

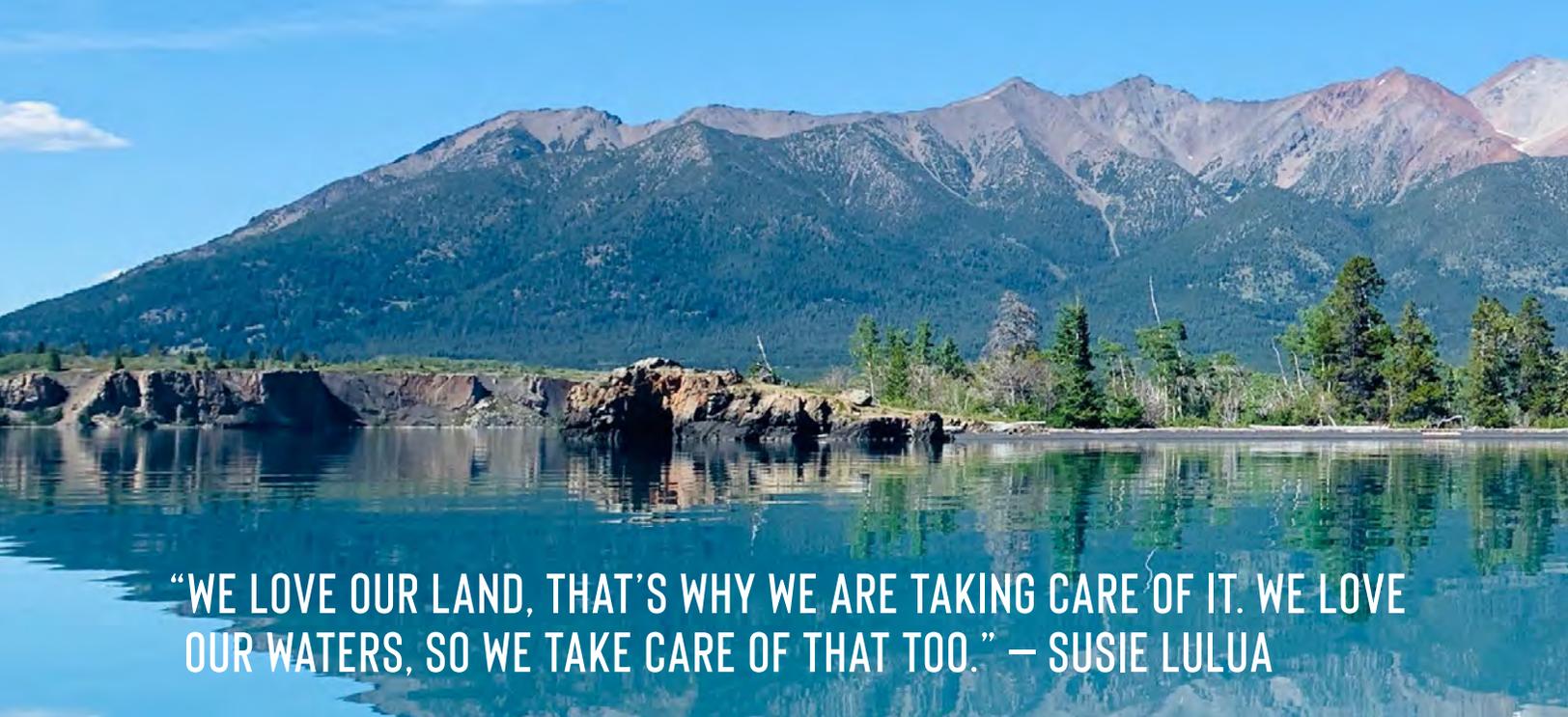


# “WATER IS THE BASIS FOR EVERYTHING”

## XENI GWET’IN WATERSHED PLAN



Prepared by Suzanne von der Porten  
Technical advising and analysis by Jonaki Bhattacharyya  
Technical review by Michelle Myers & Shannon Woods  
Submitted to the Xení Gwet’in First Nation Government  
July 2021



**“WE LOVE OUR LAND, THAT’S WHY WE ARE TAKING CARE OF IT. WE LOVE OUR WATERS, SO WE TAKE CARE OF THAT TOO.” – SUSIE LULUA**

**“Water is the Basis for Everything”:  
Xeni Gwet’in Watershed Plan**

July 2021

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Thank you to the non-human relatives of Xeni Gwet’in who inspire this work and who are always with the lands and waters.

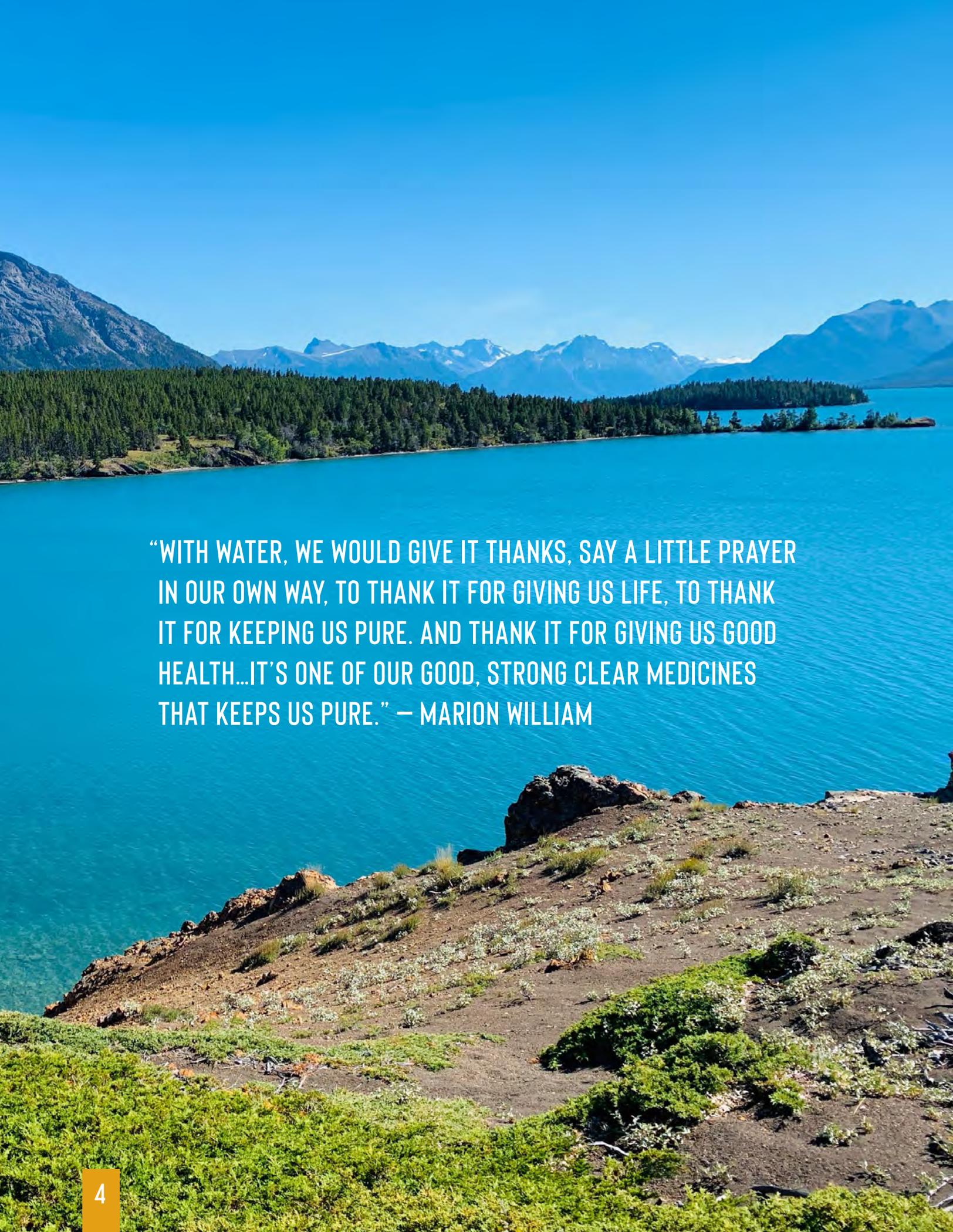
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“WITH WATER, WE WOULD GIVE IT THANKS, SAY A LITTLE PRAYER  
IN OUR OWN WAY, TO THANK IT FOR GIVING US LIFE, TO THANK  
IT FOR KEEPING US PURE. AND THANK IT FOR GIVING US GOOD  
HEALTH...IT’S ONE OF OUR GOOD, STRONG CLEAR MEDICINES  
THAT KEEPS US PURE.” — MARION WILLIAM



## VISION FOR OUR WATERSHEDS

*Our vision for our watersheds and our lands are built upon the wisdom of Ancestors and Elders and is based in a strong future T̓silhqot̓in communities.*

*We will protect the land of our Ancestors.*

*Our land and water provide for our spiritual and physical needs. We are part of the land and water. The land and water are part of us.*

*We have always been able to approach water and drink it and do not want that to change.*

*We want to maintain the opportunity for the quiet, spiritual enjoyment of our lands and our watersheds.*

*Our relatives, our ts'eman,<sup>1</sup> have the right to live among and return to healthy waterways.*

*We are walking the path to reclaiming full XGFNG authority of watershed and water decision making.*

<sup>1</sup> Ts'eman is the T̓silhqot̓in word for salmon.

