that the Islands Trust investigate irregularities identified in the current Development Permit SS-DP-2020.7. These irregularities relate to a rock block wall and are outlined in the attached letter, received by our council, from owner Ralf Waters.

We request that the existing DP be amended to show the location of the wall, elevations, sections and other details currently missing from the Plan. We ask also that the DP indicate how the area around the wall will be landscaped as currently we have only the word of the developer that the area will be "greened".

Please don't hesitate to be in contact with me ([REDACTED]) or vice president Don James ([REDACTED]) should you have any questions.

Sincerely,
Linda Underwood

Letter from Owners:

August 8, 2022

Attention: Linda Underwood and Summerside Strata Council.

On behalf of Phase 4 residents, I wish to request that an amendment be made to the existing Development Permit SS-DP-2020.7 regarding the construction currently in progress by TLA within the Summerside Strata. I've reviewed the existing DP and have found some irregularities and missing items in the DP, including on the Landscape Plan, that we all agree urgently needs to be rectified.

Our major concern is regarding the completed concrete lock block wall that runs directly behind seven of the existing strata town homes. This wall is up to five tiers tall and is an eye sore to the residents living here. The wall was not shown on the original development drawings but is shown on one of the current landscape drawings as a thin pencil line curving through the development. Some of the landscape drawings are inconsistent with regards to the existence of a lock block wall. The DP drawings lack any details for the proposed wall such as elevations and sections that show the actual dimensions of the wall and its visual impact to residents. There are no indications of any landscaping to be completed to screen or beautify the wall.

We have been told verbally and in writing from the developer, TLA, that landscaping will be completed around the wall to make it a "green wall" and less offensive to the residents.

The council has asked for drawings and details of what their landscaping plan around the wall will be but have received nothing. TLA has told us that they have a landscape architect who will be designing suitable landscaping around the wall, but to date we have received nothing. The constructed wall is also not located as shown in the landscape drawing and is actually straight, not curved, and is closer to some of the homes than indicated. The

existing landscape plan does not indicate that trees were cut down below the wall, nor does it show any proposed plantings of trees or shrubs below the wall.

We request that the existing DP be amended to show the exact location of the wall and show elevations, sections and other details of the lock block wall and how it will be landscaped, as verbally promised by the developer.

Our second major concern is the lack of a safety lighting plan on the existing DP.

I realize that the strata council has already submitted a request for an amendment to the development plan regarding lighting but I wish to reiterate the importance of the lighting as a safety issue to the Islands Trust and to the trustees. The original strata development was built with a lighting plan, that provided lighting by each home to ensure the safety of pedestrians and vehicles. It is a very serious safety issue not to include any lighting along the new access drive to the new units. This should have been included as part of the DP and should be installed by the developer during construction, as was completed in the original development.

Sincerely,

Ralf Waters, P.Eng, on behalf of:

Judith Avery [REDACTED]
Sylvia Sikunder [REDACTED]
Brenda Bowes [REDACTED]
Dave & Dale [REDACTED]
Ron & Helen Ormiston Smith [REDACTED]
Julie Kemble [REDACTED]

DATE OF MEETING: August 9, 2022

TO: Salt Spring Island Local Trust Committee

FROM: Geordie Gordon, Island Planner (Acting)
Salt Spring Island Team

COPY: Louisa Garbo, Regional Planning Manager (Acting)

SUBJECT: Application to amend Official Community Plan from Channel Ridge Residential to Residential Neighbourhoods, and Land Use Bylaw from Residential 6 (a) to Residential 8 .
Applicant: Tyler Chapman
Location: 361 Sunset Drive

RECOMMENDATION

1. **That the Salt Spring Island Local Trust Committee proceed no further with application SS-RZ-2021.3 for the following reasons:**
 - a. **The Salt Spring Island Local Trust Committee will not undertake piecemeal rezoning of the Channel Ridge Residential designated areas.**
 - b. **The Salt Spring Island Local Trust Committee will not consider any rezoning of the Channel Ridge Residential or Channel Ridge Village area until issues related to water allocation (the North Salt Spring Water Works District moratorium policy) are resolved.**
 - c. **The application is contrary to Islands Trust Policy Statement 4.4.2 which ensures that density or intensity of land use is increased in an area of a known problem with freshwater supplies.**
 - d. **The application is contrary to Salt Spring Island Official Community Plan Policies and Objectives in Part C.3, in particular C3.1.1.1.**

REPORT SUMMARY

This report brings forward initial analysis of the proposed Salt Spring Island Official Community Plan amendment from Channel Ridge Residential to Residential Neighbourhoods and proposed Salt Spring Island Land Use Bylaw amendment from Residential 6 (a) to Residential 8. Staff have reviewed Official Community Plan policies and objectives as well as historical zoning and applicable covenants (see appendix 6). Based on the complexity of density allocation through the land use covenant as well as previous iterations of the Official Community Plan and the Land Use Bylaw, the Channel Ridge Village and surrounding residential areas has long been intended as a comprehensive planning area, piecemeal rezoning will undermine the long-standing approach to development of the area. If property owners in the Channel Ridge Residential-designated area wish to re-designate or rezone particular properties, it should be done comprehensively. The proposed rezoning will require an OCP amendment to Residential Neighbourhoods. Furthermore, given the on-going North Salt Spring Water District connection moratorium, it is inadvisable to either create or allocate additional densities at this time.

BACKGROUND

The applicant is pursuing bylaw amendments for the subject property to allow subdivision. The current R6 (a) rezoning requires lots created within this designation to be connected to community water systems. As the subject property is within the North Salt Spring Waterworks District (NSSWD) service area, connection is not possible due to the on-going [moratorium](#). The possible density to be created through subdivision is impacted by a lack of community water supply. Rezoning to R8 would remove the community water supply requirement and instead allow ground water supplies to be used for subdivision servicing.

The subject property has previously (in 2021) been utilized for unlawful commercial guest accommodation operation, though this operation was not established by the owner, only with the owner's authorization. Although some structures have been established, the use as commercial guest accommodation has not yet begun. The Channel Ridge Residential designation does not allow for Temporary Use Permits (TUPs). Amending the land use designation is required before a TUP could be sought.

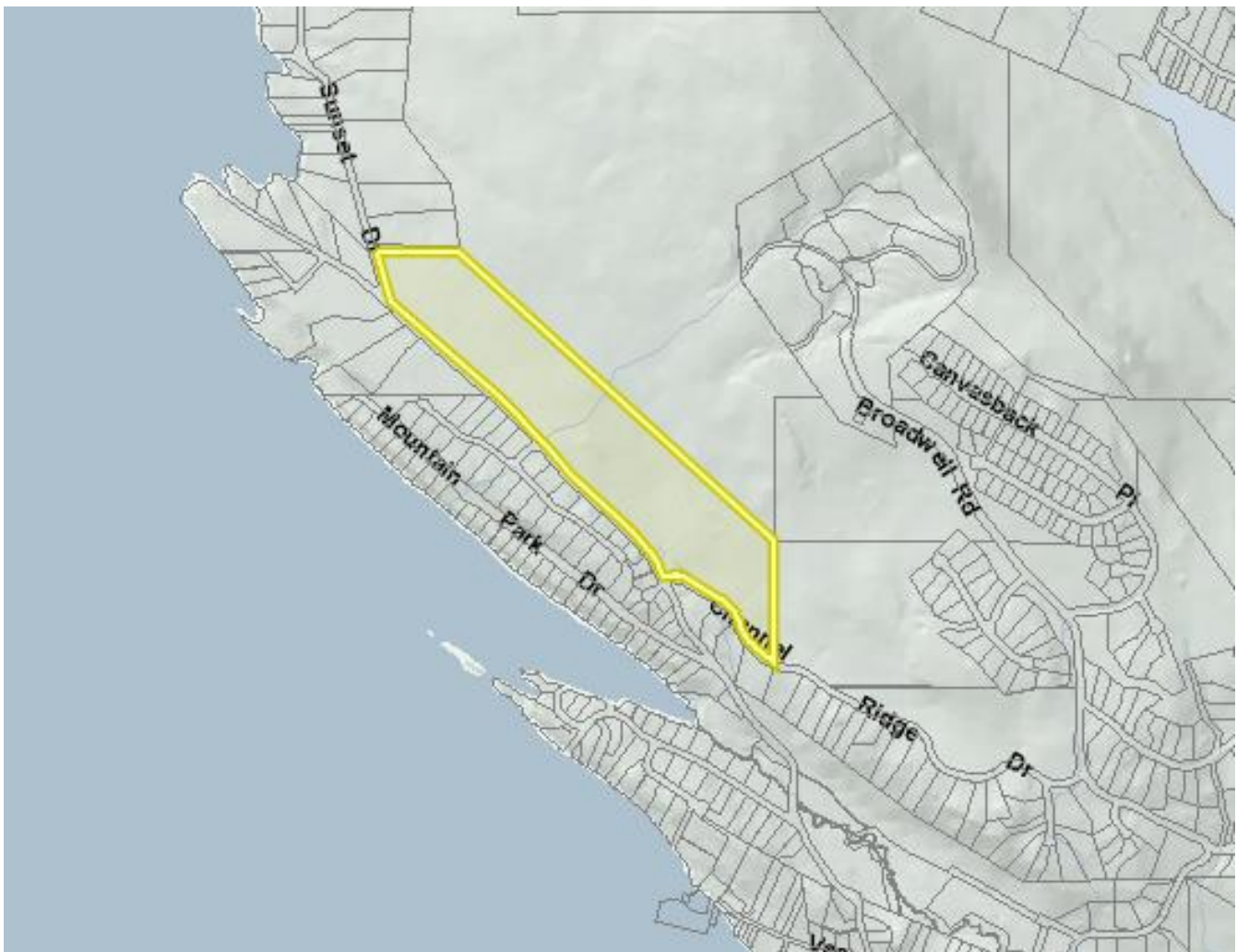


Figure 1 – Location of subject property.



Figure 2 – Orthophoto of subject property (2017 data).

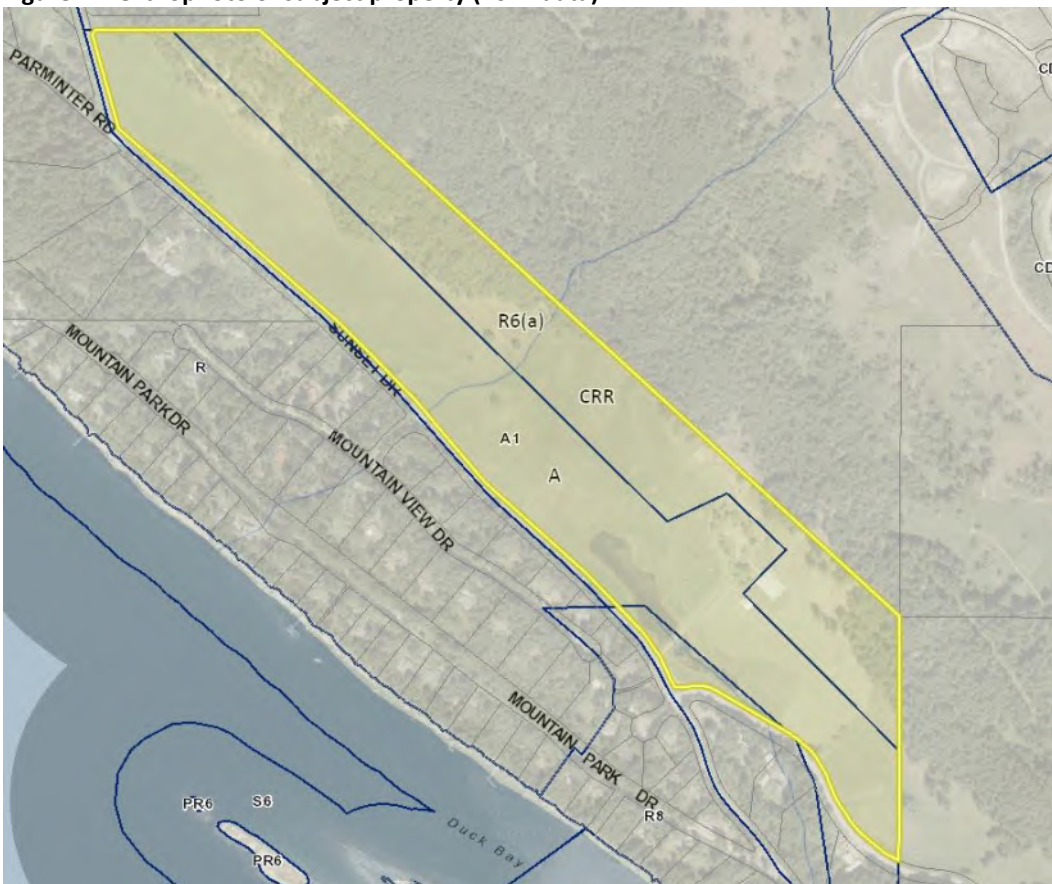


Figure 3 – Zoning (A/R6(a)) and land use designation (A/CRR) of subject property.

The planning history of the Channel Ridge area is long, complex, and somewhat convoluted. The complexity of the past planning context is further compounded by the present day NSSWD moratorium on new service connections, the resultant on-going legal action, and the splintered ownership of Channel Ridge lands made development potential challenging. At some point in the planning history of Channel Ridge, the subject property was included in the R6(a) designation, which covers all residential areas in Channel Ridge. Despite this inclusion in the R6(a) designation, the subject property was not included in the development Blocks that are to guide the subdivision of this zoning designation (see 'Block' area per Schedule 'C' of Land Use Bylaw No. 355 in appendix 1).

The applicant has provided a hydrogeologist report on an existing well on the subject property, attached as appendix 7. The applicant's letter in support of the application is attached as appendix 8. This application was deferred from the June 14, 2022 SS LTC meeting at the applicant's request.

ANALYSIS

Policy/Regulatory

Islands Trust Policy Statement (ITPS)

Staff have reviewed the Islands Trust Policy Statement in consideration of the application and determined a number of policies that apply to this application (see appendix 4). At time of this initial report, staff have determined that the application is likely inconsistent with Policy 4.4.2 regarding freshwater resources. While the applicant has indicated that sufficient ground water resources are available to permit subdivision, the property is within the boundaries of NSSWD.

No significant inconsistencies with the ITPS policies were noted in this preliminary review. If the Local Trust Committee resolves to proceed with the application, more in-depth review will be provided in a future report to assess the compliance with the Policy Statement using the Directives Only Checklist in accordance with Section 1.9 of Trust Council Policy 1.3.i.

Official Community Plan

The subject property is designated Channel Ridge Residential (CRR) in Salt Spring Island Official Community Plan Bylaw No. 434 (OCP). Channel Ridge Residential policies and objectives are as follows:

- B.2.6.1.1 To continue to provide for clusters of medium density residential settlement compatible with the natural environment of the designation.
- B.2.6.2.2 Zones within the Channel Ridge Residential Designation will continue to allow clusters of medium density residential developments and the other compatible uses allowed by existing zoning.
- B.2.6.2.4 Blocks of land that may be used for residential settlement should remain generally as indicated in the Local Trust Committee's current Land Use Bylaw. The number of new lots that can be created by subdivision in the Designation should not be increased.
- B.2.6.2.5 The Local Trust Committee should consider rezoning applications that would allow owners of undeveloped property within the Channel Ridge Residential Designation to transfer their development potential to more suitable locations within the Designation or to the Channel Ridge Village Designation. Such applications should follow the guidelines in Appendix 4. The Channel Ridge Residential Designation is a Development Potential Donor Area. Proposals to transfer development potential from areas north of the Channel Ridge Village Designation could be

considered if a thorough analysis of the benefits and impacts of any road network changes is provided.

The applicant is proposing an OCP amendment to Residential Neighbourhoods (RN); policies and objectives are as follows:

- B.2.4.1.1 To continue to provide for a range of medium density residential uses consistent with the community's rural character.
- B.2.4.1.2 To continue to accommodate non-residential uses that are compatible with medium density residential use.
- B.2.4.2.2 Zones within the Residential Neighbourhoods Designation will continue to accommodate the *medium density residential uses* and the other compatible land uses allowed in the existing bylaw. Existing commercial, *general employment* and multi-family zones will also remain, but zoning changes should not be made to locate more of these zones on additional lands in this Designation, with the exception of multiple-family *affordable housing* projects.
- B.2.4.2.3 The minimum size of lots that can be created by subdivision will remain the same as indicated in the existing Land Use Bylaw. However, the Local Trust Committee could consider rezoning applications that allow a slightly higher density (smaller minimum average lot sizes) as part of a proposal that provided a community amenity (see Appendix 3) or as part of a proposal to transfer development potential (see Policy B.2.3.2.1 and Appendix 4).

Applicable OCP Policies

Other relevant OCP policies that to this proposal are shown on appendix 2.

The subject property is zoned Residential 6 (a) – R6 (a) under Salt Spring Island Land Use Bylaw No. 355. The applicant is proposing a Land Use Bylaw amendment Residential 8 (R8). A comparison of the uses permitted is attached in Appendix 4.

Islands Trust Conservancy

Policy 3.3.ii, Islands Trust Conservancy and Local Planning Services Coordination does not apply to this application.

Issues and Opportunities

Density

A 1986 covenant that applies to the subject property regulates density in the Channel Ridge area by restricting the total number of dwelling units to 577. There is an issued Development Permit (SS-DP-2003.9(a)) that draws down on this number. A previous (2010) staff report for a rezoning in the Channel Ridge noted that there is a discrepancy between the number of residential dwelling units permitted outside the village area by the Land Use Bylaw (268) and the Restrictive Covenant (256), with the restrictive covenant taking precedence.

Density	Units
Total Channel Ridge Development Potential per 1986 Restrictive Covenant	577
Existing single family lots using Islands Trust GIS Mapping Data	-179
Total Dwelling Units permitted in Village per Development Permit SS-DP-2003.9(a)	-321
Remaining Potential Dwelling Units	77

The remaining subdivision potential is regulated by Block area as per Schedule 'C' of Land Use Bylaw No. 355. However, while the subject property is zoned R6(a), it is not included in any of the subdivision blocks (see appendix 2). It is unclear how the R6(a) zoning was extended to the subject property but excluded from the subdivision Blocks. The subject property may have been inadvertently included in a bylaw consolidation when the R6(a) zoning for the Channel Ridge was implemented, or inadvertently left off the Block mapping.

Although the subject property is left off the subdivision Block mapping, density is still governed by the restrictive covenant and the Land Use Bylaw. Removing the subject property from R6(a) zoning would not remove the restrictive covenant requirements. Therefore any removal of density from R6(a) by rezoning the property should be reflected by amending the Land Use Bylaw accordingly by reducing the 268 dwelling units permitted accordingly.

Given the limited number of densities available in the Channel Ridge Area, the restrictive covenant with multiple signatories, the NSSWD moratorium, and the splintered ownership of development lands in the Channel Ridge area, staff do not recommend proceeding with a rezoning on a property-by-property basis, but that any rezoning should be done comprehensively despite the challenges in achieving consensus on a rezoning given the differing ownership of land within the Channel Ridge area.

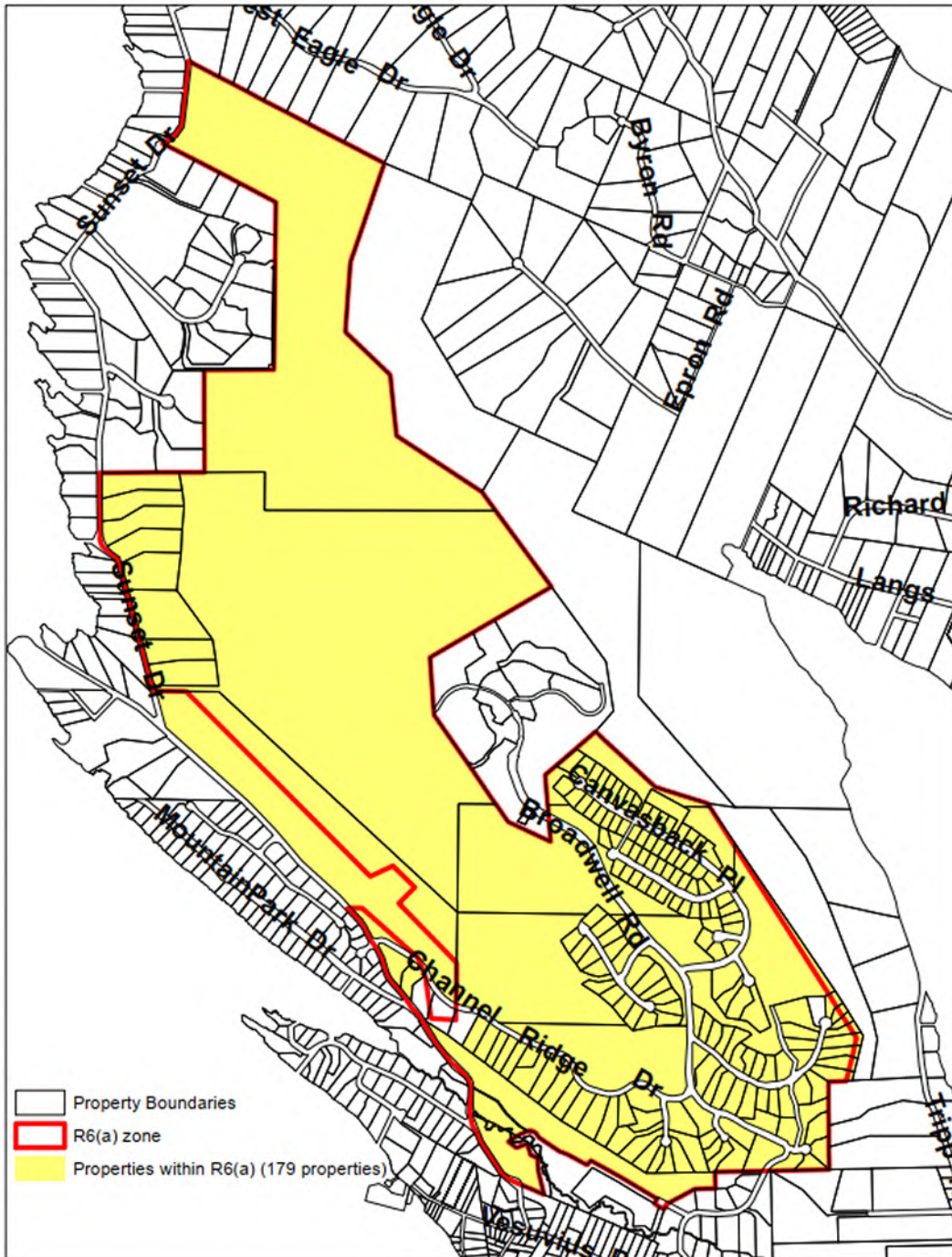


Figure 4: Properties zoned R6(a).

The proposed rezoning to R8 would also allow each lot that met a minimum of 1.2 hectares to be permitted a seasonal cottage, further drawing down the number of dwelling units permitted by bylaw and covenant. A very rough calculation of the available land area in the residential portion of the subject property shows a subdivision potential of approximately 20 lots. If the maximum number of lots is achieved, locating a seasonal cottage would not be possible on any of the lots.

Water

An adequate supply of potable water for a proposed use is typically required to be demonstrated for a rezoning. The proposed application makes it difficult to assess what level of water supply should be demonstrated as no development is actually proposed through the application, but rather the potential for future development is sought. An adequate supply of potable water will still be required to create additional lots through the subdivision process, in accordance with servicing requirements in Section 5 of Land Use Bylaw No. 355.

Although water requirements would be addressed at time of subdivision, the applicant has demonstrated some water supply by providing a well pump test detailing two wells (52445 and 50148) with significant production capacity (25-60 USgpm). The wells would therefore appear to be capable of supplying multiple lots with water required for subdivision. However, staff noted that the location of the wells tested are far removed from the area of the subject property that could be subdivided:

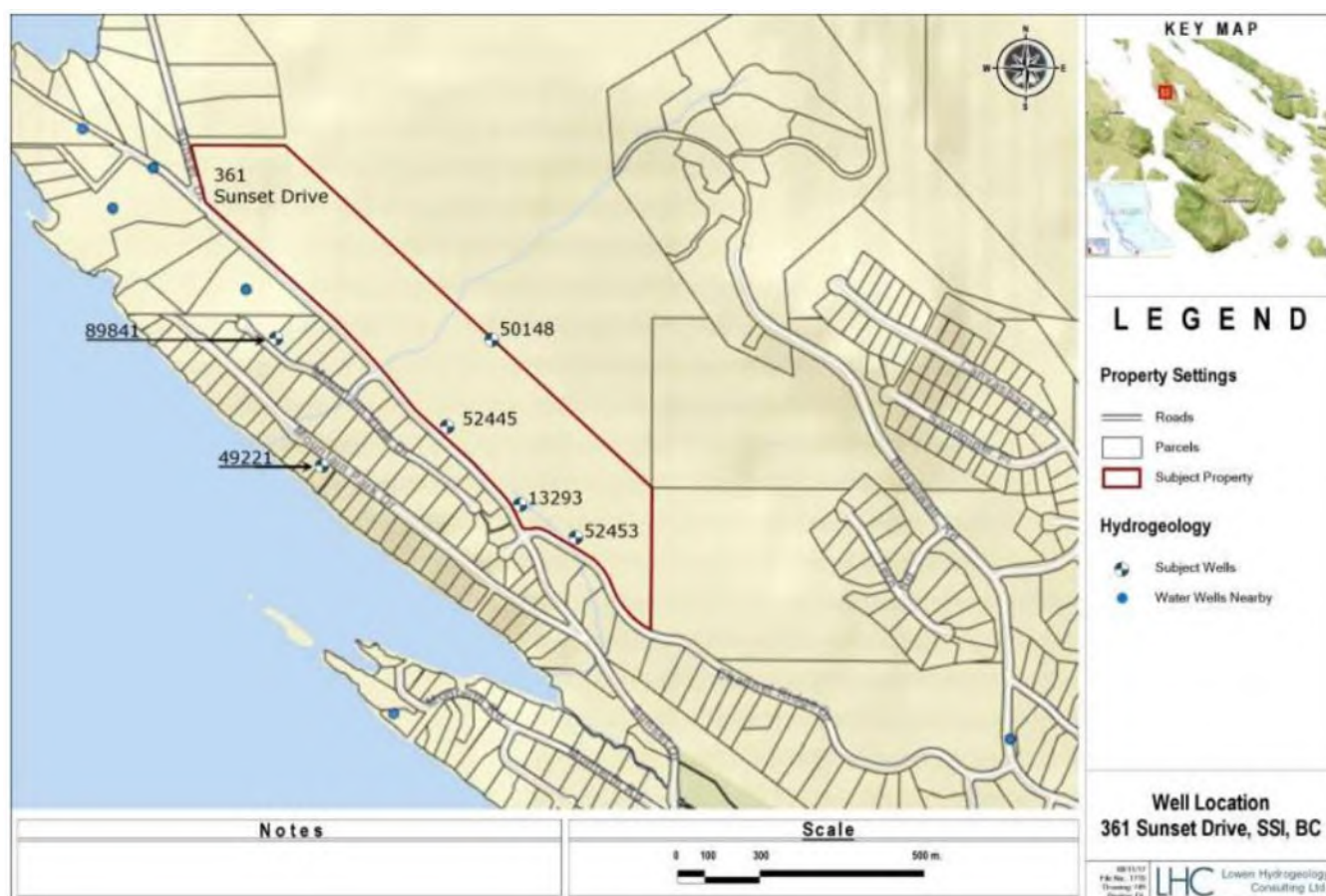


Figure 5: Well locations.

There would likely need to be significant infrastructure installed to convey water to any newly created lots. Staff also noticed that the wells are located on the agriculture-zoned portion of the property, and question the impact of water availability for agriculture use if the wells are pumped at a significant rate. Additionally, the requirement to create a water utility per the Water Utility Act would depend on the number of dwellings served if the intent is to use a single well to serve multiple properties. Finally, a ground water well drilled in the area of the subject

property where new lots could be created showed a marginal rate of 0.75 USgpm, the hydrogeologist report noted isolated issues of quantity issues in the summer months.

Temporary Use Permits

Part G of the OCP - Temporary Use Permits and Development Approval Information does not allow TUPs to be granted for the Channel Ridge Residential designation (see Section E.3.4.33). If the property designation is amended to Residential Neighbourhoods, TUPs could be issued.

As noted in the background section, the subject property is the location of a nascent commercial accommodation operation that was planned to function out of a number of purpose-built geodesic domes. The owner of the property had leased a portion of the CRR designated land to a commercial accommodation business operator, who in turn had sought an SS LTC “community need” exemption for bylaw enforcement while a rezoning was sought. The SS LTC did not take up the issue, no community need designation was granted, and the operator continued on with establishing the commercial accommodation business. At time of this report, the commercial accommodation is not operating, many of the structures are half built, and the future operation of the business is not known. If the amended land use designation sought is issued, the SS LTC might expect to see a TUP for a similar commercial accommodation use brought forward for their consideration.

Consultation

No correspondence has been received at the time of preparing this report, but may be received before or during the LTC meeting. Correspondence may be sent to ssiinfo@islandstrust.bc.ca.

As the proposed rezoning would involve an OCP amendment, the LTC is required by the *Local Government Act* to consider opportunities for consultation with persons, organizations and authorities it considers will be affected. The LTC should consider if it wishes to undertake additional consultation if the LTC elects to move forward with the application.

Protocols

No Islands Trust protocols have been identified as relevant to this application.

Agencies

If the SS LTC elects to direct staff to draft a bylaw, the draft bylaw will be referred to agencies for comment as per SS LTC direction

First Nations

If the SS LTC elects to direct staff to draft a bylaw, the draft bylaw will be referred to First Nations for comment as per SS LTC direction.

The Islands Trust reviews all applications to ensure the preservation and protection of cultural heritage, archaeological sites, and ancestral places. As reviewed, the application is consistent with respect to LTC Standing Resolutions on reconciliation. Notwithstanding, to provide applicants with awareness regarding unknown archaeological areas, staff forwarded the Islands Trust Chance Find Protocol and the provincial Archaeological Branch guidelines on Heritage Act directly to the applicants with the initial application.

