

## Community Emergency Preparedness Fund Disaster Risk Reduction – Climate Adaptation 2023/24 Application Worksheet

Please complete and return the worksheet with all required attachments by **March 28, 2024**. Applicants will be advised of the status of their application within 120 days of the application deadline.

All questions must be answered by typing directly in this form. **As all questions are reviewed and scored as part of the adjudication process, please do not leave any questions blank.**

If you have any questions, contact [cepf@ubcm.ca](mailto:cepf@ubcm.ca) or (604) 270-8226 ext. 220.

### SECTION 1: Primary Applicant Information

First Nation or Local Government full name: Capital Regional District	File number*: LGPS-10761
--	-----------------------------

*\*Refer to the LGPS Online Application Form submission confirmation email*

### SECTION 2: Detailed Project Information

**1. Type of Project.** Please identify each component you are applying for:

- Category 1: Foundational activities (risk mapping, risk assessments, planning)
- Category 2: Non-structural activities (non-physical such as land use planning, community education, purchase of eligible equipment)
- Category 3: Small scale structural activities

**2. Project Cost and Grant Request.**

- a) Total proposed grant request (provide grant request breakdown below): \$180,000.00
  - Category 1: \$150,000.00
  - Category 2: \$30,000.00
  - Category 3: \$0.00
- b) Does the proposed project include repairs and/or relocation of infrastructure that was damaged through an eligible DFA event? If yes, please provide more information.  
No

### 3. Project Area.

- a) Describe the proposed project area(s) (location, size, total number of people benefiting from this project, land use, etc.) for each proposed project included in this application.

Category 1 (Risk Assessment): Consolidated climate risk assessment for the Capital Regional District (CRD) (2,340 km<sup>2</sup>). Assessment focused on the three electoral areas of Juan de Fuca (5,500 residents), Salt Spring Island (11,600 residents), and the Southern Gulf Islands (6,100 residents) and the area served by CRD critical infrastructure operations supporting the 400,000+ residents of the region. Knowledge gained will be relevant for, and shared with, the 13 local governments within the capital region, as well as the 19 First Nations that maintain a traditional interest in the area. Intent is to incorporate traditional Indigenous knowledge with the additional goal of understanding how climate change could impact First Nations' cultural sites within the region. The data will also inform climate projections and emergency preparedness and business continuity planning for critical infrastructure operators in the region.

Category 2: (Water Conservation Signage) This project aims to bring water consumption awareness and the need for water conservation measures to our most vulnerable water systems in the electoral areas of the CRD, which includes the Southern Gulf Islands and the Juan de Fuca Electoral Area. The signage will have a similar look and feel to wildfire danger rating signage, with a moveable arrow to indicate what stage of water restriction the local water system is currently at. The total population of CRD Electoral Areas is approximately 23,267 residents (as per 2021 census), with significant increases in transient populations in the Spring and Summer due to high rates of tourism, particularly on Salt Spring Island.

Last year was the first year of a new water restrictions bylaw for the CRD Electoral Areas, Bylaw 4492. This new bylaw is distinct from the existing water restriction bylaw for the Regional Water Supply, Bylaw 4099. The need to create this new bylaw was in part driven by climate change, increased drought conditions, increased population growth in the electoral areas and the need to conserve water to ensure that there is enough drinking water to make it through the dry season. For context, many of our small systems cannot make it through the dry season and we are required to truck in drinking water. We had to do this for one of our 12 systems last year. The CRD is not the only water purveyor in the electoral areas, which created unnecessary confusion for communities about what stage of water restrictions were in effect. Last year, the CRD used small sandwich board signs in communities at key and high traffic areas to inform communities what stage of water restrictions were in effect. Feedback from communities was that the sandwich board signs were far too small and barely visible when driving past. The communities have asked for larger permanent signage that would help to clearly articulate the need for water conservation. This message is particularly critical for the high level of tourists who arrive in the Summer months, many of whom are not local and have no understanding of the dire drought conditions electoral areas face in the Summer. All signage is net new except for Pender Island where dated signage will be replaced with the new signage proposed in this project. Installing the same signage for each water system ensures that consistent branding and messaging is in place for all

electoral areas. There will be a total of 13 signs. Signs will be professionally fabricated and measure 2.5 x 2.5 feet and will be mounted to posts. All signs will be installed within the water system area (exact location TBD) or with a Memorandum of Understanding (MOU), signs may be installed outside of the water service area in higher traffic areas such as at or near ferry terminals. See attachment "Water Conservation Signage Info Package (UBCM - DRR-CA Grant 2024)" for a detailed work plan, budget, quotes, design proofs and maps of water service areas.

The QR code on the sign will take people directly to their small water system webpage which provides detailed information about current water restrictions, including watering schedules, tips and tricks for water conservation and bylaw and ticketing information related to Bylaw 4492. The webpages are a one stop shop for residents and tourists to learn about the water system, including where the water supply comes from, how the water is treated and distributed, and how to sign up for emergency communciations, such as boil water advisories.

*Map(s) indicating the location of the proposed project must be included with this application along with GPS coordinates.*

- b) Does the proposed project(s) build on other recent projects in your region? If yes, please explain. If referencing reports, please include the relevant page number(s).

Category 1: (Risk Assessment) – N/A

Category 2: (Water Conservation Signage) – N/A

- c) Are there previous emergency response costs that the proposed project(s) is designed to mitigate?

None

**4. Evidence and Rationale.** What is the evidence and rationale for undertaking the proposed project(s)? This may include evidence of how the local natural hazard and/or climate risk is being assessed through threat levels (e.g., as identified in completed risk assessments) and projected climate risks and/or recent history (e.g., evacuation order, disaster financial assistance).

For Category 2 or 3 projects, this may also include completed risk maps, assessments or plans, environmental impact analysis, design drawings or details, record of engagement with First Nations, asset management plan (including natural assets where applicable), projected climate risks, and/or letters of support (from provincial ministries, etc.).

Category 1: (Risk Assessment) – Rationale to apply for funding to conduct a consolidated climate risk assessment comes from two sources. In the first, the province’s passing of the *Emergency and Disaster Management Act (EDMA)* in December 2023 mandated that local authorities “prepare and maintain” risk assessments that considers “changes in the local climate or extreme weather events that can reasonably be expected to result from a changing global climate”. It is the Capital Regional District’s goal to comply with this mandate by meeting the spirit and intent of the legislation. The second driver to conduct a consolidated climate risk assessment comes from witnessing record breaking heat and cold events, atmospheric rivers, and unprecedented drought. The amplitude and

frequency of these events is increasing, we would like to understand how these changing events are likely to impact the CRD.

Category 2: (Water Conservation Signage) Rationale for project: As climate change continues, the need to be more judicious with resources also increases. The proposed signage will provide, clear, accurate, and timely information about water restrictions to communities. Seeing a large professionally made water conservation sign in community generally decreases water consumption. More and more smaller island communities have incorporated this type of signage in their community and have seen significant decreases in water consumption. The impact of such community signage was shared by various BC communities (many of whom were Vancouver Island communities) on the Provincial Drought Communication Coordination call last Summer, which the CRD participated in. This call was for all levels of government communication staff across the province to share ideas of how they are getting out the message of water conservation to their communities, what is working and what is not working in terms of altering human behavior in relation to water consumption.

Having CRD specific branded signage in communities will help to differentiate CRD water systems from other water systems and water purveyors in the electoral areas. Many people including tourists and some locals may be unaware of where their water is coming from, but seeing water conservation signage in communities drives home the generic messaging to conserve water regardless of who the water purveyor is. Most other water purveyors in the electoral areas draw from the same water sources as the CRD and most other purveyors do not have signage up in the community. This signage project would likely benefit customers outside of CRD water systems as most people adhere to safety or warning signage posted which would further increase general community awareness of the need to conserve water, regardless of who the water purveyor is.

Copies or extracts of the available evidence is required to be submitted with the application. Please indicate what documentation is being submitted *and provide a specific reference to the sections of documents that should be reviewed.*

Category 2: (Water Conservation Signage) - Refer to attached Water Conservation Info Package. All pages need to be reviewed.

## **5. Alignment with Intent of DRR-CA funding.**

- a) Describe how the proposed project(s) considers climate change in the project methodology and adapts to the impacts of climate change through the final deliverables.

Category 1: (Risk Assessment) The proposed project is directly attributed and related to the CRD's desire to understand how climate change is going to impact the region. A consolidated climate risk assessment will formalize emergency managers' anecdotal observations and identify forthcoming risks that have not presented any forewarning evidence. This assessment will inform critical infrastructure operations planning such as water, wastewater and solid waste for emergency and business continuity requirements under the *EDMA*.

Category 2a: (Water Conservation Signage) The proposed signage is a visual reminder for all community members and visitors of the urgent need to conserve

water during drought season. Our hope is that the signs would have a stronger impact on tourists, who are the group we are trying to target the most for behavioral changes. Tourism to the electoral areas is extremely high in the Summer months which creates a substantial strain on the water systems that are already struggling to keep up with supply for residents during the dry season. Visitors to the electoral areas would likely be unaware of the water needs of these smaller communities and would be more likely to conserve water if they saw prominent signage displayed in key areas of town, particularly at ferry terminals. We want drought awareness and water conservation to be the first message that visitors receive when they arrive in these communities. Prominent, permanent water conservation signage would achieve this goal. Additionally, permanent signage is a reminder to the community to conserve water year round and not just in the dry season. Small behavioral changes to water usage goes a long way to conserving the resources of these vulnerable water systems. The more people conserve water, the better their communities will fare during drought season. Higher adherence to water conservation measures means a lower risk of having to truck in drinking water to communities. As climate change continues to negatively impact the environment, causing longer, hotter and drier temperatures, permanent community signage is a visual reminder to all locals and visitors for the ongoing need to conserve water year round, despite what season it is and what is happening with the weather.

- b) How will the proposed project(s) lead to increased understanding of the social, cultural, and/or environmental impacts of natural hazards and/or climate-related risks?

Category 1: (Risk Assessment) This initiative's sole intent is to increase the CRD's understanding of the social and environmental impacts of natural hazards and climate-related risks. The consolidated climate risk assessment will incorporate current empirical data, climate change forecasts, and traditional Indigenous knowledge.

Category 2: (Water Conservation Signage) Permanent water conservation signage will help to alter human behavior. Well designed and strategically placed signs are effective communication tools for spreading a message. Water conservation is a continual and ever changing educational awareness need, particularly in the face of climate change and longer, hotter, drier Summers. Permanent community signage will help increase water conservation awareness year round. The more water that is conserved in each community, the less impacts of climate change will be felt within communities during drier months. Water conservation is a community effort that starts with community education and awareness of the need to conserve water and how to conserve water. Each sign will have a unique short URL and QR code related specifically to each water system where additional information on water conservation can be found. Each water system webpage also provides information on the current water restrictions, lawn watering schedules, water bylaws, and emergency communications, all of which will further increase community awareness and understanding of the need for water conservation and emergency preparedness year round.

- c) Will the proposed project(s) identify or achieve co-benefits (e.g., assessing multiple hazards, protecting valuable cultural assets, reducing greenhouse gas emissions, improving community health and wellbeing, enhancing biodiversity)?

Category 1: (Risk Assessment) The risk assessment the CRD is envisioning would very much assess multiple hazards, protecting valuable cultural assets, and improve community safety.