**“OUR NENQAY, LAND THAT WE LIVE ON, ALL THE PLANTS, BERRIES GROW ON, THE MOUNTAINS THAT PROVIDE TO OUR LAKES, THE GRASS THAT GROWS TO FEED OUR DEER THAT WE CONSUME AND EAT. WE NEED TO TAKE CARE OF THIS LAND SO THAT IT IS THERE FOR FUTURE GENERATIONS AND TO ONLY TAKE WHAT WE NEED. SOMETIMES PEOPLE TAKE MORE THAN WHAT THEY NEED.” — DINAH LULUA**



# EXECUTIVE SUMMARY

*“Yeah, we know what the water is, connected with the mountains up there, glaciers. We know that it is there for us ... you know, all summer, all winter, it takes care of us. And we know, we know about mountains that they are sacred and powerful, and can’t be messing around with those, those spirits, because we have karma, you know, that we don’t want to even point at the mountains because we believe all these spirits is there, and we know that water is powerful medicine for all humans on earth. The most powerful medicine is that water, without that we are like dehydrated and dust, you know. We talk to the water, we sing to the water.” — Gilbert Solomon*

**W**ater is a fundamental element for all life, and for Xeni Gwet’in and T̓silhqot’in people, their lands, and their non-human relatives. Xeni Gwet’in people have always cared for their lands and waters, as they are inextricable from Xeni Gwet’in and T̓silhqot’in identity, language, way of life, and survival. While the *T̓silhqot’in v. British Columbia* title case was one step in Crown recognition of Xeni Gwet’in authority to their unceded lands, it is well known to the Xeni Gwet’in people that their authority and responsibility to nen and as Caretakers (including waters, animals, fish, plants, as well as lands) has always been known.

In recent decades, the Xeni Gwet’in First Nation — both the government and community — have already done much work on water and their watersheds. The purpose of this watershed plan was to bring together all of that previous work, knowledge, and technical expertise that has been produced by or provided to the XGFNG by the community, Elders, knowledge-holders, and external area experts. However, a more pressing motivation for this work, and resulting plan, are the building pressures and threats to the watershed, and in particular the north Chilko, including:

- Visitors to the area and the resulting pressure on waters, fish, bears that comes with increased human presence and usage;
- Increasing stress on ecosystem, animals, communities from climate change (for example wildfire, drought, glacial melt, warming stream temperatures, changes in precipitation, flooding, etc.);
- Declines in ts’eman number, health, and spawning habitat;
- Jurisdictional uncertainties (effecting licences, access, rights, permits, and tenures);
- Water contamination, diversion, and depletion; and
- The need to reinvigorate and maintain Xeni Gwet’in culture and cultural activities.

This watershed plan contains principles, a purpose, goals, objectives, and finally, a watershed action plan, all of which come directly from a review of XGFNG's existing reports, work, and accumulated expertise in this area. External funding, provided by REFBC, was used to support this review and plan. The resulting plan, outlined in detail in this report, pivots on six main goals and related actions:

## **GOAL 1: TO CENTRE T̂SILHQOT'IN CULTURE AND HEALING IN ALL OF OUR WATERSHED DECISION MAKING**

### **Goal 1 objectives:**

- To maintain and celebrate our way of living, cultural traditions, and connection to water through spirituality, ceremony, and access to food and medicines.
- To re-centre Xeni Gwet'in women as decision makers in connection to water and the land.
- To focus on healing our Xeni Gwet'in people and our watershed.
- To support our Xeni Gwet'in people, especially our young people, to spend time out on the land and within our watershed to reinvigorate our knowledge of T̂silhqot'in water laws and connection with the land and waters.
- To protect our culturally important sites and water sources.

### **Example Goal 1 action item:**

- Host events out on the land for Elders to come together with community members at important waterways to both celebrate and reinvigorate T̂silhqot'in ways of being with and language related to respect for water.

## **GOAL 2: TO MAINTAIN, AND WHERE NECESSARY RESTORE, A CLEAN, INTACT WATERSHED**

### **Goal 2 objectives:**

- To maintain and protect unpolluted water bodies and headwaters within all of our watersheds that are clean enough to drink directly from and abundant.
- To continue holistic management of watershed as our Xeni Gwet'in people have always done.
- To align our work on protection of water bodies with climate resilience and advocacy.

### **Example Goal 2 action item:**

- Establish, assess and monitor key indicators for overall watershed health (glaciers, surface water, groundwater and wetlands) centred around XG needs and T̂silhqot'in knowledge. Specifically, assess, create baseline data for, and monitor: key lake, river and stream levels for flooding; water quality of streams and lakes; and water quality of drinking water sources.

### **GOAL 3: TO TAKE CARE OF THE HABITAT OF ALL OF OUR RELATIONS ON THE LANDSCAPE AS WE ALWAYS HAVE**

#### **Goal 3 objectives:**

- To protect the sustainability and health of fish and aquatic life within our watersheds and downstream, and therefore all of our kin who depend on them. This should include stewardship of:
  - Sufficient flows to support the correct temperatures of waters; and
  - Aquatic habitat, in particular, ts’eman spawning grounds;
- To ensure the sustainability and health of grizzly bears in our watershed, as well as our other relations. This should include stewardship of:
  - Ts’eman spawning grounds;
  - Quiet, undisturbed feeding areas; and
  - Grizzly habitat as it relates to water bodies.

#### **Example Goal 3 action item:**

- Implement or continue bear monitoring in relation to ts’eman and spawning area monitoring (e.g., numbers, distribution, effects of human or habitat disturbances).

### **GOAL 4: TO BUILD CAPACITY ON WATER GOVERNANCE WITHIN THE XGFNG AND OUR XENI GWET’IN COMMUNITY, WHILE CENTRING TŜILHQOT’IN KNOWLEDGE IN OUR WATERSHED DECISION MAKING**

#### **Goal 4 objectives:**

- To maintain and revitalize our Tŝilhqot’in knowledge, cultural practices, and stewardship related to water and waterways.
- To use our traditional knowledge alongside science to guide stewardship of our watershed.
- To improve the capacity and knowledge base of our watershed and water-related decision making and opportunities in our community and in the XGFNG and staff.

#### **Example Goal 4 action item:**

- Increase the capacity of XG staff to restore and enhance land and aquatic systems in the Title lands (i.e., hire, train, and equip XG staff/contractors to restore degraded lands, fence, manage livestock/wildlife and aquatic systems in Title lands).



PHOTO: NEAL MAULDIN/FLICR COMMONS

## **GOAL 5: TO COORDINATE, INTEGRATE, AND COMMUNICATE OUR WATERSHED DECISION MAKING WITH XENI GWET'IN WORK AND T̂SILHQOT'IN NATION GOVERNMENT WORK**

### **Goal 5 objectives:**

- To coordinate our watershed decision making with all Nenqay and XGFNG work such as:
  - Access management;
  - Fisheries;
  - Land use planning;
  - Forestry;
  - Climate adaptation;
  - Tourism; and
  - Economic development related to water.
- To improve communication between XGFNG and our community about water decision-making.
- To maintain or build new meaningful partnerships and communication plans with other T̂silhqot'in communities, especially those overlapping watersheds and sub-watersheds, on watershed decision making.

### **Example Goal 5 action item:**

- Create a council of XG citizens (i.e., advisory forum or group) to inform and advise on water and land decision-making. (1) Identify and convene XG people with unique knowledge and opinions to inform water and land decision making. (2) Regularize accessible communication between XG advisory group, XG leadership, and the broader community to create a stronger community voice on land and water management issues.

**GOAL 6: TO COMMUNICATE, AND WHERE NECESSARILY WRITE DOWN, OUR T̂SILHQOT'IN LAWS AND LAWS OF THIS LAND IN THE FORM OF POLICIES, PROTOCOLS, REGULATIONS, STRATEGIES, AND/OR LAWS**

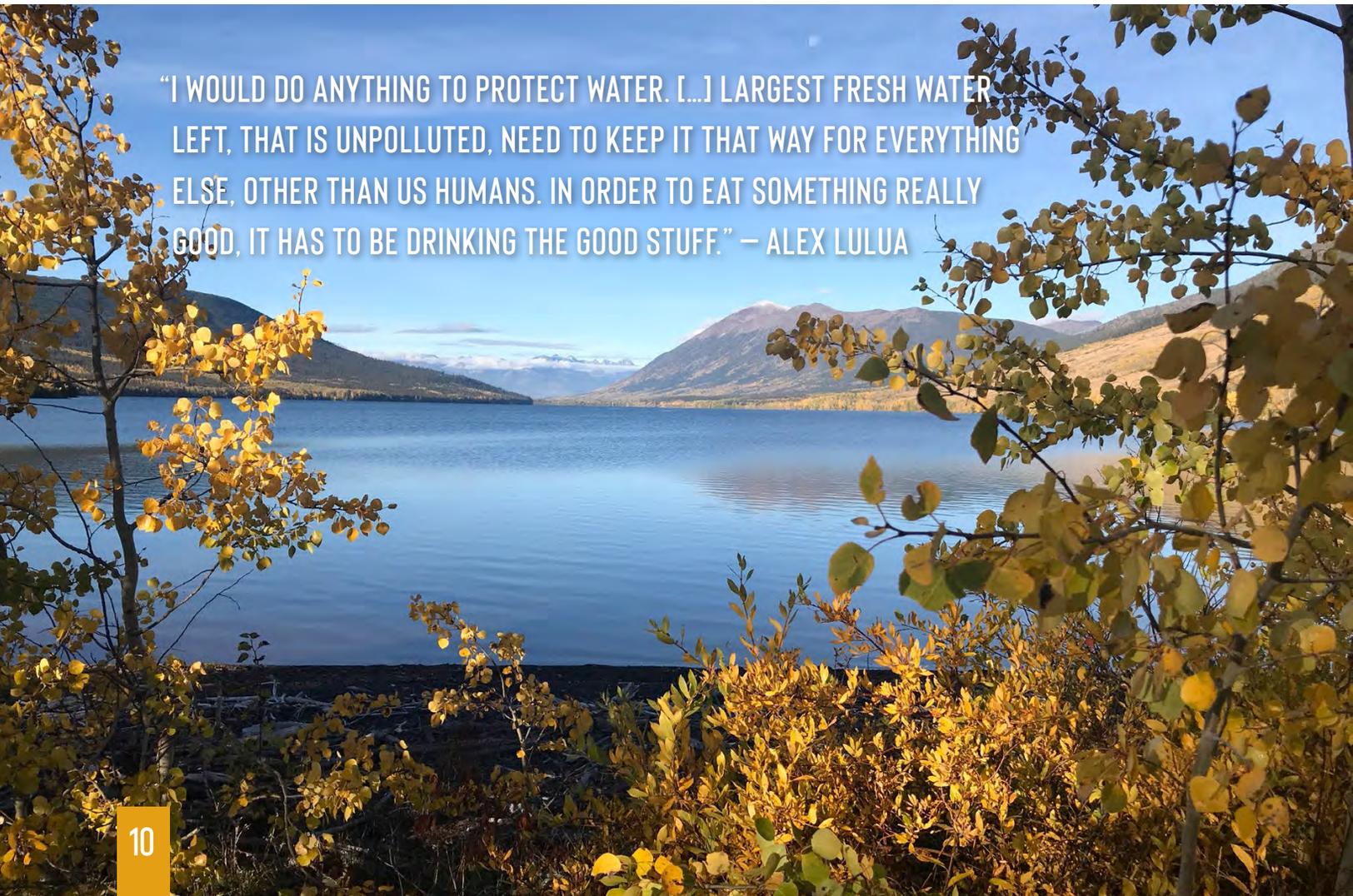
**Goal 6 objectives:**

- To write down, where necessary, XGFNG water policies, protocols, regulations, and/or strategies that reflect the above-stated goals.
- To write down, where a written law is found necessary to address certain problems or goals, a XGFNG water law that reflects T̂silhqot'in laws, laws of the land, and values related to water.