Rationale for Recommendation

Staff consider that the zoning, land use designation, covenant, NSSWD moratorium, and history of the area to create a complex regulatory situation for the subject property. In consideration of the complexity, staff

recommend that the SS LTC not proceed with piecemeal rezoning of the subject property and only undertake a comprehensive rezoning that addresses a multitude of land use and servicing issues. In addition, the rezoning and OCP amendment under current NSSWD conditions would be at variance with a number of OCP and ITPS policies and objectives regarding water supply. For these reasons, staff recommend that the SS LTC proceed no further.

ALTERNATIVES

The LTC may wish to consider the following alternatives to the staff recommendation:

1. Request further information

The LTC may request further information prior to making a decision. Staff advise that the implications of this alternative are increased processing time and potentially increased cost to the applicant. If selecting this alternative, the LTC should describe the specific information needed and the rationale for this request. Recommended wording for the resolution is as follows:

That the Salt Spring Island Local Trust Committee request that the applicant submit to the Islands Trust an [specify report type], completed by a [specify professional designation], which identifies the potential impacts of the proposed rezoning on [specify impact].

2. Hold the application in abeyance

The LTC may choose to hold the application in abeyance pending completion of a significant study or OCP process, etc. Staff advise that the implication of this decision is that no further work will be done on the application until the conditions for abeyance are resolved. Recommended wording for the resolution is as follows:

That the Salt Spring Island Local Trust Committee hold application SS-RZ-2021.3 in abeyance until [define timeframe for abeyance].

NEXT STEPS

If the LTC accepts staff's recommendation, the application will be closed and will be assessed for an applicable refund.

Submitted By:	Geordie Gordon, Acting Island Planner	June 1, 2022
Concurrence:	Louisa Garbo, Acting Regional Planning Manager	June 1, 2022

ATTACHMENTS

1. Site Context
2. Maps, Plans, Photographs
3. OCP Policies
4. LUB 355 Regulations
5. Islands Trust Policy Statement Directive Policies

6. Covenant R32170
7. Well Pump Test
8. Application letter

ATTACHMENT #1 – SITE CONTEXT

LOCATION

Legal Description	LOT A, SECTION 13, RANGE 4 WEST, AND SECTIONS 11, 12 AND 13, RANGE 3 WEST, NORTH SALT SPRING ISLAND, COWICHAN DISTRICT, PLAN 44304 EXCEPT THAT PART IN PLAN 46042
PID	005-624-827
Civic Address	361 Sunset Drive

LAND USE

Current Land Use	Residential, agriculture
Surrounding Land Use	Residential, agriculture, comprehensive development zone (Channel Ridge Village).

HISTORICAL ACTIVITY

File No.	Purpose
n/a	

POLICY/REGULATORY

Official Community Plan Designations	Channel Ridge Residential (CRR) + Agriculture (A): 
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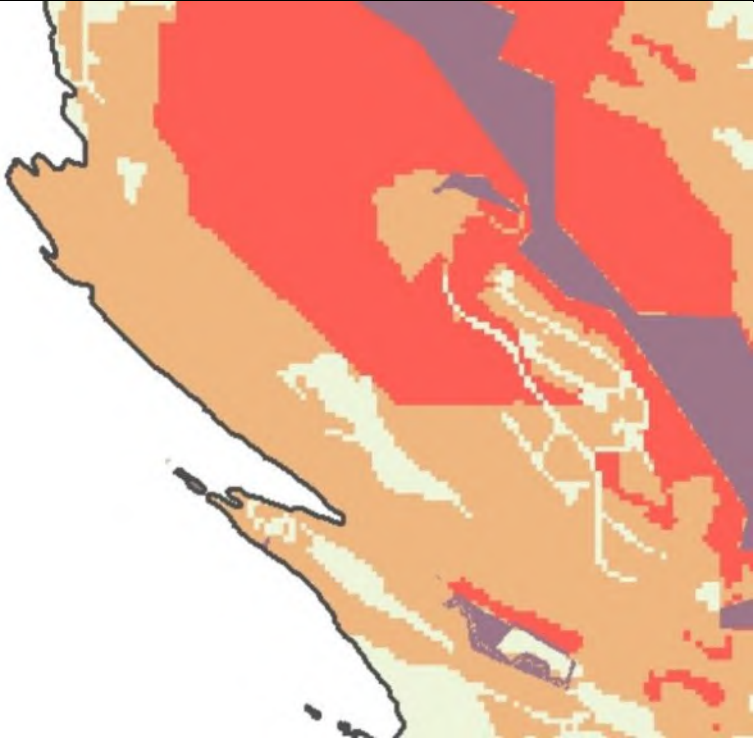
Land Use Bylaw	Residential 6 (a) – R6(a)	
		R6
	Principal Uses, Buildings and Structures	
	<i>Single-family dwellings</i>	◆
	<i>Duplexes</i>	◆
	Dental and medical office <i>services</i> for a maximum of two medical practitioners	◆
	Elementary schools, pre-schools and <i>child day care</i> centres	◆
	Hospitals and <i>public</i> health care facilities	◆
	<i>Community halls</i>	◆
	<i>Non-commercial outdoor active recreation</i>	◆
	<i>Churches</i>	◆
	<i>Public service uses</i>	◆
	Accessory Uses	
	<i>Home-based businesses</i> , subject to Section 3.13	◆
		R6
	Minimum Lot Areas and Servicing Requirements	
	Minimum water <i>service</i> required for <i>subdivision</i>:	
	Adequate supply of <i>potable</i> water	
	<i>Community water system</i>	◆
	Minimum sewage <i>service</i> required for <i>subdivision</i>:	
	Individual on-site sewage treatment system per <i>lot</i>	◆
	<i>Community sewage collection system</i>	
	Minimum area of an individual <i>lot</i> that may be created through <i>subdivision</i> provided each <i>lot</i> has an individual on-site sewage treatment system and an adequate supply of <i>potable</i> water (ha)	N/A

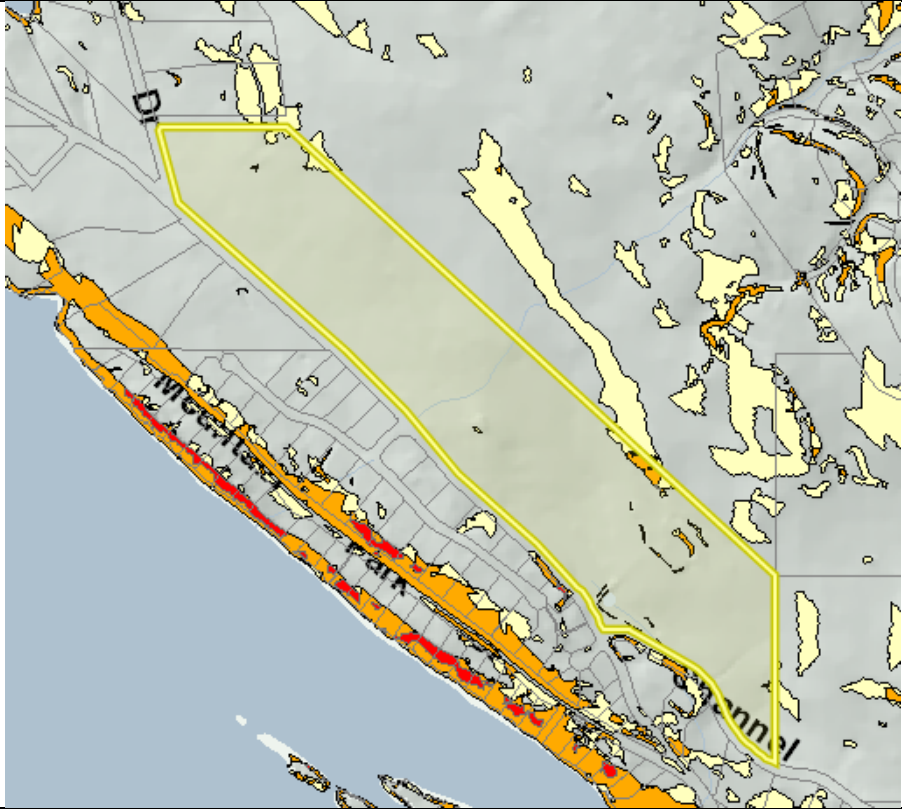
	Minimum area of an individual lot that may be created through <i>subdivision</i> provided each <i>lot</i> has an individual on-site sewage treatment system and connection to a <i>community water supply</i> (ha)	0.4																																	
	Minimum area of an individual lot that may be created through <i>subdivision</i> provided each <i>lot</i> has connection to a <i>community sewage collection system</i> and a <i>community water system</i> (ha)	0.11																																	
	Minimum average area of <i>lots</i> in a <i>subdivision</i> , provided each <i>lot</i> has an individual on-site sewage treatment system and an adequate supply of <i>potable</i> water (ha)	N/A																																	
	Minimum average area of <i>lots</i> in a <i>subdivision</i> , provided each <i>lot</i> has an individual on-site sewage treatment system and connection to a <i>community water system</i> (ha)	0.4																																	
	Minimum average area of lots in a subdivision , provided each <i>lot</i> has connection to a <i>community sewage collection system</i> and a <i>community water system</i> (ha)	0.11																																	
Zone Variation – R6 (a)																																			
(18)	Duplexes are not permitted.																																		
(19)	The following additional <i>uses</i> are permitted:																																		
	(a)	Indoor public recreation facility;																																	
	(b)	Public health clinic.																																	
(20)	A maximum of one <i>dwelling unit</i> is permitted per <i>lot</i> .																																		
(21)	No more than a total of 268 <i>dwelling units</i> are permitted on all lands in this <i>zone</i> .																																		
(22)	The following regulations apply to the blocks of land indicated by letter on Schedule “C” to this Bylaw:																																		
<table><tr><th>BLOCK LOCATION</th><th>A</th><th>B</th><th>C</th><th>D</th><th>E</th><th>F</th><th>G</th></tr><tr><td></td><td colspan="7">Blocks as indicated on Schedule “C” to this Bylaw</td></tr><tr><td colspan="8">Minimum water service required for subdivision:</td></tr><tr><td>Adequate supply of potable water</td><td></td><td></td><td>◆</td><td>◆</td><td>◆</td><td>◆</td><td>◆</td></tr></table>				BLOCK LOCATION	A	B	C	D	E	F	G		Blocks as indicated on Schedule “C” to this Bylaw							Minimum water service required for subdivision:								Adequate supply of potable water			◆	◆	◆	◆	◆
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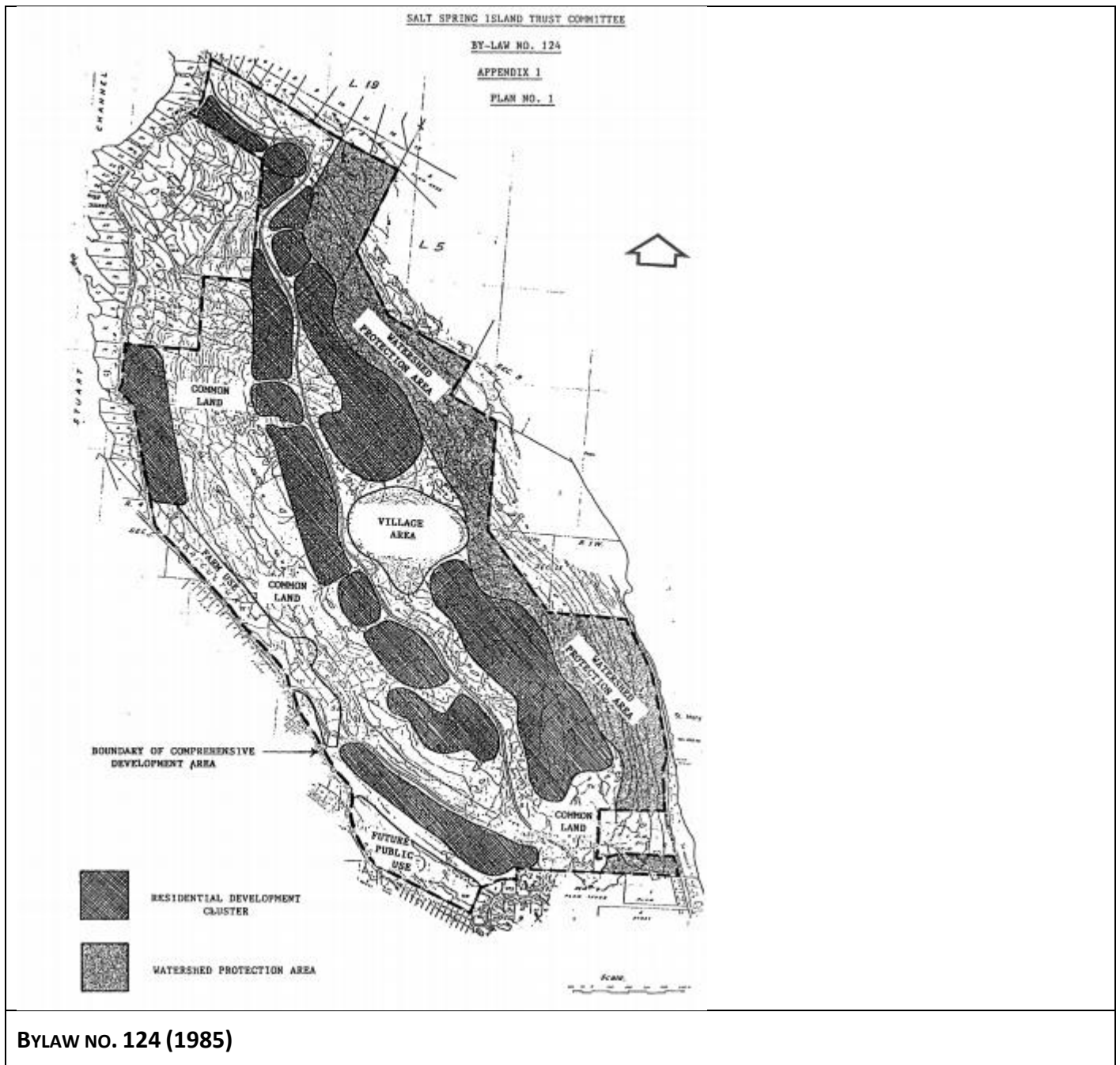
	Community water system	◆	◆					
	Minimum sewage service required for subdivision: individual on-site sewage treatment system per lot	◆	◆	◆	◆	◆	◆	◆
	Minimum area (in ha) of an individual lot that may be created through subdivision.	0.2	0.2	1.2	250	0.2	0.4	0.5
	Minimum average area (in ha) of lots in a subdivision	0.46	0.4	2	250	.57	.85	1.4
(23)Variations of the block boundary illustrated on Schedule “C” may be permitted in order to accommodate lots larger than the minimum average lot area provided both the following conditions are met: (a) at least 10 per cent of each lot being created falls within the boundary of the Block defined in Schedule “C”; (b)the revised area of the Block does not exceed 110 per cent of the stated area of the Block defined in Schedule “C”.								
Other Regulations	A1 portion is within the Agricultural Land Reserve (ALR). Rezoning application is subject to Development Approvals Information (DAI) bylaw.							
Covenants	R32170 – Restrictive Covenant							
Bylaw Enforcement	One closed bylaw file, another contravention related to land use is outstanding.							

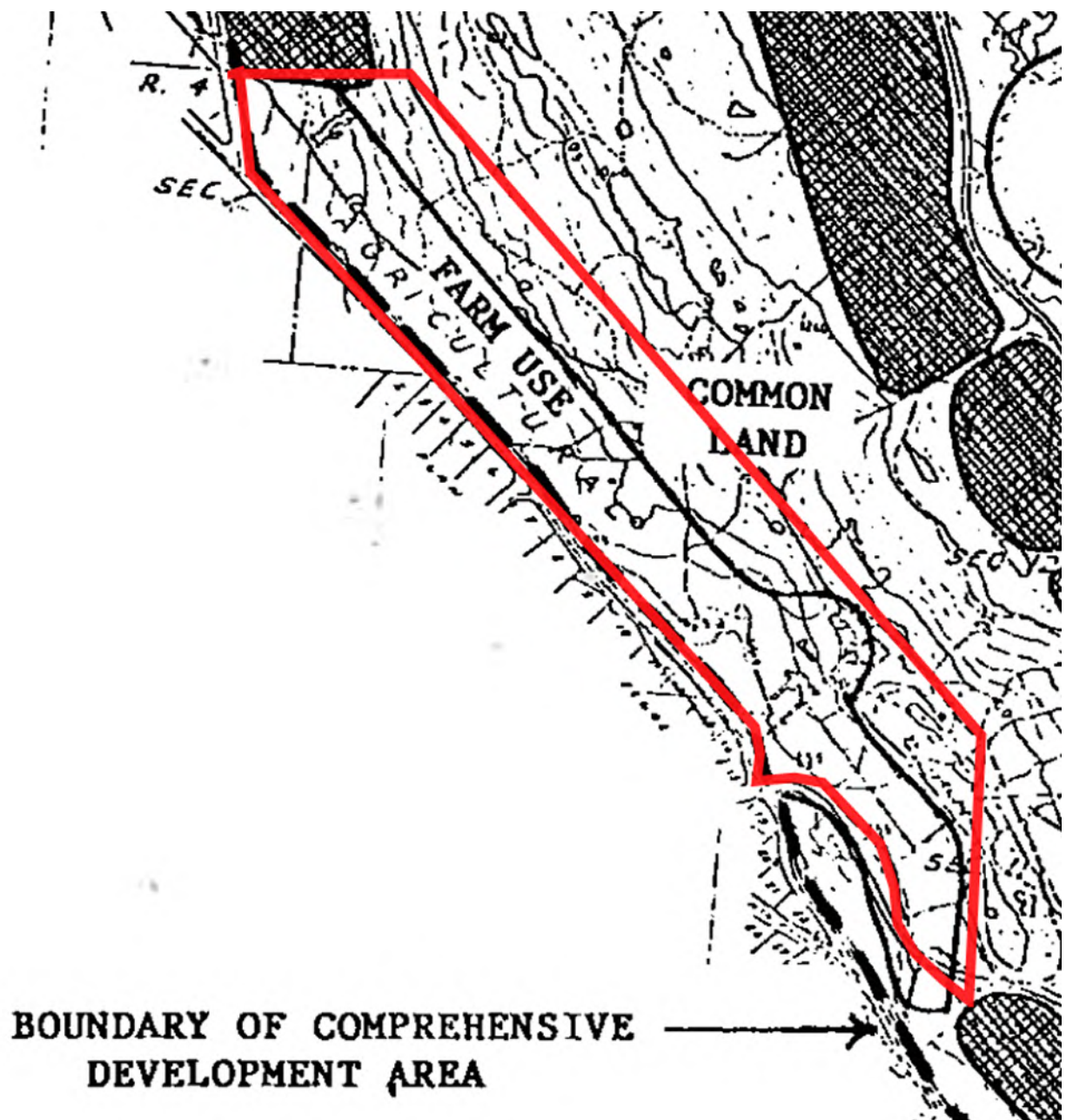
SITE INFLUENCES

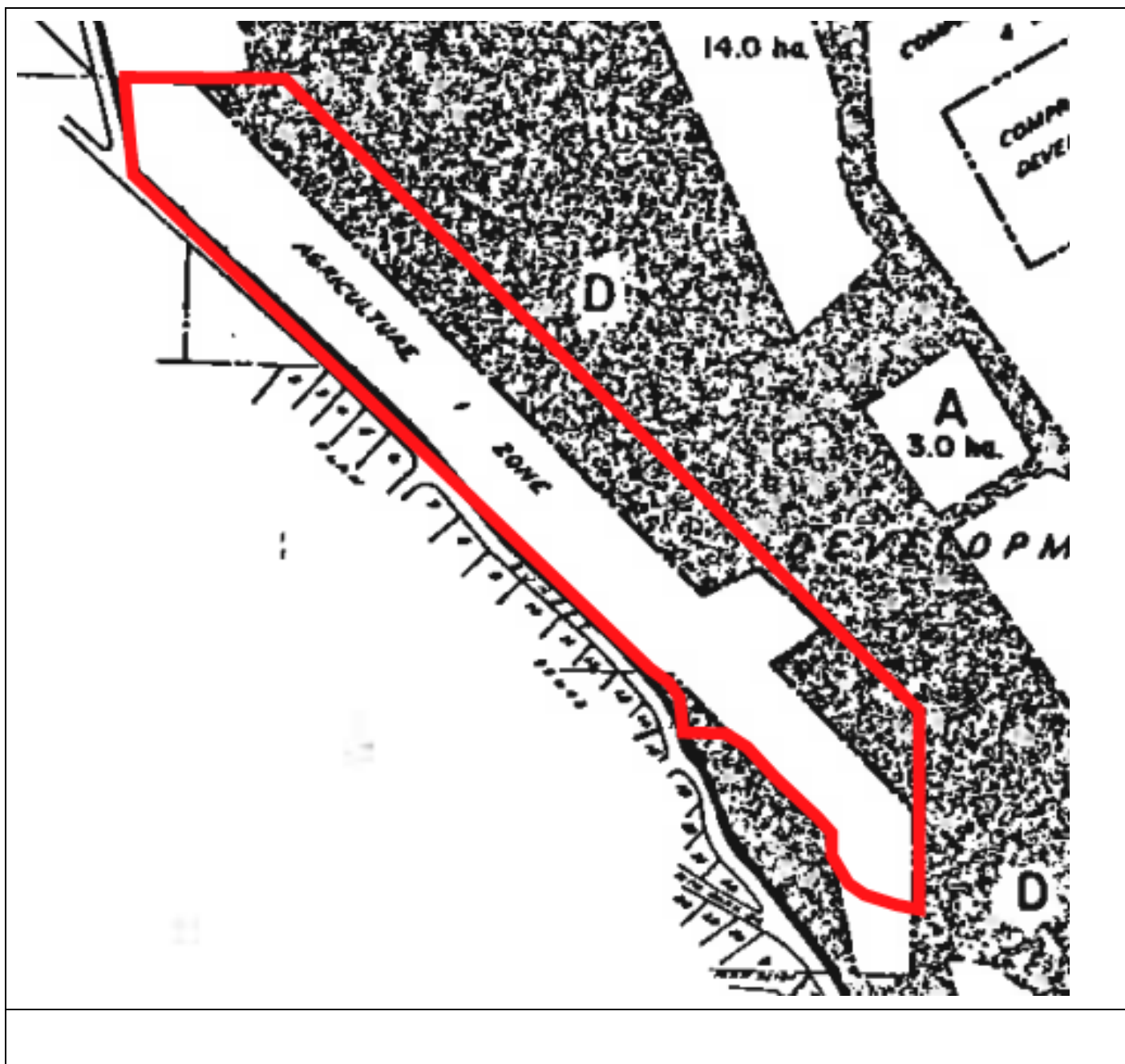
Islands Trust Conservancy	n/a
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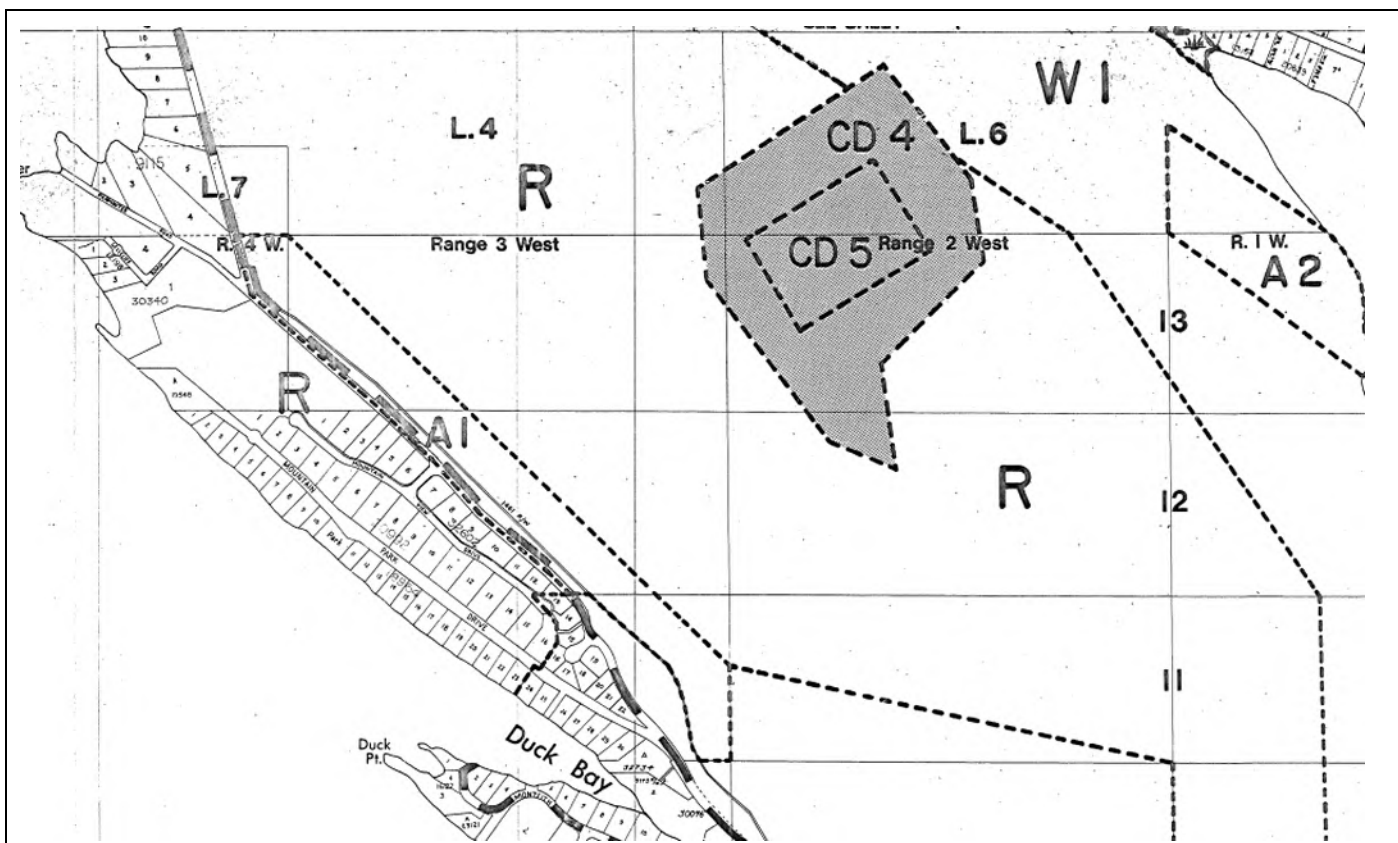
Regional Conservation Strategy	 Medium Value in RCS.
Species at Risk	 Western Painted Turtle Pacific Coast population Sharp-tailed Snake
Sensitive Ecosystems	None mapped.