Category 2: (Water Conservation Signage) The proposed project is singular in nature and focuses on the need for water conservation year round. If people access the short URL or QR code on the sign, they will be taken directly to their water systems webpage. The webpage provides a significant amount of information and resources on water conservation. Additionally, the webpage also provides information about where the system's water source comes from and how the water is treated and distributed to users of the system. When people understand where their water comes from and the intricacies involved in providing high quality, potable drinking water they begin to make strong personal connections to how precious the water supply is and what they can do to protect the water system. Knowledge is power, the more educated people are about their water source, the more likely they are to change their behaviors to protect the water source and ensure that there is enough water to survive long dry summers and droughts. The webpage also provides information on how to sign up for CRD's emergency notification system which is an opt in system that informs users of critical life safety information related to emergencies. Users can sign up for alerts through SMS or email. In the case of water, boil water advisory (BWA) notifications are shared through the notification system. Many of the small water systems struggle with water quality issues year round due to high turbidity and algae blooms that are increasing with climate change. Some water systems require BWAs for several months at a time due to poor water quality. A simple water conservation sign which points users to a website they may not have known existed, could provide significant health and wellbeing benefits to an individual if they choose to register for the emergency notification system.

**6. Engagement with First Nations and/or Indigenous Organizations.** As noted in the Program Guide, engagement with First Nations and/or Indigenous organizations in advance of submission of the application is required. Please identify the specific bands, Treaty First Nations, and/or Indigenous organizations that were engaged in advance of submitting the application as well as the specific traditional territory, reserve or other First Nation's land that may be impacted by the proposed project(s).

- a) Which First Nations and/or Indigenous organizations were engaged as part of the development of this application?

Category 1: (Risk Assessment) First Nations in the CRD were consulted to participate on the development of the *EDMA* legislation. We have not engaged Nations in the preparation of this application as the CRD believes it must produce an updated climate risk assessment to comply with *EDMA* requirements regardless of First Nations capacity to contribute content and direction. Moreover, the CRD is actively working on how best to utilize the Indigenous Engagement Requirement

funds dispersed by Emergency Management and Climate Readiness (EMCR) for First Nations and local governments to collaborate on matters of emergency management.

Please see our entry in section 6a as a demonstration of how the CRD intends to proceed with First Nation engagement on this risk assessment initiative.

Category 2: (Water Conservation Signage) Bylaw 4492 does not apply to water not provided under a Water System operated by the CRD. Currently, there are no First Nations communities within the CRD Electoral Areas that are serviced by CRD water systems.

- b) Which First Nations and/or Indigenous organizations will participate in the proposed activities and what specific role will they play?

Category 1: (Risk Assessment)

The CRD Protective Services Division has consulted with the CRD Indigenous Engagement team and have utilized the provincial Profiles of Indigenous (PIP) data base, to assist identifying all the Nations that maintain a traditional interest in the region. The Nations the CRD intends to engage on matters of traditional knowledge and culturally significant sites are as follows:

paaʔčiidʔatx (Pacheedaht First Nation)

Scia'new First Nation

T'Sou-ke Nation

Cowichan Tribes

Halalt First Nation

Lyackson First Nation

Penelakut Tribe

sčəwaθən məsteyəx<sup>w</sup> (Tsawwassen)

Semiahmoo First Nation

Snuneymuxw First Nation

Stz'uminus First Nation

Ts'uubaa-asatx (Formerly Lake Cowichan)

Songhees Nation

x<sup>w</sup>sepsum (Esquimalt Nation)

BOKÉCEN (Pauquachin First Nation)

MÁLEXEŁ (Malahat First Nation)

SȚÁUTW (Tsawout First Nation)

ŪJOŁEŁP (Tsartlip First Nation)

ŪSIKEM (Tseycum First Nation)

Category 2: (Water Conservation Signage) None - There are no First Nations communities within the CRD Electoral Areas that are serviced by CRD water

systems. The hope is that CRD water conservation signage will encourage water conservation for the entire community including First Nations regardless of who the water purveyor is.

- c) Describe the specific traditional territory, reserve or other First Nation's land that may be impacted by the proposed project(s)

Category 1: (Risk Assessment) Defining the specific traditional territory each of the above Nations maintains a connection which is beyond the scope of this application.

The following Nations have reserve lands within the CRD:

paaʔčiidʔatx (Pacheedaht First Nation)

Scia'new First Nation

T'Sou-ke Nation

Songhees Nation

x<sup>w</sup>sepsum (Esquimalt Nation)

BOKÉCEN (Pauquachin First Nation)

SʔÁUTW (Tsawout First Nation)

WJOŁEŁP (Tsartlip First Nation)

WŚIKEM (Tseycum First Nation)

Category 2: (Water Conservation Signage) None - There are no First Nations communities within the CRD Electoral Areas that are serviced by CRD water systems.

- d) Indicate the extent to which staff and/or elected officials have undertaken Indigenous Cultural Safety and Cultural Humility Training

Category 1: (Risk Assessment) We cannot comment on the Cultural Safety and Cultural Humility training undertaken by elected officials.

CRD staff take in-house Cultural Perspectives training as part of their onboard training material. As well, the personnel from our partner local authorities have similar Cultural Safety and Cultural Humility training as part of their onboard orientation.

Category 2: (Water Conservation Signage) The CRD requires First Nations Cultural Safety and Humility Training for all staff. Staff who have not yet had a chance to take said training can connect with trained staff within the First Nations Relations department for guidance on anything First Nations related.

*If applicable, please submit evidence of support for the proposed activities from First Nations and/or Indigenous organizations identified above. This could be in the form of a letter, email, or other correspondence.*



## 7. Comprehensive and Cooperative Approach.

- a) Identify any partners (e.g., local governments, equity organizations, agricultural sector, critical infrastructure owners) that will participate in the proposed project and the specific role they will play.

Category 1: (Risk Assessment) The exact scope of local government partner participation is yet to be determined. We anticipate having CRD Emergency Programs personnel manage the risk assessment project with a contractor conducting partner facilitation, information synthesis, and report writing. CRD owned critical infrastructure operations (water, wastewater, solid waste, etc.) will be engaged as part of the process as they will be an end user of the resulting report. Partner local governments and First Nations will be invited to participate in risk brainstorming sessions as a means to crowd-source all the nuance of risks and hazards facing the region.

Category 2: (Water Conservation Signage) Signs will be fabricated and installed by a third party company called Signpad. Installations and community interactions around signage installs will be managed by CRD staff.

- b) Describe how the proposed project will contribute to a comprehensive, cooperative, and regional approach to disaster risk reduction-climate adaptation.

Category 1: (Risk Assessment) This project contributes to a comprehensive, cooperative, and regional approach to disaster risk reduction-climate adaptation primarily in the vastness and variability of the geographic area under consideration. Secondly, while the CRD's mandated emergency management focus is on the three electoral areas of Juan de Fuca, Salt Spring Island, and Southern Gulf Islands, and for our critical infrastructure services, it is our objective to consult with our neighbouring jurisdictions and share the information discovered with this initiative. We would expect the geoclimatic zone to be consistent across the CRD such that climate related information would be transferrable.

Category 2: (Water Conservation Signage) Having professional permanent water conservation signage within communities that are deemed vulnerable due to unstable water systems will significantly improve the availability of water to said water systems. Signage includes a weblink and QR code that link to the local CRD water system webpage which provides a plethora of water conservation information and additional information about the water system. As residents and visitors educate themselves about where their water comes from and how to simply and effectively conserve water, overall water consumption is expected to lower. Lower water consumption during drought season means that there is more water available for life safety issues such as wildfires and maintaining a healthy drinking water supply. Higher rates of water conservation during the Summer months substantially lowers the risk of having to truck in drinking water. Water conservation signs are becoming the norm in smaller communities and communities with vulnerable water supplies, this is particularly true for Vancouver Island communities. Similar water conservation signage to what is being proposed in this grant application already exists in Tofino, Comox Valley Regional District, Parksville, and Campbell River. While none of these communities are part of the CRD, the message is clear, water conservation is

everyone's responsibility, no matter where you travel. Water conservation messaging leads to behavioral changes in water use for many people. Once water conservation behaviors become second nature, people are more likely to employ conservation measures wherever they travel. The more people that reduce their water consumption, the more water will be available during drought months or unexpected climate change incidents that may adversely impact water supplies.

- c) Describe how diverse populations, including equity-denied populations, will be involved or benefit from this project (e.g., engagement considers non-English speaking populations, DRR-CA measures benefit equity-denied populations).

Category 1: (Risk Assessment) The intent of this consolidated climate risk assessment is anticipated to benefit all residents and visitors to the CRD. A supplemental benefit to the diverse populations, including equity-denied populations of the area would be the realization that forecast, climate change-driven extreme temperatures could exceed the heating and cooling capabilities of residential living areas and identify the need to aggressively pursue local government led warming or cooling solutions. This is pure speculation at this point, but we hope that an updated climate risk assessment will clarify for the CRD that we are either on the right track and have adequately planned for the future or that we are going to be grossly underprepared in our current state of readiness.

Category 2: (Water Conservation Signage) Signage has been thoughtfully designed to be as inclusive as possible. Signage utilizes a universal stop light colour palette of green, amber (yellow), and red to indicate danger ratings and water availability levels. Orange has been added to the stop light colour palette to allow for the three stages of water conservation the CRD has. Green indicates no water restrictions, amber (yellow) indicates moderate restrictions, orange indicates high restrictions, and red indicates extreme water restrictions. If a person is colour blind, they can read the words within each colour that indicate the degree of water restriction in effect. If a person does not speak English they can rely on the colours on the sign or the scale moving from left to right (no restrictions to highest level of restrictions). Numbers are also used on the sign to indicate the severity rating of water restrictions. Numbers are universal and when utilized in a linear scale are generally assumed to mean that the higher the number the worse the situation is. For those with visual impairment, the QR code can be scanned which will link to the water system webpage that can be read with a screen reader or other adaptive technologies. The addition of other visual elements such as a raindrop to indicate the sign is referring to water will also be considered in the final design to increase accessibility for people with low literacy or people who do not speak English.

*If applicable, please submit evidence of support for the proposed activities from partners identified above. This could be in the form of a letter, email or other correspondence.*

- 8. Qualified Professionals.** Disaster risk reduction-climate adaptation activities can require specialized technical knowledge and experience to provide meaningful results to your community. If applicable, please outline your procurement process to engage the

necessary subject matter expertise (Qualified Professionals) required for the proposed project(s) and the criteria you will use to make the selection.

Category 1: (Risk Assessment) As emergency managers, we do not consider ourselves experts in the field of climate change. Our first objective in this new risk assessment initiative is to consult with the CRD's own in-house Climate Action team to glean their advice on scoping the project and who we ought to consult. We fully anticipate procuring the services of contractors that specialize in climate adaptation and risk assessment.

The CRD's procurement process is a standard tender-based system in that we would launch this initiative with a request for quote (RFQ) via a bid-based procurement process. Selection of the appropriate vendor would rest on the bidder's ability to demonstrate they could meet the terms of the project at a competitive price.

Category 2: (Water Conservation Signage) N/A. No technical experts need to be consulted for this project. Signs will be fabricated and installed by a third party company called Signpad. Installations and community interactions around signage installs will be managed by CRD staff.

### **SECTION 3: CATEGORY 1 – Detailed Project Information**

*Only complete this section if you are applying for a project under Category 1: Foundational Activities. If this project includes flood risk mapping, confirm that you have contacted EMCR in advance of submitting the application and provide the date and contact person:*

We have contacted EMCR: NA

**9. Proposed Category 1 Activities.** What specific activities will be undertaken as part of the proposed project? Please refer to Section 6 of the *Program and Application Guide* for eligibility and note that activities must align with the required workplan and budget.

This proposed initiative endeavours to integrate information from multiple sources and disciplines (e.g., empirical data, research-based climate change forecasts, traditional Indigenous knowledge, etc.) to identify the natural hazard and climate related risk profile that the CRD will face into the reasonably foreseeable future. This renewed risk-oriented dataset will feed into the CRD's phased approach to re-draft its comprehensive emergency management plans.

### **10. Proposed Deliverables and Outcomes.**

a) What specific deliverables will result from this project?

A direct outcome from this endeavour is a risk assessment product that either supports the CRD's current effort and decisions on matters of emergency management, or exposes future vulnerability that we can adapt our approach to mitigate. The ultimate deliverable would be a well informed CRD Protective Services Division and critical infrastructure operations that are responsive to future threats as opposed to reactive in the face of a radically changing climate.