**Example Goal 6 action item:**

- Consider XG regulations/laws that protect cultural assets, springs, and water bodies of cultural spiritual importance.

This watershed plan is a step in the journey of healing the watersheds of the Xeni Gwet'in Caretaker Area, and maintaining water at the centre of the Xeni Gwet'in way of life, and the lands and life water supports. This watershed plan, and in particular the prioritized watershed action plan, will support the crucial work of the Nenqay Department and the XGFNG.



**“I WOULD DO ANYTHING TO PROTECT WATER. [...] LARGEST FRESH WATER LEFT, THAT IS UNPOLLUTED, NEED TO KEEP IT THAT WAY FOR EVERYTHING ELSE, OTHER THAN US HUMANS. IN ORDER TO EAT SOMETHING REALLY GOOD, IT HAS TO BE DRINKING THE GOOD STUFF.” – ALEX LULUA**



# T̂SILHQOT'IN PEOPLE OF XENI GWET'IN INDIGENOUS TITLE

*We, the Xeni Gwet'in, are part of the T̂silhqot'in Nation, or "People of the River." Our ancestral nen (land) includes the lands declared by the Supreme Court of Canada in T̂silhqot'in Nation v. British Columbia, 2014 SCC 44 to be T̂silhqot'in Aboriginal title lands (the "Declared Title Lands" or "DTA") and lands to which T̂silhqot'in Aboriginal title was proven but not declared. In that same case, the courts also declared that the T̂silhqot'in hold Aboriginal rights to hunt, trap and trade throughout the claim area, which lies at the heart of the Xeni Gwet'in Caretaker Area of T̂silhqot'in territory.*

*We have occupied our ancestral nen since time immemorial. Our identity is bound to our nen. We have never ceded or surrendered our rights, our title, or our sacred and legal responsibilities to our nen. Our rights, title and sacred and legal responsibilities extend throughout our Caretaker Area.*

*We have exercised and continue to exercise governance authority and jurisdiction over our nen through our values, principles, and dechen ts'edilhtan (literal translation: "laying down the stick" — in English, this term is better known as "laws"). Our authority and jurisdiction is also recognized and affirmed in Canadian law, through s. 35 of the Constitution Act, 1982, the Supreme Court of Canada decision in the 2014 T̂silhqot'in Nation case, and in international law through the United Nations Declaration on the Rights of Indigenous Peoples.*

*Since time immemorial, the T̂silhqot'in and Xeni Gwet'in have lived by our dechen ts'edilhtan as taught to us by our ancestors. We are at a time in our history where it has become necessary to share our dechen ts'edilhtan on paper with each other as T̂silhqot'in and with non-T̂silhqot'in, as part of our laws that bind us as T̂silhqot'in people.*



# NENDUWH JID GUZITIN DECLARATION

Declared in Xení Gwet'in on August 23, 1989, the NenduwH Jid Guzitin Declaration (Nemiah Declaration) set a precedent for the *T̄silhqot'in Nation v. British Columbia* court case proving Aboriginal Rights and Titles to a portion of Xení Gwet'in Traditional Territories. The Declaration was rooted in the traditional values to preserve and uphold reciprocal relationships with the landscape and stemmed from impending clear cut logging threats encroaching on the territories during this time. This declaration was led by Xení Gwet'in community in a successful attempt to declare self-sovereign jurisdiction on T̄silhqot'in territory:

*Nemiah Aboriginal Wilderness Preserve (1989)*

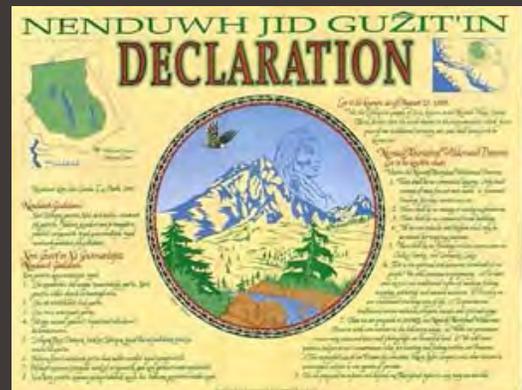
*Let it be known that:*

*Within the Nemiah Aboriginal Wilderness Preserve:*

- *There shall be no commercial logging. Only local cutting of trees for our own needs. i.e. firewood, housing, fencing, native uses, etc.*
- *There shall be no mining or mining explorations.*
- *There shall be no commercial road building.*
- *All-terrain vehicles and skidoos shall only be permitted for trapping purposes.*
- *There shall be no flooding or dam construction on Chilko, Taseko, and Tatlayoko Lakes.*

*This is the spiritual and economic homeland of our people. We will continue in perpetuity:*

- *To have and exercise our traditional rights of hunting, fishing, trapping, gathering, and natural resources.*
- *To carry on our traditional ranching way of life.*
- *To practice our traditional native medicine, religion, sacred, and spiritual ways.*



*That we are prepared to SHARE our Nemiah Aboriginal Wilderness Preserve with non-natives in the following ways:*

- *With our permission visitors may come and view and photograph our beautiful land.*
- *We will issue permits, subject to our conservation rules, for hunting and fishing within our Preserve.*
- *The respectful use of our Preserve by canoeists, hikers, light campers, and other visitors is encouraged subject to our system of permits.*

*We are prepared to enforce and defend our Aboriginal rights in any way we are able.*

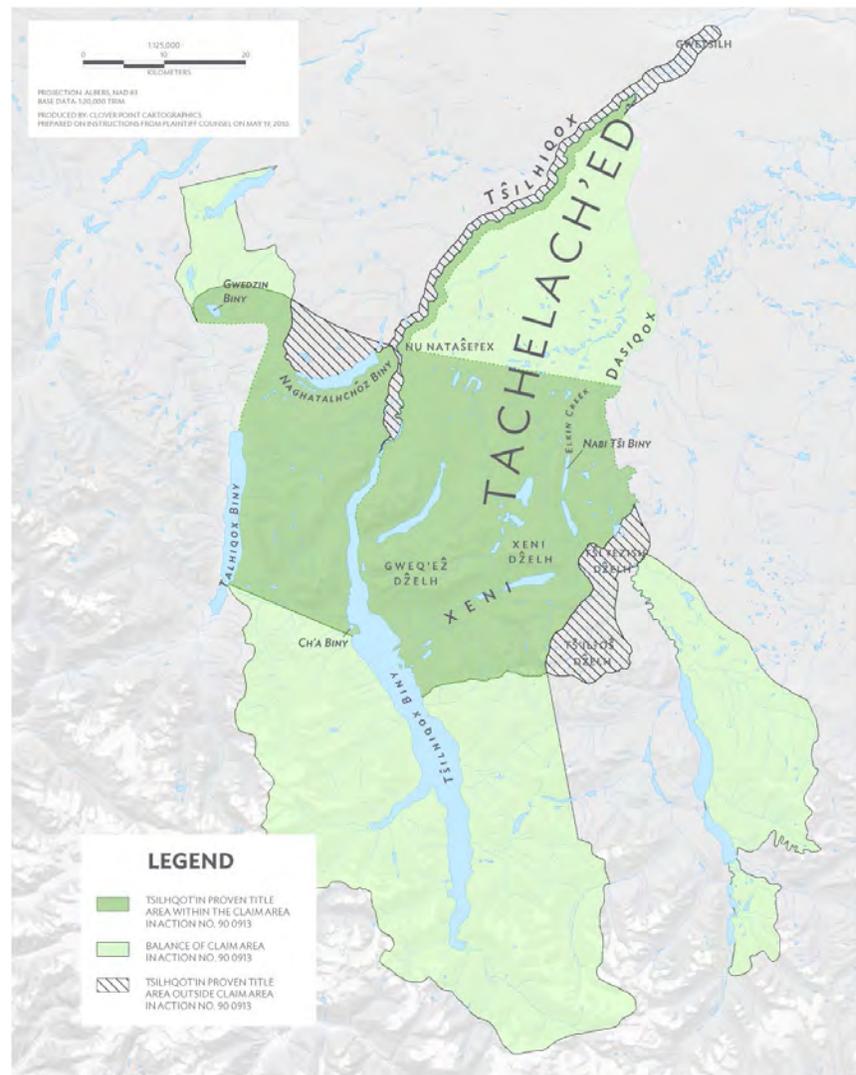
# DISCLAIMER STATEMENT

On June 26, 2014, the Supreme Court of Canada rendered a historic judgment and declaration of Aboriginal title to approximately 1,900 square kilometers (the “Declared Title Area” see Figure 1) within T̄silhqot̄in traditional territory and Xeni Gwet̄in Caretaker Area.

The Supreme Court of Canada judgement recognized the T̄silhqot̄in right to use, benefit from, and manage the Declared Title Area. The judgment did not examine whether these rights extend to private and submerged lands in the Declared Title Area. The T̄silhqot̄in hold title and rights to all the lands and waters in their traditional territory.