Hazard Areas	
Archaeological Sites	Potential indicated. By copy of this report, the owners and applicant should be aware that there is still a chance that the lot may contain previously unrecorded archaeological material that is protected under the <i>Heritage Conservation Act</i>. If such material is encountered during development, all work should cease and Archaeology Branch should be contacted immediately as a <i>Heritage Conservation Act</i> permit may be needed before further development is undertaken. This may involve the need to hire a qualified archaeologist to monitor the work.
Climate Change Adaptation and Mitigation	Undetermined
Shoreline Classification	Not Applicable
Shoreline Data in TAPIS	Not Applicable

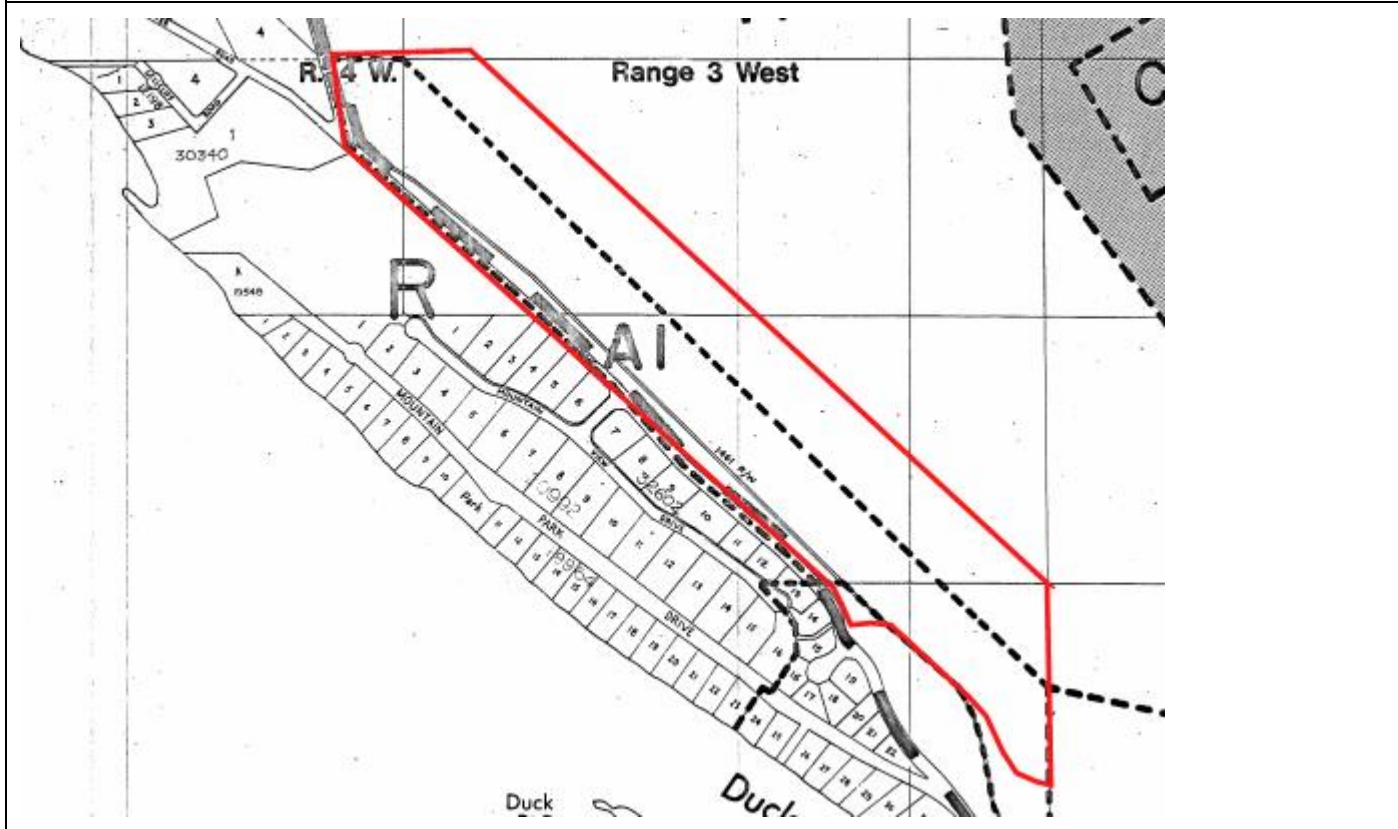


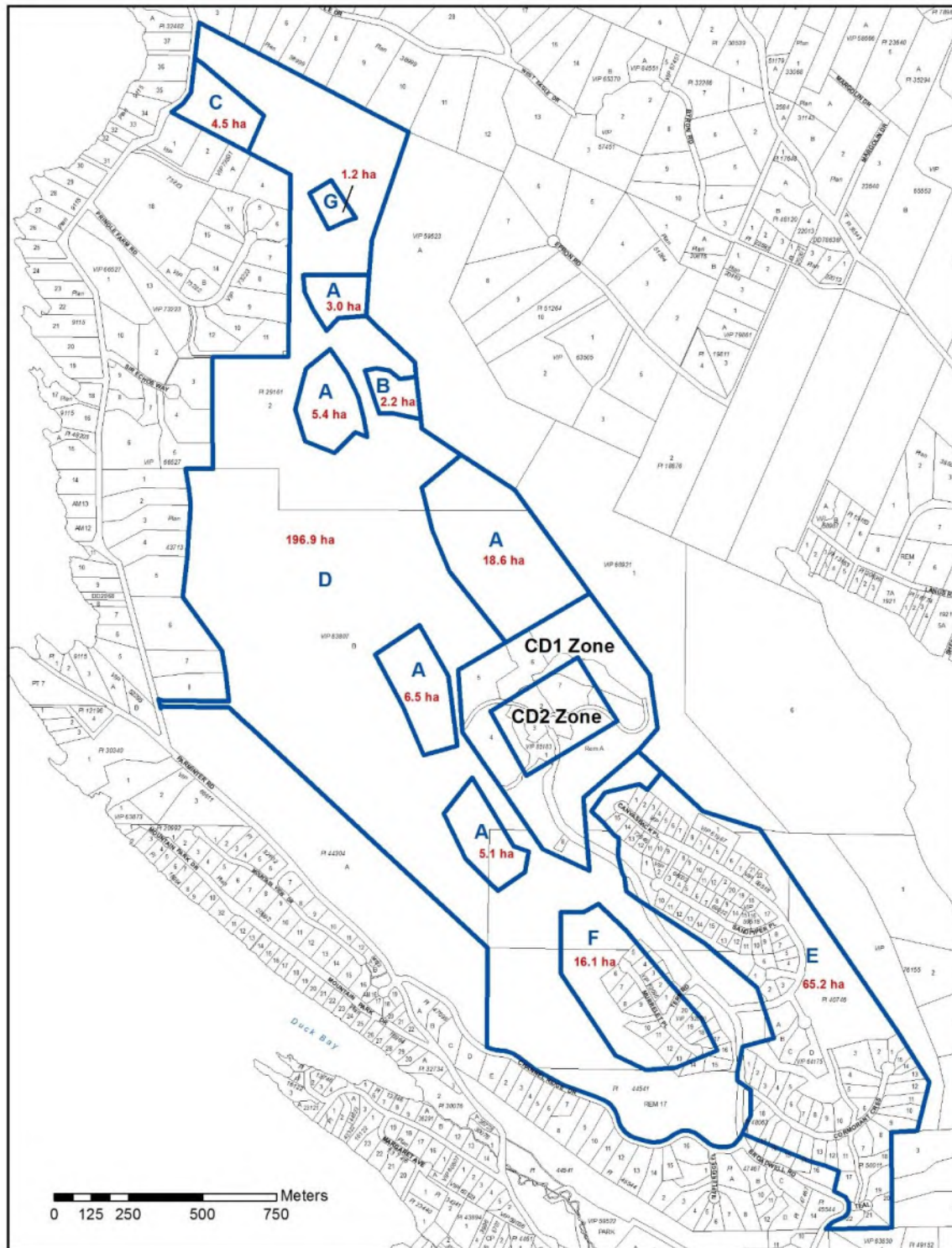






BYLAW NO. 123 (1985)





BYLAW NO. 355 (1999) SCHEDULE 'C'

ATTACHMENT #3 – OCP POLICIES

SALT SPRING ISLAND OFFICIAL COMMUNITY PLAN BYLAW NO. 434

OCP Objective/Policy	
General Objectives	
A.4.1.4	To adopt the precautionary principle in the decision-making of the Local Trust Committee. The precautionary principle asserts that, when an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause-and-effect relationships are not fully established scientifically. In this context, the essential elements of a precautionary approach to decision-making include: a. a duty to take anticipatory action to prevent harm; b. the right for the community to know complete and accurate information on potential human health and environmental impacts as best it can be determined; c. requiring the proponent to supply this information to the public; d. an obligation to consider alternatives and select the alternative with the least potential impact on human health and the environment, including the alternative of no change; e. a duty to consider broader short-term and long-term costs and benefits to the community when evaluating potential alternatives; and f. a responsibility to make decisions in a transparent, participatory manner, relying on the best available information.
Residential Neighbourhoods Designation	
B.2.4.2.2	Zones within the Residential Neighbourhoods Designation will continue to accommodate the <i>medium density residential uses</i> and the other compatible land uses allowed in the existing bylaw. Existing commercial, <i>general employment</i> and multi-family zones will also remain, but zoning changes should not be made to locate more of these zones on additional lands in this Designation, with the exception of multiple-family <i>affordable housing</i> projects.
B.2.4.2.3	The minimum size of lots that can be created by subdivision will remain the same as indicated in the existing Land Use Bylaw. However, the Local Trust Committee could consider rezoning applications that allow a slightly higher density (smaller minimum average lot sizes) as part of a proposal that provided a community amenity (see Appendix 3) or as part of a proposal to transfer development potential (see Policy B.2.3.2.1 and Appendix 4).
Channel Ridge Residential Designation	
B.2.6.2.2	Zones within the Channel Ridge Residential Designation will continue to allow clusters of medium density residential developments and the other compatible uses allowed by existing zoning.
B.2.6.2.4	Blocks of land that may be used for residential settlement should remain generally as indicated in the Local Trust Committee's current Land Use Bylaw. The number of new lots that can be created by subdivision in the Designation should not be increased.
B.2.6.2.5	The Local Trust Committee should consider rezoning applications that would allow owners of undeveloped property within the Channel Ridge Residential Designation to transfer their

	development potential to more suitable locations within the Designation or to the Channel Ridge Village Designation. Such applications should follow the guidelines in Appendix 4. The Channel Ridge Residential Designation is a Development Potential Donor Area. Proposals to transfer development potential from areas north of the Channel Ridge Village Designation could be considered if a thorough analysis of the benefits and impacts of any road network changes is provided.
Potable Water Quantity And Supply Objectives And Policies	
C.3.1.1.1	To apply the precautionary principle in ensuring that the density and intensity of land use is not increased in areas which are known to have concerns with the supply of potable water.
C.3.1.1.2	To acknowledge that the surface water supply sources on the island are finite and remain under Provincial control and that more effective use, management and sharing of the resource should be encouraged to support present commitments and future desired land use decisions.
C.3.2.1.3	To ensure that zoning changes in the North Salt Spring Waterworks District do not result in such a level of development that water cannot be supplied to needed public facilities or would not be available for firefighting purposes. In particular, to ensure that water remains available for hospital and school expansion, and <i>affordable housing</i> .
C.3.2.2.1	When the Local Trust Committee receives rezoning applications for land inside the boundaries of a community water system, it will refer the application to the operators of the affected system. They will be asked if water could be supplied to the proposed new development, considering the needs of their existing customers and the provision of water for firefighting, and any properties already zoned for further development. When it considers zoning changes within a community water system, the Local Trust Committee will also consider the amount and percentage of any remaining supply capacity that would be used by the proposed new use. The Committee will not make zoning changes within a community water system if the change would mean water could not be supplied (under the existing license) to existing customers. It should not normally make zoning changes if the change would mean water could not also be supplied to vacant or under-developed properties already zoned for further development. Should such zoning changes be proposed, the applicant could be encouraged to suggest other water supplies so that the application could be considered. Examples are rainwater catchment, groundwater use or a water conservation program. The Local Trust Committee could make an exception to the above policy within the North Salt Spring Waterworks District to allow community facilities or affordable housing projects to proceed. However such changes should only be made if the Committee is satisfied that the District is likely to receive a sufficiently larger water license.
C.3.2.2.2	In addition to policy C.3.2.2.1, the Local Trust Committee should not make zoning changes within the North Salt Spring Waterworks District that could mean that water will not be available (under the District's existing license) for the following projects (in order of priority): - essential services such as hospitals and schools needed within the district to serve the island's projected population. - special needs and affordable housing needed by the community. The Local Trust Committee could make an exception to this policy so that one of the above projects could proceed before another of higher priority. However, it must be satisfied that the District will receive a sufficiently larger water license in time to serve the higher priority project when it is needed.

C.3.2.2.5	The Local Trust Committee will continue to cooperate with community water system operators to ensure water supply issues are considered before zoning changes are made. The Committee should also continue to assist in the development of better estimates of projected water demands and supply potential. The Committee could consider zoning changes that would limit land uses with a high water demand. The Committee particularly recognizes that this Plan could critically affect the North Salt Spring Waterworks District's ability to meet future needs and will cooperate with the District to address this issue
C.3.2.2.11	When the Local Trust Committee receives applications for zoning changes within a water system's boundaries, and the zoning change would increase the demand for water, the Committee will consider the impacts on agriculture, as further outlined in Section B.6.2
C.3.3.2.2	When considering rezoning applications, the Local Trust Committee should consider the impacts of the proposed new use on existing wells, springs, or other water supplies. If the proposed use is expected to need more water than the uses already allowed on the property, then the Committee should ask for evidence that wells or other water supplies in the neighbourhood would not be depleted. The Committee should also consider whether water use would affect agricultural activities or deplete any springs necessary to maintain fish habitat. Should a zoning change be proposed where groundwater supplies are not adequate, the applicant could be encouraged to find other means of supplying water. Rainwater catchment or a water <i>conservation</i> program could be considered.

ATTACHMENT #4 – SALT SPRING ISLAND LAND USE BYLAW NO. 355 POLICIES

	R6	R8
Principal Uses, Buildings and Structures		
<i>Single-family dwellings</i>	♦	♦
<i>Duplexes</i>	♦	
<i>Duplexes constructed before July 31, 1990</i>		♦
<i>Multi-family dwellings</i>		
Dental and medical office <i>services</i> for a maximum of two medical practitioners	♦	♦
Elementary schools, pre-schools and <i>child day care</i> centres	♦	♦
Hospitals and <i>public</i> health care facilities	♦	♦
<i>Community halls</i>	♦	♦
<i>Non-commercial outdoor active recreation</i>	♦	♦
<i>Churches</i>	♦	♦
<i>Agriculture, excluding intensive agriculture</i>		♦
<i>Public service uses</i>	♦	♦
<i>Seniors' supportive housing complex</i>		
Accessory Uses		
<i>Home-based businesses</i> , subject to Section 3.13	♦	♦
<i>Seasonal cottages</i> subject to Section 3.14		♦

Zone Variation – R6 (a)

- (18) *Duplexes* are not permitted.
- (19) The following additional *uses* are permitted:
- (a) *Indoor public* recreation facility;
 - (b) *Public* health clinic.
- (20) A maximum of one *dwelling unit* is permitted per *lot*.
- (21) No more than a total of 268 *dwelling units* are permitted on all lands in this *zone*.

- (22) The following regulations apply to the blocks of land indicated by letter on Schedule "C" to this Bylaw:

BLOCK LOCATION	A	B	C	D	E	F	G
	Blocks as indicated on Schedule “C” to this Bylaw						
Minimum water <i>service</i> required for <i>subdivision</i> :							
Adequate supply of <i>potable</i> water			◆	◆	◆	◆	◆
<i>Community water system</i>	◆	◆					
Minimum sewage <i>service</i> required for <i>subdivision</i> : individual on-site sewage treatment system per <i>lot</i>	◆	◆	◆	◆	◆	◆	◆
Minimum area (in ha) of an individual <i>lot</i> that may be created through <i>subdivision</i> .	0.2	0.2	1.2	250	0.2	0.4	0.5
Minimum average area (in ha) of <i>lots</i> in a <i>subdivision</i>	0.46	0.4	2	250	.57	.85	1.4

- (23) Variations of the block boundary illustrated on Schedule "C" may be permitted in order to accommodate *lots* larger than the minimum average *lot area* provided both the following conditions are met:

- (a) at least 10 per cent of each *lot* being created falls within the boundary of the Block defined in Schedule "C";
- (b) the revised area of the Block does not exceed 110 per cent of the stated area of the Block defined in Schedule "C".

Notable differences are seasonal cottages permitted in R8 but not in R6, and agriculture permitted in R8 but not in R6.

Subdivision Servicing Requirements - Comparison Of Between R6(A) And R8

BLOCK LOCATION	A	B	C	D	E	F	G	R6	R8
	Blocks as indicated on Schedule "C" to this Bylaw								
Minimum water service required for subdivision:									
Adequate supply of <i>potable</i> water			◆	◆	◆	◆	◆		◆
<i>Community water system</i>	◆	◆						◆	
Minimum sewage service required for subdivision:									
individual on-site sewage treatment system per <i>lot</i>	◆	◆	◆	◆	◆	◆	◆		
<i>Community sewage collection system</i>	Not applicable								
Minimum area (in ha) of an individual lot that may be created through <i>subdivision</i> .	0.2	0.2	1.2	250	0.2	0.4	0.5	n/a	
Minimum area of an individual lot that may be created through <i>subdivision</i> provided each <i>lot</i> has an individual on-site sewage treatment system and an adequate supply of <i>potable</i> water (ha)	Not Applicable							n/a	0.6
Minimum area of an individual lot that may be created through <i>subdivision</i> provided each <i>lot</i> has an individual on-site sewage treatment system and connection to a <i>community water supply</i> (ha)								0.4	0.2
Minimum area of an individual lot that may be created through <i>subdivision</i> provided each <i>lot</i> has connection to a <i>community sewage collection system</i> and a <i>community water system</i> (ha)								0.11	0.2
Minimum average area of <i>lots</i> in a <i>subdivision</i> , provided each <i>lot</i> has an individual on-site sewage treatment system and an adequate supply of <i>potable</i> water (ha)								n/a	0.2
Minimum average area of <i>lots</i> in a <i>subdivision</i> , provided each <i>lot</i> has an individual on-site sewage treatment system and connection to a <i>community water system</i> (ha)								0.4	0.4
Minimum average area of lots in a subdivision , provided each <i>lot</i> has connection to a <i>community sewage collection system</i> and a <i>community water system</i> (ha)								0.11	0.4
Minimum average area (in ha) of <i>lots</i> in a <i>subdivision</i>	0.46	0.4	2	250	.57	.85	1.4	n/a	

APPENDIX #5 ISLANDS TRUST POLICY STATEMENT DIRECTIVES ONLY CHECKLIST

PART III: POLICIES FOR ECOSYSTEM PRESERVATION AND PROTECTION

CONSISTENT	No.	DIRECTIVE POLICY
	3.2	Forest Ecosystems
	3.2.2	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the protection of unfragmented forest ecosystems within their local planning areas from potentially adverse impacts of growth, development, and land-use.

PART IV: POLICIES FOR THE STEWARDSHIP OF RESOURCES

CONSISTENT	No.	DIRECTIVE POLICY
	4.1	Agricultural Land
	4.1.5	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the preservation, protection, and encouragement of farming, the sustainability of farming, and the relationship of farming to other land uses.
	4.1.6	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the use of adjacent properties to minimize any adverse affects on agricultural land.
CONSISTENT	No.	DIRECTIVE POLICY
	4.1.7	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the design of road systems and servicing corridors to avoid agricultural lands unless the need for roads outweighs agricultural considerations, in which case appropriate mitigation measures shall be required to derive a net benefit to agriculture.
	4.1.8	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address land uses and activities that support the economic viability of farms without compromising the agriculture capability of agricultural land.
	4.2	Forests
	4.2.6	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the need to protect the ecological integrity on a scale of forest stands and landscapes.
CONSISTENT	No.	DIRECTIVE POLICY
	4.3	Wildlife and Vegetation
	4.4	Freshwater Resources
	4.4.2	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address measures that ensure neither the density nor intensity of land use is increased in areas which are known to have a problem with the quality or quantity of the supply of freshwater, water quality is maintained, and existing, anticipated and seasonal demands for water are considered and allowed for.
	4.4.3	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address measures that ensure water use is not to the detriment of in-stream uses

PART V: POLICIES FOR SUSTAINABLE COMMUNITIES

CONSISTENT	No.	DIRECTIVE POLICY
	5.2	Growth and Development
	5.2.4	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address any potential growth rate and strategies for growth management that ensure that land use is compatible with preservation and protection of the environment, natural amenities, resources and community character.
	5.2.5	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address means for achieving efficient use of the land base without exceeding any density limits defined in their official community plans.
	5.3	Transportation and Utilities
	5.3.5	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the impacts of road location, design, construction and systems.
	5.3.7	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the development of land use patterns that encourage establishment of bicycle paths and other local and inter-community transportation systems that reduce dependency on private automobile use.

	5.7	Economic Opportunities
	5.7.2	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address economic opportunities that are compatible with conservation of resources and protection of community character.

Status: Registered

Doc #: R32170

RCVD: 1986-04-28 RQST: 2020-08-24 12.11.36

R 32170

(P.I.D#1's see schedule "A")

APPLICATION
LAND TITLE ACT Form 17 (Section 151, 152 (1) 220)

NOTE: Before submitting this application for interests under (1) and (2), applicants should check and satisfy themselves as to the tax position, including taxes of the Crown Provincial, a Municipality and Improvement, Water and Irrigation Districts.

NATURE OF INTEREST

() FEE SIMPLE MARKET VALUE \$ _____
☒ CHARGE COVENANT TRUE VALUE \$ NOMINAL
 () CANCELLATION OF _____ No. _____
 HERewith FOR: \$ 10.00

McKENZIE LIBSTONE % WEST COAST TITLE SEARCH LTD.
 595 Burrard St. 318-645 Fort Street
 Vancouver B.C. Victoria, B.C. V8W 1G2
 (604-5263) Bob Laroche
 Signature of Applicant/Collector/Agent

HAVING PRIORITY
OVER MORTGAGES:

N59959
 N59960
 N59952
 N59953

AND ASSIGNMENT OF
MORTGAGE N80874

Grantor.

Channel Ridge Properties
Limited (N.C. NO. 230481)Corporate Mortgagee:
Mountain Park Farm Ltd
(inc # 102235)

04/28/86 A2220 CHG NOM 10.00

FORM 1 (Section 36)
 MEMORANDUM OF REGISTRATION
 Registered on application received on
 the day and time written hereon.
 K.O. JACOUES, Registrar of the
 Victoria Land Title Office

RECEIVED
 LAND TITLE B.C.
 VICTORIA B.C.
 28 APR 86 10 34

Status: Registered

Doc #: R32170

RCVD: 1986-04-28 RQST: 2020-08-24
12.11.36RESTRICTIVE COVENANT AND AGREEMENTTHIS AGREEMENT made this 27th day of March, 1986.

BETWEEN:

CHANNEL RIDGE PROPERTIES LTD.
Third Floor
736 Broughton Street
Victoria, British Columbia
V8W 1E1,

("Grantor")

AND:

HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE
OF BRITISH COLUMBIA, as represented by the
Ministry of Municipal Affairs
747 Fort Street
Victoria, British Columbia
V8W 3F1

("Grantee")

AND:

THE BOARD OF TRUSTEES OF SCHOOL DISTRICT
NO. 64,
School District Office
Lower Ganges Road
Ganges, British Columbia
V0S 1E0

("Trustees")

AND:

THE SALTSRING ISLAND WATER PRESERVATION SOCIETY
R.R. #2
Mount Maxwell Road
Ganges, B.C.
V0J 1E0

("Society")

AND:

NORTH SALTSRING WATERWORKS DISTRICT
P.O. Box 749
Ganges, B.C.
V0S 1E0

("District")

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AND:

3

RODNEY PRINGLE, NORMAN GAVIN MOUAT,
CAROLYN FLORENCE MOUAT, HARALD BERLE
FRIELE, and EVELYN WINNIFRED FRIELE,
Sunset Drive,
Ganges, British Columbia
V0S 1E0

(collectively the "Personal Mortgagees")

AND:

MOUNTAIN PARK FARMS LTD. (Inc. #102235)
800 - 1070 Douglas Street
Victoria, British Columbia
V8W 2C3

(the "Corporate Mortgagee")

AND:

THE BANK OF MONTREAL,
595 Burrard Street
Vancouver, British Columbia

(the "Bank")

W H E R E A S:

A. The Grantor desires to grant this covenant to the Grantee to limit the use of land and buildings on the land on the terms and pursuant to the conditions set out in this Agreement and further, to register this Agreement against the "Development Lands" defined herein in the Victoria Land Title Office under Section 215 of the Land Title Act;

B. The Grantor is the registered owner in fee simple of all those certain lands and premises described in Schedule A to this Agreement (the "Development Lands");

C. The Grantor desires to transfer to the Society all those certain lands and premises shown and identified as Parcels

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A, B and C on the explanatory plan attached hereto as Schedule B to this Agreement free and clear of all registered financial charges and encumbrances and on the terms and conditions and for the purposes described herein;

D. The Grantor desires to transfer to the Trustees all those certain lands and premises shown as Parcel A on the plan of subdivision attached hereto as Schedule C to this Agreement free and clear of all registered financial charges and encumbrances and on the terms and conditions and for the purposes described herein;

E. The Grantee is responsible for the administration of the Islands Trust Act R.S.B.C. 1979, c. 208;

F. The Grantor desires to subdivide and develop the Development Lands in conformance with Saltspring Island Trust Committee Bylaws and proposed Bylaws No. 124, 125, 126 and 127 and this Agreement, and to build on permitted areas of the Development Lands no more than the number of residential dwelling units permitted under the Bylaws and this Agreement;

G. The Personal Mortgagees, the Corporate Mortgagee and the Bank have charges registered against title to the Development Lands and desire to grant the Grantee, the Society and the Trustees priority for their interests described and established under this Agreement over all of the interests of each of the Personal Mortgagees, the Corporate Mortgagee and the Bank, respectively and to release and forever discharge all of the interests of each of the Personal Mortgagees, Corporate Mortgagee and the Bank against the Watershed Lands shown in the explanatory plan attached as Schedule B to this Agreement which are to be transferred to the Society and against the lands shown in the

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subdivision plan attached as Schedule C to this Agreement which are to be transferred hereunder to the Trustees;

NOW THEREFORE THIS INDENTURE WITNESSETH that in consideration of the premises and the sum of ONE (\$1.00) DOLLAR of lawful money of Canada paid by each of the Grantee, the Trustees, the District and the Society to each of the Grantor, the Personal Mortgagees, the Corporate Mortgagee and the Bank, the receipt and sufficiency of which from each of them is hereby acknowledged by the Grantor, the Personal Mortgagees, the Corporate Mortgagee and the Bank to each of the Grantee, the Trustees, the District and the Society, the parties hereto agree as follows:

1. The Grantor shall not construct or cause to be constructed more than five hundred and seventy-seven (577) residential dwelling units on those certain lands described in Schedule A to this Agreement (the "Development Lands") provided that in the event a competent government authority permits a person other than the Grantor or a corporation associated with the Grantor within the meaning of an associated corporation under the Income Tax Act, or a director, officer, employee or agent of the Grantor or of an associated corporation to further subdivide any portion of the Development Lands and to construct upon such further subdivided lands any residential dwelling units, then such additional residential dwelling units shall not be included in calculating the number of residential dwelling units on the Development Lands for the purposes of this Agreement.

2. The Grantor shall not engage in clear cutting or logging on that part of the Development Lands to be utilized as a common area provided however that the Grantor may in its discretion cut down such trees as may be required to provide and retain views for residential dwelling units constructed or to be

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constructed upon the lands or to provide septic fields, drainage fields, sewer lines, water mains, roads or other services that may be required within, on, upon, or through the said common area or for the purposes of constructing trails, footpaths or other recreational facilities and amenities as in the judgement of the Grantor may be desirable for the benefit of residents within the Development Lands.

3. In this Agreement:

- (a) "building" means a structure used or intended to be used for sheltering a use or occupancy;
- (b) "parcel" means any lot, block or other area, including a strata lot, in which land is held or into which it is subdivided, but does not include a highway;
- (c) "residential dwelling unit" means a self-contained set of habitable rooms containing not more than one set of cooking facilities and located in a building.

4. The Grantor shall transfer to the Society the lands shown and identified as Parcels A, B, and C on the explanatory plan attached hereto as Schedule B to this Agreement (the "Watershed Lands") free and clear of all registered financial charges and encumbrances as follows:

- (a) the Grantor shall transfer to the Society the portion of the Watershed Lands commencing at the northernmost point of the Watershed Lands, which portion is shown and identified as Parcel A on the

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explanatory plan attached as Schedule B to this Agreement, on the earlier of:

- (i) within 30 days of the date a subdivision plan or plans providing for the creation or development of 150 or more parcels or residential dwelling units within the Development Lands is deposited for registration in the Victoria Land Title Office; or
 - (ii) a date five years from the date of execution of this Agreement; and then
- (b) the Grantor shall transfer to the Society a further portion of the Watershed Lands, which is shown and identified as Parcel B on the explanatory plan attached as Schedule B to this Agreement, on the earlier of:
- (i) within 30 days of the date a subdivision plan or plans providing for the creation or development of a further 150 or more parcels or residential dwelling units within the Development Lands is deposited for registration in the Victoria Land Title Office; or
 - (ii) a date ten years from the date of execution of this Agreement; and then
- (c) the Grantor shall transfer to the Society the final portion of the Watershed Lands, which portion is shown and identified as Parcel C on the

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12.11.36

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explanatory plan attached as Schedule B to this Agreement on the earlier of:

- (i) within 30 days of the date a subdivision plan or plans providing for the creation or development of a further 200 or more parcels or residential dwelling units within the Development Lands is deposited for registration in the Victoria Land Title Office; or
 - (ii) a date fifteen years from the date of execution of this Agreement.
5. The transfer of the Watershed Lands from the Grantor to the Society shall be on the trust conditions that:
- (a) subject to this Agreement, the Watershed Lands shall be used exclusively for water preservation purposes and should the Society ever resolve to use the Watershed Lands for other than the purposes permitted herein, or should the Society resolve that any of its assets may be used for the personal benefit or profit of its members, or any of them, then in such case the Society covenants and agrees to transfer forthwith all its interest in the Watershed Lands to the District;
 - (b) the Society shall permit the construction and maintenance and use by the public of footpaths and a look out in locations in the Watershed Lands to be approved in advance by the Society within not less than 40 acres and not more than 50 acres of the Watershed Lands;

Status: Registered

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- (c) the Society shall grant to the District easements or rights of way that may reasonably be required from St. Mary's Lake to the Development Lands for the purposes of provision of water to the Development Lands, the location and nature of such easements or right of way to be approved of in advance by the Saltspring Island Trust Committee and in any such event, the Grantor shall forthwith on demand pay any legal, land title or other expenses incurred in the granting, preparation and registration of such charges; and
- (d) the Society shall re-convey a prorated proportion of the Watershed Lands, commencing at the northernmost point, to the Grantor, to the same extent and in the same proportion as the Grantor is prevented from constructing the 577 residential dwelling units as a result of the Saltspring Island Trust Committee, or other Crown Provincial governmental authority empowered to control land use, altering permitted land uses, densities or conditions of use.
6. (a) Subject to Section 5(d) of this Agreement, the Grantors covenant and agree that the use of the Watershed Lands shall, while the Grantor retains title to them, or any portion of them, be limited to the uses permitted hereunder and shall permit the Grantee, the Society, the District and their respective officers, employees, agents and contractors free access to and over the Watershed Lands for the purposes described in this Agreement.

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- (b) The permitted uses of the Watershed Lands by the Grantor prior to transfer to the Society are limited and restricted to agricultural and animal range purposes and the Grantor shall not log or cut trees and shall leave the Watershed Lands in an undisturbed state, save and except such steps as may reasonably be required for fire prevention or the eradication of tree disease, provided however, the Grantor may top or cut such trees as may be required to provide or retain views for the residential dwelling units constructed upon the Development Lands.

7. The Grantor shall transfer to the Trustees the lands and premises shown as Parcel A on the plan of subdivision attached as Schedule C to this Agreement free and clear of all registered financial charges and encumbrances within 30 days after delivery of the plan of subdivision to the Grantor and shall forthwith sign the plan, a Transfer of the lands shown as Parcel A on the plan of subdivision and any other documentation required to transfer the lands as provided in this paragraph.

8. The District consents and agrees to the conveyance of The Watershed Lands to the Society. The District agrees that the Development lands are within the area of the District and will serve it with potable water as provided by its Letters Patent and in accordance with its Bylaws in effect at the time the Grantor submits its plan of each subdivision to the District for approval respecting a watersystem to be installed therein.

9. This Agreement shall be void and have no force and effect for all purposes in the event that the Saltspring Island Trust Committee has not before April 30, 1986 adopted Bylaws and proposed Bylaws No. 124, 125, 126 and 127 which are attached as Schedule D to this Agreement.

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10. (a) The Personal Mortgagees hereby covenant and agree that all interests of the Grantee, the Society, the District and the Trustees created under this Agreement shall rank in priority to and take precedence over any and all interests of the Personal Mortgagees;
- (b) Notwithstanding the generality of paragraph 10(a) the:
- (i) aforesaid Restrictive Covenant in favour of the Grantee; and
- (ii) rights of the Society to the transfer of the Watershed Lands free and clear of all financial charges and encumbrances
- shall rank in priority to and take precedence over Mortgages registered under Numbers N59959 and N59960 notwithstanding the said Mortgages were registered prior to the execution of these presents.
- (c) The Personal Mortgagees shall provide discharges of their interests and charges in registrable form when the Watershed Lands, or any portion thereof, are to be transferred to the Society and shall provide discharges of all their interests and charges in registrable form in the lands to be transferred to the Trustees pursuant to this Agreement and shown as Parcel A on the subdivision plan attached as Schedule C to this Agreement.