- b) If applicable, how does this project address and/or inform existing or future amendments to local plans, policies, building codes, floodplain zoning bylaws, and/or public awareness/education?

The intent of this renewed risk assessment is to establish a comprehensive and anchored foundation from which to build emergency plans that address the climate hazards of the future. In addition to informing the CRD's Protective Services Division and critical infrastructure operations, we anticipate a consolidated risk assessment could inform future infrastructure projects or CRD Bylaws if it exposes a previously unforeseen vulnerability (e.g., protracted drought in combination with increased extreme heat event frequency).

#### **SECTION 4: CATEGORY 2 – Detailed Project Information**

*Only complete this section if you are applying for a project under Category 2: Non-Structural Projects*

- 11. Proposed Category 2 Activities.** What specific activities will be undertaken as part of the proposed project? Please refer to Section 6 of the *Program & Application Guide* for eligibility and note that activities must align with the required workplan and budget.

Fabrication and installation of community centric water conservation signage. CRD staff will oversee the installation of signs and manage community engagement and communications around sign installations.

**12. Proposed Deliverables & Outcomes.**

- a) What specific deliverables will result from this project?

Professional fabricated water conservation signage

- b) If applicable, how does this project address and/or inform existing or future amendments to local plans, policies, building codes, floodplain zoning bylaws, and/or public awareness/education?

Water conservation measures are here to stay. Even if specific amendments are made to Bylaw 4492 there will always be stages of water conservation that communities must abide by. The longer the signs are up in a community the more impactful they will be and with time, we are expecting to see tangible behavioral pattern shifts in the way people use water. Permanent water conservation signage will encourage residents and visitors to reduce their water consumption year round which will support current and future water needs for communities during climate crises.

- 13. Monitoring & Performance Measures.** Describe how the project will be monitored and what performance measurements will be used (e.g., work progress reports, timeline review, resource planning, procurement plan and roll out).

The success of this project will be measured by community feedback and reviews of real time water usage data. The CRD uses SCADA software to monitor the health and operational needs of its water systems. Usage rate data can be extracted from SCADA and analyzed to track water consumption trends. In theory, professional water

conservation signage should drive users of the system to consume less water. According to the Provincial Drought Communications call that the CRD attended last Summer, similar signs to the ones proposed in this project were successful in decreasing community water consumption. To a much lesser degree, any media coverage of the community signs can also be analyzed as to the success or failure of the project. The ongoing maintenance of the signs will be the responsibility of the CRD.

## **SECTION 5: CATEGORY 3 – Detailed Project Information**

*Only complete this section if you are applying for a project under Category 3: Small-Scale Structural Projects*

### **14. Proposed Category 3 Activities.**

- a) What specific activities will be undertaken as part of the proposed project? Include key activities and steps that will be taken to complete the project.

*Refer to Section 6 of the Program & Application Guide for eligibility and note that activities must align with the required work plan and budget.*

- b) Have discussions taken place with applicable agencies to prepare for all required permits and regulatory approvals? Have the required approvals, authorizations and permits to complete the proposed project been applied for or received?
- c) How do you intend to ensure the project is completed to provincial and federal standards?
- d) List any potential implementation risks that may impact your ability to deliver on the project and explain what mitigation measures are in place to address them (e.g., staff capacity, procurement, severe weather, permitting (DMA, WSA, DFO), in-stream works fishery window, Land Right of Way requirements).
- e) How will the project be developed and constructed to ensure that project risk is not increased, or transferred, to any parties or to the environment (e.g., transfer of flood risk downstream, destruction of fish habitat, introduction of pollutants to the environment).

### **15. Evidence of Completed Foundational Activities.**

Describe the risk assessment process, options assessment (e.g., structural and non-structural, benefit cost analysis) and engagement process that was utilized to determine the proposed project.

*Copies or extracts of the available evidence is required to be submitted with the application. Please indicate what documentation is being submitted and provide a specific reference to the sections of documents that should be reviewed.*

**16. Asset Management.** Project sustainability and lifecycle costing are important considerations for structural mitigation projects. Many organizations have implemented asset management practices consistent with [Asset Management for Sustainable Service Delivery: A BC Framework](#).

Outline any ongoing asset management / lifecycle maintenance considerations for the project, and how these will be addressed as part of your organization's asset management framework (at a minimum please include details on ownership, lifetime, operation and maintenance, and budgets).

**17. Proposed Outcomes.** For each of the following, please describe the extent to which the proposed project will:

- a) Prevent, eliminate, or reduce the impacts of hazards through construction of disaster risk reduction-climate adaptation works.
- b) Reduce disaster-related financial liabilities (e.g., history or likelihood of future Disaster Financial Assistance (DFA) claims).

**18. Monitoring & Performance Measures.** Describe how the project will be monitored and what performance measurements will be used (e.g., work progress reports, timeline review, resource planning, procurement plan and roll out, etc.).

## **SECTION 6: Required Attachments**

Only complete applications will be considered for funding.

The following separate attachments are required to be submitted as part of the application:

- Band Council resolution, Treaty First Nation resolution, or local government Council or Board resolution indicating support for the current proposed activities and willingness to provide overall grant management.
- Detailed work plan that includes a breakdown of work activities, tasks, deliverables or products, resources, timelines (start and end dates), and other considerations or comments.
- Detailed budget that indicates the proposed expenditures from CEPF and aligns with the proposed activities outlined in the Application Worksheet. Although additional funding or support is not required, any other grant funding or in-kind contributions must be identified. Applicants are encouraged to use the new [LGPS Budget and Financial Summary Tool](#).
- Map(s) indicating the location of the proposed project(s).
- If applicable, copies of any relevant documents that support the rationale for this project must be included with this application.
- For regional projects only: Band Council resolution, Treaty First Nation resolution, or local government Council or Board resolution from each sub-applicant that clearly states their approval for the primary applicant to apply for, receive, and manage the grant funding on their behalf. Resolutions from partnering applicants must include this language.

**SECTION 7: Signature** This worksheet is required to be signed by an authorized representative of the applicant (*i.e., staff member or elected official*). Please note all application materials will be shared with the Province of BC.

I certify that to the best of my knowledge: (1) all information is accurate, (2) the area covered by the proposed project is within the applicant's jurisdiction (or appropriate approvals are in place) and (3) it is understood that this project may be subject to a compliance audit under the program.

Name: Corey Anderson

Title: Manager, Emergency Programs

Signature\*:

Date: March 28, 2024

*\*An original or certified digital signature is required.*

**Documents should be submitted as Word, Excel, or PDF files. Total file size for email attachments cannot exceed 20 MB.**

All documents should be submitted to Local Government Program Services,  
Union of BC Municipalities by e-mail: [cepf@ubcm.ca](mailto:cepf@ubcm.ca).  
Please note “2024 DRR-CA” in the subject line.



## Detailed Workplan:

### Consolidated Climate Risk Assessment Workplan

**Duration:** 24 months

**Objective:** Conduct a consolidated climate risk assessment to identify, evaluate, and prioritize risks associated with climate change for the Capital Regional District.

#### Phase 1: Preparation (Months 1-3)

1. Project Initiation
  - Define project scope, objectives, and deliverables.
  - Establish project team roles and responsibilities.
  - Kick-off meeting with interest holders, including First Nations representatives.
2. Interest Holder Engagement
  - Identify key interest holders.
  - Conduct interest holder analysis.
  - Plan and conduct consultation workshops with interest holders, including respectful collaboration with First Nations communities.
3. Data Collection and Review
  - Identify relevant data sources (e.g., climate data, socio-economic data, infrastructure data).
  - Gather historical climate data for the region including traditional Indigenous knowledge.
  - Review existing risk assessments and reports.

#### Phase 2: Risk Identification (Months 4-7)

1. Climate Hazard Identification
  - Identify and assess potential climate hazards (e.g., extreme weather events, sea-level rise, temperature changes).
  - Analyze historical climate trends and projections.
2. Vulnerability Assessment
  - Identify vulnerable sectors, populations, and infrastructure.
  - Assess the exposure and sensitivity of assets to climate hazards.
3. Risk Mapping
  - Develop visualization products for climate risks and vulnerabilities.
  - Integrate hazard, exposure, and vulnerability data.

#### Phase 3: Risk Evaluation (Months 8-14)

1. Quantitative Risk Assessment
  - Develop quantitative models to assess the likelihood and impact of climate risks.
  - Estimate potential economic losses and damages.
2. Qualitative Risk Assessment
  - Conduct expert workshops to evaluate non-quantifiable risks and uncertainties.
  - Identify potential cascading effects and interdependencies.
3. Prioritization of Risks
  - Develop criteria for risk prioritization.
  - Prioritize climate risks based on their severity, likelihood, and consequences.

#### Phase 4: Reporting and Implementation (Months 15-20)

1. Finalize Climate Risk Assessment Report
  - Compile all findings, analyses, and recommendations into a comprehensive report.
  - Review and finalize the report with input from interest holders, including First Nations representatives.
2. Dissemination of Results
  - Present key findings and recommendations to decision-makers and interest holders, including First Nations communities.
  - Publish the report and share it with relevant agencies and organizations.
3. Monitoring and Evaluation
  - Develop a monitoring and evaluation framework to track the implementation of adaptation measures.
  - Establish mechanisms for regular review and updates of the risk assessment.

**Conclusion:** This detailed workplan outlines the activities and timeline for conducting a consolidated climate risk assessment over a 24-month period (4 months built in for contingency), with a focus on respectful collaboration with First Nations communities and engagement with all interest holders. Our structured approach to identify, evaluate, and prioritize climate risks, will build resilience to climate change impacts while honoring the perspectives and contributions of diverse interest holders.

<b>Proposed 2024 UBCM DRR-CA Budget</b>					
	Budgeted	Actual	Difference	Notes	
<i>Administration</i>					
Internal Staff Grant Administration	\$ 15,000.00		0%		
<i>Collaboration Facilitation</i>					
First Nation Consultation	\$ 5,000.00		0%		
Local Government/Multi-jurisdictional Consultation	\$ 3,000.00		0%		
Subject Matter Expertise	\$ 15,000.00		0%		
<i>Contractor Services</i>					
Project Contractor	\$ 112,000.00		0%		
Total	\$ 150,000.00	\$ -	0%		

# Work Plan & Budget

## Water Conservation Signage

Capital Regional District | Category 2 – UBCM - DRR-CA 2023/24

### Work Plan

The work plan for this project is quite simple. Once funding is approved for the project, the vendor (Signpad) can begin fabrication of the signage which is estimated to take approximately 30 days. Once fabrication is completed, installation of signage is estimated to take 15-30 days. Since the majority of the signage will be installed on the Southern Gulf Islands, travel to and from the smaller islands is dependent on staff availability to travel and ferry schedules, therefore install times may exceed 30 days. The total length of time for this project is estimated at 90 days, allocated as follows, 60 days for the fabrication and installation of signage and an additional 30 days added for contingency time should unexpected delays occur during the project.

### Budget

The estimated budget for this project is \$30,000. A quote from the vendor (Signpad) for the signage is estimated at \$19,260.15, the quote includes the cost for fabrication and installation of all 13 signs. The quote provided is dated September 2023 and the actual cost of the signage may increase due to higher material costs in 2024. Please note the quote was obtained last Summer as the CRD was hoping to have EMCR cover the cost of permanent water conservation signage through their expense authorization process but were denied and told to pursue UBCM grant funding for the project instead. A phone call with Signpad on March 28, 2024 indicated that material costs are expected to increase by 3-5% beginning in April 2024. The additional \$10,000 is allocated for staff administration time related to project management and communications for the project, travel expenses and a small contingency fund of \$3,000 - \$4,000 should any unexpected expenses arise related to the project.