This water plan is not a complete expression of Xeni Gwet̄in’s rights, responsibilities, or authority with respect to the lands and waters in the Xeni Gwet̄in’s traditional territories. This water strategy in no way constrains, derogates, or in any way limits the aboriginal title or aboriginal rights of the T̄silhqot̄in, the Xeni Gwet̄in First Nation or any T̄silhqot̄in or Xeni Gwet̄in members. The Xeni Gwet̄in First Nation is one of six T̄silhqot̄in communities which include: Yunesit̄in, Tl’etingox, Tsi Deldel, ?Esdilagh, and Tl’esqox.

**Figure 1. Declared Title Area (in dark green) from the Supreme Court of Canada judgement**





# GUIDING PRINCIPLES

“IT WOULD BE OUR PEOPLE’S RESPONSIBILITY [TO CARE FOR THE LAND AND PROTECT IT] BECAUSE WE ARE KEEPERS OF THE LAND, CARETAKERS OF THE LAND; IT’S OUR RESPONSIBILITY TO CONTINUE TO PROTECT THE LAND AND TAKE CARE OF IT. SO, THAT WAY, IF WE TAKE CARE OF IT, IT CAN ALSO TAKE CARE OF US. EVERYONE ENJOYS A RIGHT TO CLEAN WATER ...PEOPLE WITHIN THE T̂SILHQOT’IN LEGAL TRADITION HAVE A RESPONSIBILITY TO ONLY TAKE WHAT THEY NEED.” – MARION WILLIAM

Xeni Gwet’in and Yunesit’in elders and community members explained the correct relationships with nenqay, to the team working for Dasiqox-Nexwagwez’an. That relationship between T̂silhqot’in and nenqay is reflected in eight fundamental principles articulated in the Dasiqox-Nexwagwez’an Community Vision and Management Goals<sup>2</sup>, to guide future work in relationship to nenqay.

Below, the Dasiqox principles are named, explained, and expressed in relation to Xeni Gwet’in and tu (water).<sup>3</sup>

## 1 NENDIDÉGÁT@’I /ELHÉLH GÁGÚNT’ÍH. EVERYTHING IS INTERCONNECTED.

We need to first take care of the land, as it is the land that takes care of us. We must respect the capacity of the lands and waters to give so that it can continue.

*“Where there is loons, there are fish. Plenty of fish. So if there is plenty of fish then the water must be healthy. If there is no loon, then there is no fish. [...] They are our fish finders.”—Dinah Lulua*

## 2 TU BET’ÁD GWÉNÍH. WATER IS LIFE.

Our people and our non-human relatives have the right to clean, plentiful water. Water is critical in our culture and it connects everything. T̂silhqot’in people cannot be healthy unless tu is.

*“To me water is life. We wouldn’t be alive without it, and neither would the animals and fish, and plants...and it has healing properties.”—June Williams*

2 2018. Dasiqox-Nexwagwez’an Community Vision and Management Goals. Prepared by J. Bhattacharyya, M. Murray, and the Firelight Group, under direction from the Dasiqox-Nexwagwez’an Governance Team, and the community members of Xeni Gwet’in and Yunesit’in.

3 Translation by William Myers.

3

**GUZUN JÍD XÉDÍNÁDÉTÁGHANDINH, GUZUN JÍD XÉDÍDÍNDÍNH, GUZUN JÍD DÉNI NINLIN.**

**HEALING, HEALTH, AND WELL-BEING; WE ARE GOING TO GET HEALTHY, WE ARE HEALTHY, WE ARE LIVING WELL.**

We must heal ourselves, and heal and restore the land, waters and our non-human relatives. Our lives and ways depends on the lands and waters and we will keep them healthy.

*“Water heals us because there is spirit in the water, and if we go to a creek or river, or lake, and we use the water wherever we’re hurting on our body and we take the water and we put it on our body, and we tell the water to heal whatever is hurting us, the water will heal us.”*

4

**YEDANX NÉN JÍ/ÁNÁJÉ@T’ÍN /EYEN GUZUN JÍD GÚBADÁNITAGHAN^ED.**

**HONOURING SPIRIT; PEOPLE WHO USE THE LAND IN THE PAST WE ARE TO THINK OF THEM IN A GOOD WAY.**

Respect the traditions and heritage of the T’silhqot’in People of Xení. T’silhqot’in birth givers carry the first tu we live in to bring us the next generation.

*“The people of the T’silhqot’in Nation have, and continue to, govern their lands according to dechen ts’edilhtan, the laws of their ancestors.”*

5

**NÉN GWÁXÉTÁGHANTÍNLH.**

**CARETAKING. YOU ARE TO LOOK AFTER THE LAND.**

Xení Gwet’in are the caretakers of our waters and we have an obligation to care for water and protect it for future generations. Taking only what you needs and keeping waters clean.

*“[i]t would be our people’s responsibility because we are keepers of the land, caretakers of the land; it’s our responsibility to continue to protect the land, take care of it. So, that way, if we take care of it, it can also take care of us.” — Marion William*

6

**GÁN XÚLT’ÍN /ÉYED LHA JIDETEZAGHÁDÍNH.**

**THRIVING CULTURE. WHATEVER WE DO WE WILL NOT LOSE OUR CULTURE.**

We practice our culture through water: water ceremonies utilized during pregnancy/birth, the teaching of fishing and preparation practices, language, and values.

*“[Women] use [water] as prayer in the sweats to help us cleanse our bodies, cleanse our minds, keep us balanced in life. It’s also a way of healing with our emotional, our physical, our medicine wheel.” — Marion William*

7

**NENDUWH /ÉGÚYÉNÍD^ÉN /ÉGÚH DÉNILH NÁGWETAGHÁLNĠ.**

**SHARING KNOWLEDGE. WE WILL TELL STORIES OF WHAT WE KNOW.**

We have the duty to teach our dechen ts’edilhtan on tu and our knowledge to our youth. We have been taught that there are consequences if we disrespect or improperly use or pollute.

*“I just remember my grandmother mentioning for us not to spit in the water or throw things in the water, things that are not natural I guess to the water... like with the leaf, you know, putting your, um, your problems or whatever, talking to and putting all your stuff on the leaf and letting it go in the creek and then it takes away everything.” — Phyllis William*

8

**YÁDÍ GWÉTÁGHANLH/INLH.**

**WE WILL RESPECT IT.**

Human activities should not negatively impact our waters. We need to value water and keep it clean for ts’eman to keep coming.

*“...every time you consume [water], you want to thank it; you always want to acknowledge what you are consuming.” — Gilbert Solomon*

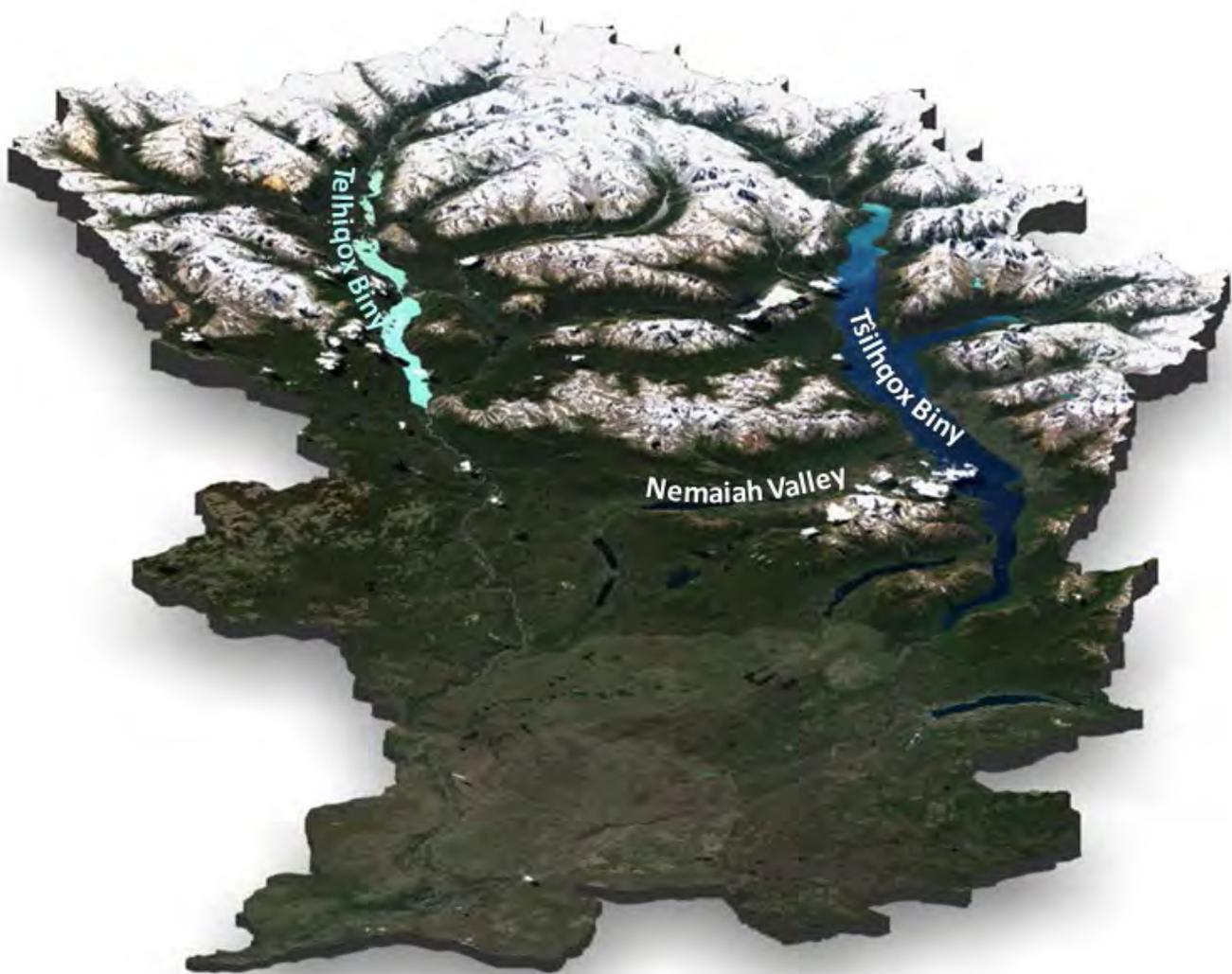


## WATERSHEDS OF THE XENI GWET'IN CARETAKER AREA:

# INTRODUCTION & CONTEXT

Figure 2. Watersheds of the Xeni Gwet'in Caretaker Area.