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- 11 - 12

11. (a) The Corporate Mortgagee hereby covenants and agrees that all interests of the Grantee, the Society, the District and the Trustees created under this Agreement shall rank in priority to and take precedence over any and all interests of the Corporate Mortgagee;
- (b) Notwithstanding the generality of paragraph 11(a) the:
- (i) aforesaid Restrictive Covenant in favour of the Grantee; and
- (ii) rights of the Society to the transfer of the Watershed Lands free and clear of all charges and encumbrances
- shall rank in priority to and take precedence over two Mortgages assigned to the Bank and registered under Numbers N59952 and N59953 notwithstanding that the said Mortgages were registered prior to the execution of these presents.
- (c) The Corporate Mortgagee shall provide discharges of its interests and charges in registrable form when the Watershed Lands, or any portion thereof, are to be transferred to the Society and shall provide discharges of all its interests and charges in registrable form in the lands to be transferred to the Trustees pursuant to this Agreement and shown as Parcel A on the subdivision plan attached as Schedule C to this Agreement.

Status: Registered

Doc #: R32170

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- 12 - 13

12. (a) The Bank hereby covenants and agrees that all interests of the Grantee, the Society, the District and the Trustees created under this Agreement shall rank in priority to and take precedence over any and all interests of the Bank;
- (b) Notwithstanding the generality of paragraph 12(a) of this Agreement the:
- (i) aforesaid Restrictive Covenant in favour of the Grantee; and
- (ii) rights of the Society to the transfer of the Watershed Lands free and clear of all charges and encumbrances
- shall rank in priority to and take precedence over two Mortgages assigned to the Bank by way of an Assignment of Mortgages Numbered N80874 wherein Mortgages Number N59952 and N59953 are assigned to the Bank notwithstanding the said Mortgages and the Assignment were registered prior to the execution of these presents.
- (c) The Bank shall provide discharges of its interests and charges in registrable form when the Watershed Lands, or any portion thereof, are to be transferred to the Society and shall provide discharges of all its interests and charges in registrable form in the lands to be transferred to the Trustees pursuant to this Agreement and shown as Parcel A on the subdivision plan attached as Schedule C to this Agreement.

Status: Registered

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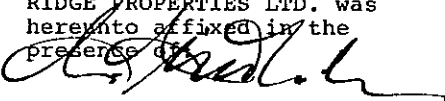
- 13 -

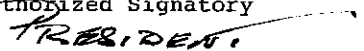
13. The Grantor, the Personal Mortgagees, the Corporate Mortgagee and the Bank shall each, at its sole expense, do, execute and deliver such further acts, assurances and documents as the Grantee, the Trustees, the District or the Society from time to time requires or demands for the assuring or confirming unto the Grantee, Trustees, the District or the Society of the rights hereby created or intended now or hereafter so to be, or for carrying out the intention or facilitating the performance of the terms of this Agreement, including the provision in registrable form of any documents required or demanded for registration in any Land Title Office.

14. It is understood and agreed by and between the parties hereto that the words "Grantor" and "Grantee" whenever used in this Agreement shall include the parties hereto and their respective heirs, executors, administrators, successors and assigns and this restrictive covenant shall be annexed to the Development Lands and run with the Development Lands and bind the Grantor and its successors in title to the said lands in perpetuity.

IN WITNESS WHEREOF the parties hereto have hereunto set their hands and seals and corporate seals the day, month and year first above written.

THE COMMON SEAL of CHANNEL
RIDGE PROPERTIES LTD. was
hereunto affixed in the
presence of


Authorized Signatory


PRESIDENT
Authorized Signatory

C/S

Status: Registered

Doc #: R32170

RCVD: 1986-04-28 RQST: 2020-08-24
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SIGNED, SEALED AND DELIVERED)
on behalf of HER MAJESTY THE)
QUEEN IN RIGHT OF THE)
PROVINCE OF BRITISH COLUMBIA)
in the presence of:)

Witness Eike Karbel)Address 530 Oliver St.)Victoria BC)Occupation Planner.)

SIGNED, SEALED AND DELIVERED)
on behalf of THE BOARD OF)
TRUSTEES OF SCHOOL DISTRICT)
NO. 64 in the presence of:)

Witness Michael Lammann)Address R.R. 3 Coombs)B.C.)Occupation Superintendent)

CHRISTOPHER L. WOODWARD
DEPUTY MINISTER OF MUNICIPAL AFFAIRS

THE SEAL of SALTSRING ISLAND)
WATER PRESERVATION SOCIETY)
was hereunto affixed in the)
presence of:)

Thomas Lamm
Authorized Signatory)

Michael Lammann
Authorized Signatory)

C/S

THE SEAL of NORTH SALTSRING)
WATERWORKS DISTRICT)
was hereunto affixed in the)
presence of:)

Thomas Lamm
Authorized Signatory)

Michael Lammann
Authorized Signatory)

C/S

Status: Registered

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SIGNED, SEALED AND DELIVERED
by RODNEY PRINGLE in the
presence of:

Witness [Signature]Address Box 540CANBESOccupation Clerk
Rodney Pringle

SIGNED, SEALED AND DELIVERED
by NORMAN GAVIN MOUAT in the
presence of:

Witness [Signature]Address Box 540CANBESOccupation Clerk[Signature]
Norman Gavin Mouat

SIGNED, SEALED AND DELIVERED
by CAROLYN FLORENCE MOUAT
in the presence of:

Witness [Signature]Address Box 540CANBESOccupation Clerk
Carolyn Florence Mouat

SIGNED, SEALED AND DELIVERED
by HARALD BERLE FRIELE in the
presence of:

Witness [Signature]Address Box 540CANBESOccupation Clerk
Harald Berle Friele

Status: Registered

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SIGNED, SEALED AND DELIVERED)
by EVELYN WINNIFRED FRIELE in)
the presence of:)

Witness *[Signature]*)Address *Box 546*)*GANGOS*)Occupation *Chk.*)
Evelyn Winnifred Friele

THE COMMON SEAL of MOUNTAIN)
PARK FARMS LTD. was hereunto)
affixed in the presence of:)

Authorized Signatory *[Signature]*)*[Signature]*
Authorized Signatory)

c/s

SIGNED, SEALED AND DELIVERED)
on behalf of THE BANK OF)
MONTREAL in the presence of:)

Witness *[Signature]*)

ELAINE PHEMISTER)

Address 5th Floor, 1483 DOUGLAS ST.)VICTORIA, B.C. V8W 3K4)Occupation COMMERCIAL LOANS CLERK)

THE BANK OF MONTREAL

P48765

Per: *[Signature]*
COMMERCIAL BANKING MANAGERPer: *[Signature]*
DIVISION MANAGER CREDIT

1247 C-7

Status: Registered

Doc #: R32170

RCVD: 1986-04-28 RQST: 2020-08-24
12.11.3618
LAND TITLE ACT

FORM 6

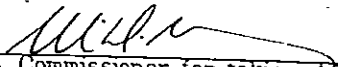
(Section 46)

PROOF OF EXECUTION BY CORPORATION

I certify that on the 27th day of March,
1986, at the City of Victoria
in British Columbia, LOUIS FREDERICK LINDHOLM
~~(whose identity has been proved by the evidence on oath of~~
~~(state full name, address and occupation)~~

who is personally known to me, appeared before me and acknowledged
to me that he/~~she~~ is the authorized signatory of CHANNEL RIDGE PROPERTIES LTD.
and that he/~~she~~ is the person who subscribed his/~~her~~ name and affixed
the seal of the corporation to the instrument, that he/~~she~~ was autho-
rized to subscribe his/~~her~~ name and affix the seal to it, and that the
corporation existed at the date the instrument was executed by the
Corporation.

IN TESTIMONY of which I set my hand and seal of office at
the City of Victoria, Province of British Columbia, this 27th day
of March, 1986.


A Commissioner for taking Affidavits for
British Columbia

WILLIAM DALE MURRAY
736 BROUGHTON ST.
VICTORIA, B.C.
SOLICITOR

Status: Registered

Doc #: R32170

RCVD: 1986-04-28 RQST: 2020-08-24
12.11.36

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SCHEDULE A

(Development Lands)

Status: Registered

Doc #: R32170

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STATUTORY DECLARATION WHERE ATTORNEY IS NOT A
CORPORATION AND
CERTIFICATE OF ACKNOWLEDGEMENT OF TRANSFEROR

We R.W. Pearce and T.C. Walker
COMMERCIAL BANKING MANAGER DIVISION MANAGER CREDIT
of Vancouver, in British Columbia, do solemnly declare that:

1. We are the attorneys for Bank of Montreal under a power of attorney filed under the Land Title Act.
2. We are the persons who subscribed the name of Bank of Montreal and our names in the instrument as a transferor.
3. At the time of execution of the instrument the power of attorney had not been revoked by or on behalf of Bank of Montreal, that Bank of Montreal is legally entitled to hold and dispose of land in British Columbia, and we had not received any notice or information of the bankruptcy or dissolution of Bank of Montreal.
4. We know the contents of the instrument and subscribed the name of Bank of Montreal to it voluntarily as the free act of the transferor.

AND we make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath.

SEVERALLY DECLARED before me
today at Vancouver, in the Province of
British Columbia,

AND I CERTIFY that today, at Vancouver, in the Province of British Columbia, the above named attorneys who are personally known to me, appeared before me and acknowledged to me that they are the persons mentioned in the instrument as attorneys of a transferor, that their names are subscribed to it, they know the content of the instrument and executed it voluntarily, and are of the age of 19 years or more.

In testimony of which I set my hand at Vancouver, British Columbia, this 3rd day of April, 19 76.

[Signature]
A Commissioner for Taking
Affidavits for British Columbia.

Status: Registered

Doc #: R32170

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SCHEDULE B

(Explanatory Plan)

Status: Registered

Doc #: R32170

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SCHEDULE C
(Subdivision Plan)

Status: Registered

Doc #: R32170

RCVD: 1986-04-28 RQST: 2020-08-24
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SCHEDULE D

(Bylaws Nos. 124, 125, 126 and 127)

Status: Registered

Doc #: R32170

RCVD: 1986-04-28 RQST: 2020-08-24
12.11.36

Westcoast

Application R 3 2 1 7 0

LAND TITLE ACT
(NOTICE DECLINING TO REGISTER)

FILM

Land Title Office.
Victoria, B.C.

08:05:1986

IN THE MATTER of the above application to register a covenant

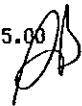
PLEASE SEE ATTACHED

Sir:

TAKE NOTICE that I refuse to effect registration in accordance with the tenor of the above application. My reason for such refusal and my requirements are as follows:

1. Form 17 - charge should be covenant pursuant to Sec. 215 Land Title Act.
2. If the covenant is to have priority over mortgages please apply for priority in the Form 17.
3. Schedule A - 2 legal descriptions appear to be incorrect.

05/21/86 A5039 DEFECT 5.00

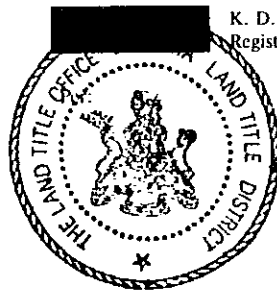


AND FURTHER TAKE NOTICE that under the provisions of Section 298 of the *Land Title Act*, this notice is deemed to have been received by you within ten days from the posting, which is the same as the date hereof; and that unless you comply with the provisions of Sections 288 and 289 of this Act, this application shall be deemed to be cancelled and void.

N.B.

See print of Sections 288 and 289 on back hereof.
Fee for this notice, \$5.00.

TO: McKenzie Lidstone
595 Burrard Street
Vancouver, B.C.



K. D. Jacques
Registrar of Title

Status: Registered

Doc #: R32170

RCVD: 1986-04-28 RQST: 2020-08-24
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25
SCHEDULE D
SALT SPRING ISLAND TRUST COMMITTEE

BY-LAW NO. 124

A BY-LAW TO AMEND CAPITAL REGIONAL DISTRICT BY-LAW NO. 118, BEING "OFFICIAL
COMMUNITY PLAN (ELECTORAL AREA "F" - SALT SPRING ISLAND) BY-LAW, 1972"

WHEREAS the Regional Board of the Capital Regional District enacted By-law No.
118, being the "Official Community Plan (Electoral Area "F" - Salt Spring
Island) By-law, 1972";

AND WHEREAS Section 3(2)(h) of the Islands Trust Act confers on the Salt Spring
Island Trust Committee all power and authority of a municipality under Section
694 and Divisions (1), (2), (3) and (4) of Part XXI of the Municipal Act;

AND WHEREAS the Salt Spring Island Trust Committee deems it expedient to amend
the Official Community Plan;

NOW THEREFORE the Salt Spring Island Trust Committee, being the Trust Committee
having jurisdiction on and in respect of the Salt Spring Island Electoral Area
in the Province of British Columbia, pursuant to the Islands Trust Act,
R.S.B.C., 1979, Chapter 208, as amended, in open meeting assembled, enacts as
follows:

I. Schedule "A" of Capital Regional District By-law No. 118, cited as the
"Official Community Plan (Electoral Area "F" - Salt Spring Island) By-law,
1972" is amended as follows:

a. by adding to Part 1 - Proposals for the Island - Policies, a new
policy respecting comprehensive development as follows:

"2(a) Comprehensive Development Areas

A comprehensive development is one which is based upon a
detailed plan for one or more larger parcels of land. Such a
development should contribute to achievement of the goals of
this Plan. Normally such development would provide
substantial public benefits such as the preservation of large
undeveloped areas of land, enhanced watershed protection,
areas for public recreation, education, and other public
uses.

With a Comprehensive Development Area, residential
development may occur over a range of development densities
and may include a variety of housing types. In recognition
of the public benefits that may accrue from such development,
an increase in the number of lots created may be permitted,
however, such an increase should not provide for more
dwellings in the area than would otherwise be permitted under
the policies of this Plan.

Limited commercial development may be permitted in
conjunction with residential development. Activities such as
retail stores, personal services, and those which provide for
the day to day needs of residents would predominate. In
addition, facilities for the cultural, recreational,
employment, and public service needs of the area would be
permitted.

2(b) Designation of Comprehensive Development Areas

Those areas designated Comprehensive Development Areas are identified in Part 3 of this By-law. Also included in Part 3 is a statement of the principles which will guide development within particular Comprehensive Development Areas."

b. by adding a new Part 3 as follows:

"Part 3

The land lying within the area defined in Appendix 1 is hereby designated a Comprehensive Development Area. Development and the pattern of subdivision within this area will be substantially in accordance with the attached plans and text identified as Appendix 1."

II. This By-law may be cited as "Official Community Plan (Electoral Area "F" - Salt Spring Island) By-law, 1972, Amendment By-law No. 1, 1985".

READ A FIRST TIME THIS	20th	DAY OF	March	1985
READ A SECOND TIME THIS	17th	DAY OF	May	1985
READ A THIRD TIME THIS	17th	DAY OF	May	1985
APPROVED BY THE MINISTER OF MUNICIPAL AFFAIRS THIS			12th	DAY OF
August	, 1985			
RECONSIDERED AND FINALLY ADOPTED THIS	20th	DAY OF	September	1985


MANAGER


CHAIRMAN

Certified a true and correct copy of
By-law No. 124 for Salt Spring Island.

Manager Date

Status: Registered

Doc #: R32170

RCVD: 1986-04-28 RQST: 2020-08-24
12.11.36APPENDIX 1CHANNEL RIDGE COMPREHENSIVE DEVELOPMENT AREA

Development within this area will consist of clusters of residential development and a central village area. These areas will be separated by a continuous large open space area. Within the residential clusters, average building lot sizes will range from 3/4 acre to 5 acres. The area will be serviced by a community water supply, individual septic tanks, and in some cases, a community sewer based on ground disposal.

The village area will consist of an outer ring of residential and public service uses and an inner residential/commercial area around a central plaza.

The outer area will consist of a mix of residential housing types including single family dwellings on small lots, multiple family dwellings including town houses and garden apartments. Residential development would not exceed two full storeys above ground, and residential development density will not exceed one dwelling unit per one-fifth acre. The outer area could also include schools, halls, clinics, a fire hall, a theatre, and other public services.

The inner village area will surround a central public plaza which will be the focus of recreation, entertainment and community life. Buildings containing both residential and commercial uses, not exceeding 3 storeys in height will face the plaza.

Overall residential density in the village area will not exceed an average of one dwelling unit per one-fifth acre. No commercial use of land shall take place except in conjunction with a residential use of a parcel. A commercial use should not be larger than 1500 ft.² (139 m²) and there should not be more than one commercial use for each two residential uses on a parcel.

Plan No. 1 illustrates the concept, and defines the boundaries of the Comprehensive Development Area.

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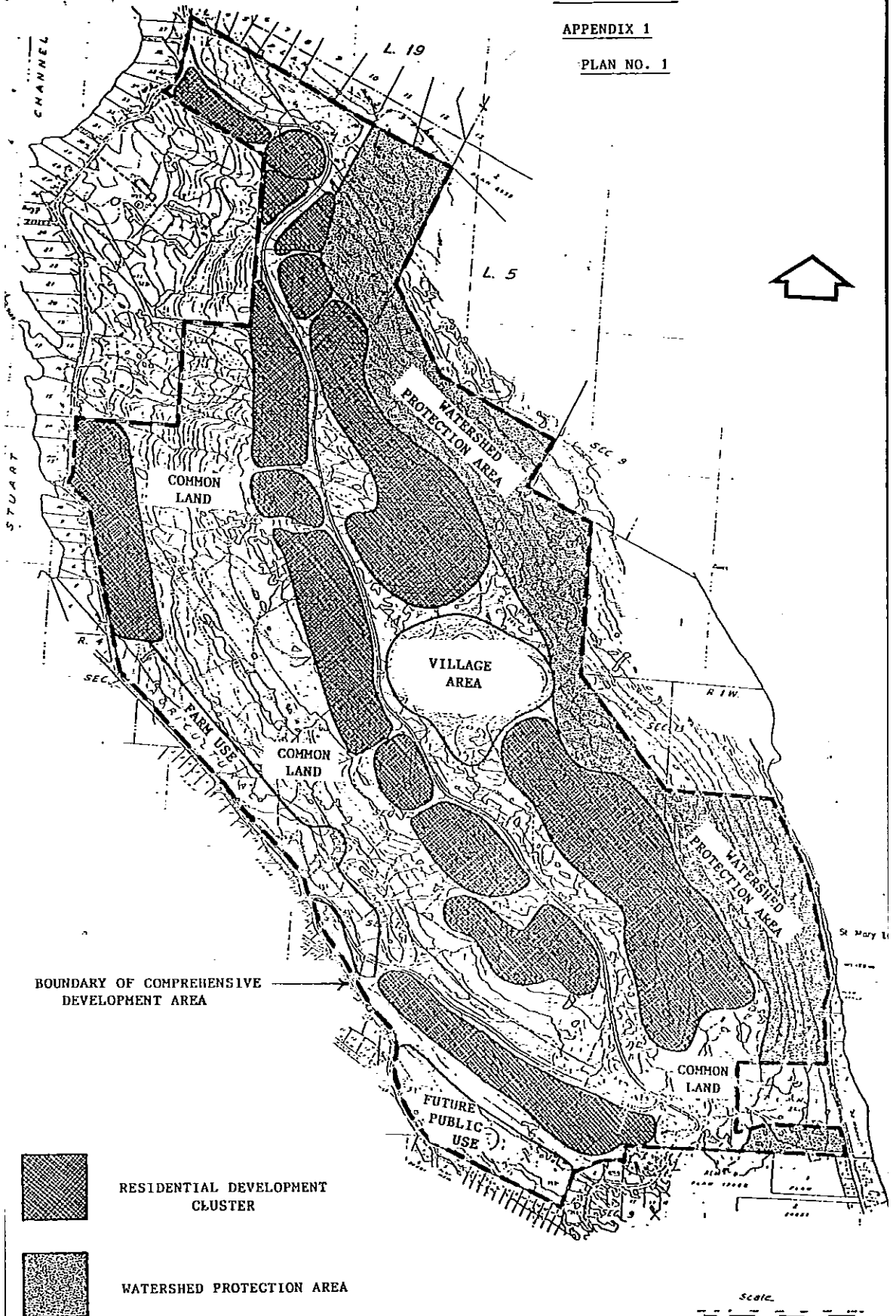
SALT SPRING ISLAND TRUST COMMITTEE

12.11.36

BY-LAW NO. 124

APPENDIX 1

PLAN NO. 1



Status: Registered

Doc #: R32170

RCVD: 1986-04-28 RQST: 2020-08-24
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SALT SPRING ISLAND TRUST COMMITTEE

BY-LAW NO. 125

A BY-LAW TO AMEND "ZONING BY-LAW, SALT SPRING ISLAND, 1985" BEING BY-LAW NO. 123

The Salt Spring Island Trust Committee being the Trust Committee having jurisdiction on and in respect of Salt Spring Island in the Province of British Columbia, pursuant to the Islands Trust Act, R.S.B.C., 1979, Chapter 208, as amended, in open meeting assembled, enacts as follows:

1. Salt Spring Island Trust Committee By-law No. 123 cited as "Zoning By-law, Salt Spring Island, 1985" is amended as follows:
 - a) by adding to Section 3.2 Zones a new zoning classification "Comprehensive Development (3)" Zone (CD3);
 - b) by changing the zoning classification of the following lands in accordance with Plan No. 1, attached to and forming part of this By-law.
 - 1) Lot 1, Plan 39834, R1W, Section 10, North Salt Spring Island from the Watershed 1 (W1) Zone to the Watershed Protection Zone (WP);
 - 2) Lot 1, R1W, Section 12, Plan 40746, North Salt Spring Island, Lot 2, R1W, Sections 11 and 12, Plan 40746, North Salt Spring Island, and Lot 3, R1W, Section 11, Plan 40746, North Salt Spring Island from the Watershed 1 Zone (W1) to the Watershed Protection Zone (WP);
 - 3) Lot 4, Sections 10 and 11, Plan 40746, North Salt Spring Island, from the Watershed 1 (W1) to the Watershed Protection Zone (WP).
 - 4) Lot 5, R1W, Sections 10, 11, and 12, Plan 40746, North Salt Spring Island from the Watershed 1 Zone (W1) to the Watershed Protection Zone (WP) and from the Rural Zone (R) to the Comprehensive Development (3) Zone (CD3);
 - 5) Section 11, R2W, North Salt Spring Island from the Rural Zone (R) and the Rural Residential 2 Zone (RR2) to the Comprehensive Development (3) Zone (CD3);
 - 6) Section 12, R2W, North Salt Spring Island from the Rural Zone (R) to the Comprehensive Development (3) Zone (CD3), and from the Rural Zone (R) to the Watershed Protection Zone (WP);
 - 7) Remainder of Section 13, R2W, North Salt Spring Island from the Rural Zone (R) to the Comprehensive Development (3) Zone (CD3), and from the Rural Zone (R) to the Watershed Protection Zone (WP);
 - 8) Remainder of Lot 6, North Salt Spring Island from the Rural Zone (R) to the Comprehensive Development (3) Zone (CD3) and from the Watershed 1 Zone (W1) to the Watershed Protection Zone (WP), and from the Watershed 1 Zone (W1) to the Comprehensive Development (3) Zone (CD3), and from the Rural Zone (R) to the Watershed Protection Zone (WP);

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- 9) Lot 2, Plan 29161, North Salt Spring Island from the Rural Zone (R) to the Comprehensive Development (3) Zone (CD3) and from the Watershed 1 Zone (W1) to the Watershed Protection Zone (WP), and from the Rural Zone (R) to the Watershed Protection Zone (WP), and from the Watershed 1 Zone (W1) to the Comprehensive Development (3) Zone (CD3);
 - 10) Remainder of Parcel "B" (DD 140653-1), North Salt Spring Island from the Rural Zone (R) to the Comprehensive Development (3) Zone (CD3) and from the Watershed 1 Zone (W1) to the Comprehensive Development (3) Zone (CD3);
 - 11) Remainder of Lot 7, North Salt Spring Island from the Rural Zone (R) to the Comprehensive Development (3) Zone (CD3);
 - 12) Remainder of Section 13, R3W, North Salt Spring Island from the Rural Zone (R) to the Comprehensive Development (3) Zone (CD3);
 - 13) Remainder of Section 12, R3W, North Salt Spring Island from the Rural Zone (R) to the Comprehensive Development (3) Zone (CD3) and from the Rural Zone (R) to the Agriculture 1 Zone (A1);
 - 14) Remainder of Section 11, R3W, North Salt Spring Island from the Rural Zone (R) and the Rural Residential 2 Zone (RR2) to the Comprehensive Development (3) Zone (CD3);
 - 15) Remainder of Parcel "B" (DD 86186-1) of Section 9, R2W and Section 10, R2 and 3 West, North Salt Spring Island from the Rural Residential 2 Zone (RR2) to the Comprehensive Development (3) Zone (CD3);
 - 16) Parcel "C" (DD 135683-1) of Section 10, R2W, North Salt Spring Island from the Rural Residential 2 Zone (RR2) to the Comprehensive Development (3) Zone (CD3);
 - 17) Remainder East 50 acres of Section 10, R2W, North Salt Spring Island from the Rural Residential 2 Zone (RR2) to the Comprehensive Development (3) Zone (CD3);
- c) by adding a new Section 25.B as follows:

"Section 25.B

Comprehensive Development (3) Zone (CD3)

25.B.1 Permitted Uses

In addition to uses permitted in Section 4.1 of this By-law, the following uses and no others shall be permitted in the Comprehensive Development (3) Zone;

- 1) One family dwelling
- 2) Public Parks and Community Recreation Facilities
- 3) Community Hall
- 4) Community Health Clinic
- 5) Public Safety use including Firehalls and Police Stations
- 6) Private Recreation and Forest Use
- 7) Home Occupations

25.B.2 Site Coverage

Buildings and structures shall not cover more than 33 percent of the parcel of land on which they are located.

25.B.3 Height

No building or structure shall exceed 7.6 metres (25 feet) and two storeys in height.

25.B.4 Setbacks

- 1) No building or structure or part thereof except a fence or pumphouse shall be located within 7.6 metres (25 feet) of any front lot line.
- 2) No building or structure or part thereof except a fence or pumphouse shall be located closer than a distance of 3.0 metres (10 feet) from an interior side lot line, nor subject to regulations adopted pursuant to the Highways Act, closer than 4.5 metres (15 feet) from an exterior lot line."

2. Schedule 'A' "Zone Schedule" is amended to include:

"Comprehensive Development (3) Zone (CD3)"

3. This By-law may be cited as "Zoning By-law, Salt Spring Island, 1985, Amendment By-law No. 1, 1985".

READ A FIRST TIME THIS	20TH	DAY OF	MARCH	1985
READ A SECOND TIME THIS	17TH	DAY OF	MAY	1985
READ A THIRD TIME THIS	5TH	DAY OF	JUNE	1985
APPROVED BY THE MINISTER OF MUNICIPAL AFFAIRS THIS				DAY OF
	, 198			
RECONSIDERED AND FINALLY ADOPTED THIS		DAY OF		198

MANAGER

CHAIRMAN

Status: Registered

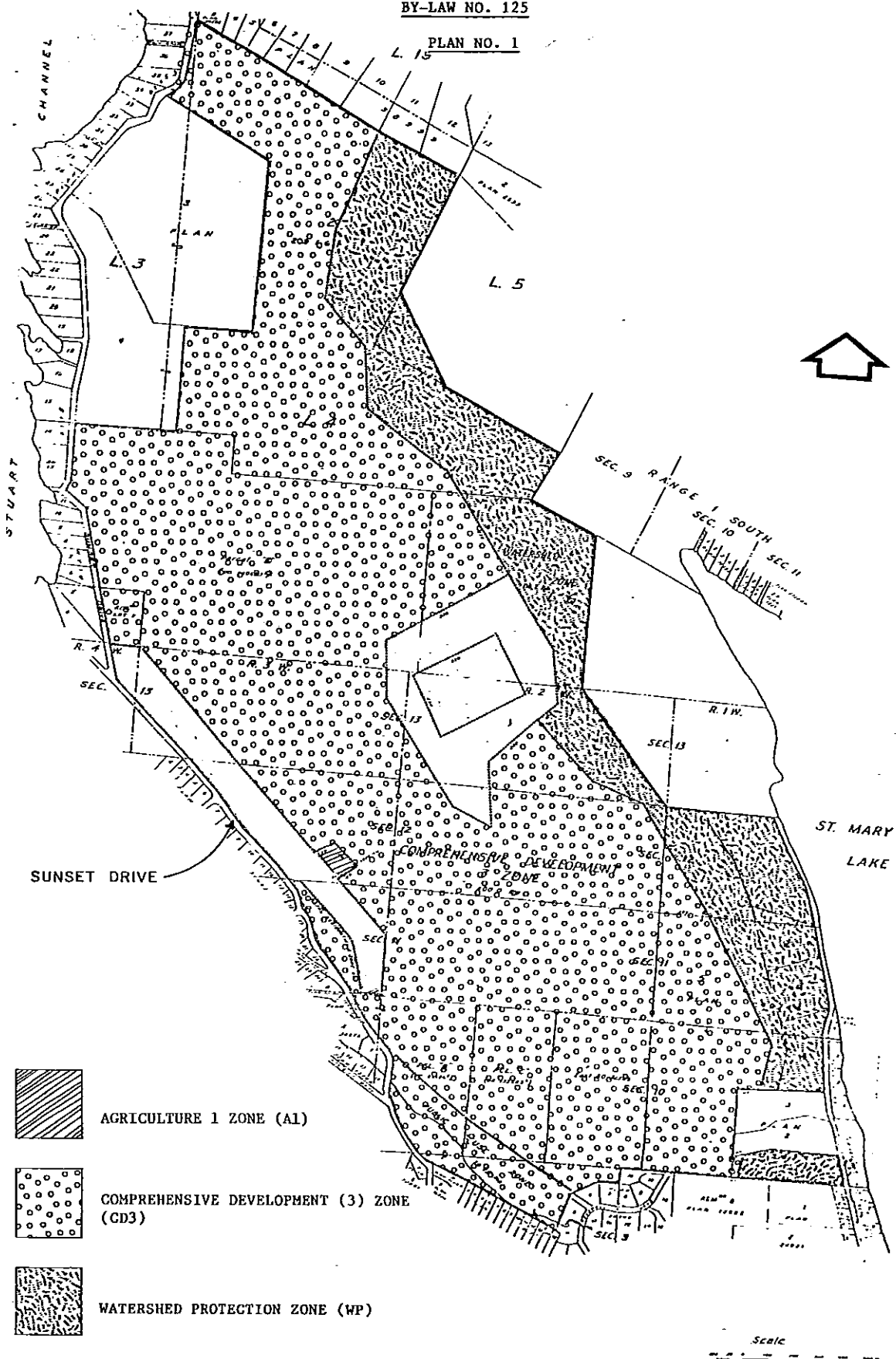
Doc #: R32170

RCVD: 1986-04-28 RQST: 2020-08-24 12.11.36

SALT SPRING ISLAND TRUST COMMITTEE

BY-LAW NO. 125

PLAN NO. 1



SALT SPRING ISLAND TRUST COMMITTEE

BY-LAW NO. 126

A BY-LAW TO AMEND "ZONING BY-LAW, SALT SPRING ISLAND, 1985", BEING BY-LAW
NO. 123

The Salt Spring Island Trust Committee being the Trust Committee having jurisdiction on and in respect of Salt Spring Island in the Province of British Columbia, pursuant to the Islands Trust Act, R.S.B.C., 1978, Chapter 208, as amended, in open meeting assembled, enacts as follows:

1. Salt Spring Island Trust Committee By-law No. 123 cited as "Zoning By-law, Salt Spring Island, 1985", is amended as follows:
 - a) by adding to Section 3.2 Zones, a new zoning classification "Comprehensive Development (4) Zone (CD4);
 - b) by changing the zoning classification of the following lands (as shown on Plan No. 1 which is attached to and forms part of this By-law):
 - i) that portion of Remainder Parcel B (DD 140653-1) of Lot 4, North Salt Spring Island shown on Plan No. 1, from the Rural Zone (R) to the Comprehensive Development (4) Zone (CD4);
 - ii) that portion of Lot 6, North Salt Spring Island shown on Plan No. 1, from the Rural Zone (R) to the Comprehensive Development (4) Zone (CD4), and from the Watershed 1 Zone (W1) to the Comprehensive Development (4) Zone (CD4);
 - iii) that portion of Section 13, R3W, North Salt Spring Island, shown on Plan No. 1, from the Rural Zone (R) to the Comprehensive Development (4) Zone (CD4);
 - iv) that portion of Remainder Section 13, R2W, North Salt Spring Island, shown on Plan No. 1, from the Rural Zone (R) to the Comprehensive Development (4) Zone (CD4);
 - v) that portion of Section 12, R2W, North Salt Spring Island shown on Plan No. 1 from the Rural Zone (R) to the Comprehensive Development (4) Zone (CD4);
 - c) by designating the area above, within the Comprehensive Development (4) Zone (CD4), as a Development Permit Area pursuant to Section 717(3) and Schedule 'A' is amended accordingly;
 - d) by adding a new Section 25.C as follows:

"Section 25.CComprehensive Development (4) Zone (CD4)25.C.1 Permitted Uses

In addition to uses permitted in Section 4.1 of this By-law, the following uses and no others shall be permitted in the Comprehensive Development (4) Zone:

- 1) One family dwellings subject to Section 25.C.2
- 2) Multiple family dwelling units subject to Section 25.C.2

- 2 -

3) Institutional uses as follows:

- a) Public Parks and Community Recreation Facilities
- b) Community Hall
- c) Community Health Clinic
- d) Public Safety Facilities
- e) Schools

4) Private Recreation and Forest Use

5) Home Occupations.