The Sign Pad  
 103-2675 Wilfert Road Victoria, British Columbia V9B 6M3  
 office@thesignpad.com  
 (250) 590-7785



HST/GST #: 875297509 RT0001  
 www.thesignpad.com

# Quote 5214

## Water Conservation Signage

QUOTE DATE  
 Thu, 09/21/2023  
 QUOTE EXPIRY DATE  
 Sat, 10/21/2023  
 TERMS  
 Due on receipt

ORDERED BY  
 CRD

CONTACT INFO  
 Monique Booth  
 mbooth@crd.bc.ca  
 (250) 360-3165

#	ITEM	QTY	UOM	U.PRICE	TOTAL (EXCL. TAX)	TAX	TAXABLE
1	<b>QTY 13 - 1/4" thick Alupanel signs</b> Sized at 48" wide x 32" tall CNC to to size with drill / dwell holes to accept slotted bolt through for adjustable arrow Long term gloss UV overlamine applied to signs for long term duration Includes 6mm CNC routed sign with cnc routed arrow and push-thru peg Includes heavy duty angle supports on back-premounted into 4x4 treated lumber Lumber to be painted white or black to match sign struture.	13	Unit	\$516.00	\$6,708.00	\$335.40	Y
2	<b>Installation</b> Installation at the following locations Includes travel, ferry time Includes concrete in place footers. Dig footers and set in place.	13	Unit	\$895.00	\$11,635.00	\$581.75	Y

- SSI (five signs)
- Saturna (one)
- Pender (two)
- Port Renfrew (one)
- Mayne (two)
- Galiano (one)
- Metchosin/Sooke (one)

*This handcrafted quote is based on the specific information you've given us and is valid for 30 days.*

When you approve this quote, you are agreeing to pay 100% of the quoted price. We require a 50% deposit to begin work on your project. Once we receive your deposit, we'll schedule your project and email you an estimated completion date. The remaining balance is due upon completion of your order.

**Need to make that changes?**

No problem - but please realize, changes to quantity or specifications will affect your price. We will provide you with an updated quote based on the changes.

<b>Subtotal:</b>	<b>\$18,343.00</b>
<b>Sales Tax:</b>	<b>\$917.15</b>
<b>Total:</b>	<b>\$19,260.15</b>

## Tax Totals

<b>G(5.0%)</b>	<b>\$917.15</b>
----------------	-----------------

**SIGNATURE:**

**DATE:**

# WATER RESTRICTIONS

## Magic Lake Estates

**No  
Restrictions**

**Stage 1  
MODERATE**

**Stage 2  
HIGH**

**Stage 3  
EXTREME**

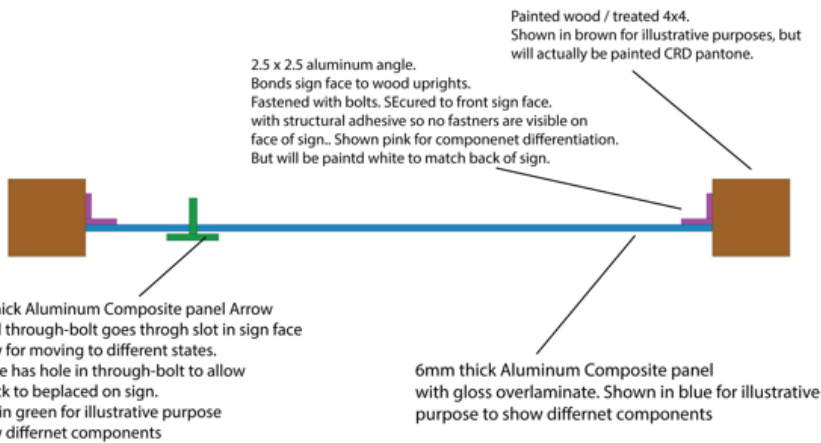
**Please conserve water every day!**

More info: [www.crd.bc.ca/magiclake-ws](http://www.crd.bc.ca/magiclake-ws)





4x4 treated Posts-  
Paint CRD blue.  
Exterior Grade - satin finish



Date:   
 Job #:   
 Artist:

Client: CRD  
 Project: Water restriction signage  
 Page:

**READ BEFORE APPROVING**

Please carefully review your proof for any errors in spelling, grammar, size, quantity or other job details.

All artwork is copyright property of The Signpad, and may not be duplicated or reproduced without prior consent.

Color shown on your screen or printer may not be accurate. If you have specific color requirements, please let us know so printed samples can be prepared before final production.

Your **everything** team.



# Beddis Water System



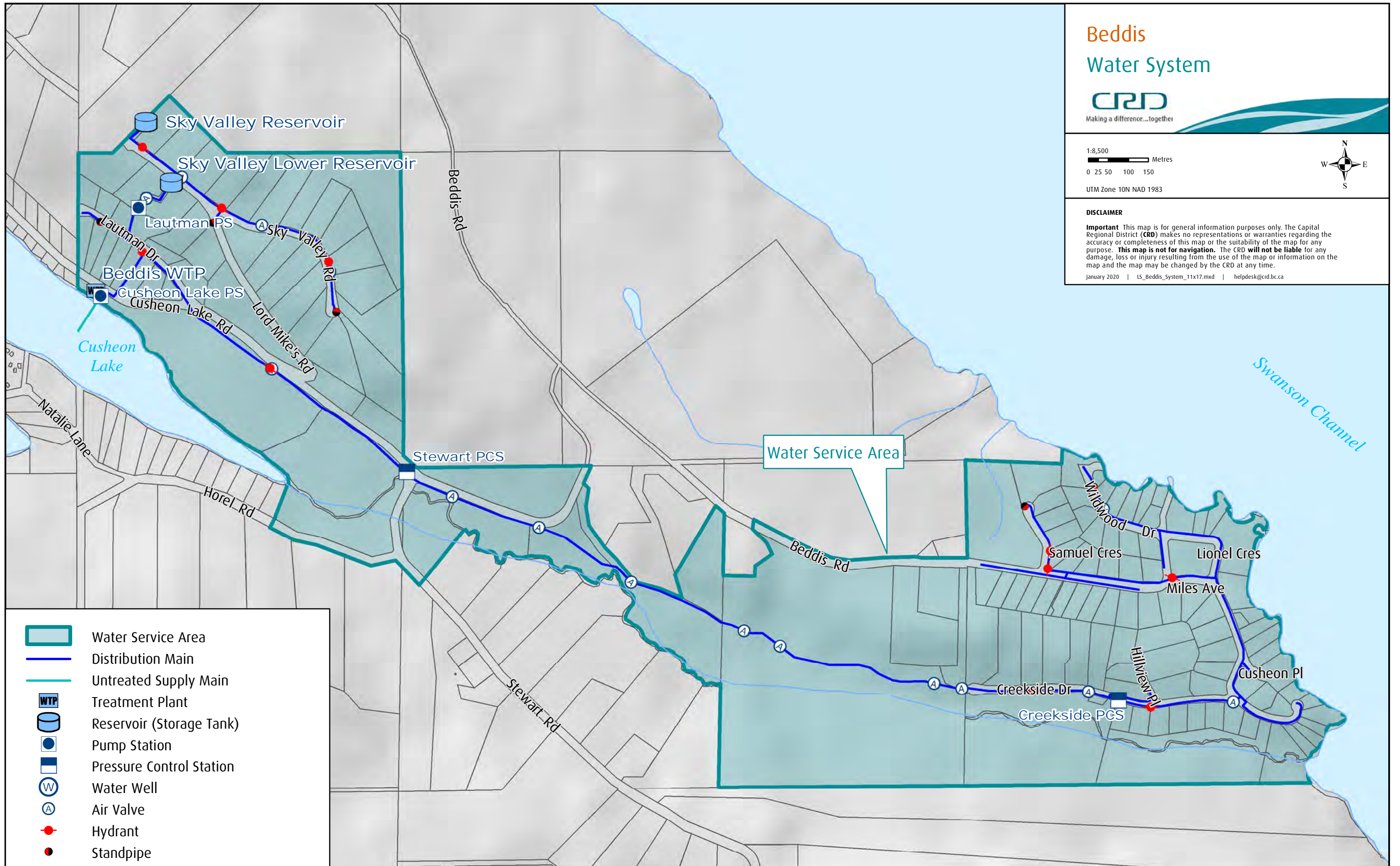
1:8,500  
 0 25 50 100 150 Metres  
 UTM Zone 10N NAD 1983



### DISCLAIMER

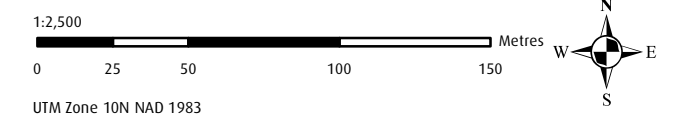
**Important** This map is for general information purposes only. The Capital Regional District (CRD) makes no representations or warranties regarding the accuracy or completeness of this map or the suitability of the map for any purpose. **This map is not for navigation.** The CRD **will not be liable** for any damage, loss or injury resulting from the use of the map or information on the map and the map may be changed by the CRD at any time.

January 2020 | LS\_Beddis\_System\_11x17.mxd | helpdesk@crd.bc.ca



- Water Service Area
- Distribution Main
- Untreated Supply Main
- Treatment Plant
- Reservoir (Storage Tank)
- Pump Station
- Pressure Control Station
- Water Well
- Air Valve
- Hydrant
- Standpipe

# Cedar Lane Water System

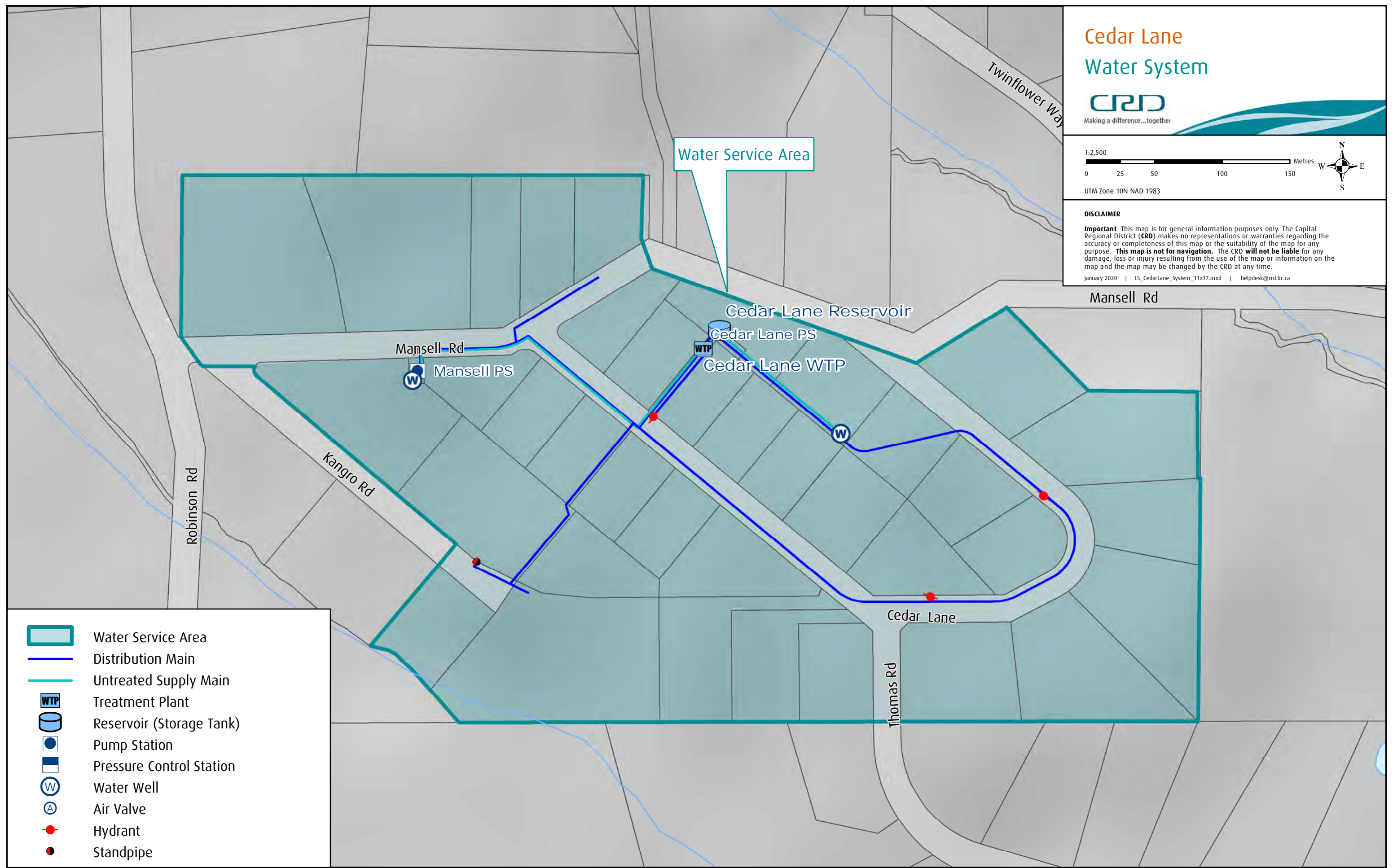


UTM Zone 10N NAD 1983












**DISCLAIMER**

**Important** This map is for general information purposes only. The Capital Regional District (CRD) makes no representations or warranties regarding the accuracy or completeness of this map or the suitability of the map for any purpose. **This map is not for navigation.** The CRD **will not be liable** for any damage, loss or injury resulting from the use of the map or information on the map and the map may be changed by the CRD at any time.