*Since time immemorial the Xeni Gwet'in people have fished the two great rivers that border their Caretaker Area; the Chilko River and the Taseko River. These two great ts'eman producing rivers have sustained the Xeni Gwet'in for time immemorial.*



## PURPOSE

The purpose of this watershed planning is for XGFNG and community to gain new pathways in resuming their rightful position in their continued role as caretakers of these waters within the XG Caretaker Area and its watersheds—including lands, waters, and non-human relatives within them. In addition to encouraging Xení Gwet'in citizens of all ages to continue practicing their way of life ceremony and healing on the land, in the watershed, this watershed plan provides the basis upon which near-term and long-term planning can be coordinated. It establishes a framework—vision, goals, objectives, and prioritized actions—for how watersheds within the Caretaker Area can be looked after. Importantly, this watershed plan is also very much a tool for XGFNG leadership, Nenqay management and staff, and collaborating partners to make more informed decisions about next steps for protecting the watersheds of the Xení Gwet'in Caretaker Area.

## XENI GWET'IN LANDS AND WATERSHEDS

Xeni Gwet'in have long lived in a respectful relationship with their watersheds, lands, and non-human relatives, and have managed their rights and responsibilities within their unceded territories accordingly. That approach has always been informed by Tšilhqot'in teachings, the laws of nature, and a place-based, sophisticated knowledge system built upon millennia of understanding and being an integral part of the surrounding ecosystems.

While Xení Gwet'in decision-making about watersheds is continuous and ongoing, this written watershed plan supports that work in response to more recent and growing conflict in the north Chilko. The conflict stems in large part from unregulated, non-Tšilhqot'in access to and use of the area for recreational activities such as bear viewing, fishing and motorized vehicle access. Increased access to, and pressure on, the Chilko corridor and waters threatens the whole ecosystem, but in particular ts'eman<sup>4</sup>, grizzly and black bears, and XG traditional uses, including fishing. The whole ecosystem, including fish, bears, and people, are threatened by a decline in fish species because of multiple factors including: overfishing, loss of habitat, industrial effluent uses downstream, and climate change.<sup>5</sup>

4 “The Upper Chilko River, from approximately the mouth of Chilko Lake to the Bridge near Henry's Crossing, provides the richest, most continuous stretch of salmon feeding sites along the Upper Chilko River.” (Source: 2018 XG Bear Viewing Management Plan).

5 2013 Xení Freshwater Aquaculture Feasibility Study Final.

“THE SUN, THE PLANTS, THE WHOLE EARTH, AND THE PEOPLE, THE ANIMALS, THE BUGS, THE FISH, ALL THOSE ARE ALL RELATIONS. THEY ALL COME FROM WATER. SO WE ARE ALL THE SAME, IF IT HAS TO DO WITH WATER, THE SPIRITS. [...] SO, I GUESS THAT WE HAVE TO TREAT EVERYTHING LIKE THE WAY WE WANT TO BE TREATED [...]. WELL EVERY TIME THEY ARE EXPLOITING THE LAND, TAKING TREES AWAY OR MINING, POISONING EVERYTHING, IT'S ALSO DOING A NUMBER ON US, AS PEOPLE WHO LIVE ON THE LAND AND CARE ABOUT THOSE THINGS.” — GILBERT SOLOMON

“I WOULD DO ANYTHING TO PROTECT WATER...”  
— ALEX LULUA

The Upper Chilko River Corridor is part of the ancestral territory, or Caretaker Area (see Figure 3 below), of the Xení Gwet'in First Nation. The Xení Gwet'in First Nation is among six T̓shilhqot'in communities which also include: Yunesit'in, Tl'etingox, Tsi Del Del, ʔEsdilagh, and Tl'esqox. In 1989 the Xení Gwet'in issued the Declaration of the Nemiah Aboriginal Wilderness Preserve, which states how the Caretaker Area would be managed and what uses would be allowed and disallowed. Xení Gwet'in, Yunesit'in, and other T̓shilhqot'in communities have a strong tradition of stewardship in which taking care of the land is central to their cultural identity and resilience. As caretakers of their lands, T̓shilhqot'in people have fought to protect their lands and waters for thousands of years upholding T̓shilhqot'in governance. This fight has included the Chilcotin War of 1864, to protect T̓shilhqot'in land, people, and governance against aggressive colonial incursions and maltreatment of T̓shilhqot'in peoples and lands. The Xení Gwet'in First Nation Government and the Xení Gwet'in community continue to protect their lands and waters through means such as collective political action from negotiations, court action, and blockades.<sup>6</sup>

## HYDROLOGICAL CONTEXT OF XGCA WATERSHEDS

The watersheds of the Xení Gwet'in Caretaker Area (XGCA) are within one of the last intact dryland ecosystems on the east side of the Chilcotin Range, which is unique in terms of its high ecological integrity.<sup>7</sup> The peaks of XGCA's watersheds are high-elevation, the glaciers of the Chilko and Taseko watersheds are primarily located in the southern, upper-elevation headwaters. Additionally, there are a few small glaciers surrounding Mount Nemaia at the head of the Klokon Creek watershed, each of which contribute meltwater to Klokon Creek, which is used by the Xení Gwet'in community as a primary source of fresh water.<sup>8</sup> The majority of Xení Gwet'in live in the Nemiah Valley, a relatively dry ecosystem with dry mountainsides and abundant glacial-fed water in the valley. Nemiah Valley is bordered to the west by Chilko Lake, the largest high-altitude lake in the region and is populated with smaller lakes like Konni Lake, Hah-tee (Nemiah) Lake, and Vedan, Elkin, and Chaunigan Lakes to the north-east.<sup>9</sup>

The future of the intact watersheds of the XGCA is threatened not only by present-day encroachment of activities such as industrial logging, overfishing, mining and exploration, unregulated motorized use of lands and waters, and contaminants, but increasingly, the threat of climate change. Box 1 summarizes the affects that climate change is projected to have on mountainous watersheds of BC. Wildfire, directly linked to climate change, further threatens these watersheds. Appendix C details the impact of wildfire upon watersheds and hydrological systems.

**I KNOW WHAT THIS LAND MEANS TO US TODAY, SO THAT WE CAN  
STAND ON IT TODAY AND IT IS STRONG.” – JAMES LULUA SR.**

6 2016 Dasiqox Tribal Park Strategy Report.

7 2014 Xení Gwet'in Vision for Sustainable Development.

8 2010 Glaciers of the Xení Gwet'in Caretaker Area: Glacier Inventory and Recent Change.

9 2013 Xení Gwet'in Range Management Plan.

## CLIMATE CHANGE IMPACTS ON HYDROLOGY

*Summary provided by: Sheena Spencer, Research Hydrologist, FLNRORD, Penticton, February 2021*

Air temperatures are predicted to increase over the coming decades, although the magnitude of rise depends on the climate change scenario. This probable increase in air temperature has the potential to impact streamflow quantity due to the influence on glaciers, snow accumulation and melt, wildfires, and other aspects of climate and hydrology.

A continued reduction in the mass of glaciers is expected for most regions of British Columbia.

The hydrologic benefits of glaciers include:

- maintenance of higher streamflow discharge in the late summer (August) when streams are typically low or dry
- cooler stream temperatures in the late summer
- both of which result in a thermal habitat refuge for fish

Therefore, the reduction or loss of glaciers could:

- initially increase streamflow downstream due to increases in melt rates from glaciers
- reduce streamflow discharge, particularly low flows, over longer time periods
- result in warmer stream temperatures in late summer
- alter chemical and biological characteristics of streams

Impacts on snow accumulation and snowmelt from increased air temperature include:

- decrease duration of snow cover — delay start in winter snow accumulation, advance the timing of the snowmelt period, and increase the rate of snowmelt
- increase elevation of snow-rain transition zone, reducing spatial extent of over-winter snowpack
- increase snow accumulation at higher elevations — more precipitation and cold temperatures maintained at higher elevations
- increase rain-on-snow events

The loss of lower elevation snowpacks and shorter duration of snow cover could:

- decrease annual streamflow and summer low flows
- extend growing season, potentially increasing water demand by forests and further reducing low flows
- increase spring flood risk
- alter hydrologic regime from snow-dominated to rain- and snow-dominated or rain-dominated
- increase wildfire risk