25.C.2 Site Density

The number of dwelling units on a parcel shall not exceed one dwelling unit per one-fifth acre (12.3 per hectare), or one dwelling unit for each legal lot into which the land can be subdivided under the terms of the Subdivision Control By-law in effect for the land; whichever is least.

25.C.3 Height

No building or structure shall exceed 7.6 metres in height.

25.C.4 Setbacks

No building or structure or part thereof shall be located within 7.6 metres of a front lot line nor within 3 metres of any other lot line."

- e) by adding to section 3.2 Zones, a new zoning classification, "Comprehensive Development (5) Zone (CD5);
- f) by changing the zoning classification of the following lands (as identified on Plan No. 1 which is attached to and forms part of this By-law):
 - i) that portion of the remainder of Lot 6, North Salt Spring Island from the Rural Zone (R) to the Comprehensive Development (5) Zone (CD5);
 - ii) that portion of Section 13, R2W, North Salt Spring Island from the Rural Zone (R) to the Comprehensive Development (5) Zone (CD5);
- g) by designating the area above, within the Comprehensive Development (5) Zone (CD5) as a Development Permit Area pursuant to Section 717(3) of the Municipal Act and Schedule 'A' is amended accordingly;
- h) by adding a new Section 25.D as follows:

"Section 25.DComprehensive Development (5) Zone (CD5)25.D.1 Permitted Uses

In addition to the uses permitted in Section 4.1 of this By-law, the following uses and no others shall be permitted in the Comprehensive Development (5) Zone.

- 1) Multiple family dwellings subject to Section 25.D.2
- 2) Retail stores
- 3) Business and professional offices
- 4) Personal services, laundry, laundromats, dry cleaning and small repairs

- 25)
- Restaurants
- 6)
- Banks
- 7)
- Automobile rentals
- 8)
- Home occupations

25.D.2 Site Density

The number of dwelling units on a parcel shall not exceed one dwelling unit per one-fifth (12.3 per hectare), or one dwelling unit for each legal lot into which the land can be subdivided under the terms of the Subdivision Control By-law in effect for the land; whichever is least.

25.D.3 Regulation of Commercial Development

- 1)
- Commercial use of land shall occur only in conjunction with an established residential use of a parcel.
- 2)
- An individual commercial use of land shall not exceed 1500 ft.² (139 m²) total floor area.
- 3)
- There shall not be more than one commercial use of land for each two established residential uses on a parcel.

25.D.4 Height

No building shall exceed 11 metres (36 ft.) in height.

25.D.5 Setbacks

No building or structure or part thereof shall be located within 4.5 metres (15 ft.) of any front lot line.

2.
- This By-law may be cited as "Zoning By-law, Salt Spring Island, 1985, Amendment By-law No. 2, 1985".

READ A FIRST TIME THIS	20th	DAY OF	March	1985
READ A SECOND TIME THIS	17th	DAY OF	May	1985
READ A THIRD TIME THIS	5th	DAY OF	June	1985
APPROVED BY THE MINISTER OF MUNICIPAL AFFAIRS THIS			12th	DAY OF
August				, 1985
RECONSIDERED AND FINALLY ADOPTED THIS	20th	DAY OF	September	1985

C. Hawthorth

MANAGER

M. Thompson

CHAIRMAN

Certified a true and correct copy of
By-law No. 126 for Salt Spring Island.

Manager

Date

RCVD: 1986-04-28 RQST: 2020-08-24

2.11.36

PLAN NO. 1



ST. MARY
LAKE

COMPREHENSIVE DEVELOPMENT (5) ZONE (CD5)

Scale

SALT SPRING ISLAND TRUST COMMITTEE

BY-LAW NO. 127

A BY-LAW TO AMEND CAPITAL REGIONAL DISTRICT BY-LAW NO. 207, "SALT SPRING ISLAND SUBDIVISION BY-LAW NO. 1, 1975"

The Salt Spring Island Trust Committee, being the Trust Committee having jurisdiction on and in respect of Salt Spring Island in the Province of British Columbia, pursuant to the Islands Trust Act, R.S.B.C., 1979, Chapter 208, as amended, in open meeting assembled, enacts as follows:

1. Capital Regional District By-law No. 207, cited as "Salt Spring Island Subdivision By-law No. 1, 1975" is amended as follows:
- a) to delete from Section 3.1 the words "Zoning By-law No. 2, Salt Spring Island, 1978" and substitute therefore "Zoning By-law, Salt Spring Island, 1985";
 - b) to add the words "and the Subdivision Districts defined in Schedule 'B'";
 - c) to add to Schedule 'A' as referred to in Section 3.1, the list of zones being the following:

"Comprehensive Development 3 Zone (CD3)

Within the Comprehensive Development 3 Zone (CD3) there are 4 Subdivision Districts, the boundaries of which are shown on Schedule 'B'. Subdivision shall occur generally within the Subdivision Districts defined in Schedule 'B'. Variations from the general boundaries may be permitted but no increase in the area of the individual Subdivision Districts will be permitted. The parcel area requirements and minimum service levels are listed below.

<u>Subdivision District</u>	<u>Minimum Average Parcel Area</u>	<u>Minimum Parcel Area</u>	<u>Minimum Service Level</u>
DISTRICT 'A'	0.3 ha	0.2 ha	Community Sewer Community Water
DISTRICT 'B'	0.4 ha	0.2 ha	Individual Septic Tank Community Water
DISTRICT 'C'	2.0 ha	1.2 ha	Individual Septic Tank and Well
DISTRICT 'D'	250 ha		Individual Septic Tank and Well"

- d) to add to Schedule 'A' as referred to in Section 3.1, the list of zones, being the following:

"Comprehensive Development 4 Zone (CD4)	0.08 ha	Community Water Community Sewer
Comprehensive Development 5 Zone (CD5)	0.08 ha	Community Water Community Sewer"

2. This By-law may be cited as "Salt Spring Island Subdivision By-law No. 1, 1975, Amendment By-law No. 4, 1985".

READ A FIRST TIME THIS 20TH DAY OF MARCH 1985
READ A SECOND TIME THIS 17th DAY OF MAY 1985
READ A THIRD TIME THIS 17th DAY OF MAY 1985
APPROVED BY THE MINISTER OF MUNICIPAL AFFAIRS THIS DAY OF
, 198
RECONSIDERED AND FINALLY ADOPTED THIS DAY OF 198

Manager

Chairman

Status: Registered

Doc #: R32170

RCVD: 1986-04-28 RQST: 2020-08-24
12.11.36SCHEDULE "A"

R32170

ALL AND SINGULAR those certain parcels or tracts of lands and premises situate, lying and being in the Gulf Islands Assessment District and North Salt Spring Waterworks District, in the Province of British Columbia, more particularly known and described as:

- X Parcel Identifier 000-638-498 ✓
Lot 1, Section 10, Range 1 West, North Salt Spring Island, Cowichan District, Plan 39834;
- X Parcel Identifier 000-638-641 ✓
Section 11, Range 2 West, North Salt Spring Island, Cowichan District;
- X Parcel Identifier 000-638-536 ✓
Lot 2, District Lots 3, 4, and 5, North Salt Spring Island, Cowichan District, Plan 29161;
- X Parcel Identifier 000-638-731 ✓
Section 12, Range 3 West, North Salt Spring Island, Cowichan District, except part in Plans 18964, 20992 and 32602;
- X Parcel Identifier 000-638-587 ✓
Section 11, Range 3 West, North Salt Spring Island, Cowichan District, except part in Plans 18964, 20992 and 32602;
- Parcel Identifier 000-290-033 ✓
Parcel "B" (D.D. 86186I) of Section 9, Range 2 West and of Section 10, Ranges 2 and 3 West, except Plans 4476, 4757, 14317 and 24809 and except that part lying to the west of Duck Bay Road as said road is shown on Plan 4476;
- Parcel Identifier 000-290-131 ✓
Parcel C (D.D. 86186I), Section 10, Range 2 West, North Salt Spring Island, Cowichan District;
- X Parcel Identifier 000-290-190 ✓
The East 50 acres of Section 10, Range 2 West, North Salt Spring Island, Cowichan District;
- X Parcel Identifier 000-638-340 ✓
Section 12, Range 2 West, North Salt Spring Island, Cowichan District;
- X Parcel Identifier 000-638-391 ✓
Section 13, Range 2 West, North Salt Spring Island, Cowichan District except Parcel A (D.D. 100250-I);
- X Parcel Identifier 000-638-412 ✓
District Lot 6, North Salt Spring Island, Cowichan District, except Parcel A (DD 100250-I);
- X Parcel Identifier 000-638-463 ✓
Parcel B (DD 140653-I), District Lot 4, North Salt Spring Island, Cowichan District, except part in Plans 9115 and 29161;
- X Parcel Identifier 000-638-471 ✓
Section 13, Ranges 3 and 4 West, North Salt Spring Island, Cowichan District, except part lying to the south west of Parmister Road, as said Road was gazetted May 1, 1941, and except part in Plan 9115;

Status: Registered

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2.11.36

- 2 -

Parcel Identifier 000-638-480

X District Lot 7, North Salt Spring Island, Cowichan District,
except part lying to the south west of Parmister Road,
as said road was gazetted May 1, 1941, and except part
in Plan 9115.

ALL AND SINGULAR those certain parcels or tracts of lands
and premises situate, lying and being in the Gulf Islands
Assessment District, in the Province of British Columbia,
more particularly known and described as:

Parcel Identifier 000-350-141

X Lot 1, Section 12, Range 1 West, North Salt Spring Island,
Cowichan District, Plan 40746;

Parcel Identifier 000-350-168

X Lot 2, Sections 11 and 12, Range 1 West, North Salt Spring
Island, Cowichan District, Plan 40746;

Parcel Identifier 000-350-150

^ Lot 3, Section 11, Range 1 West, North Salt Spring Island,
Cowichan District, Plan 40746;

Parcel Identifier 000-350-176

X Lot 4, Section 10 and 11, Range 1 West, North Salt Spring
Island, Cowichan District, Plan 40746;

Parcel Identifier 000-350-184

X Lot 5, Sections 10, 11, and 12, Range 1 West, North Salt
Spring Island, Cowichan District, Plan 40746.

Status: Registered

Doc #: R32170

RCVD: 1986-04-28 RQST: 2020-08-24
12.11.36

- SCHEDULE B

FIRSTLY

All those portions of

- Lot 2 of Lots 3, 4 and 5, Plan 29161,
- Lot 6 except Parcel "A" (DD 1002501),
- Section 13, Range 2 West, except Parcel "A" (DD 1002501),
- Section 12, Range 2 West, and
- Lot 5 of Sections 10, 11 and 12, Range 1 West, Plan 40746

North Salt Spring Island, Cowichan District,

lying easterly of the following described line and its productions thereof;

Commencing at the most westerly corner of Lot 11 of Lot 4, Plan 38999,

- thence 198° 31' 40", 384.357 metres;
- thence 183° 48' 50", 255.566 metres;
- thence 133° 12' 35", 226.385 metres;
- thence 173° 37' 55", 225.391 metres;
- thence 122° 55' 40", 375.288 metres;
- thence 143° 25' 35", 772.010 metres;
- thence 171° 09' 30", 182.165 metres;
- thence 220° 10' 10", 100.767 metres;
- thence 132° 24' 15", 296.582 metres;
- thence 107° 21' 15", 201.157 metres;
- thence 143° 41' 25", 491.423 metres;
- thence 147° 31' 45", 534.575 metres;
- thence 193° 29' 55", 169.196 metres more or less to a point on the northerly boundary of Lot 3, Section 10, Range 1 West, Plan 39834 bearing 86° 34' 05" and distant 88.000 metres easterly of the north-westerly corner thereof.

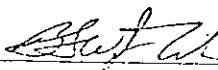
SECONDLY

All of Lots 1, 2, 3 and 4, of Sections 10, 11 and 12, Range 1 West, North Salt Spring Island, Cowichan District, Plan 40746.

THIRDLY

All of Lot 1, Section 10, Range 1 West, North Salt Spring Island, Cowichan District, Plan 39834.

AS SAID FIRSTLY, SECONDLY AND THIRDLY PARTS ARE SHOWN LYING WITHIN THE HEAVY BORDER OF THE PLAN HERETO ATTACHED.



Brian B. Wolfe-Millar, S.C.L.C.
April 22, 2020

Status: Registered

Doc #: R32170

RCVD: 1986-04-28 RQST: 2020-08-24
12.11.36



Government of British Columbia

File No. R32170

☐ Not available at time of filming.

☒ Plan not suitable for filming, see VAULT CLERK

☐ See _____

☐ _____

DO NOT PHOTOCOPY

RMB 077

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November 9, 2017
LHC Project File: 1719

Bryce Chapman
[REDACTED]
[REDACTED]
[REDACTED]

Dear: Mr. Chapman

Re: Certification of Groundwater Quantity and Quality - Drilled Well ID. 52453 at 361 Sunset Drive, Salt Spring Island, BC

1.0 BACKGROUND

Lowen Hydrogeology Consulting (LHC) was engaged in July 2017 to provide hydrogeology consulting services and to prove out the water supply capacity for the wells at 361 Sunset Drive, Salt Spring Island. The wells were drilled on the subject property in June 2017. Two of the wells had significant production capacity (25 - 60 USgpm) and one had marginal capacity of <1 USgpm.

The higher capacity wells are proposed to supply water for the neighboring Channel Ridge Development. One of the potential production wells has been tested for capacity and water quality. The results of which are presented herein.

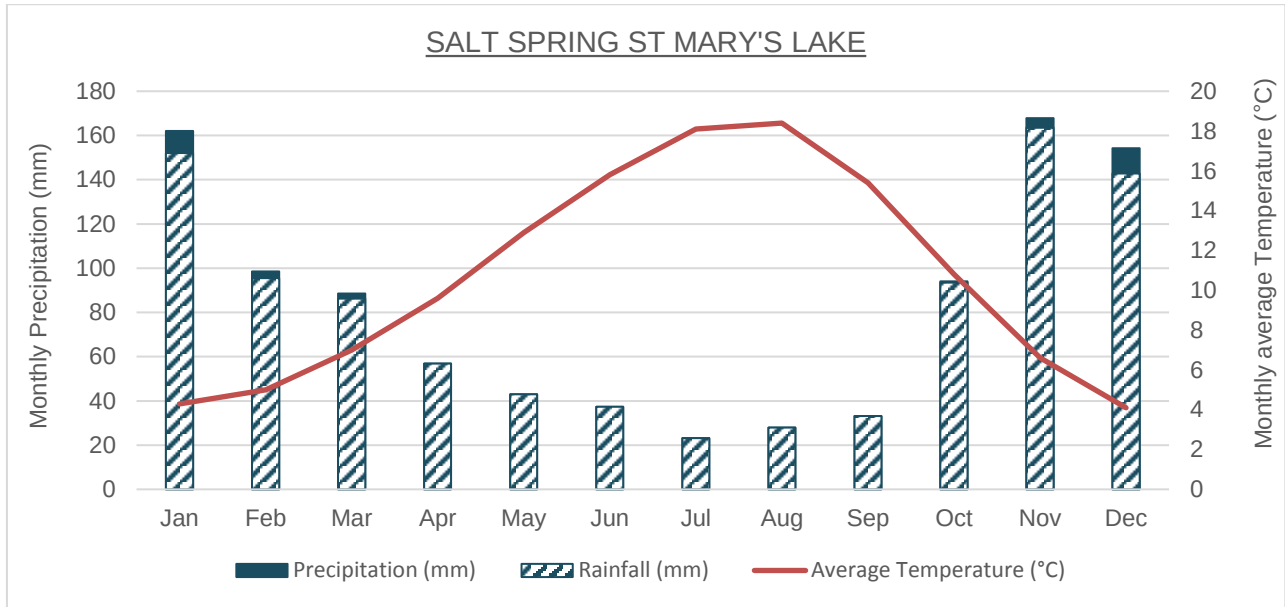
2.0 PHYSICAL AND HYDROLOGIC SETTINGS

2.1 Physiography of the Area

The subject property is located on the northern west coast of Salt Spring Island. This area is encompassed within the Nanaimo Lowland physiographic region. This region is characterized as lowlands below 2000 ft (600m) elevation and largely underlain by sedimentary rocks of the Nanaimo Group (Holland, 1976). These lowlands are flanked to the west by the Vancouver Island Range. The general landscape consists of long wooded ridges separated by narrow valleys. The subject property lies at an elevation ranging from 80 m.asl. to the west, to 100 m.asl. to the east.

2.2 Climate Data

The region of Saint Mary's Lake, north part of Salt Spring Island receives an annual average precipitation of 987 mm, with 32 cm of annual snow. The wettest months are between October to February, with over 90 mm of monthly precipitation and the driest months are between June and September with less than 40 mm of precipitation. Snow occurs between November and March, rarely in October. The average annual temperature is 10.7°C, the hottest months being July and August.



2.3 Surficial Water Bodies

The subject property is located approximately 1.8 km west of St Mary's Lake, lying at an elevation of approximately 60 m.asl. This feature is separated from the subject property by a hill culminating at a height of approximately 220 m.asl. A small unnamed channel flows southwestward from the hill to the ocean and crosses the subject property.

A large surficial water body of approximately 9 000 m² is located on the south-western side of the property and discharges its water through a stream generally flowing southward. This waterbody is listed as a wetland rather than a pond and is most likely directly fed by groundwater.

3.0 GEOLOGY AND HYDROGEOLOGICAL SETTINGS

3.1 Aquifer Description

The subject well is completed into the bedrock aquifer #0721, composed of sedimentary rocks from the Nanaimo Group (Upper Cretaceous Period, Cenozoic Era). Locally, the type of rocks mostly consists in shale and sandstone. The subject well ID. 52453 and its observation well ID. 52445 report fine to coarse-grained sandstone, with rare intercalation of shale or siltstone.

3.2 Groundwater Direction, Recharge and Discharge Areas

The regional groundwater flow direction has not been yet determined, but likely flows linearly through fractures and follows topography towards the ocean. Locally, the main direction is likely to the west. The aquifer is recharged directly by precipitation in the highlands, as the overburden is limited in the region. Hydraulic connection between St Mary's Lake and the aquifer is possible but has not been studied for the purpose of this report.

Locally, it is very likely that a hydraulic connection exists between groundwater flowing through surficial fractures and the wetland located on the south-western part of the property. This wetland is in fact not fed by any apparent surficial water body, and only discharges through a stream flowing towards the ocean.

3.3 Groundwater Quantity and Quality Issues

Isolated cases of quantity issues in local wells have been reported in the summer. The geometric mean of well production in the aquifer #0721 is 2.0 USgpm, which is sufficient for domestic purposes.

Localized quality issues have been reported also in the summer, with saltwater intrusion, which varies in the impacted wells directly with rate of pumping (Hodge, 1977).

3.4 Neighboring Wells

The well density in the immediate vicinity of the subject property is low. A 1 km radius circle around the subject well encompasses 6 wells (data shown in the next table). The water table is locally shallow, with uppermost water-bearing fractures logged around 200 ft deep.

Table 1 - Neighbouring Wells

Well	Yield (USgpm)	Static Water Level (ft.)	Well Depth (ft.)	Bedrock Depth (ft.)	Uppermost Water-bearing Fracture (ft.)
ID. 52453 (Subject Well)	60	3	440	14	160
ID. 52445 (Observation well)	25	-	401	10.5	200
#13293 (Old Cistern Well)	-	-	-	-	-
ID. 50148	0.75	25	501	13	250
#49221	6	15	182	18	175
#89841	1.5	-	150	11	112

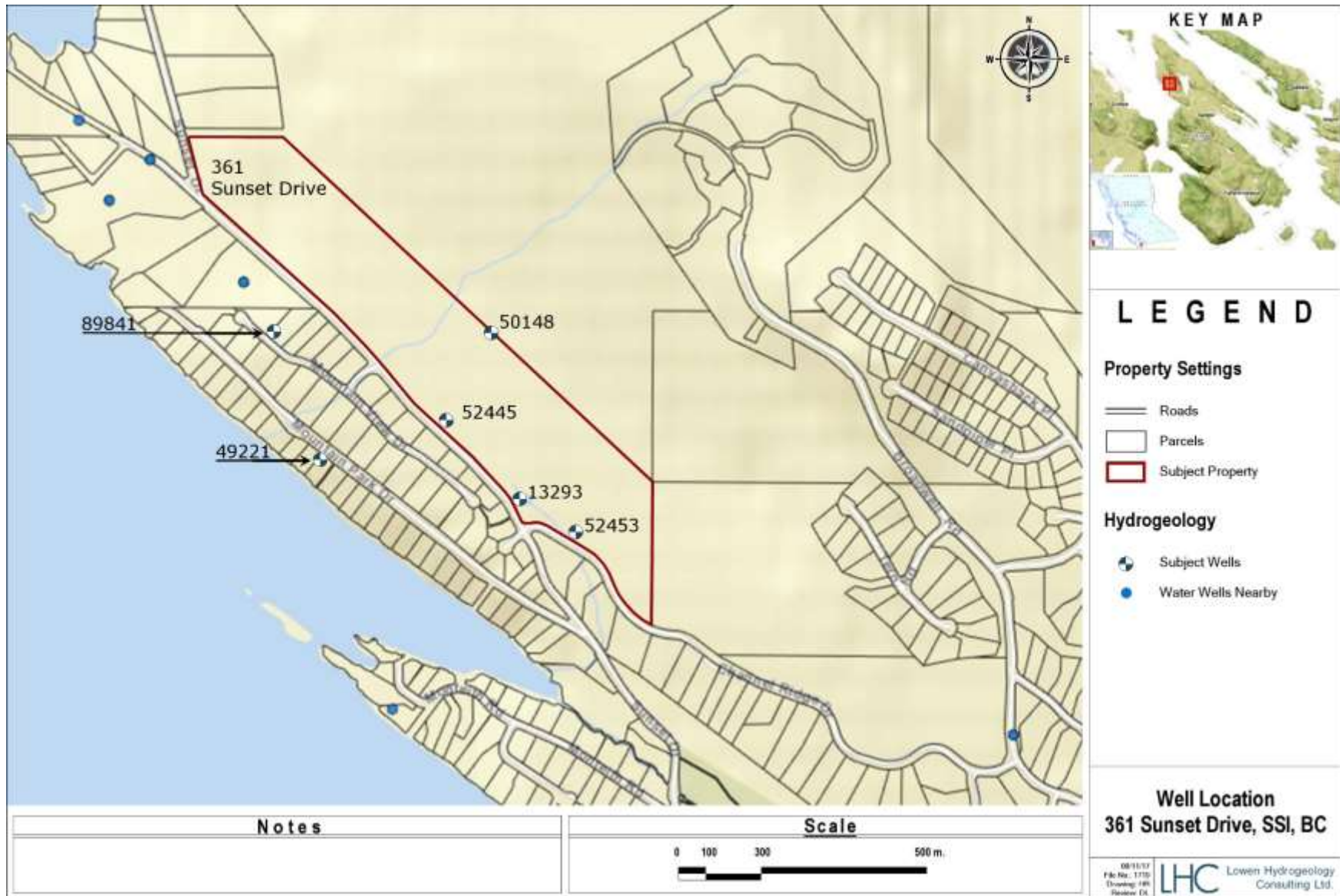
4.0 WELL CONSTRUCTION

The subject well ID. 52435 was drilled by air rotary in June 27, 2017 by Drillwell Enterprises Ltd. It is completed into bedrock to a depth of 440 ft. (134 m.). Productive fractures are located at 160 ft. (49 m.), 200 ft. (61 m.), 350 ft. (107 m.) and 400 ft. (122 m.).

The bedrock is found at a depth of 14 ft. (4.3 m.), with confining overburden consisting of gravelly clay. The estimated yield at the time of drilling was 60 USgpm. The static water level is near surface (3 ft. or 0.9 m.).

The subject well log and the observation Well ID. 52445 are provided in Appendix A.

Figure 1 - Location Plan



5.0 PUMPING TEST DISCUSSION

5.1 Pumping Test

The subject Well was tested for 72 hours at constant rate of 60 USgpm by Wellmaster Pumps in October 2017. A 3-hour recovery was also recorded. A submersible pump was temporarily installed in the Wells and the pump size matched to the anticipated pumping rate of the Well. Approximately 24 hours prior to the pumping test, the Well was disinfected with the appropriate amount of chlorine bleach (5.25 percent sodium hypochlorite). Water level measurements were taken at specific intervals using an electric well sounder. A ¾ inch diameter PVC pipe was temporarily installed in the Wells to facilitate accurate measurements. The flow rate was checked throughout the pumping test to ensure that the pumping rate was held constant. All drawdown and recovery data and plots have been shown in Appendix B.

The pumping test included water level recording at 2 observation wells:

- ID. 52445, located 402 m. to the north west
- Old Cistern Well, located 178 m to the north west

Groundwater samples were collected at the end of the test by Wellmaster and submitted to MB Labs in Sidney. Water quality is discussed in Section 8.0 and results from the lab testing are shown in Appendix C.