January 2020 | LS\_CedarLane\_System\_11x17.mxd | helpdesk@crd.bc.ca



Water Service Area

-  Water Service Area
-  Distribution Main
-  Untreated Supply Main
-  Treatment Plant
-  Reservoir (Storage Tank)
-  Pump Station
-  Pressure Control Station
-  Water Well
-  Air Valve
-  Hydrant
-  Standpipe

# Cedars of Tuam Water System



1:2,500

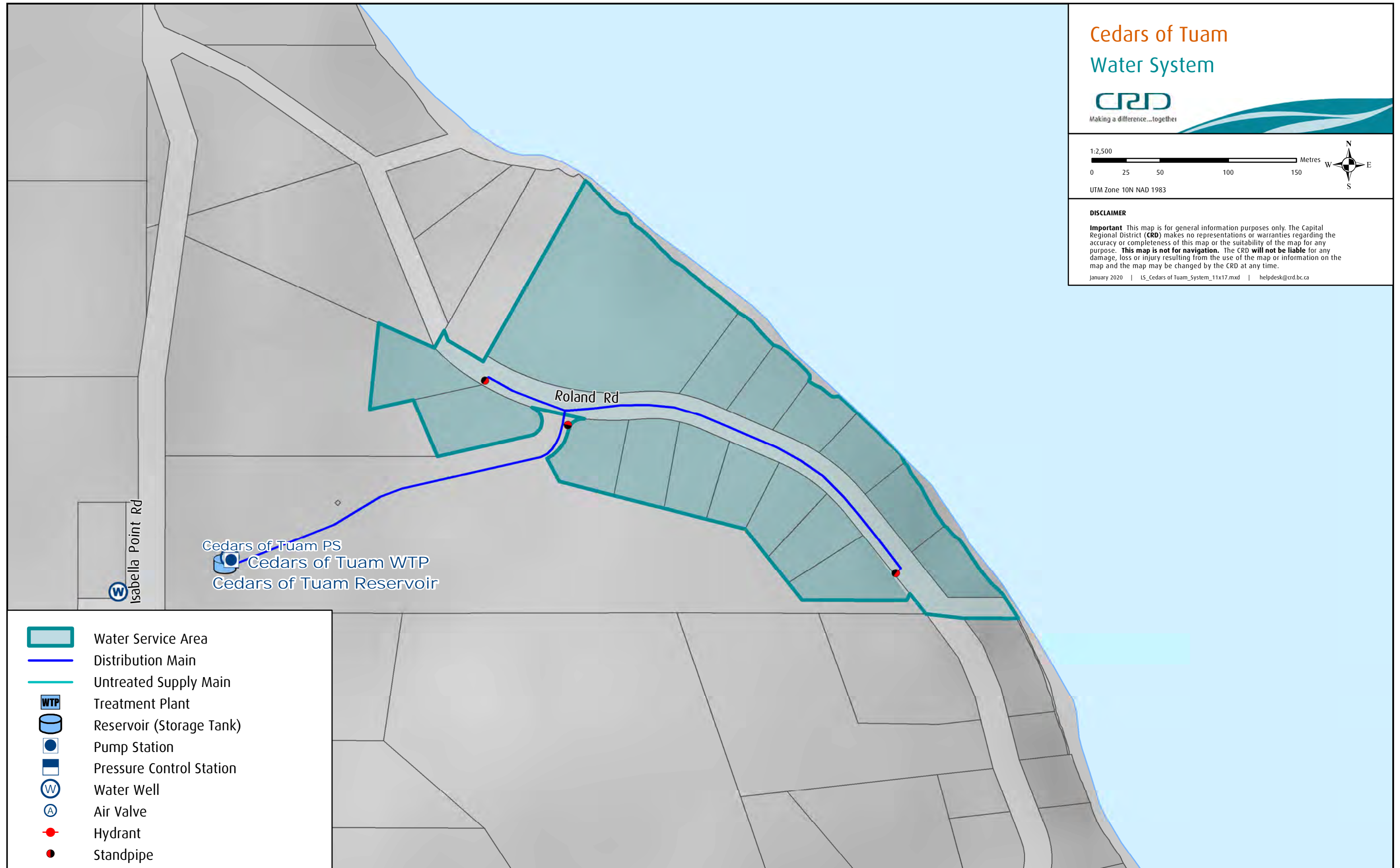


UTM Zone 10N NAD 1983

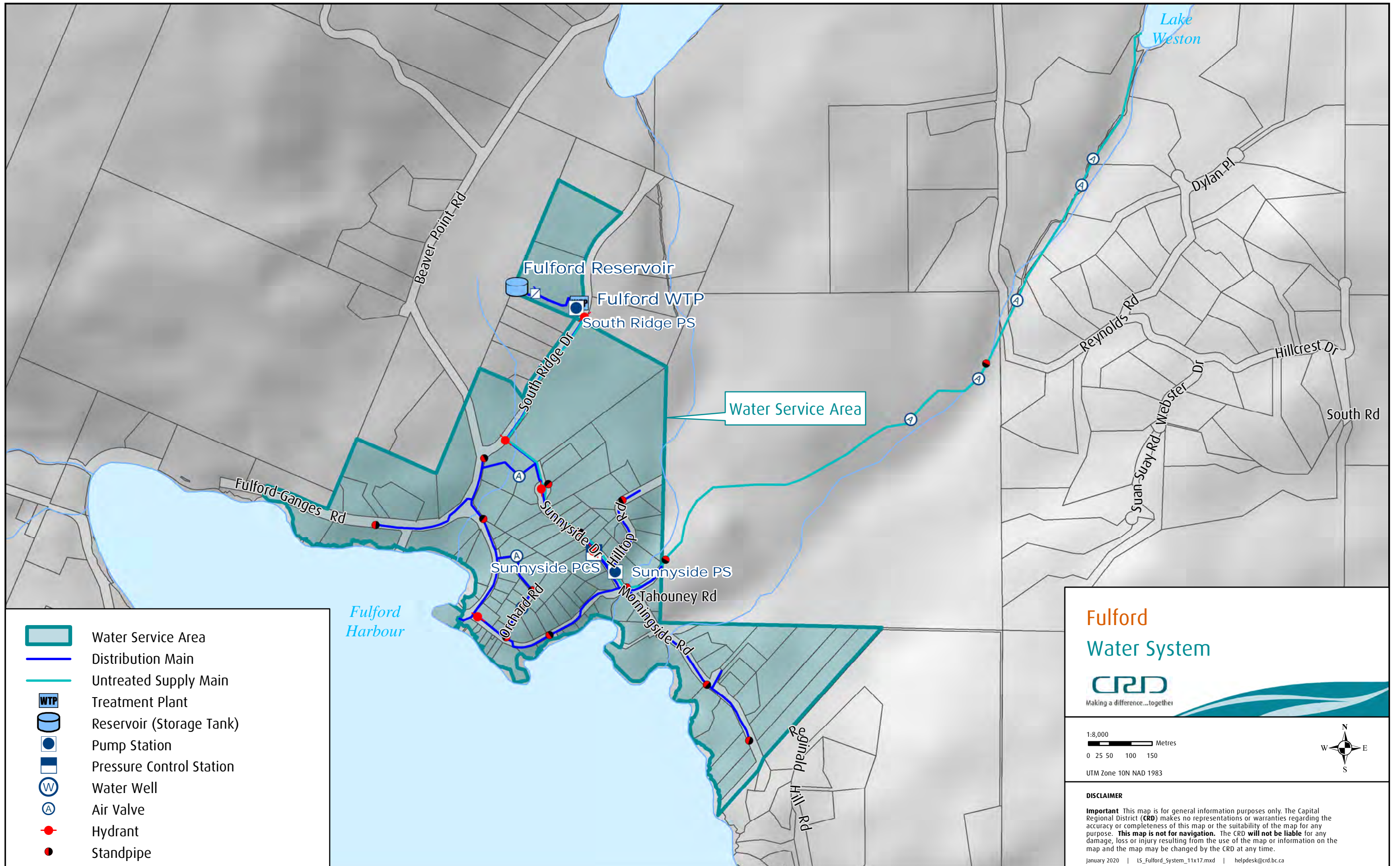
### DISCLAIMER












**Important** This map is for general information purposes only. The Capital Regional District (CRD) makes no representations or warranties regarding the accuracy or completeness of this map or the suitability of the map for any purpose. **This map is not for navigation.** The CRD **will not be liable** for any damage, loss or injury resulting from the use of the map or information on the map and the map may be changed by the CRD at any time.

January 2020 | LS\_Cedars of Tuam\_System\_11x17.mxd | helpdesk@crd.bc.ca



- Water Service Area
- Distribution Main
- Untreated Supply Main
- Treatment Plant
- Reservoir (Storage Tank)
- Pump Station
- Pressure Control Station
- Water Well
- Air Valve
- Hydrant
- Standpipe



-  Water Service Area
-  Distribution Main
-  Untreated Supply Main
-  Treatment Plant
-  Reservoir (Storage Tank)
-  Pump Station
-  Pressure Control Station
-  Water Well
-  Air Valve
-  Hydrant
-  Standpipe

**Fulford Water System**

**CRD**  
Making a difference...together

1:8,000  
0 25 50 100 150 Metres  
UTM Zone 10N NAD 1983

**DISCLAIMER**  
Important This map is for general information purposes only. The Capital Regional District (CRD) makes no representations or warranties regarding the accuracy or completeness of this map or the suitability of the map for any purpose. This map is not for navigation. The CRD will not be liable for any damage, loss or injury resulting from the use of the map or information on the map and the map may be changed by the CRD at any time.  
January 2020 | IS\_Fulford\_System\_11x17.mxd | helpdesk@crd.bc.ca