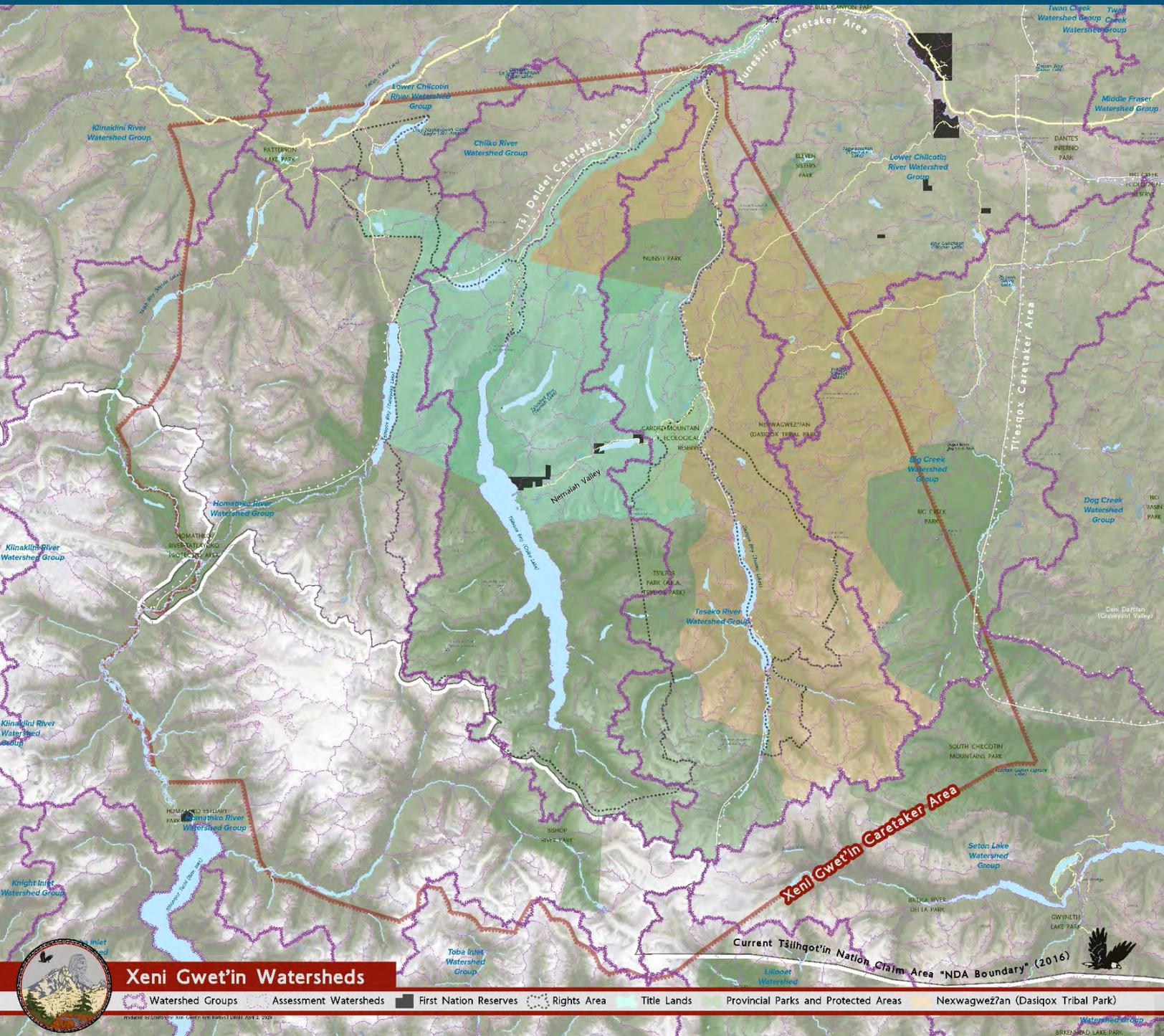
Potential for wildfires:

- warmer temperatures in spring and fall extend the snow-free period and subsequently, extend the wildfire season
- drier summer conditions in forest
- increase fuel for wildfires

With increased potential for wildfires, hydrology could be further impacted particularly if wildfires are severe and large scale.

**“THIS PROBABLE INCREASE IN AIR TEMPERATURE HAS THE POTENTIAL TO IMPACT STREAMFLOW QUANTITY DUE TO THE INFLUENCE ON GLACIERS, SNOW ACCUMULATION AND MELT, WILDFIRES, AND OTHER ASPECTS OF CLIMATE AND HYDROLOGY.”**

Figure 3. Watersheds and Sub-watersheds of the XGCA (Hohenschau, EcoPlan 2020)



“WE ARE HONOURING THE SPIRITS. ESPECIALLY FOR THE FISH PEOPLE, WE KNOW THEM AS PEOPLE, AND WE HONOUR THEM, BECAUSE THEY WILL BE THE LAST RESOURCE TO FEED US, WHEN THERE IS NO, EVERYTHING COME EXTINCT, FISH WILL BE KIND OF THERE IF WE DON'T POISON THE WATERS.” – GILBERT SOLOMON



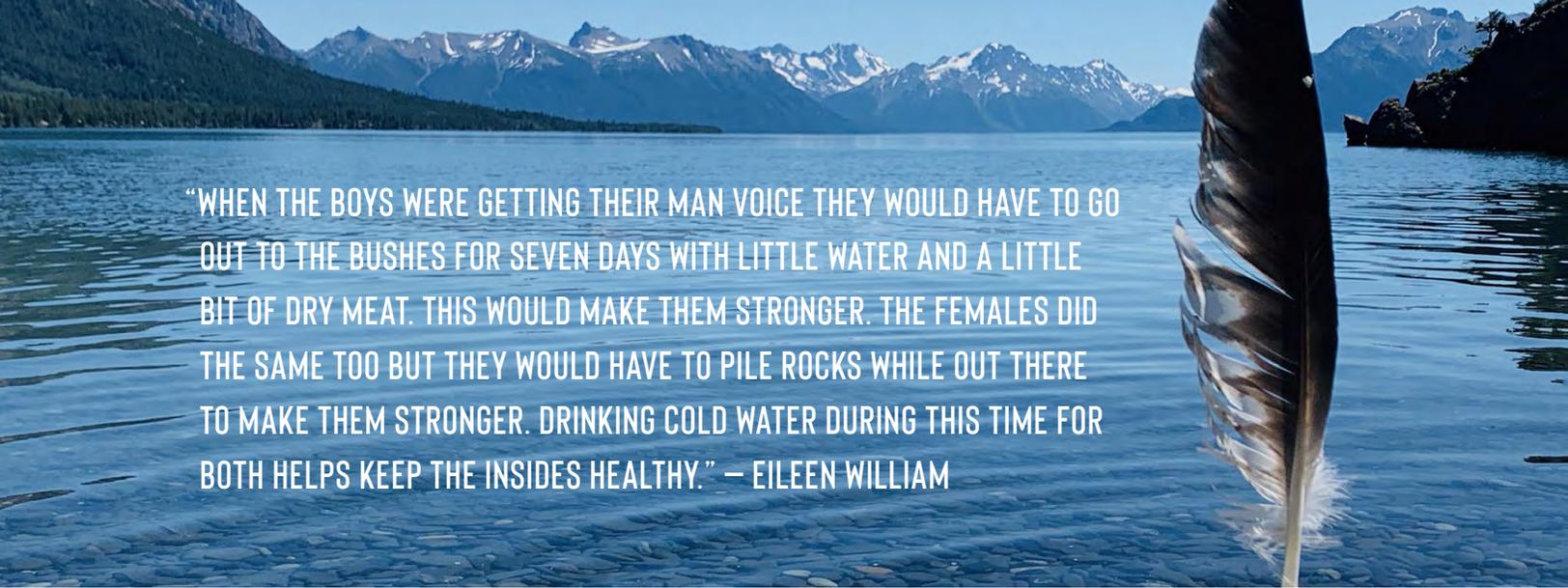
## SCOPE

This watershed plan—including the vision, goal, objectives, and actions—apply to the watersheds of the Xeni Gwet'in Caretaker Area. However, some action items are mostly applicable to the north Chilko and Declared Title Area. The area given consideration in this watershed plan can be seen in Figure 3.

Since imposed and overlapping jurisdictions are not synonymous with the natural catchment boundaries created by the flow of water, the watersheds that are within the XGCA and that drain into the XGCA are all given consideration in this watershed plan. The primary focus of this plan is thus to consider the priorities of the Xeni Gwet'in community, and what actions can be taken, or at least prioritized, in the protection of these watersheds and the waterbodies and non-human relatives who depend up on them.

Not included in this watershed plan, but notable for future work and coordination by the Nenqay Department when planning for the protection of the watersheds, are:

- Fisheries programs
- Aquaculture
- Economic development
- Ranching
- Agriculture
- Access management planning
- Forestry
- Wildfire protection
- Climate modeling
- Hydrological modeling



“WHEN THE BOYS WERE GETTING THEIR MAN VOICE THEY WOULD HAVE TO GO OUT TO THE BUSHES FOR SEVEN DAYS WITH LITTLE WATER AND A LITTLE BIT OF DRY MEAT. THIS WOULD MAKE THEM STRONGER. THE FEMALES DID THE SAME TOO BUT THEY WOULD HAVE TO PILE ROCKS WHILE OUT THERE TO MAKE THEM STRONGER. DRINKING COLD WATER DURING THIS TIME FOR BOTH HELPS KEEP THE INSIDES HEALTHY.” – EILEEN WILLIAM

## METHODS

The methods used to create this watershed plan, and its principles, goals, objectives, and action plan, are all based in a review of existing Xeni Gwet'in work/reports. This method was used because the community has already, many times, expressed and contributed their priorities and ideas about their watershed, many of which are reflected in Xeni Gwet'in plans and reports written over the last decade or so. The documents reviewed that informed the content of this report are listed in Appendix A.

The creation of this watershed plan was an iterative, collaborative process overseen by a core working group consisting of Xeni Gwet'in Nenqay manager and staff, XGFNG chief and council, and XGFNG managers and administrators. This working group guided the development and verification of overarching goals and objectives, and reviewed the documents and pre-watershed plan deliverables that were instrumental to its creation. Additional methods and steps taken to inform this work included:

- Literature review of just over 60 reports representing prior work completed by and for Xeni Gwet'in;
- Best practices review of selected publicly available documents and information on other Indigenous watershed plans and strategies;
- Legal advising through meetings, documents, and presentations;
- Synthesis of content in Xeni Gwet'in documents related to water management including vision statements, guiding principles, goals, objectives, action items, and recommendations; and
- Analysis to systematically rank and prioritize recommended actions.

Although COVID-19 hampered the in-person community engagement planned for this watershed plan, some online engagement was done. On March 9, 2021, 1:30–3:30 pm, the Nenqay department invited community members to join a recorded online meeting to learn and ask questions about the watershed plan. The final version of the watershed plan was reviewed by and finalized in collaboration with the XGFNG Nenqay Department.



## OUR WATERSHEDS

# STRENGTHS, CHALLENGES, OPPORTUNITIES, AND THREATS

**“[OUTSIDERS] ARE DISRESPECTING THE LAND, THEY ARE RUNNING ATVs ON THE LAND AND TRYING TO GET IN ON OUR BUSINESS, LIKE THE FISHING PORTION OF THE RIVER. THEY ARE NOT PRESERVING, OR THEY ARE NOT TAKING JUST WHAT IS NEEDED. THEY ARE GOING BEYOND. SO, IT’S LIKE RAPING THE LAND OR THE RIVER IN A SENSE. — PHYLLIS WILLIAM**

The following situational analysis of the XG Caretaker Area is a compilation of strengths, challenges, opportunities and threats that were articulated in the 60 XGFNG documents reviewed (see Appendix A for a full list of documents reviewed). Table 2 is a summary of points resulting from the analysis of the documents reviews, as well as from expertise within the watershed plan working group.