5.2 Well Long-term capacity

Well long-term capacity corresponds to a safe long-term yield for a well. According to this capacity, the well can sustain the determined flow rate continuously using a maximum of 70% of the total available drawdown under the lowest seasonal aquifer static level. The estimated theoretical long-term capacity of the well has been calculated as follows:

$$\text{Long-term capacity} = \text{Specific capacity @ 100-day} \times \text{safe available drawdown}$$

Where:

- Specific capacity = Pumping rate during the test / Extrapolated drawdown @ 100 days
- Safe available drawdown = 0.7 x Total available drawdown

The following Well long-term capacity is calculated as follows:

Pumping rate during the test:	327.1	m ³ /d
	60	USgpm
Extrapolated drawdown @ 100 days:	54.2	m.
↳ Specific capacity:	6.0	m ³ /d /m
Static water level:	0.9	m.
Depth to uppermost water-bearing fracture:	106.0	m.
↳ Total available drawdown:	105.1	m.
↳ Safe available drawdown:	73.6	m.
Well long-term capacity:	443.6	m ³ /d
	81.4	USgpm

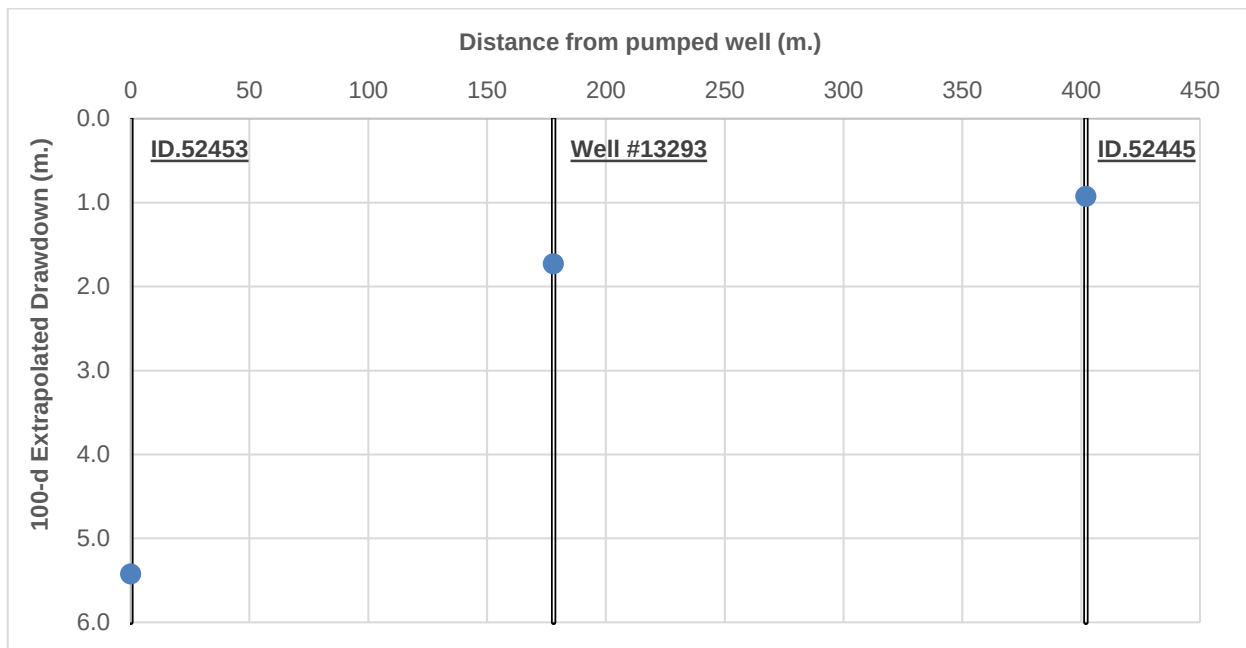
Notes:

1. The seasonal low water level measured on October 24, 2017 is used for the above capacity calculation.
2. Water level recovery was excellent, with 81% of the drawdown recovered after 180 min.

6.0 AQUIFER WATER LEVEL RESPONSE DUE TO PUMPING

The observation wells responded to the pumping at the Well ID. 52453. Extrapolated drawdown values at 100 days were projected for the 2 observation wells (Cistern well and ID.52445). These extrapolated values are displayed in the following graph.

The long-term extrapolated drawdown at the observation Well ID. 42445 located 402 m away represents 17% of the extrapolated drawdown at the pumped well. Significant drawdown interference is therefore not expected to occur beyond a radius of 500 m from the Well ID. 52453, under pumping rates averaging 60 USgpm. The interference would naturally be smaller under lower pumping rates.



7.0 WATER SUPPLY SUSTAINABILITY

The aquifer #0721 tapped by the subject well is replenished annually by precipitation. Due to the thin overburden layer, it is our opinion that an average of 20% of total precipitation reaches the underlying bedrock aquifer. Considering the annual average precipitation is 987 mm (at St Mary's Lake climate station), this equates to $987 \times 0.2 = 197.4$ mm/year of recharge.

Over the extent of the aquifer (47 km^2) this provides an annual recharge volume of $0.197 \times 47 \times 10^6 = 9.3 \times 10^6 \text{ m}^3/\text{year}$.

The subject well has the capacity to extract a maximum volume of $443.6 \text{ m}^3/\text{d}$ or $161,914 \text{ m}^3/\text{year}$, which corresponds to 2% of the aquifer annual recharge.

Considering the locally low well density, this scenario is sustainable in respect of other users and groundwater availability. However, the well being located 300 m away from the ocean, high extracting rates should be combined with high care regarding water quality control, the drawdown interference radius may extend to the shoreline under an production rate of 81.4 USgpm . However, considering the geologic trend of northwest-southeast the drawdown effect is expected to extend further in the NW-SE direction than south toward the shoreline.

8.0 WATER QUALITY DISCUSSION

Groundwater samples were collected in October 2017 and submitted to MB Labs. The results of the testing are provided in Appendix C. All parameters tested meet the Guidelines for Canadian Drinking Water Quality (December 2016; Health Canada) except for Coliform Bacteria, Arsenic and Antimony. Treatment for heavy metals and disinfection of the Well Water is recommended.

The following parameters are a guarantee of stable quality:

- The aquifer is locally confined with gravelly clay, which constitute a protection from contamination from surface.
- The area around the well, particularly upstream is mostly undeveloped. Only residential homes are built, and green spaces are predominant.
- There are no hazardous activities in the vicinity of the well.

The following aspects must be considered as they can affect water quality:

- The well is located 300 m. away from the ocean and high pumping rates (50+ USgpm) are known to affect wells up to 400 m. away. However, the pumping water level will not go below sea level and flow from the ocean will be precluded.
- The wetland near the well is believed to be fed by shallow groundwater. This nonetheless is a potential window to deeper fractures and should be protected from potential pollution.

Regular water quality monitoring is highly recommended, particularly for the pre-and post treated water to ensure treatment efficiency.

9.0 WELL PUMPING IMPACT

As seen in Sections 6 and 7 the Well pumping impact will be minor considering the available resource. Well water level impacts on existing nearby Wells or Springs must also be considered.

The nearest reported neighboring well is located 640 m. to the north west of the well, which is beyond the estimated significant drawdown interference of 500 m. No production well should be impacted from the subject well.

The local creeks flowing in the well vicinity should not be either impacted by the well, as the water-bearing fractures are located 50 m. deep and a 4-m confining layer of gravelly clay insulates the bedrock to the ground surface.

The wetland on the property which is believed to be hydraulically connected to surficial groundwater is rather likely to impact water quality (as being an open window to the aquifer) than being impacted by pumping.

Considering that no wells, springs or other surface water resources will be impacted by the subject well, therefore, no agriculture activity or fish habitat will be impacted.

10.0 CONCLUSIONS AND RECOMMENDATIONS

10.1 The Subject Well can produce a safe potable water supply of 443.6 m³/d or 81 USgpm.

10.2 Water level recovery of the well was excellent (81% recovery in 3h).

10.3 The Subject Well is located at an offset greater than 500 m. from the closest neighboring well. No significant drawdown interference is expected beyond this distance. Also, no springs or surface water

features will be impacted by the proposed pumping. No existing water consumers; domestic, agricultural, fishery or industrial will be negatively impacted by the subject well.

- 10.4 It is recommended that the water levels in the Wells be monitored periodically to ensure that any induced or regional decline in water level does not result in the water level in the well falling below the level of the pump.
- 10.5 Water quality should be monitored regularly, especially for saline intrusion (chloride and sodium level). Water treatment is recommended for heavy metals and bacteria.
- 10.6 Considering the Salt Spring Island requirement (Bylaw 355) of 2280 L/d per subdivided lot the Well #52453 can supply 194 lots.

11.0 CLOSURE / DISCLAIMER

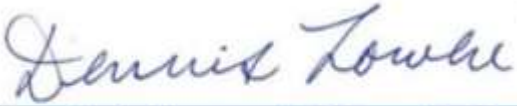
This report has been prepared in accordance with generally accepted groundwater engineering practices. The opinions expressed herein are considered valid at the time of writing. Changes in site conditions can occur, however, whether due to natural events (e.g. climate change, earthquakes) or to human activities (e.g. recharge area modification, or blasting on this or adjacent properties). These changes may in turn impact Well yields and / or water quality. In addition, changes in regulations and standards may occur, whether they result from legislation or the broadening of knowledge. This report is therefore subject to review and revision as changed conditions are identified.

In formulating our analysis, we have relied on information provided by others; Well drilling and pumping test contractors and a certified water testing laboratory. The information provided by others is believed to be accurate but cannot be guaranteed by Lowen Hydrogeology Consulting Ltd.

Furthermore, if the recommendations in this report are not implemented, the undersigned assumes no responsibility for any adverse consequences that may occur.

Respectfully submitted,

LOWEN HYDROGEOLOGY CONSULTING LTD.



Dennis A. Lowen, P. Eng. P. Geo.

DL / MD / hr

References:

- 1 Driscoll, F. G. 1986. *Groundwater and Wells*; second edition, Johnson Division, St. Paul, Minnesota.
- 2 Hodge, W.S., *Groundwater Conditions on Salt Spring Island*, 1995, BC Ministry of Environment, Water Management Division.
- 3 Ministry of Environment. 2006. *BC Water Resources Atlas*; Province of British Columbia. Internet site <http://srmapps.gov.bc.ca/apps/wrbc/>
- 4 P. Domenico & F. Schwartz, 1990, *Physical and Chemical Hydrogeology*, J. Wiley and Sons, 551.46-dc20.
- 5 Todd, Wei et al., 2016, Guidance for Technical Assessment Requirements in Support of an Application for Groundwater Use in British Columbia

Well Log Record

WELL LOG RECORD Well ID 52453

PROJECT:	Sunset Drive, SSI	GROUND ELEVATION:	230 ft.asl
PROJECT No.	1719	WELL DEPTH:	440 ft
DRILLING DATE:	June 27, 2017	STATIC WATER LEVEL:	3 ft
ID Plate:	52453	METHOD OF DRILLING:	Air rotary
ADDRESS:	361 Sunset Dr., Salt Spring Island	METHOD OF DEVELOPMENT:	Air lifting
DRILLING CONTRACTOR:	Drillwell Enterprises Ltd.	ESTIMATED YIELD:	60 USgpm
CLIENT:	B. Chapman	LOGGED BY:	Drillwell Enterprises Ltd.

DEPTH (ft.bgl.)		GEOLOGIC FORMATION	
From	To	Description	Water
0	9	Silty clay, hard, brown	
9	14	Clay till, hard, grey	
14	32	Fine-grained sandstone, Medium, grey	
32	34	Broken sandstone, soft, brown	7 USgpm
34	84	Sandstone & shale interbedded, hard, black	
84	210	Medium-grained sandstone, hard, grey	12 USgpm @ 160' 14 USgpm @ 200'
210	440	Coarse-grained sandstone (many fractures), hard, grey	20 USgpm @ 350' 50 USgpm @ 400'

bgl: below ground level

DEPTH (ft.bgl.)		WELL CONSTRUCTION
From	To	
Ground	+1.17	Stick-up (14-in)
0	19	Casing (6-in. steel), Surface seal: bentonite clay
19	440	Open hole

NOTES

Water:
Surface seal: Bentonite, 2-in. thickness to 19 ft deep

UTM
Coordinates: 10U 458024.42 5415358.31

Pumping Test Data - Well Tag #52453

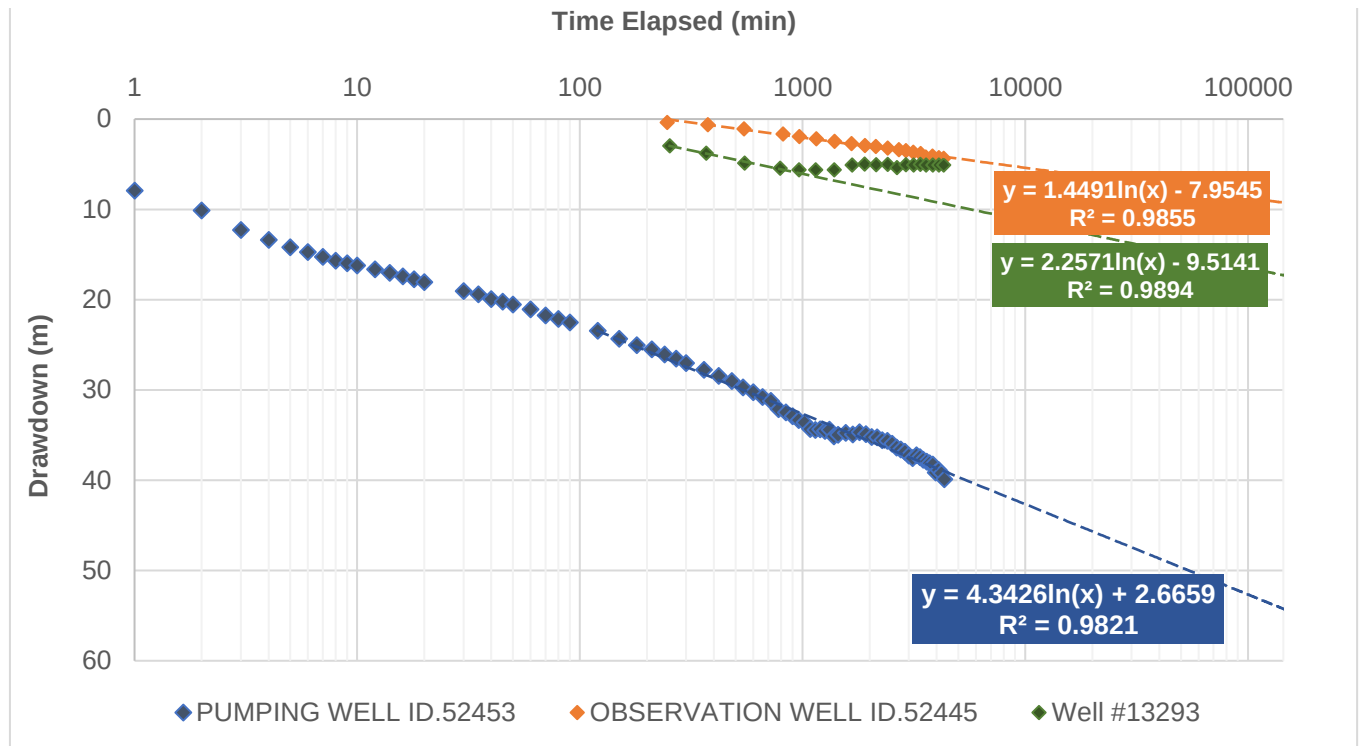
LHC PROJECT NAME:	Sunset Drive, SSI	REFERENCE POINT:	Top of Casing
LHC PROJECT No.:	1719	GROUND ELEVATION:	70 m. 230 ft.
DATE OF PUMPING:	October 24, 2017 - Start 8:00 am	PUMP INTAKE DEPTH:	N/A
WELL ID. PLATE No.:	52453	START WATER LEVEL:	0.9 m. 3 ft.
WELL TAG #:	N/A	END PUMPING LEVEL:	40.8 m. 134 ft.
LOCATION:	361 Sunset Dr., Salt Spring Island, BC	END RECOVERY LEVEL:	8.5 m. 28 ft.
PUMPING CONTRACTOR:	Wellmaster	DEPTH TO FRACTURE:	106 m. 348 ft.
CLIENT:	B. Chapman		

Elapsed Time (min.)	Pumped Well		Pumping Rate (USgpm)	Elapsed Time (min.)	Pumped Well		Pumping Rate (USgpm)
	Level (m.)	Drawdown (m.)			Level (m.)	Drawdown (m.)	
0	0.90	0.00	60	720	32.11	31.21	
1	8.82	7.92		780	33.02	32.12	
2	11.01	10.11		840	33.39	32.49	
3	13.17	12.27		900	33.81	32.91	
4	14.27	13.37		960	34.24	33.34	
5	15.10	14.20		1020	34.52	33.62	
6	15.64	14.74		1080	35.22	34.32	
7	16.16	15.26		1140	35.34	34.44	
8	16.59	15.69		1200	35.25	34.35	
9	16.86	15.96		1260	35.43	34.53	
10	17.11	16.21		1320	35.31	34.41	
12	17.56	16.66		1380	36.06	35.16	
14	17.93	17.03		1440	35.87	34.97	
16	18.33	17.43		1560	35.64	34.74	
18	18.66	17.76		1680	35.84	34.94	
20	18.96	18.06		1800	35.60	34.70	
30	19.96	19.06		1920	35.81	34.91	
35	20.31	19.41		2040	36.11	35.21	
40	20.84	19.94		2160	36.14	35.24	
45	21.14	20.24		2280	36.47	35.57	
50	21.45	20.55		2400	36.54	35.64	
60	21.96	21.06		2520	36.88	35.98	
70	22.64	21.74		2640	37.28	36.38	
80	23.05	22.15		2760	37.49	36.59	
90	23.42	22.52		2880	37.75	36.85	
120	24.34	23.44		3000	38.16	37.26	
150	25.22	24.32		3120	38.46	37.56	
180	25.96	25.06		3240	38.13	37.23	
210	26.41	25.51		3360	38.34	37.44	
240	26.99	26.09		3480	38.64	37.74	
270	27.44	26.54		3600	38.83	37.93	
300	27.93	27.03		3720	39.04	38.14	
360	28.69	27.79		3840	39.16	38.26	
420	29.36	28.46		3960	40.06	39.16	
480	29.90	29.00		4080	39.77	38.87	
540	30.61	29.71		4200	40.12	39.22	
600	31.15	30.25		4320	40.78	39.88	
660	31.68	30.78					

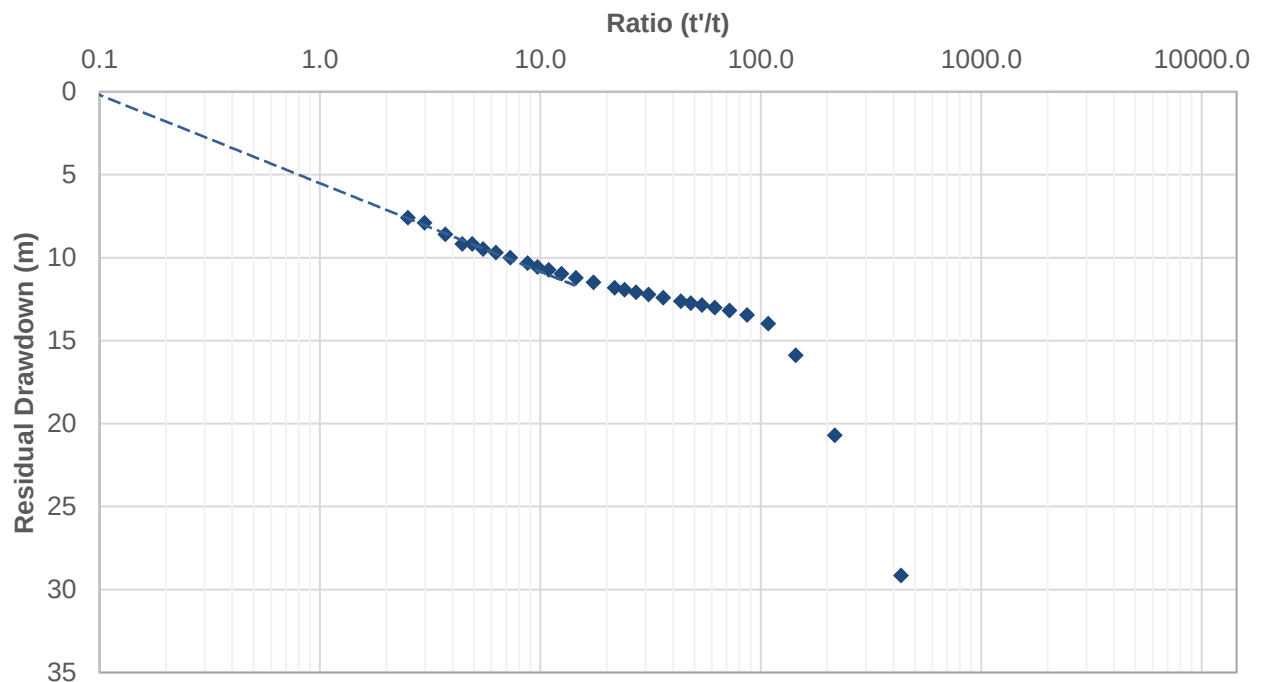
Recovery Data - Well Tag #52453

Time	Time t	Elapsed Time t'	Ratio (t/t')	Water Level	Residual Drawdown
	(min.)	(min.)		(m.)	(m.)
8:00	4321	1	4321.0	30.05	29.15
	4322	2	2161.0	21.61	20.71
	4323	3	1441.0	16.79	15.89
	4324	4	1081.0	14.87	13.97
	4325	5	865.0	14.35	13.45
	4326	6	721.0	14.08	13.18
	4327	7	618.1	13.92	13.02
	4328	8	541.0	13.77	12.87
	4329	9	481.0	13.65	12.75
	4330	10	433.0	13.53	12.63
	4332	12	361.0	13.31	12.41
	4334	14	309.6	13.13	12.23
	4336	16	271.0	12.98	12.08
	4338	18	241.0	12.83	11.93
	4340	20	217.0	12.71	11.81
	4345	25	173.8	12.40	11.50
	4350	30	145.0	12.13	11.23
	4355	35	124.4	11.88	10.98
	4360	40	109.0	11.64	10.74
	4365	45	97.0	11.46	10.56
	4370	50	87.4	11.24	10.34
	4380	60	73.0	10.91	10.01
	4390	70	62.7	10.60	9.70
	4400	80	55.0	10.39	9.49
	4410	90	49.0	10.08	9.18
	4420	100	44.2	10.08	9.18
	4440	120	37.0	9.50	8.60
	4470	150	29.8	8.80	7.90
	4500	180	25.0	8.50	7.60

Drawdown graph - Well Tag #52453



Recovery graph - Well Tag #52453



Water Quality Results

Client/Code

Wellmaster Pumps - M
*
PO Box 221
Cobble Hill, BC
V0R 1L0

Date 27Oct17 3:16p No. W136673
Source Well
Type of Sample water
No. of Samples 1

TEL:
chris@wellmasterpumps.com

Comments Arrival temp.: 12.0C

Sample: Lowen/Chapman WIN 52453

Site Code	Date	Time	CFU/100 ml		CFU/100 ml		CFU/100 mL
			TC	T-NC	FC	F-NC	E.coli
Raw Water from Well	27Oct17	07:55a	10	98	2	0	0

TC = total coliform bacteria

FC = fecal coliform bacteria (aka thermotolerant coliforms)

NC = non-coliform bacteria

CFU/100 ml = colony forming units per 100 milli-litres

Results may be adversely affected if samples are submitted to the laboratory more than 24 to 30 hours after collection.

E. coli = Escherichia coli, FDA/BAM 8th ed, 1995 + Revision A, 1998

Bergey's Manual of Systematic Bacteriology vol 1, AOAC 1984; J.Clin.Micro., J.Intern.Systm.Bact.

Comments:

For Interpretation of Results:

Total or Fecal Coliforms present greater than 0 CFU/100mL (0 CFU/mL):

IF Coliform numbers exceed safe limits for drinking water -
water is not suitable for drinking without treatment.

Total Non-coliform bacteria (=Lactose Fermentors) equal to or greater than
200 CFU/100mL (2.0 CFU/mL):

IF the number of organisms present exceed recommended guidelines for
drinking water: treatment is strongly recommended.

- see following page for chemistry results -

K. Paneque Martinez
Microbiologist

W. Riggs
Sr. Microbiologist



ANALYTICAL & TESTING SERVICES P.O. BOX 2103, SIDNEY, B.C. V8L 3S6

TEL: (250) 656-1334 EMAIL: info@mblabs.com

Appendix C

Certification of Groundwater Quantity and Quality
361 Sunset Drive, Salt Spring Island, B.C.

Client/Code

Wellmaster Pumps - M
*
PO Box 221
Cobble Hill, BC
V0R 1L0

Date 27Oct17 3:16p No. W136673 pg2
Source Well
Type of Sample water
No. of Samples 1

TEL: chris@wellmasterpumps.com Comments Arrival temp.: 12.0C

Sample: Lowen/Chapman WIN 52453 - Raw Water from Well 27Oct17 07:55a

ELEMENTS	SAMPLE	UNITS	Maximum Limits Permissible In Drinking Water*
1) Aluminium	Al	0.376	mg/L no limit listed
2) Antimony	Sb	17.0	ug/L 6.00 ug/L
3) Arsenic	As	43.7	ug/L 10.0 ug/L
4) Barium	Ba	<0.009	ug/L 1.00 mg/L
5) Beryllium	Be	<0.003	mg/L no limit listed
6) Boron	B	1.06	mg/L 5.00 mg/L
7) Cadmium	Cd	<0.100	ug/L 5.00 ug/L
8) Calcium	Ca	7.71	mg/L 200 mg/L
9) Chromium	Cr	<0.010	mg/L 0.050 mg/L
10) Cobalt	Co	<0.020	mg/L no limit listed
11) Copper	Cu	<0.008	mg/L 1.00 mg/L
12) Gold	Au	<0.040	mg/L no limit listed
13) Iron	Fe	0.090	mg/L 0.300 mg/L
14) Lanthanum	La	<0.020	mg/L no limit listed
15) Lead	Pb	0.540	ug/L 10.0 ug/L
16) Magnesium	Mg	1.27	mg/L 50.0 mg/L
17) Manganese	Mn	0.011	mg/L 0.050 mg/L
18) Molybdenum	Mo	<0.020	mg/L no limit listed
19) Nickel	Ni	<0.050	mg/L no limit listed
20) Phosphorus	P	<0.010	mg/L no limit listed
21) Potassium	K	0.310	mg/L no limit listed
22) Scandium	Sc	<0.050	mg/L no limit listed
23) Silicon	Si	4.74	mg/L no limit listed
24) Silver	Ag	<0.010	mg/L 0.050 mg/L
25) Sodium	Na	98.2	mg/L 200 mg/L
26) Strontium	Sr	0.093	mg/L no limit listed
27) Titanium	Ti	<0.010	mg/L no limit listed
28) Tungsten	W	<0.050	mg/L no limit listed
29) Vanadium	V	<0.010	mg/L no limit listed
30) Zinc	Zn	0.200	mg/L 5.00 mg/L
Hardness (mg/L CaCO ₃)		24.5	mg/L 0-75 mg/L = soft
pH		7.72	units 6.5 to 8.5

* As per Canadian or B.C. Health Act Safe Drinking Water Regulation BC Reg 230/92, & 390 Sch 120, 2001. Task Force of Canadian Council of Resource & Envir. Ministers Guidelines for Canadian Drinking Water Quality, 2014.

Comments:

Antimony: continous contact, inhalation or ingestion can be toxic; sources include batteries, solder & flame-retardants.

Arsenic: continuous ingestion of high amounts is toxic; sources of arsenic in water include industrial discharge, mineral dissolution and insecticides.



ANALYTICAL & TESTING SERVICES

R. Bilodeau
Analytical Chemist

P.O. BOX 2103, SIDNEY, B.C. V8L 3S6

H. Hartmann

Sr. Analytical Chemist

TEL: (250) 656-1334 EMAIL: info@mblabs.com

OCP AMENDMENT REQUEST
361 Sunset Drive
Channel Ridge Residential (R6a) -> Residential Designation (R8)

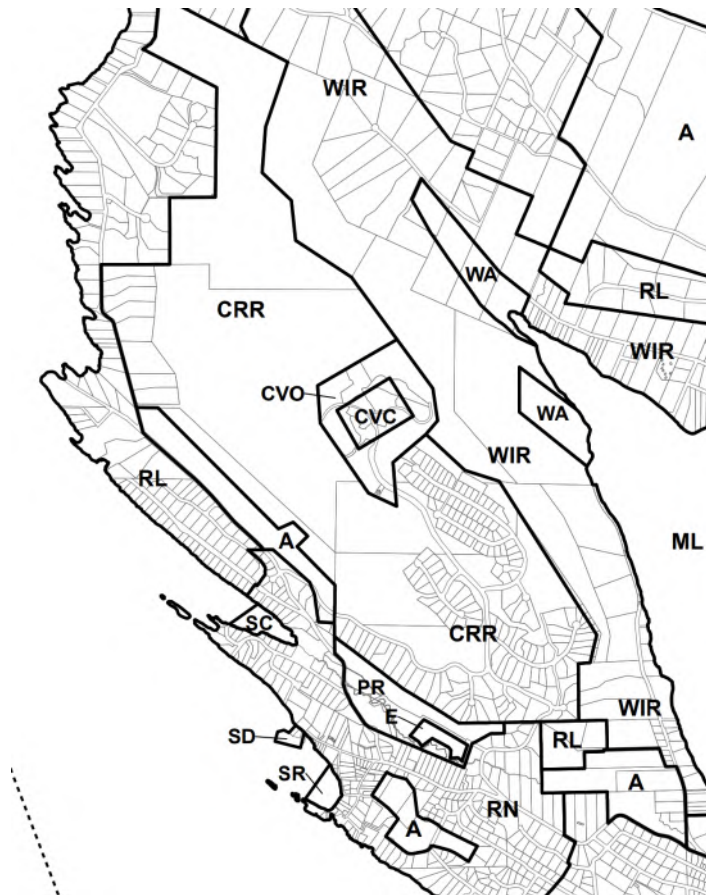
PROPERTY DETAILS

- **Address:** 361 Sunset Drive ([Google Map Link](#))
- **Legal Description:** Lot A Plan VIP44304 Section 13 Range 4W Land District 16 Portion NORTH SALT SPRING Except Plan 46042 & SECTIONS 11, 12 & 13, RGE 3 W
- **PID:** 005-624-827
- **Legal Owner:** Bryce Chapman
- **Current OCP Designation/Zoning:** Agriculture/A1 & Channel Ridge Residential/R6a

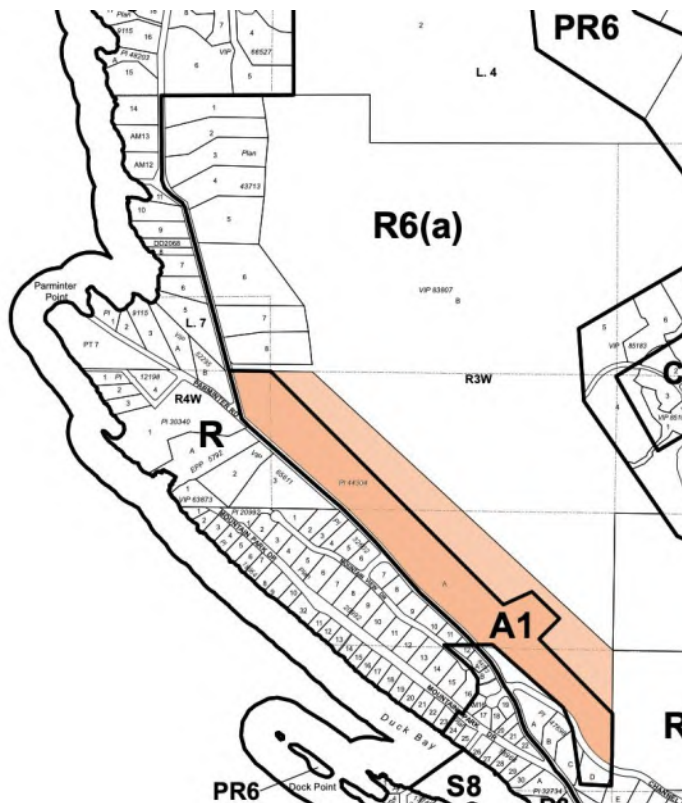
REZONING REQUEST - OCP & Rezoning Request

- Current: Channel Ridge Residential Designation (CRR) / (R6a)
- Requested: Residential Designation (RN) / (R8)

OFFICIAL COMMUNITY PLAN MAP: [Official Map here](#)



ZONING MAP: [Official Map Here](#)



CURRENT USE

- Currently this 84 acre property is used for one principal residence for one couple, as well as a barn that houses equipment needed to maintain the land.
 - Principal Residence: 2800 sqft
 - Barn: 8267 sqft

PROPOSED USE

It is my intention to create seven 1-Acre Lots on the North end of my 84 acre farm. For the purpose of setting two lots aside for [REDACTED] and five lots to hopefully find agriculturally-orientated entrepreneurs that can bring this valuable agricultural land back into production as I'm [REDACTED] now; very happy to mentor, but not so thrilled about [REDACTED].