# Highland-Fernwood Water System



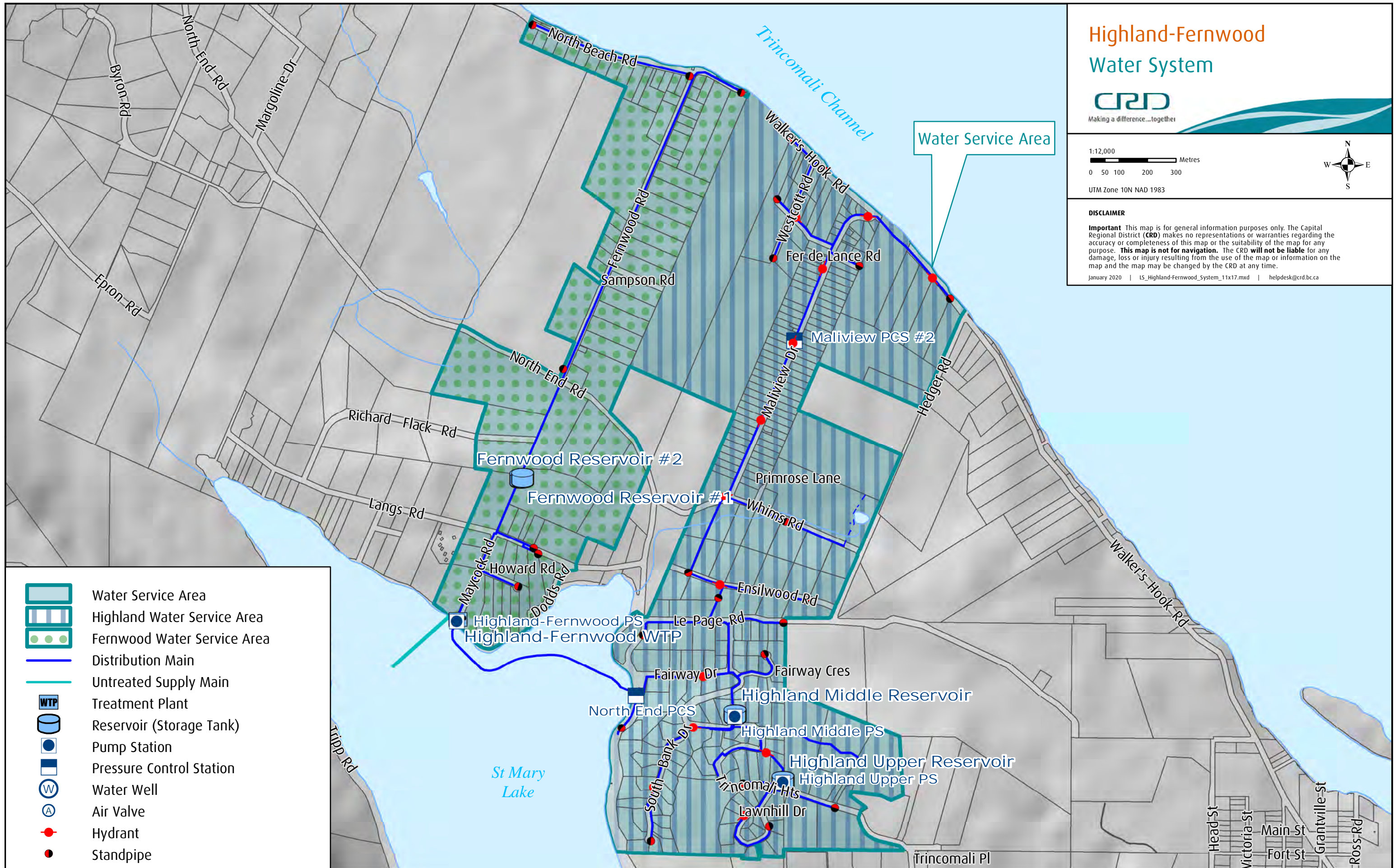
1:12,000  
 0 50 100 200 300 Metres  
 UTM Zone 10N NAD 1983













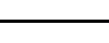


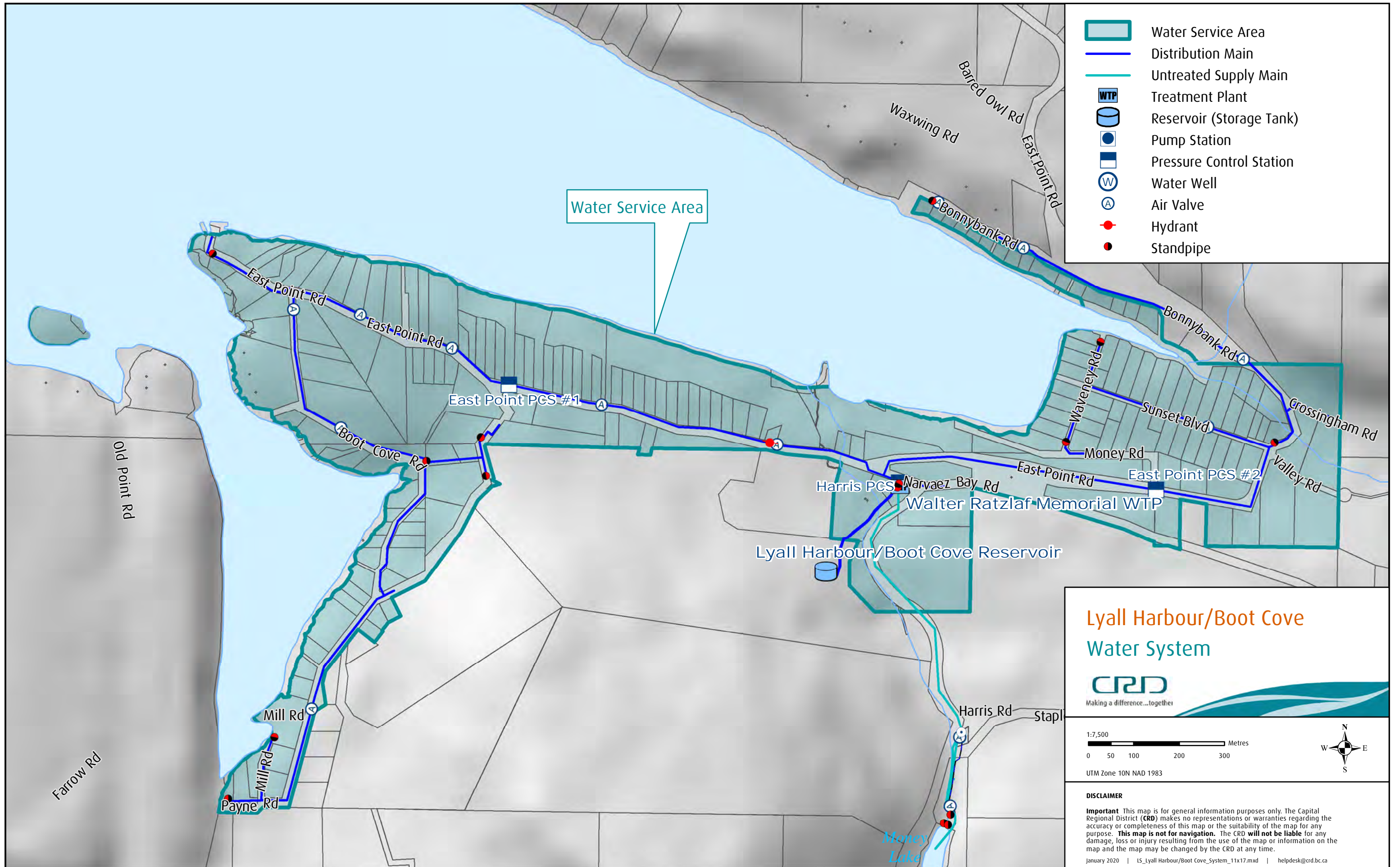
### DISCLAIMER

**Important** This map is for general information purposes only. The Capital Regional District (CRD) makes no representations or warranties regarding the accuracy or completeness of this map or the suitability of the map for any purpose. **This map is not for navigation.** The CRD **will not be liable** for any damage, loss or injury resulting from the use of the map or information on the map and the map may be changed by the CRD at any time.

January 2020 | LS\_Highland-Fernwood\_System\_11x17.mxd | helpdesk@crd.bc.ca



-  Water Service Area
-  Highland Water Service Area
-  Fernwood Water Service Area
-  Distribution Main
-  Untreated Supply Main
-  Treatment Plant
-  Reservoir (Storage Tank)
-  Pump Station
-  Pressure Control Station
-  Water Well
-  Air Valve
-  Hydrant
-  Standpipe



- Water Service Area
- Distribution Main
- Untreated Supply Main
- Treatment Plant
- Reservoir (Storage Tank)
- Pump Station
- Pressure Control Station
- Water Well
- Air Valve
- Hydrant
- Standpipe

**Lyall Harbour/Boot Cove Water System**

**CRD**  
Making a difference...together

1:7,500  
0 50 100 200 300 Metres

UTM Zone 10N NAD 1983

**DISCLAIMER**  
Important This map is for general information purposes only. The Capital Regional District (CRD) makes no representations or warranties regarding the accuracy or completeness of this map or the suitability of the map for any purpose. **This map is not for navigation.** The CRD will not be liable for any damage, loss or injury resulting from the use of the map or information on the map and the map may be changed by the CRD at any time.

January 2020 | IS\_Lyall Harbour/Boot Cove\_System\_11x17.mxd | helpdesk@crd.bc.ca












# Magic Lake Estates Water System

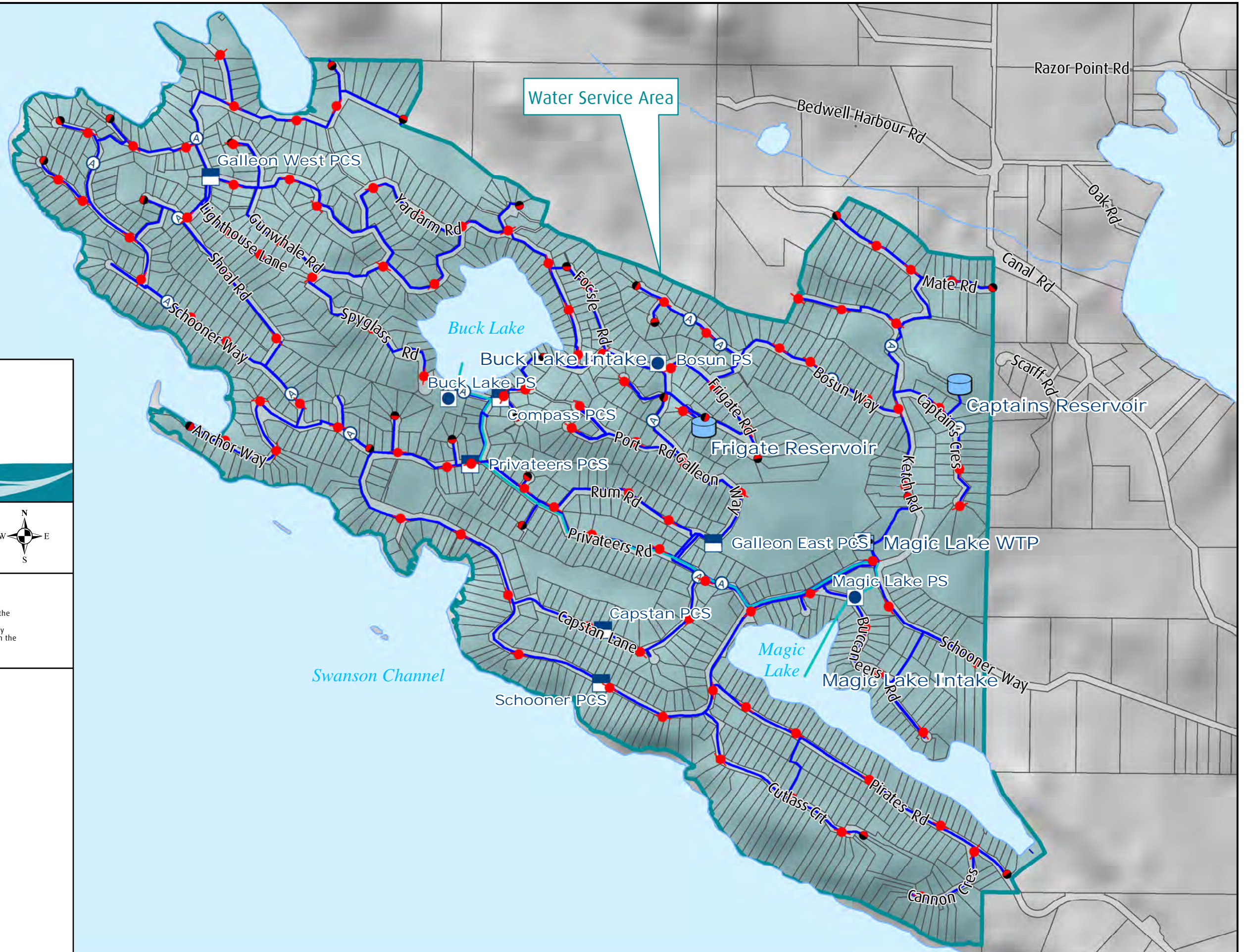


1:11,000  
0 2550 100 150 Metres  
UTM Zone 10N NAD 1983



**DISCLAIMER**  
**Important** This map is for general information purposes only. The Capital Regional District (CRD) makes no representations or warranties regarding the accuracy or completeness of this map or the suitability of the map for any purpose. **This map is not for navigation.** The CRD **will not be liable** for any damage, loss or injury resulting from the use of the map or information on the map and the map may be changed by the CRD at any time.  
 January 2020 | LS\_Magic Lake Estates\_System\_11x17.mxd | helpdesk@crd.bc.ca