## SITUATIONAL ANALYSIS

### STRENGTHS

- Rights and title recognized by the Supreme Court in the Declared Title Area.
- High profile and public support garnered from Title win and Teztan Biny.
- Expectation that XG will continue to support protection of their watershed and lands.
- XG community focus on and deep support for watershed protection.
- XG peoples know their lands and waters well and know how they should be.
- Spawning grounds of some of the most important wild chinook and sockeye stocks.
- Chilko Lake a continuously used and core area for Xeni traditional uses, fishing, plan harvest, hunting, ceremony, and cultural gatherings.
- Protecting XG water and watersheds directly protects and supports XG culture and way of life.

## CHALLENGES

- Increased public use of the Caretaker Area (e.g., jetboat use and bear-viewing during bears'eman season).
- BC and Canada's limited monitoring and enforcement of hunting & fishing and mechanized boat and vehicle use.
- Limited funding and resources for XG land use monitoring and enforcement on the ground.
- Prolonged uncertainty about permits for some small-scale tourism operators and land users in the region.
- Coordination on related initiatives (e.g., forestry, access) and levels of government (regional, TNG, Province, DFO).
- Inadequate inclusion of Xeni women in decision making around lands, waters.
- Lack of stated and communicated protocols for different user groups of Chilko corridor, Declared Title Area, and Caretaker Area.
- Overlapping jurisdictions/claims (Province, Feds, and Xeni Gwet'in).
- Lack of serious and sincere consultation by government.
- Lack of scientific data for decision making.
- Unmanaged public access in the Xeni Gwet'in Caretaker Area.
- Minimum signage relating to access management.
- Gaps in data and monitoring (e.g., fish, climate data, water flows and temperatures, water quality testing).

## OPPORTUNITIES

- Uncertain land management authority, jurisdiction, laws in overlap areas, and the opening this provides for Xeni Gwet'in to reassert unceded authority in the Chilko corridor, DTA and Xeni Gwet'in Caretaker Area.
- Increased interest in watershed planning by the XG community.
- Interest in participation by the XG community to protect their watershed and lands.
- Opening for XG to be the central collectors and holders of benchmark data (fish, water quantity, water quality).
- A time for all generations to get out on the land and waters more.
- Time to coordinate the implementation of plans from favoured previous XG reports and work.



## THREATS

- Cultural loss of cultural and sacred sites
- Increase in human impacts because of the growing public and commercial interest in the Chilko corridor.
- Climate change impacts on key resources like ts’eman, water and forests (e.g., increase in wildfires, glacial melt, habitat loss, fisheries, warming water temperatures and corresponding loss of fish and spawning habitat, snowpack loss, flows, stress on ts’eman, ground and surface water loss, drought).
- Commercial activity (e.g., overfishing, mining, pollution, oil and gas exploration, intensive adjacent land use, road construction, industrial forestry, diversion of waters), and the cumulative impacts of any number of these combined.
- Water contamination (e.g., from agricultural run-off, toxic fluids from spills, runoff from roadways).
- Increase in access by non-T̓ìlqot’in people (e.g., Motorized vehicle and boat use for hunting, camping, fishing, bear viewing; invasive weeds from boat propellers/hulls).
- Disturbance of bears from bear viewing and tourism/guide/operator practices (e.g., harassing bears; habituation of bears).
- Declining fish stocks.

“OUR PEOPLE ARE LOSING CONFIDENCE IN THE WATER IN MANY PARTS OF OUR TERRITORY, ESPECIALLY THOSE MOST HEAVILY DEVELOPED, AND ARE DRINKING FROM THE LAND LESS AND LESS. WHEN WE LOSE CONFIDENCE IN THE PURITY OF WATER SOURCES, AND CONSEQUENTLY AVOID DRINKING FRESH WATER DIRECTLY FROM THE LAND, WE ALSO LOSE OUR TRADITIONAL KNOWLEDGE AND CULTURAL CONTINUITY, AS OUR PEOPLE AND YOUNG GENERATIONS DO NOT LEARN ABOUT DRINKING WATER LOCATIONS AND HOW TO FIND THEM.” – 2018 COMMUNITY VISION AND MANAGEMENT GOALS FOR DASIQOX TRIBAL PARK



# GOALS AND OBJECTIVES

“SO EVERYTHING WITH THE LAND AND EVERYTHING, THEY HAVE A GREAT CONNECTION WITHIN... TOGETHER. LIKE, THE PEOPLE AND THE LAND WORK GOOD TOGETHER. IF YOU DON'T HAVE THAT CONNECTION, WE'RE GOING TO LOSE OUR WAY OF LIFE; WE'RE GOING TO LOSE OUR KNOWLEDGE OF OUR WILDLIFE AND HOW TO PROVIDE AND HOW TO CONTINUE TO TEACH OUR YOUNGER GENERATIONS” – MARION WILLIAM

The following six goals for this watershed plan, and the corresponding objectives for each goal, all were directly informed by the review of the XGFNG document review of previous work done relating to the Xeni Gwet'in Caretaker Area and water governance within it. At their core, these goals and objectives are embedded within to the guiding principles stated above, as well as within outside technical or scientific advice where applicable.

## GOAL 1: TO CENTRE T̂SILHQOT'IN CULTURE AND HEALING IN ALL OF OUR WATERSHED DECISION MAKING

### Objectives:

- A. To maintain and celebrate our way of living, cultural traditions, and connection to water through spirituality, ceremony, and access to food and medicines.<sup>10</sup>
- B. To re-centre Xeni Gwet'in women as decision makers in connection to water and the land.<sup>11</sup>
- C. To focus on healing our Xeni Gwet'in people and our watershed.<sup>12</sup>
- D. To support our Xeni Gwet'in people, especially our young people, to spend time out on the land and within our watershed to reinvigorate our knowledge of T̂silhqot'in water laws and connection with the land and waters.<sup>13</sup>
- E. To protect our culturally important sites and water sources.

<sup>10</sup> We will continue in perpetuity ...To practice our traditional native medicine, religion, sacred, and spiritual ways. (Source: 1989 Nemaiah Declaration) AND To ensure the sustainability of historical T̂silhqot'in cultural traditions. (Source: 2014 Xeni Gwet'in Land Use Guideline Development and Skills Training Initiative).

<sup>11</sup> Michelle Myers.

<sup>12</sup> Focus on healing first and foremost and the other goals will flow from that (conversation with Michelle Myers, November 25 — she hears this from community).

<sup>13</sup> To encourage XG people to spend time out on the land and learn about T̂silhqot'in ways and water laws (and Practice T̂silhqot'in Way of Life on the Land (Source: 2016 Dasiqox Tribal Park Strategy Report).

“...WE CAN STILL DRINK FRESH WATER DIRECTLY FROM THE GROUND. OUR COMMUNITIES RELY ON AND PREFER TO DRINK THIS FRESH WATER, AS LONG AS THEY CAN TRUST THAT IT IS PURE AND SAFE.” — DASIQOX NEXWAGWEŹʔAN 2018



## GOAL 2: TO MAINTAIN, AND WHERE NECESSARY RESTORE, A CLEAN, INTACT WATERSHED

### Objectives:

- A. To maintain unpolluted water bodies and headwaters within all of our watersheds that are clean enough to drink directly from and abundant.<sup>14</sup>
- B. To continue holistic management of watershed as our Xeni Gwet'in people have always done.<sup>15</sup>
- C. To align our work on protection of water bodies with climate resilience and advocacy.<sup>16</sup>

<sup>14</sup> Xeni Gwet'in Title Transition Table Meeting, November 3, 2020.

<sup>15</sup> Contrast to BC Pacific Salmon Forum's statement to "Start managing watersheds holistically as ecosystems, increasing their resiliency to accommodate change. Decisions on resource uses can then be adapted to ensure that we stay within ecosystem capacities rather than exceeding them, as can now be the case." (Source: 2018 A summary of Xeni Gwet'in Fisheries Projects 2006-2018).

<sup>16</sup> Stewardship of our Caretaker Area is aligned with cultural values and leads to protection of water, ecosystem restoration and climate resilience (Source: 2020 Xeni Gwet'in Forest Management Strategy 2020-2024).



### **GOAL 3: TO TAKE CARE OF THE HABITAT OF ALL OF OUR RELATIONS ON THE LANDSCAPE AS WE ALWAYS HAVE**

#### **Objectives:**

- A. To protect the sustainability and health of fish and aquatic life within our watersheds and downstream, and therefore all of our kin who depend on them. This should include stewardship of:<sup>17</sup>
  - Sufficient flows to support the correct temperatures of waters;<sup>18</sup> and
  - Aquatic habitat, in particular, ts’eman spawning grounds.
- B. To ensure the sustainability and health of grizzly bears in our watershed, as well as our other relations. This should include stewardship of:<sup>19</sup>
  - Ts’eman spawning grounds;
  - Quiet, undisturbed feeding areas; and
  - Grizzly habitat as it relates to water bodies.

<sup>17</sup> Xení Gwet’in Title Transition Table Meeting, November 3, 2020.

<sup>18</sup> Xení Gwet’in Title Transition Table Meeting, November 3, 2020.

<sup>19</sup> To ensure the sustainability and health of wild game species in the Xení Gwet’in Caretaker Area (Source: 2014 Xení Gwet’in Land Use Guideline Development and Skills Training Initiative) AND Integrate Tsilhqot’in culture, knowledge, language, and values into the core operations of the DTP, as well as the ways in which people use the land. (Source: 2016 Dasiqox Tribal Park Strategy Report).



**GOAL 4: TO BUILD CAPACITY ON WATER GOVERNANCE WITHIN THE XGFNG AND OUR XENI GWET'IN COMMUNITY, WHILE CENTRING TŚILHQOT'IN KNOWLEDGE IN OUR WATERSHED DECISION MAKING**

**Objectives:**

- A. To maintain and revitalize our Tśilhqot'in knowledge, cultural practices, and stewardship related to water and waterways.<sup>20</sup>
- B. To use our traditional knowledge alongside science to guide stewardship of our watershed.<sup>21</sup>
- C. To improve the capacity and knowledge base of our watershed and water-related decision making and opportunities in our community and in the XGFNG and staff.<sup>22</sup>

**“WE NEED TO PROTECT  
[WATER] FOR THE YOUNG  
GENERATION THAT ARE GOING  
TO BE LIVING ON THIS EARTH.”  
— JAMES LULUA SR.**

20 Tśilhqot'in knowledge, cultural practices, and stewardship related to water and waterways is maintained and revitalized (Source: 2018 Community Vision and Management Goals for Dasiqox Tribal Park).