I have tried for over 4 years now to find young agrarians to do leasing or joint ventures with, but the same problem arises – housing needs. That is why I am planning small 1-acre lots to keep the cost down. I will also be adding 22 acres of my property that is not currently agriculturally zoned into the ALR. My concept is that with my farm background and experience, we can take a portion of our land and turn it into almost an “incubator” situation for young farmers; producing all types of fruits and vegetables, livestock, nuts, berries, timber, etc. etc. Based on a serious economic business model; not glorified gardening. I will purchase the

necessary equipment so that the hopefully 5 agricultural operations on my land don't have to have that very limiting expense as well. We will co-op the equipment.

Further, to this activity, it is my wife's and my intention to help the businesses on our island/our home that have barely hung on because of Covid and the perennial decline of tourism in the winter months to create more traffic flow by holding weddings in our barn. We have met a tremendous [REDACTED] couple who have intelligently planned a glamping opportunity in a treed section, which in my mind, is about the greenest form of tourism housing that you could ever ask for. We are happy to lease some forest land to this clean, renewable, eco-friendly business and support them in their efforts as their customers will also support our island's businesses.

I am blessed with very abundant water and great privacy for my neighbours. We believe, that all of us on this island need to realize the economic struggles that the business owners have here. The warning signs are already happening. One of our Middle Schools has closed. Restaurants are being replaced with Food Trucks. One hardware store has already moved off island.

We need to improve the economics for our business people before this Island starts to spiral into decay and decline. We should all do our part to help our community survive financially as tourism is a wonderful, clean, renewable business resource. Many places would die for the opportunity we have here for this type of clean industry.

To that end, we hope to use our barn in the winter months to bring in more people for environmental seminars, permaculture training seminars, etc. It's not good enough to be "green," we should teach "green." But "green" has to have an economic focus or it's just a protest and nothing more. Our amazing artisans and craftspeople on this island also need more exposure for their products and services. The couple with the glamping tents fully intend to draw tourists, even during the winter months with the critical one or two overnight stays instead of day trippers, as the overnight stays spend dramatically more money on the island per day in support of our businesses.

It is sad every year, to look at the Grade 12 graduating class photo and realize that many of these graduates will not be able to stay "economically" on their own island. We need to fix this. We hope to help in our own small way to give some of them a chance to begin their own ventures in producing food locally.

Sincerely,

Bryce & Romy Chapman
[REDACTED]

ADDITIONAL NOTES REGARDING INTENDED USE:

Within the current CRR designation, further subdivision, small businesses rezonings, nor temporary use permits for small businesses are not allowed. Transitioning to regular Residential land will allow us to thoughtfully subdivide this land for the regenerative and community-focused uses described above. Transitioning to R8 land from R6 will also allow agricultural purposes.

PROPOSED TIMELINE:

- Once amendment is approved:
 - **Immediately after OCP amendment approval:** Temporary Use Permit application for eco-glamping accommodations
 - **0-6 months after OCP amendment approval:** Application for subdivision rezoning, and addition of 22 acres to ALR/agriculture land
 - **0-2 years after subdivision approval:** Residential + agricultural housing build on subdivided lots

REASONS IN SUPPORT OF AMENDMENT

1. OCP Alignment:

Below is a summary of the OCP bylaws that this plan is in support of:

A.4.2.2 To maintain and restore the community's natural capital represented by such items as our agricultural and forest land base, our potable water supplies, and primary value of our natural and unspoiled rural character.

A.4.4.6 To ensure the continued development of land use opportunities for non-traditional residential settlement. Opportunities that are based on the communal stewardship of land, conservation of resources and alternative forms of infrastructure are of special importance.

A.4.6.2 To maintain and encourage a diverse and creative community by providing a wide range of opportunities and locations for earning a living that are compatible with and can take advantage of the protection and preservation of the island's beauty and character. In particular, to encourage small, locally owned businesses whose revenues remain on the island, especially those which expand local production and consumption to meet the needs of islanders.

A.4.6.3 To encourage living-wage, meaningful, year-round employment and income-generating opportunities that especially enable young people and families to remain on the island.

B.3.1.1.1 To recognize and welcome the economic value to our community of tourism that is compatible with preserving and protecting the island's natural environment, authentic resident-based sense of community, and the aesthetic values that attract visitors.

B.3.1.1.2 To allow visitor accommodation to develop in a way that will best retain and distribute the resulting economic benefits and reduce any negative impacts; to avoid concentrating benefits and impacts in only a few locations.

B.3.1.1.3 To retain and maximize the economic benefits of tourism to the community.

B.3.1.1.4 To make land use decisions that would encourage tourism in the shoulder and off-seasons and discourage any significant increase in the peak period.

B.3.1.1.5 To encourage tourism that blends well with the community and complements the rural, peaceful nature of the island, and to avoid the development of tourist attractions that are unrelated to the island's natural environment, social base or cultural heritage.

Reiteration of OCP support:

- The intended plan for this land is to better allow the land to be used for regenerative/permaculture agriculture and affordable housing, and an eco-focused regenerative tourism business, while maintaining & supporting the natural assets of the land. Preserving and regenerating this land in a creative, community-focused way, is at the forefront of this application.
- The core of this intended plan is to build affordable, farm-focused housing lots, while also allowing a small eco-tourism business to run on the land. This combination of both housing, farming and small-business working together to regenerate the land is an idyllic representation of creative solutions that can support locals, tourists, and the local environment at the same time.

2. Proximity to neighbours & local businesses

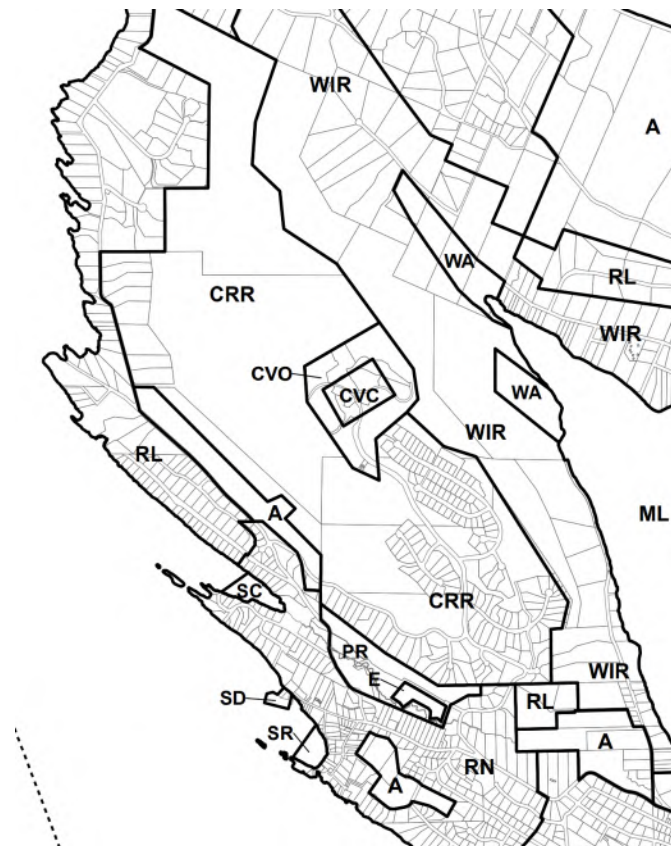
- While there are many farms on this area of the island, there are sparse tourist accommodations that can support easy access to these farms. Closest B&Bs/Resorts are between 1km-4km away
- Proximity and privacy for neighbors: The future plans would include maintaining a health vegetation screen on all business activities, while also prioritizing forest maintenance and privacy for all residents and the small glamping business.

3. Land Resources

- **Farm land:** The land has been inspected by experienced agricultural practitioners for soil, drainage, sun coverage, air movement and crop viability with enthusiastic reports on the agricultural benefits of this property.
- **Solar:** This land offers ample sunlight and winds, year round, making it an excellent location for renewable energy sources like solar, and wind.
- **Water:** A hydrologist supervised 72 hour well test has been performed on one of the wells on the south end of the property yielding 84 gpm of water with amazing recovery speed and no impact on neighbouring wells.
- **Septic & Drainage:** A septic engineer has pre-inspected the soils for drainage capacity to validate a lack of any concerns for simple septic systems for all properties that can support irrigation for the agriculture field.

EXISTING USES OF ADJACENT & NEARBY LANDS

- All adjacent properties are residential properties (CRR, RN, RL) with the exception of the land to the north east of the property which is still the undeveloped, Channel Ridge Residential trail network and unused land.



File No.: 3445-10 North Pender Island
Proposed Bylaw Nos. 223,
224 and 229

DATE OF MEETING: September 6, 2022
TO: Salt Spring Island Local Trust Committee
FROM: Jason Youmans, Island Planner
Salt Spring Island Team
COPY: Louisa Garbo, Acting Regional Planning Manager
Salt Spring Island Team
SUBJECT: Bylaw Referral from North Pender Island Local Trust Committee

RECOMMENDATION

1. That the Salt Spring Island Local Trust Committee request staff to respond to the referral from the North Pender Island Local Trust Committee for Bylaw Nos. 223, 224, and 229 indicating that the Salt Spring Island Local Trust Committee's interests are unaffected.

REPORT SUMMARY

The Salt Spring Island Local Trust Committee has been referred North Pender Island Local Trust Area Bylaw Nos. 223, [224](#)¹ and 229 for comment. The purpose of these proposed bylaws is as follows:

- Bylaw No. 223 will amend the North Pender Island Official Community Plan to include enabling policies related to Land Use Bylaw amendments proposed under Bylaw Nos. 224 and 229. Of most potential interest to SS LTC could be the following policies:
 - Policies to inform development variance permit applications for land owners wishing to exceed forthcoming maximum floor area limits under the land use bylaw;
 - Policies to allow for multi-family residential rental zoning; and
 - Policies to inform marine rezonings to permit residential docks in areas where they will no longer be permitted under forthcoming land use bylaw changes.
- Bylaw No. 224 will replace the existing North Pender Island Land Use Bylaw No. 103. It is a comprehensive update to the land use bylaw, based on a review of residential floor area, tourist commercial regulations, agricultural regulations, industrial regulations, a number of minor technical amendments. Of most potential interest to the SS LTC could be:
 - The introduction of floor area limits for residential dwellings; and

¹ Staff have not included Bylaw No. 224 as an attachment to this staff report as it is the North Pender Island Land Use Bylaw in its entirety.

- The removal of zoning that allows for residential docks around most of the island's perimeter.
- Bylaw No. 229 further amends the North Pender Island Land Use Bylaw with a number of specific regulatory changes that required new enabling policies in the OCP. Of most interest to SS LTC is most likely:
 - The introduction of multi-family residential rental zoning to the North Pender Land Use Bylaw.

ANALYSIS

Staff have reviewed the proposed bylaws and associated [staff reports](#), and consider the interests of the Salt Spring Island Local Trust Committee to be unaffected.

NEXT STEPS

Staff will provide the SS LTC's referral response to the North Pender Island Local Trust Committee.

Submitted By:	Jason Youmans, Island Planner	August 25, 2022
Concurrence:	Louisa Garbo, A/Regional Planning Manager	August 25, 2022

ATTACHMENTS

1. A1 - 3445-10 – North Pender Island Bylaw Referral Forms – Bylaw No. 223
2. A2 – 3445-10 – North Pender Island Bylaw Referral Forms – Bylaw No. 229

See hyperlink in staff report for Bylaw No. 224



Islands Trust

BYLAW REFERRAL FORM

Suite 200, 162 **Appendix 1**
Victoria, B.C. BC V8R 1H8
Ph: (250) 405-5151
Fax: (250) 405-5155
information@islandstrust.bc.ca
www.islandstrust.bc.ca

Island: North Pender Island Local Trust Area Bylaw No.: 223 Date: July 22, 2022

You are requested to comment on the attached Bylaw for potential effect on your agency's interests. We would appreciate your response within 30 days. If no response is received within that time, it will be assumed that your agency's interests are unaffected.

APPLICANTS NAME / ADDRESS:

N/A

PURPOSE OF BYLAW:

The project was identified by the North Pender Local Trust Committee (LTC) in late 2019 and the project charter was endorsed in January 2020. The objective of the project is to implement Official Community Plan (OCP) policies through amendments to the North Pender Land Use Bylaw (LUB). Bylaw No. 223 will amend the North Pender OCP in order to enable new regulations in proposed LUB Amendment Bylaw No. 229.

Additional project background, including staff reports, discussion papers, community engagement, are available for the LUB Review project webpage: <https://islandstrust.bc.ca/island-planning/north-pender/projects/>

GENERAL LOCATION:

North Pender Island Local Trust Area

LEGAL DESCRIPTION:

N/A

SIZE OF PROPERTY AFFECTED:

N/A

ALR STATUS:

N/A

OFFICIAL COMMUNITY PLAN DESIGNATION:

N/A

OTHER INFORMATION:

Additional information, including the current bylaws, is available at: <https://islandstrust.bc.ca/island-planning/north-pender/projects/> under the heading "Land Use Bylaw Review"

Please fill out the Response Summary on the back of this form. If your agency's interests are "*Unaffected*", no further information is necessary. In all other cases, we would appreciate receiving additional information to substantiate your position and, if necessary, outline any conditions related to your position. Please note any legislation or official government policy which would affect our consideration of this Bylaw.


(Signature)

Name: Kim Stockdill

Title: Island Planner

Contact Info: Tel: 250-405-5157
Email: kstockdill@islandstrust.bc.ca

PLEASE TURN OVER 

This referral has been sent to the following agencies:

Federal Agencies

n/a

Regional Agencies

Capital Regional District – Building Inspection

Provincial Agencies

Ministry of Municipal Affairs & Housing
BC Assessment Authority
Ministry of Land, Water and Resource Stewardship – Crown Lease
Branch

Adjacent Local Trust Committees and Municipalities

Mayne Island Local Trust Committee
Saturna Island Local Trust Committee
South Pender Island Local Trust Committee
Salt Spring Island Local Trust Committee

Non-Agency Referrals

Islands Trust – Bylaw Enforcement
Pender Islands Parks & Recreation Commission

First Nations

Cowichan Tribes
Halalt First Nation
Lake Cowichan First Nation
Lyackson First Nation
Malahat First Nation
Pauquachin First Nation
Penelakut Tribe
Semiahmoo First Nation
Snuneymuxw First Nation
Stz'uminus First Nation
Tsartlip First Nation
Tsawout First Nation
Tsawwassen First Nation
Tseycum First Nation
WSANEC Leadership Council

BYLAW REFERRAL FORM RESPONSE SUMMARY

☐

Approval Recommended for Reasons Outlined Below

☐

Approval Recommended Subject to Conditions Outlined Below

☐

Interests Unaffected by Bylaw

☐

Approval Not Recommended Due to Reason Outlined Below

North Pender Island Local Trust Area

(Island)

223

(Bylaw Number)

(Signature)

(Name and Title)

(Date)

(Agency)

PROPOSED

NORTH PENDER ISLAND LOCAL TRUST COMMITTEE BYLAW NO. 223

A BYLAW TO AMEND NORTH PENDER ISLAND OFFICIAL COMMUNITY PLAN BYLAW NO. 171, 2007

The North Pender Island Local Trust Committee in open meeting assembled enacts as follows:

1. CITATION

This Bylaw may be cited for all purposes as “North Pender Island Official Community Plan Bylaw No. 171, 2007, Amendment No. 1, 2021”.

2. SCHEDULES

North Pender Island Official Community Plan No. 171, 2007 is amended as shown on Schedule 1 attached to and forming part of this bylaw.

3. SEVERABILITY

If any provision of this Bylaw is for any reason held to be invalid by a decision of any Court of competent jurisdiction, the invalid provision must be severed from the Bylaw and the decision that such provision is invalid must not affect the validity of the remaining provisions of the Bylaw.

READ A FIRST TIME THIS	26 TH	DAY OF	MAY	2022.
PUBLIC HEARING HELD THIS	_____	DAY OF	_____	20____
READ A SECOND TIME THIS	_____	DAY OF	_____	20____
READ A THIRD TIME THIS	_____	DAY OF	_____	20____
APPROVED BY THE EXECUTIVE COMMITTEE OF THE ISLANDS TRUST THIS	_____	DAY OF	_____	20____
APPROVED BY THE MINISTER MUNICIPAL AFFAIRS THIS	_____	DAY OF	_____	20____
ADOPTED THIS	_____	DAY OF	_____	20____

CHAIR

SECRETARY

**NORTH PENDER ISLAND LOCAL TRUST COMMITTEE
BYLAW NO. 223**

SCHEDULE 1

The North Pender Island Official Community Plan No. 171, 2007, is amended as follows:

1. By adding the following new policy to Section 2.1 Residential Land Uses:

“2.1I If the Local Trust Committee considers Development Variance Permit applications to vary the maximum floor area of residential dwellings, the following should be incorporated into the building proposal where feasible:

 - a) The design and construction of a dwelling should incorporate energy efficient features.
 - b) Installation of a freshwater collection and storage system with a minimum cistern storage capacity of 18,000 litres.
 - c) Buildings and other structures should utilize existing topography and vegetation to be sited in a manner that is relatively unobtrusive and blends into the surrounding landscape.
 - d) Limit site coverage of impermeable surfaces.
 - e) New buildings should be sited in a manner that results in minimal disturbance to existing vegetation and unnecessary removal of trees should be avoided.
 - f) Avoid locating development in areas containing important, rare or fragile sensitive ecosystems or habitat where reasonable alternative sites exist.
 - g) Maximize undisturbed areas and consider measures for protect sensitive ecosystems.
 - h) Use of drought resistant and native plants in landscaping should be encouraged. The planting or introduction of non-native plants should be avoided.”

2. By deleting Rural Residential Policy 2.1.1.1 and replacing it with:

“2.1.1.1The principal use shall be residential. Agriculture is also a principal use on those Rural Residential lots not connected to a water system with the exception of those lots connected to the Razor Point Water System. Accessory uses shall not detract from the rural character of the island.”

3. By adding the following new polices to Section 2.3 Community Service Land Uses:

“2.3.31 The Local Trust Committee will encourage multi-family rental dwellings that are limited to residential rental tenure.

2.3.32 Zoning should regulate the density, size and siting of multi-family rental dwelling units in order to maintain rural character.

2.3.33 Developments shall be encouraged to incorporate water conservation measures and energy efficient building design elements.

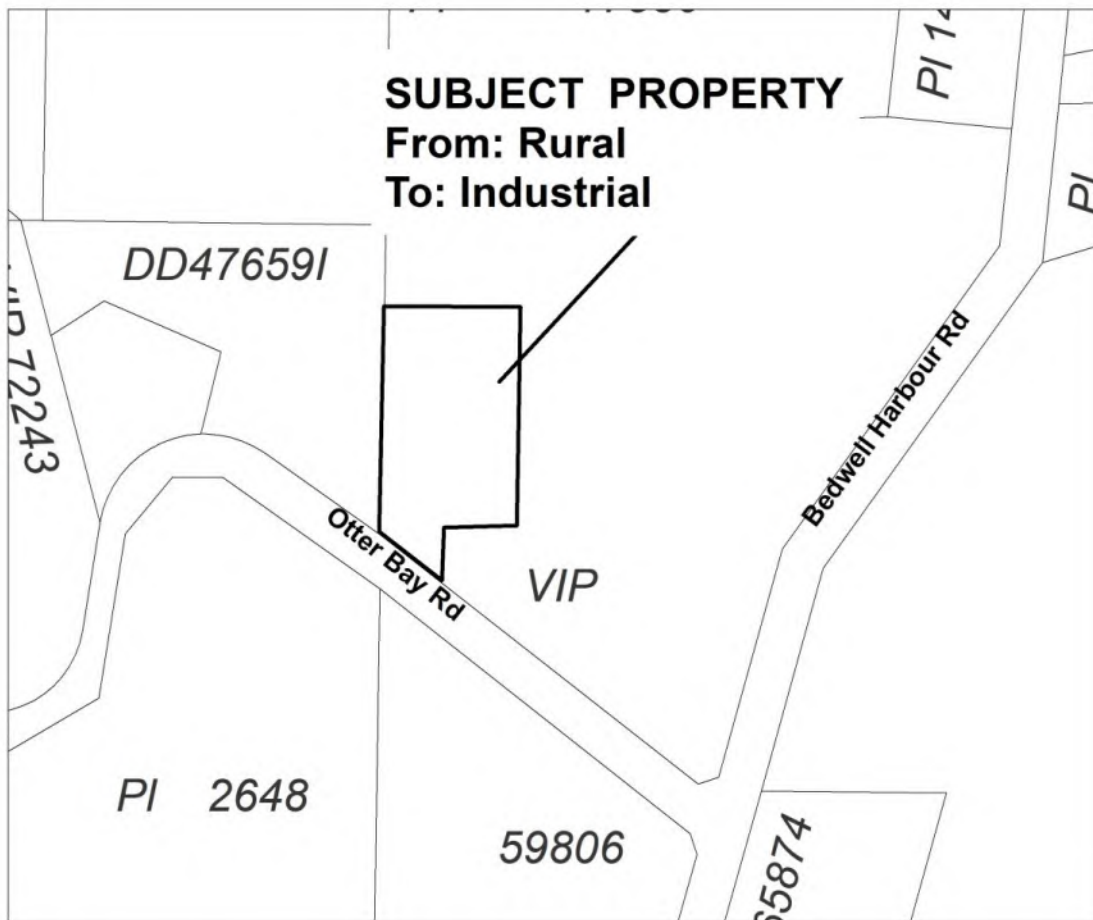
2.3.34 Applications for rezoning to a higher density to permit multi-family dwelling units may only be supported by the Local Trust Committee if there is adequate quality and quantity of freshwater.

2.3.35 Multi-family rental dwellings should be located in close proximity and accessible to existing roads, transportation and services.”

4. By adding the following new policy to Section 4.2 Coastal Area Policies:
“4.2.11 Existing private moorage for docks permitted on a site-specific basis in those areas designated as Marine (M) on Schedule “B”. New applications for private moorage for docks may be considered by site-specific rezoning subject to:
 - a) the proposal demonstrating minimal impacts on the marine environment, including eelgrass, bull kelp, forage fish, or other important habitat;
 - b) the proposal demonstrating minimal impacts on upland sensitive ecosystems or habitat;
 - c) the proposal demonstrating no impacts on archaeological or cultural sites or resources;
 - d) structures being appropriately sited and of a scale to minimize visual impacts;
 - e) structures incorporating current best practices for dock construction;
 - f) consideration being given to providing for shared or common moorage; and
 - g) consideration being given to the cumulative impacts of private moorage.”
5. Schedule “B” – LAND USE MAP is amended as shown on Plan Nos. 1, 2, 3, 4, 5, and 6 attached to and forming part of this bylaw.

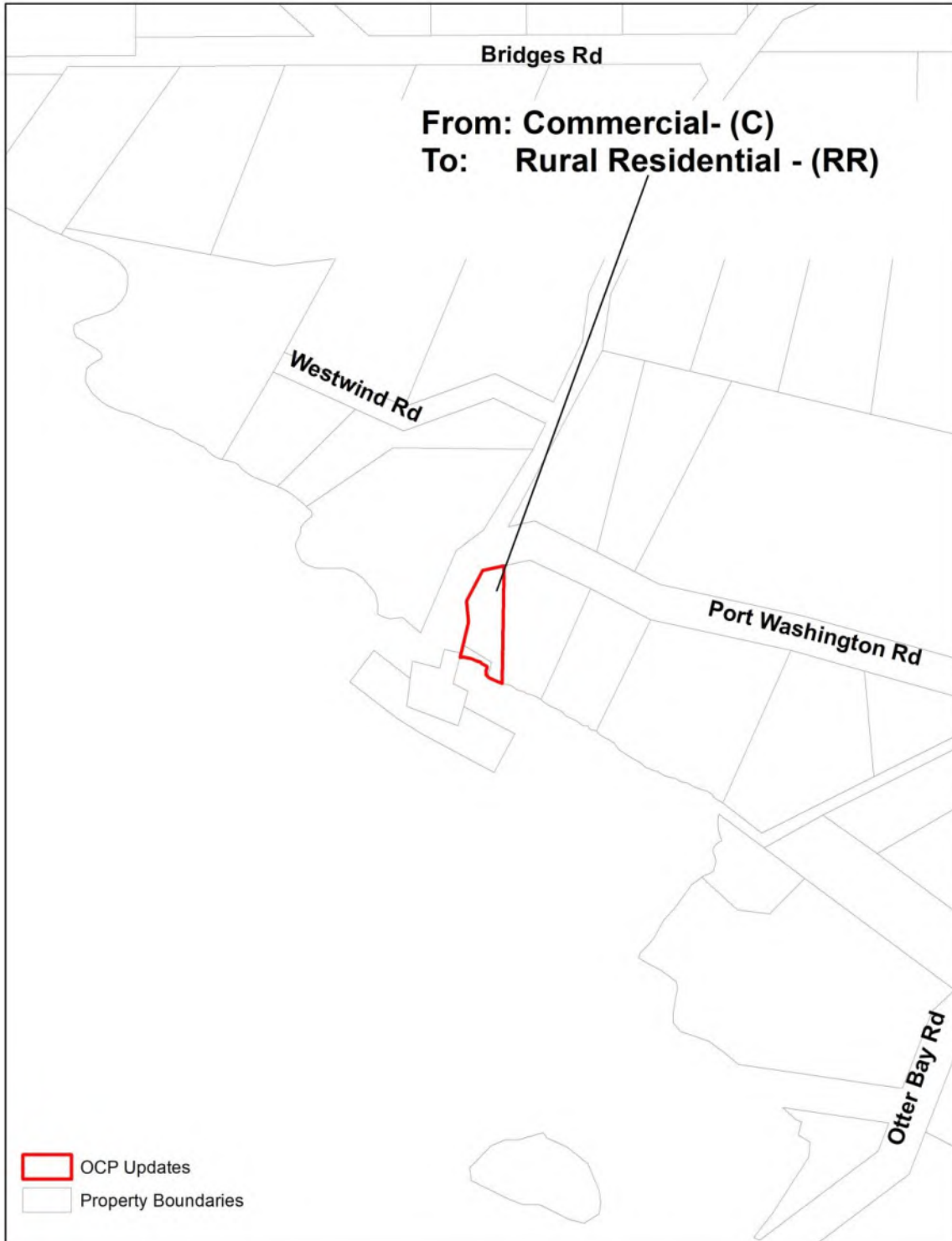
NORTH PENDER ISLAND LOCAL TRUST COMMITTEE
BYLAW NO. 223

PLAN NO. 1



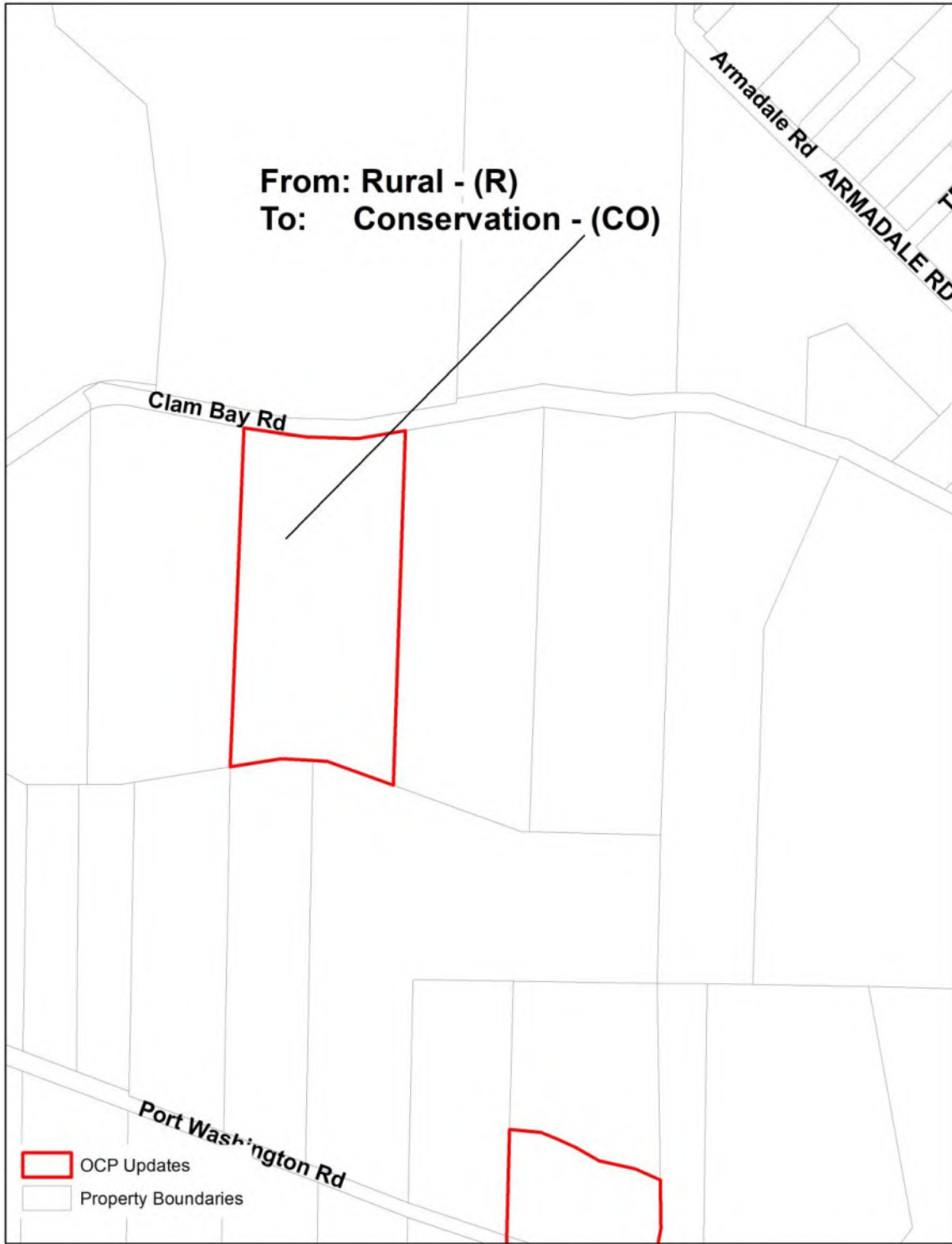
NORTH PENDER ISLAND LOCAL TRUST COMMITTEE
BYLAW NO. 223