-  Water Service Area
-  Distribution Main
-  Untreated Supply Main
-  Treatment Plant
-  Reservoir (Storage Tank)
-  Pump Station
-  Pressure Control Station
-  Water Well
-  Air Valve
-  Hydrant
-  Standpipe



# Port Renfrew Water System



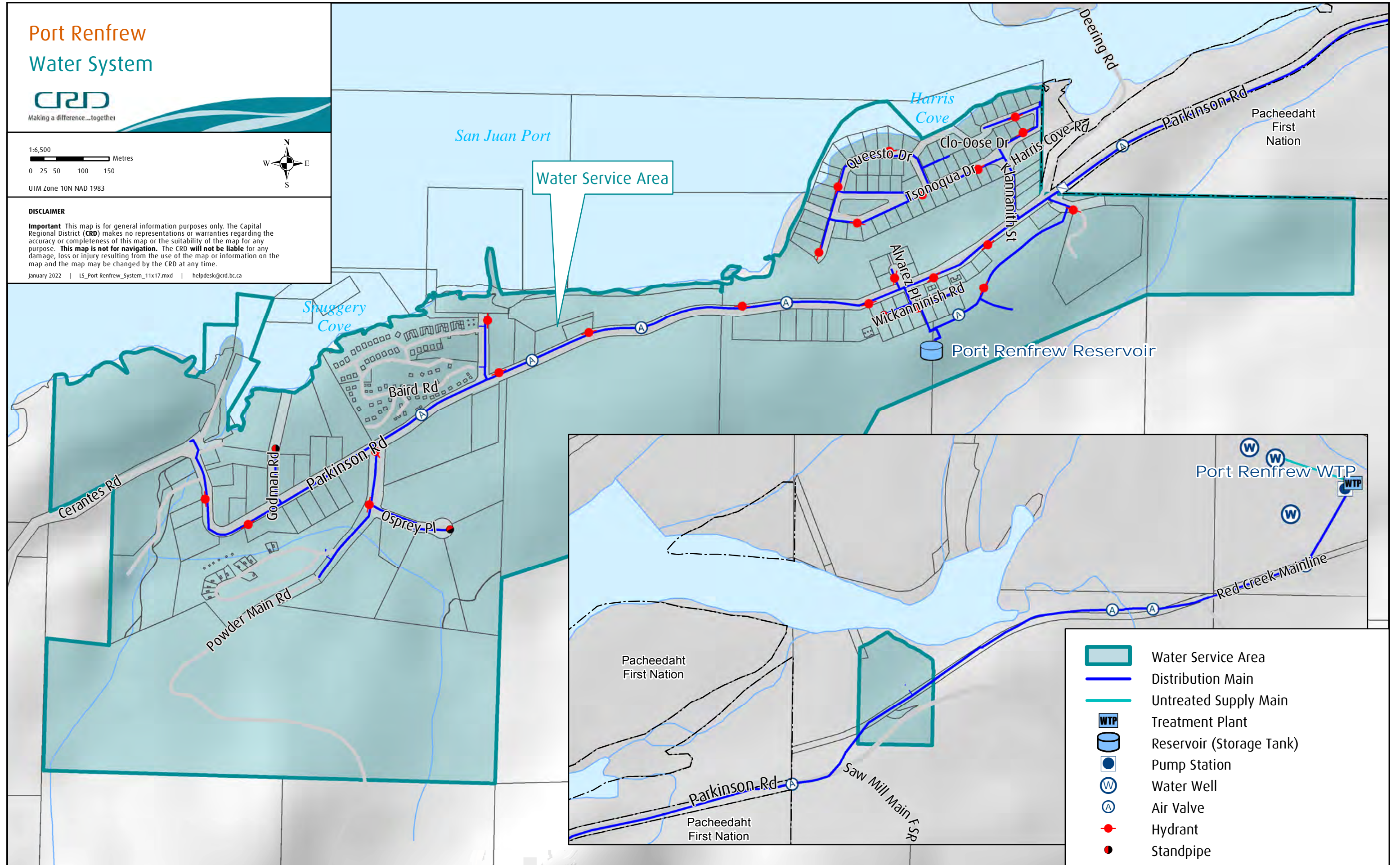
1:6,500  
0 25 50 100 150 Metres  
UTM Zone 10N NAD 1983



### DISCLAIMER

**Important** This map is for general information purposes only. The Capital Regional District (CRD) makes no representations or warranties regarding the accuracy or completeness of this map or the suitability of the map for any purpose. **This map is not for navigation.** The CRD **will not be liable** for any damage, loss or injury resulting from the use of the map or information on the map and the map may be changed by the CRD at any time.

January 2022 | LS\_Port Renfrew\_System\_11x17.mxd | helpdesk@crd.bc.ca



- Water Service Area
- Distribution Main
- Untreated Supply Main
- Treatment Plant
- Reservoir (Storage Tank)
- Pump Station
- Water Well
- Air Valve
- Hydrant
- Standpipe