PLAN NO. 2



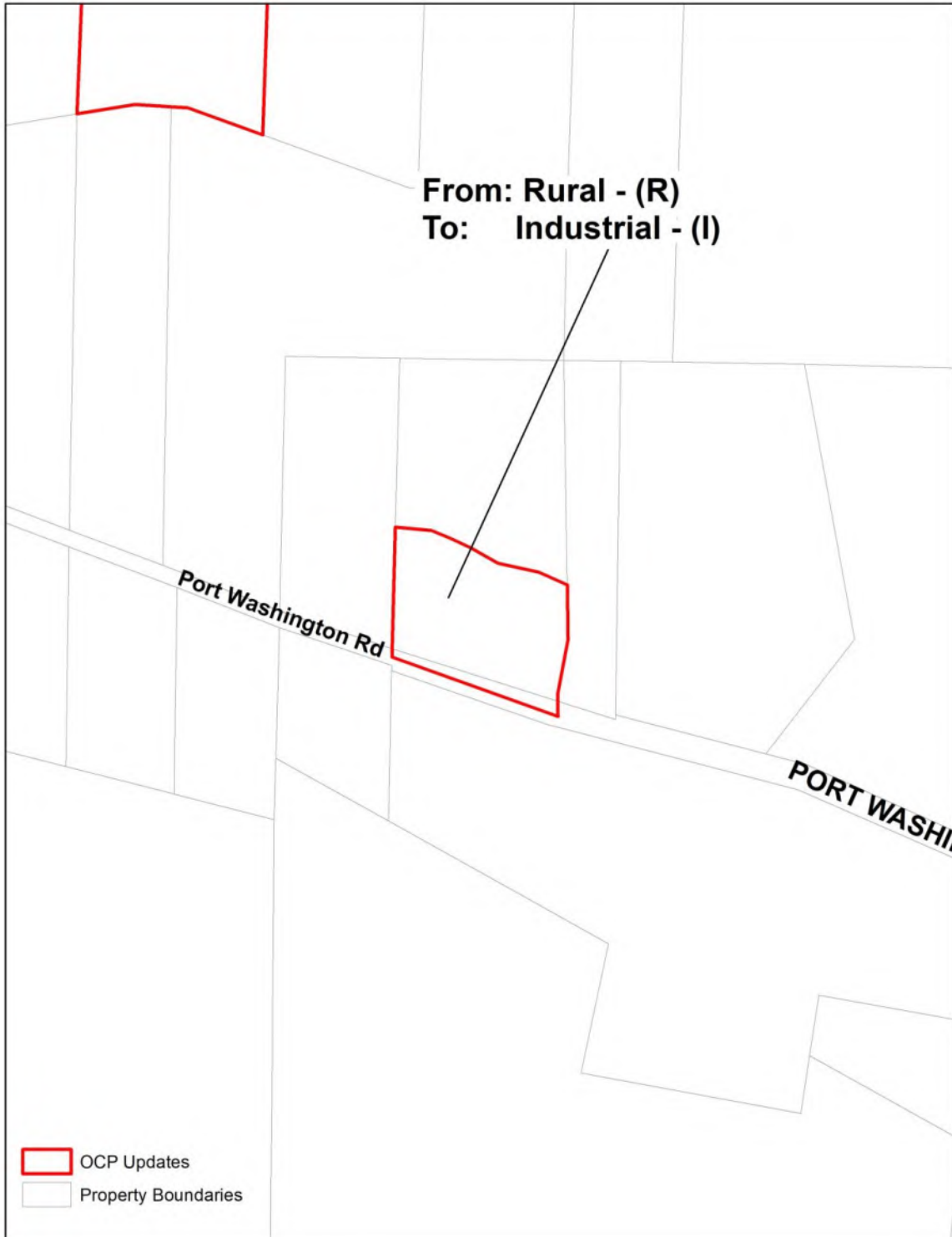
NORTH PENDER ISLAND LOCAL TRUST COMMITTEE
BYLAW NO. 223

PLAN NO. 3



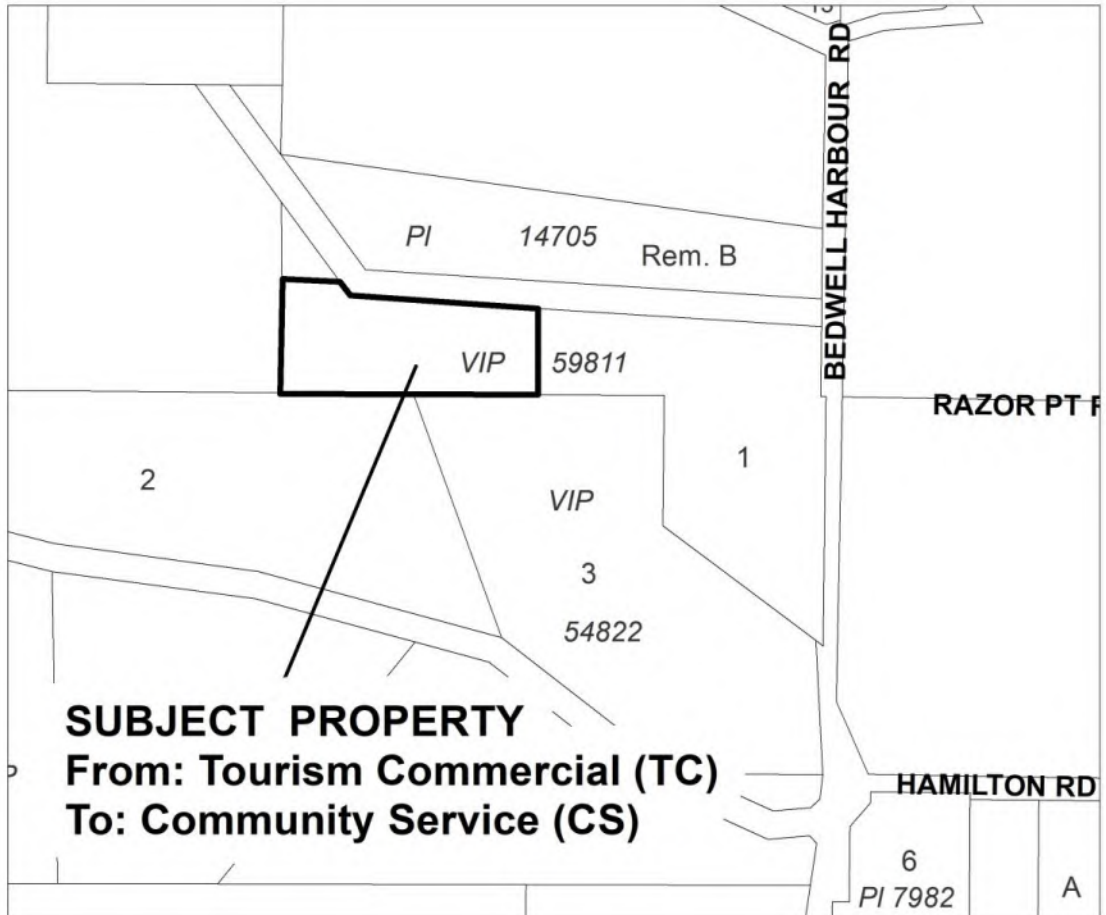
NORTH PENDER ISLAND LOCAL TRUST COMMITTEE
BYLAW NO. 223

PLAN NO. 4



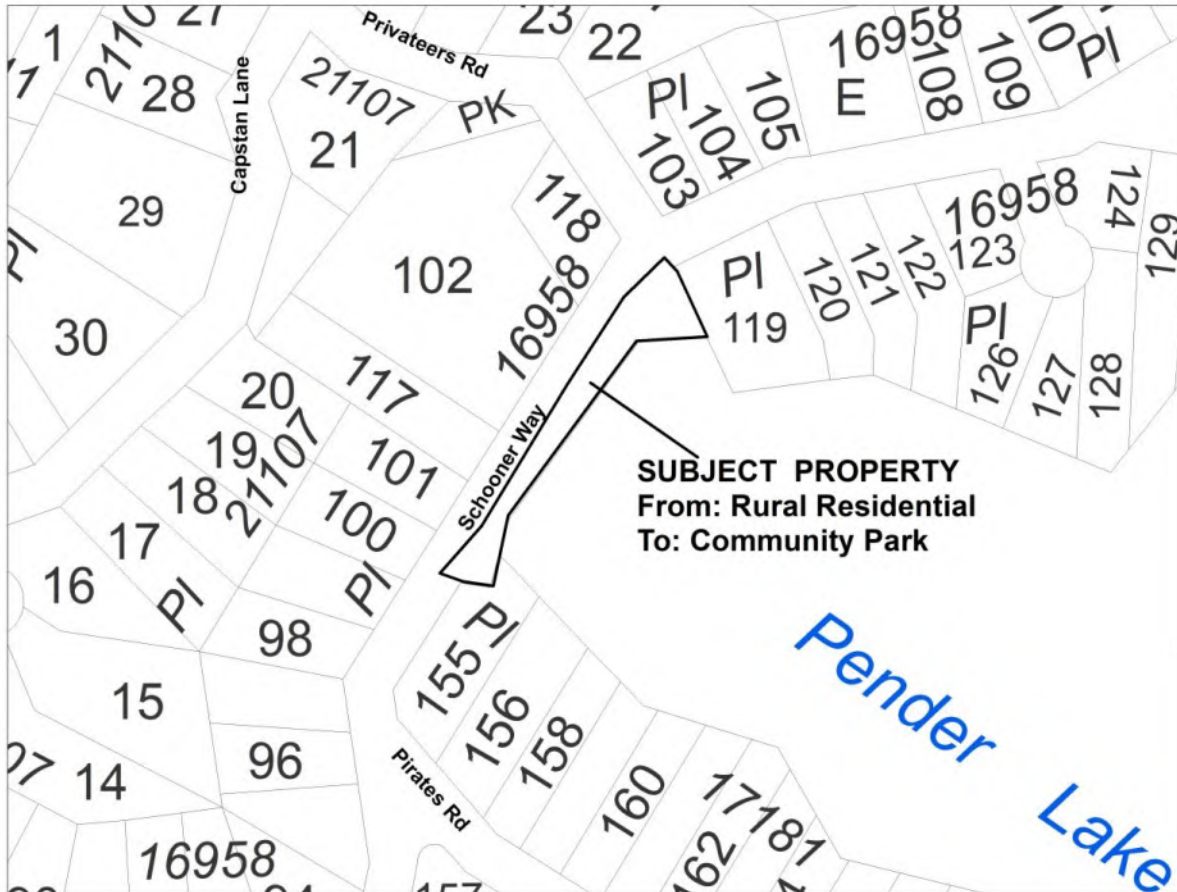
NORTH PENDER ISLAND LOCAL TRUST COMMITTEE
BYLAW NO. 223

PLAN NO. 5



NORTH PENDER ISLAND LOCAL TRUST COMMITTEE
BYLAW NO. 223

PLAN NO. 6





Islands Trust

BYLAW REFERRAL FORM

Suite 200, 162 **Appendix 2**
Victoria, B.C. BC V8R 1H8
Ph: (250) 405-5151
Fax: (250) 405-5155
information@islandstrust.bc.ca
www.islandstrust.bc.ca

Island: North Pender Island Local Trust Area **Bylaw No.:** 229 **Date:** July 22, 2022

You are requested to comment on the attached Bylaw for potential effect on your agency's interests. We would appreciate your response within 30 days. If no response is received within that time, it will be assumed that your agency's interests are unaffected.

APPLICANTS NAME / ADDRESS:

N/A

PURPOSE OF BYLAW:

The project was identified by the North Pender Local Trust Committee (LTC) in late 2019 and the project charter was endorsed in January 2020. The objective of the project is to implement Official Community Plan (OCP) policies through amendments to the North Pender Land Use Bylaw (LUB). Bylaw No. 229 will amend the proposed Bylaw No. 224. Bylaw No. 229 includes LUB regulations that require new enabling policies in proposed Bylaw No. 223.

Additional project background, including staff reports, discussion papers, community engagement, are available for the LUB Review project webpage: <https://islandstrust.bc.ca/island-planning/north-pender/projects/>

North Pender Island Local Trust Area

LEGAL DESCRIPTION:

N/A

SIZE OF PROPERTY AFFECTED:

N/A

ALR STATUS:

N/A

OFFICIAL COMMUNITY PLAN DESIGNATION:

N/A

OTHER INFORMATION:

Additional information, including the current bylaws, is available at: <https://islandstrust.bc.ca/island-planning/north-pender/projects/> under the heading "Land Use Bylaw Review"

Please fill out the Response Summary on the back of this form. If your agency's interests are "*Unaffected*", no further information is necessary. In all other cases, we would appreciate receiving additional information to substantiate your position and, if necessary, outline any conditions related to your position. Please note any legislation or official government policy which would affect our consideration of this Bylaw.

Kim Stockdill

(Signature)

Name: Kim Stockdill

Title: Island Planner

Contact Info: Tel: 250-405-5157
Email: kstockdill@islandstrust.bc.ca

PLEASE TURN OVER

This referral has been sent to the following agencies:

Federal Agencies

n/a

Regional Agencies

Capital Regional District – Building Inspection

Provincial Agencies

Ministry of Municipal Affairs & Housing
BC Assessment Authority
Ministry of Land, Water and Resource Stewardship – Crown Lease Branch
Ministry of Transportation & Infrastructure

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Penelakut Tribe
Semiahmoo First Nation
Snuneymuxw First Nation
Stz'uminus First Nation
Tsartlip First Nation
Tsawout First Nation
Tsawwassen First Nation
Tseycum First Nation
WSANEC Leadership Council

BYLAW REFERRAL FORM RESPONSE SUMMARY

☐

Approval Recommended for Reasons Outlined Below

☐

Approval Recommended Subject to Conditions Outlined Below

☐

Interests Unaffected by Bylaw

☐

Approval Not Recommended Due to Reason Outlined Below

North Pender Island Local Trust Area

(Island)

229

(Bylaw Number)

(Signature)

(Name and Title)

(Date)

(Agency)

PROPOSED

NORTH PENDER ISLAND LOCAL TRUST COMMITTEE BYLAW NO. 229

A BYLAW TO AMEND NORTH PENDER ISLAND LAND USE BYLAW NO. 224, 2022

The North Pender Island Local Trust Committee, being the Local Trust Committee having jurisdiction in respect of the North Pender Island Local Trust Area under the *Islands Trust Act*, enacts as follows:

1. Citation

This bylaw may be cited for all purposes as “North Pender Island Land Use Bylaw No. 224, 2022, Amendment No. 1, 2022”.

2. North Pender Island Local Trust Committee Bylaw No. 224, cited as “North Pender Island Land Use Bylaw No. 224, 2022,” is amended as follows:

2.1 Schedule “B” – Zoning Map, is amended by changing the zoning classification of:

- (1) a portion of Lot 1, Section 18, Pender Island, Cowichan District, Plan VIP59806 from Rural (R) to General Industrial (GI(e));
- (2) Lot 1, Section 23, Pender Island, Cowichan District, Plan 3658 from Commercial 1a (C1(a)) to Rural Residential 2 (RR2);
- (3) Lot 1, Section 23, Pender Island, Cowichan District, Plan VIP73194 from Commercial 1a (C1(a)) to Rural Residential 2 (RR2);
- (4) a portion of Lot 1, Sections 10 and 15, Pender Island, Cowichan District, Plan VIP59811 from Commercial 2f (C2(f)) to Rental Housing (RH); and
- (5) a portion of land northeast of Magic Lake from Rural Residential 1 (RR1) to Community Park 2 (CP2),

as shown on Plan Nos. 1, 2 3, and 4 attached to and forming part of this bylaw, and by making such alterations to Schedule “B” to Bylaw No. 224 as are required to effect these changes.

2.2 By adding the word “Agriculture” to Article 5.2(1)(c).

2.3 By adding the following a new site specific regulation to Table 5.10 in Subsection 5.10(12):

	Table 5.10		
	1	2	3
	Site-Specific Zone	Location Description	Site Specific Regulations

5	Gl(e)	Portion of Lot 1, Section 18, Pender Island, Cowichan District, Plan VIP59806	Despite Subsection 5.10(1), the only uses permitted in this location are: (a) <i>waste transfer facility</i> ; (b) commercial composting; (c) commercial recycling; and (d) Accessory storage of a maximum of five (5) motorized or non-motorized trucks; and five (5) construction containers.
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2.4 By adding the following to Section 5.13 'Rental Housing (RH) Zone':

"Permitted Uses

- (1) The following *uses* are permitted, subject to the regulations set out in this Section and the general regulations, and all other *uses* are prohibited:

- (a) *Multi-family rental dwelling*; and,
- (b) *Accessory uses, buildings and structures*.

Density

- (2) There may not be more than 16 *multiple-family rental dwelling units* per lot.

Siting and Size

- (3) No *building or structure* may exceed 9.7 metres in *height*.
- (4) The minimum *setback* for any *building or structure* shall be:
 - (a) 7.6 metres from any front or rear *lot line*;
 - (b) 3.0 metres from any interior side *lot line*; and,
 - (c) 4.5 metres from any exterior side *lot line*.
- (5) If a *lot line* adjoins the Agricultural (AG) Zone, the *setbacks* in respect of that *lot line* required by Subsection 5.13(4) must be increased by 3 metres.
- (6) *Lot coverage* may not exceed 25 percent.
- (7) The maximum *floor area* of a *multiple-family rental dwelling unit* must not exceed 93 m².

Conditions of Use

- (8) Every external storage area must be screened from view by a *landscape screen* complying with Subsection 3.9(1).
- (9) Every *multi-family rental dwelling* must be screened from adjacent residential *uses* along lot lines abutting *lots* zoned Rural Residential 1, Rural Residential 2, Rural, Rural Comprehensive 1, Rural Comprehensive 2 and Agricultural, complying with Subsection 3.9(2)

Subdivision Lot Area Requirements

- (10) No *lot* having an area less than 1.2 hectares may be created by subdivision in the Rental Housing Zone.”

- 2.5 By adding the following new article to Section 5.25 ‘Water 6 (W6) Zone’ and renumbering accordingly:

“5.25(1)(c) Community dock accessory to the upland community park use.”

- 2.6 By adding the following new subsection after Subsection 5.25(2) under the heading ‘Density’:

“(3) A maximum of one (1) community dock is permitted in the Water 6 Zone.”

3. SEVERABILITY

If any provision of this Bylaw is for any reason held to be invalid by a decision of any Court of competent jurisdiction, the invalid provision must be severed from the Bylaw and the decision that such provision is invalid must not affect the validity of the remaining provisions of the Bylaw.

READ A FIRST TIME THIS 26TH DAY OF MAY 2022.

PUBLIC HEARING HELD THIS _____ DAY OF _____ 20____

READ A SECOND TIME THIS _____ DAY OF _____ 20____

READ A THIRD TIME THIS _____ DAY OF _____ 20____

APPROVED BY THE EXECUTIVE COMMITTEE OF THE ISLANDS TRUST THIS _____ DAY OF _____ 20____

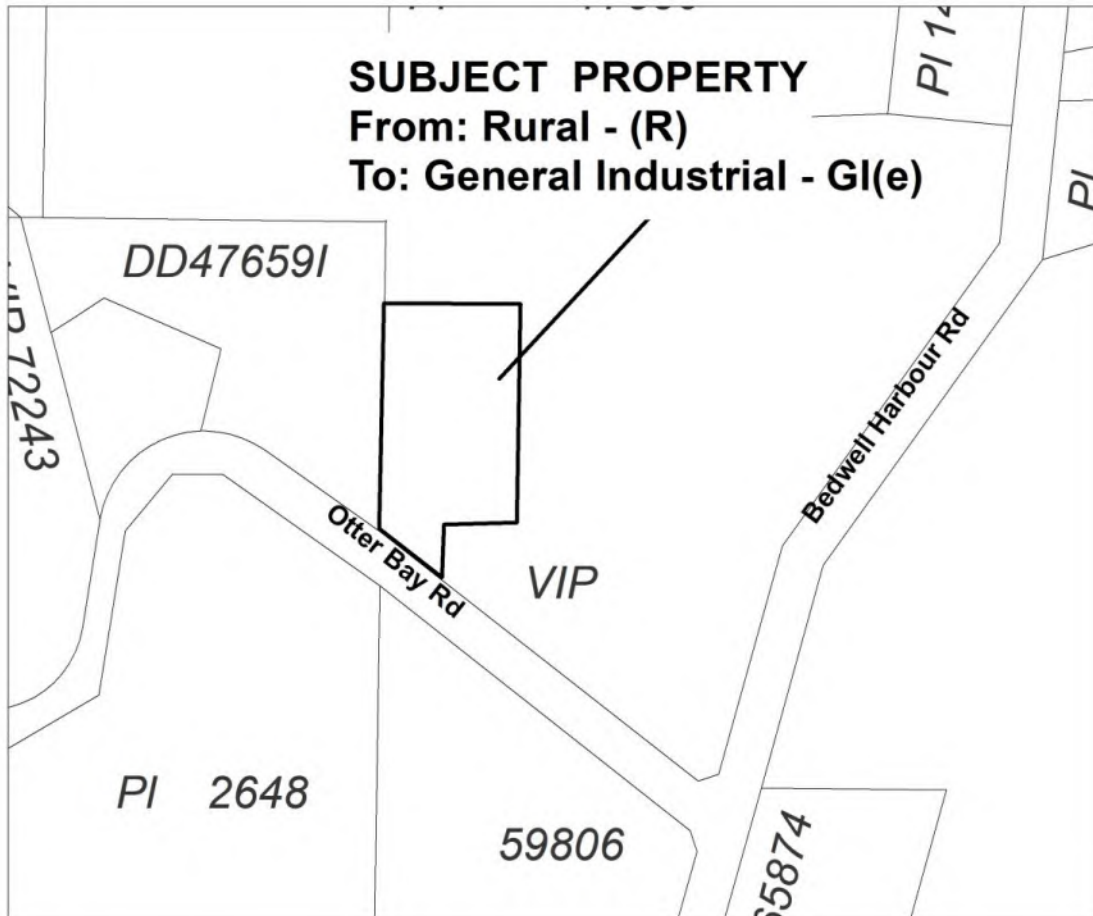
ADOPTED THIS _____ DAY OF _____ 20____

CHAIR

SECRETARY

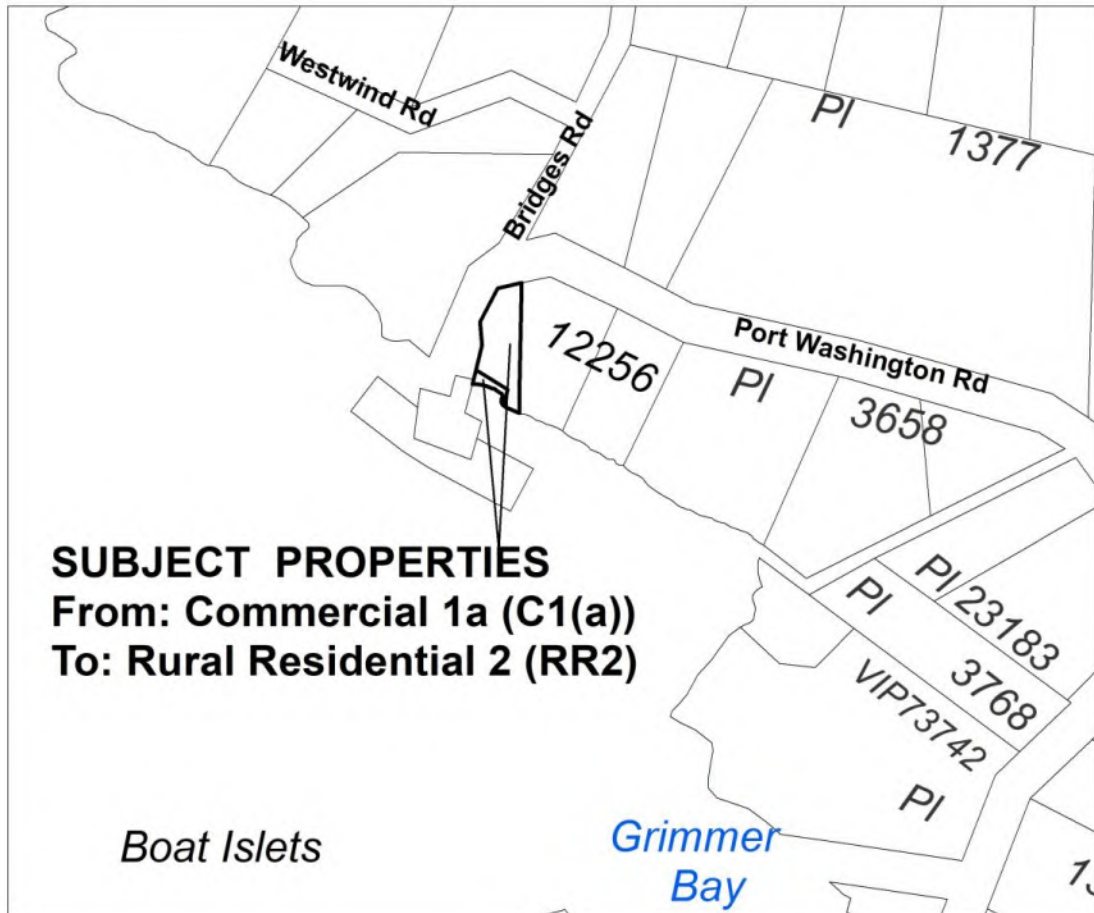
NORTH PENDER ISLAND LOCAL TRUST COMMITTEE
BYLAW NO. 229

Plan No. 1



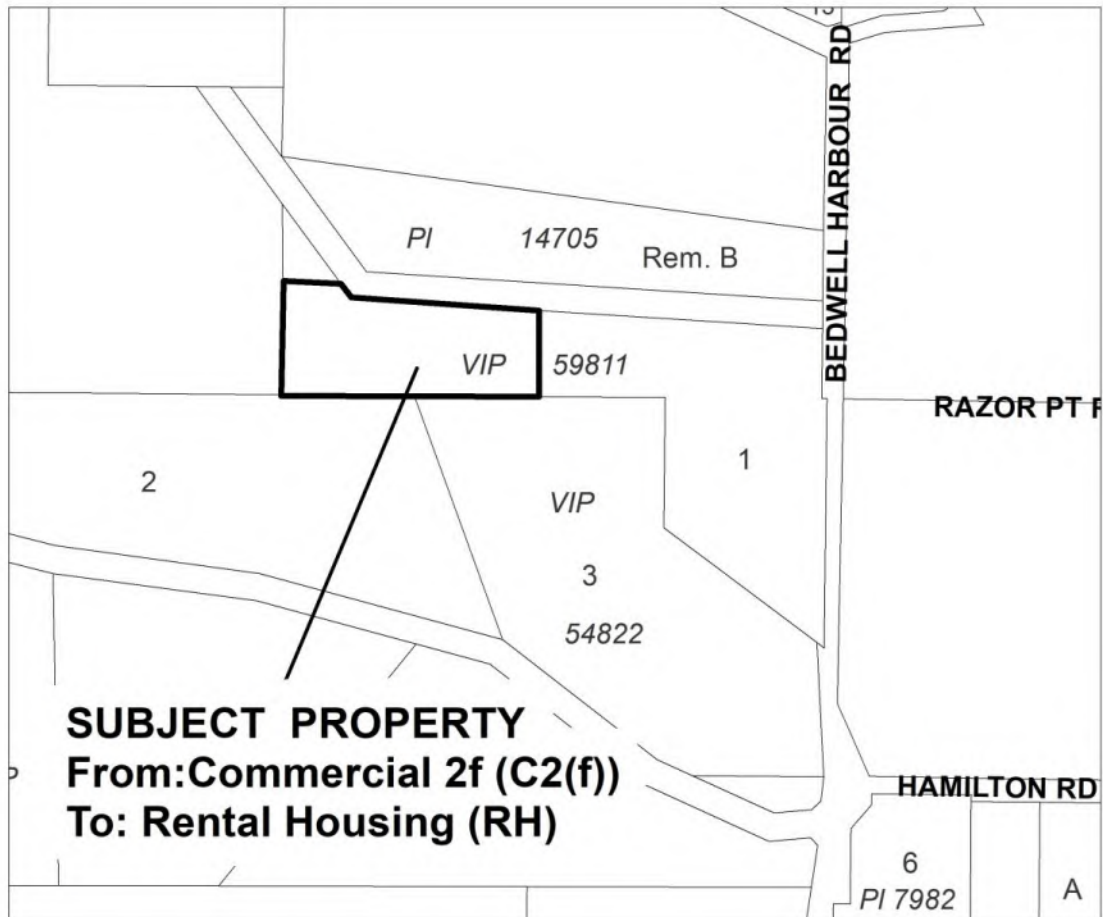
NORTH PENDER ISLAND LOCAL TRUST COMMITTEE
BYLAW NO. 229

Plan No. 2



NORTH PENDER ISLAND LOCAL TRUST COMMITTEE
BYLAW NO. 229

Plan No. 3



**NORTH PENDER ISLAND LOCAL TRUST COMMITTEE
BYLAW NO. 229**

Plan No. 4