Skana  
Water System



1:3,000



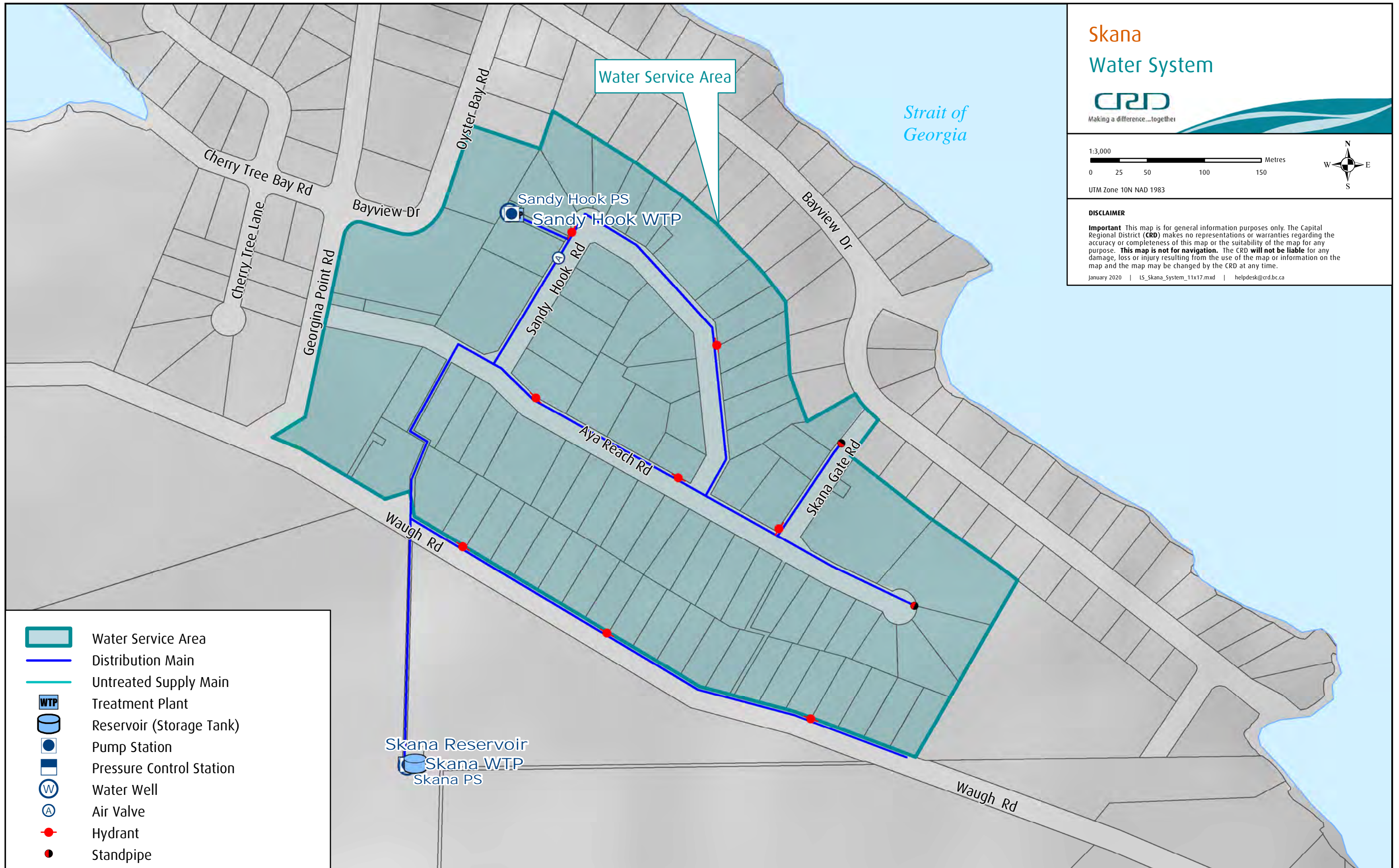
UTM Zone 10N NAD 1983














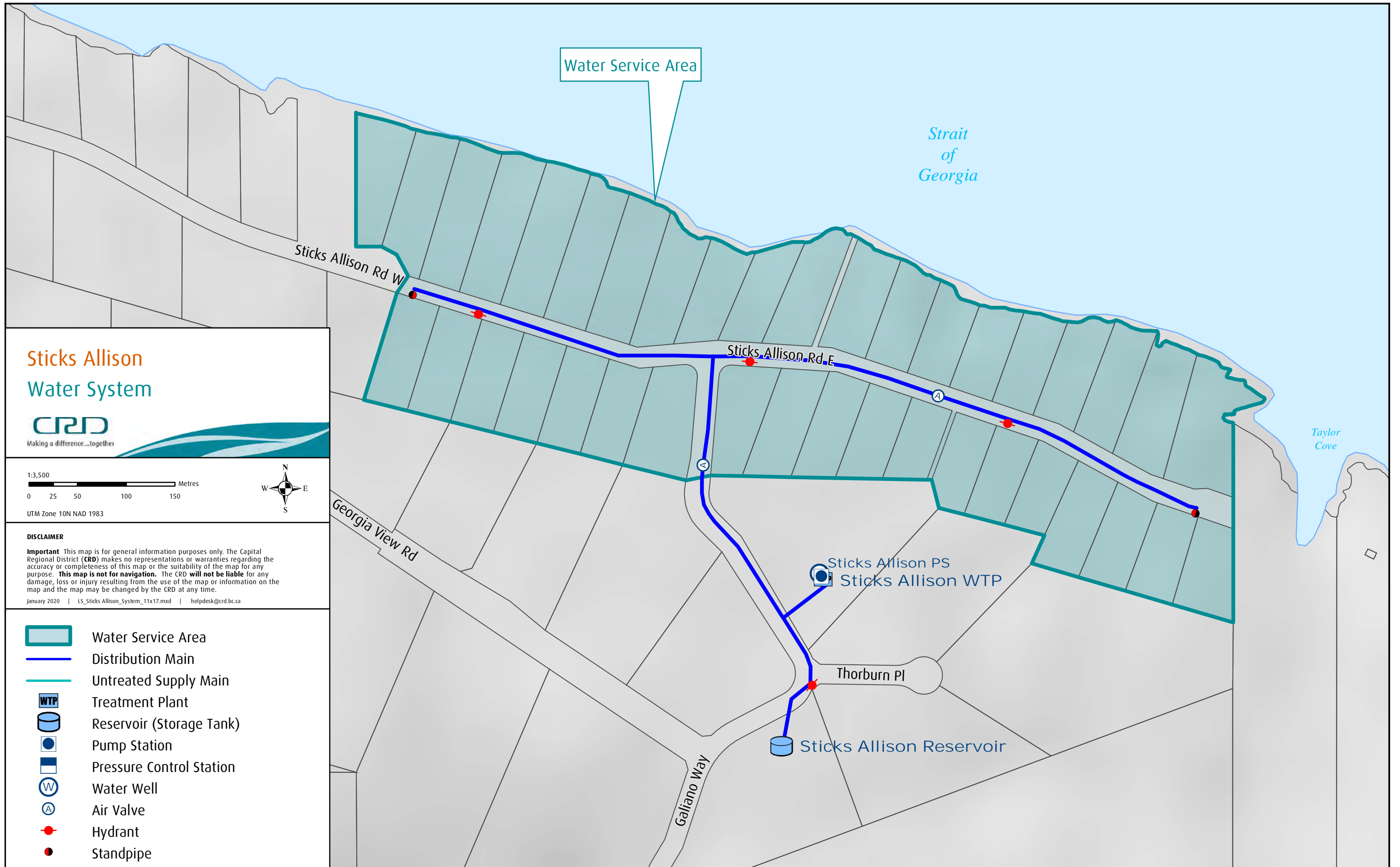
**DISCLAIMER**

**Important** This map is for general information purposes only. The Capital Regional District (CRD) makes no representations or warranties regarding the accuracy or completeness of this map or the suitability of the map for any purpose. **This map is not for navigation.** The CRD **will not be liable** for any damage, loss or injury resulting from the use of the map or information on the map and the map may be changed by the CRD at any time.

January 2020 | LS\_Skana\_System\_11x17.mxd | helpdesk@crd.bc.ca



-  Water Service Area
-  Distribution Main
-  Untreated Supply Main
-  Treatment Plant
-  Reservoir (Storage Tank)
-  Pump Station
-  Pressure Control Station
-  Water Well
-  Air Valve
-  Hydrant
-  Standpipe



# Surfside Park Estates Water System



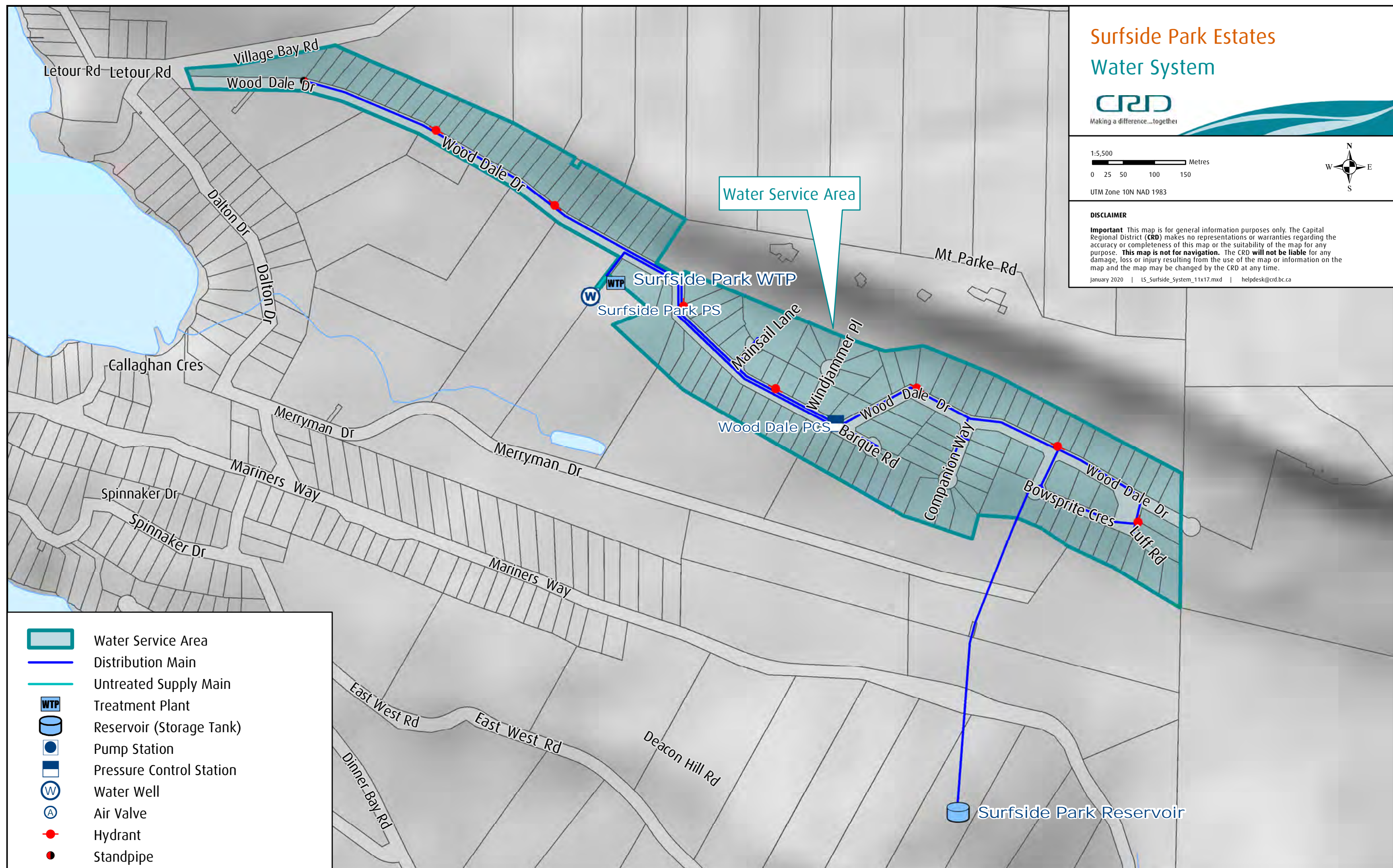
1:5,500  
0 25 50 100 150 Metres  
UTM Zone 10N NAD 1983












### DISCLAIMER

**Important** This map is for general information purposes only. The Capital Regional District (CRD) makes no representations or warranties regarding the accuracy or completeness of this map or the suitability of the map for any purpose. **This map is not for navigation.** The CRD **will not be liable** for any damage, loss or injury resulting from the use of the map or information on the map and the map may be changed by the CRD at any time.

January 2020 | LS\_Surfside\_System\_11x17.mxd | helpdesk@crd.bc.ca



-  Water Service Area
-  Distribution Main
-  Untreated Supply Main
-  Treatment Plant
-  Reservoir (Storage Tank)
-  Pump Station
-  Pressure Control Station
-  Water Well
-  Air Valve
-  Hydrant
-  Standpipe

# Wilderness Mountain Water System



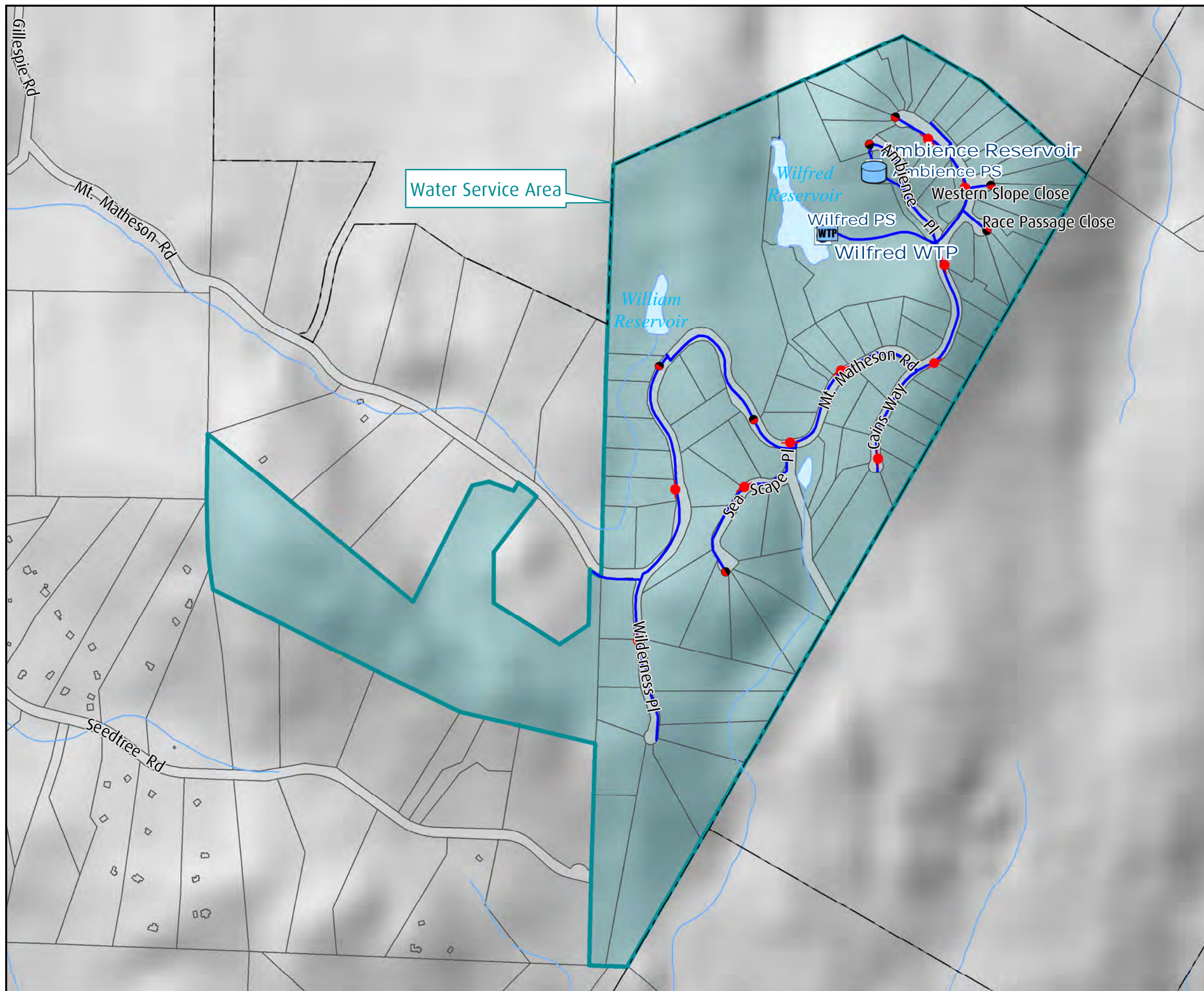
1:8,000  
 0 25 50 100 150 Metres  
 UTM Zone 10N NAD 1983



### DISCLAIMER

**Important** This map is for general information purposes only. The Capital Regional District (CRD) makes no representations or warranties regarding the accuracy or completeness of this map or the suitability of the map for any purpose. **This map is not for navigation.** The CRD **will not be liable** for any damage, loss or injury resulting from the use of the map or information on the map and the map may be changed by the CRD at any time.

January 2020 | LS\_Wilderness Mountain\_System\_11x17.mxd | helpdesk@crd.bc.ca



- Water Service Area
- Distribution Main
- Untreated Supply Main
- Treatment Plant
- Reservoir (Storage Tank)
- Pump Station
- Pressure Control Station
- Water Well
- Air Valve
- Hydrant
- Standpipe