21 Our history is celebrated and our traditional knowledge is used with science to guide stewardship of our Caretaker Area (Source: 2020 Xeni Gwet'in Forest Management Strategy 2020-2024).

22 Improve the knowledge base of watershed integrity in XGCA. Capacity building AND Increase the capacity of XG staff to restore and enhance land and aquatic systems in the Title lands (Source: 2016 Xeni Gwet'in First Nation Comprehensive Community Plan).



**GOAL 5: TO COORDINATE, INTEGRATE, AND COMMUNICATE OUR WATERSHED DECISION MAKING WITH XENI GWET'IN WORK AND T̂SILHQOT'IN NATION GOVERNMENT WORK**

**Objectives:**

- A. To coordinate our watershed decision making with all Nenqay and XGFNG work such as:
- Access management
  - Fisheries
  - Land use planning
  - Forestry
  - Climate adaptation
  - Tourism
  - Economic development related to water.
- B. To improve communication between XGFNG and our community about water decision-making.
- C. To maintain or build new meaningful partnerships and communication plans with other T̂silhqot'in communities, especially those overlapping watersheds and sub-watersheds, on watershed decision making.<sup>23</sup>

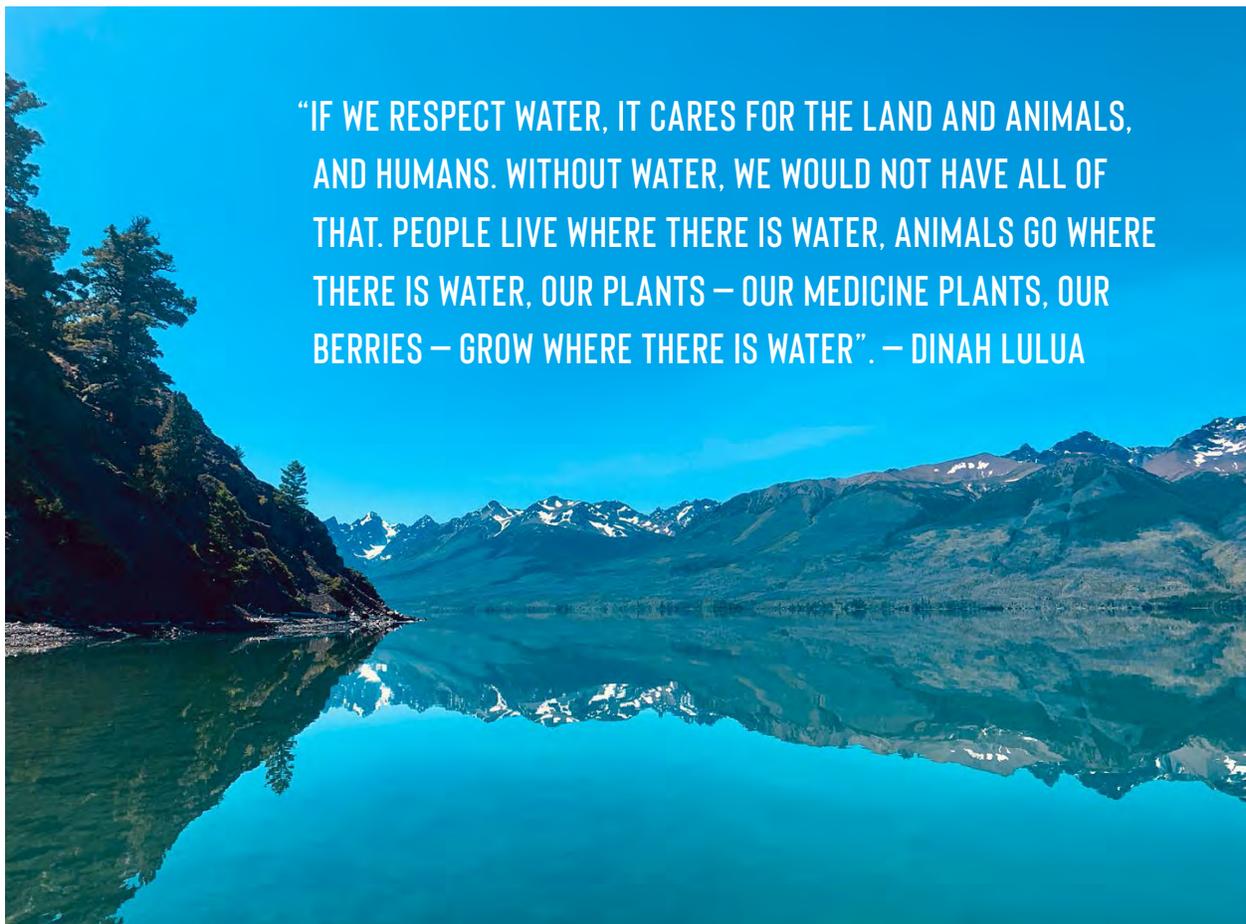
<sup>23</sup> To foster meaningful partnerships with other T̂silhqot'in communities to ensure the effective local enforcement of guidelines (Source: 2014 Xeni Gwet'in Land Use Guideline Development and Skills Training Initiative).

“WATER IS PRECIOUS FOR ME, IT IS WORTH WAY MORE THAN GOLD TO PEOPLE OUT THERE. BECAUSE WE NEED WATER TO LIVE, SO DOES ALL THE PLANTS, THE BIRDS AND THE ANIMALS, THEY ALL NEED WATER. SO WE HAVE TO PROTECT OUR WATER BY ALL MEANS.” – SUSIE LULUA

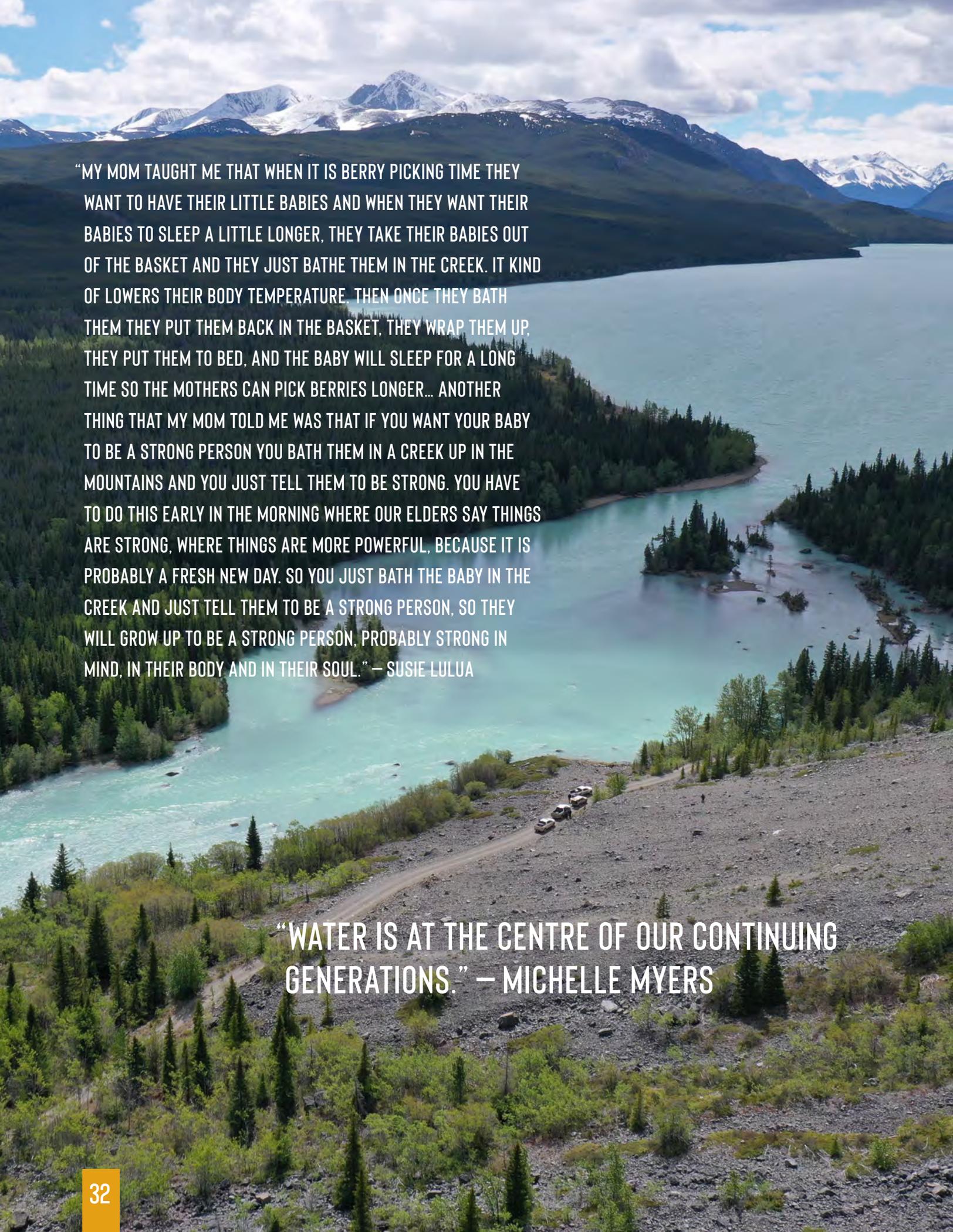
**GOAL 6: TO COMMUNICATE, AND WHERE NECESSARILY WRITE DOWN, OUR T̄SILHQOT’IN LAWS AND LAWS OF THIS LAND IN THE FORM OF POLICIES, PROTOCOLS, REGULATIONS, STRATEGIES, AND/OR LAWS**

**Objectives:**

- A. To write down, where necessary, XGFNG water policies, protocols, regulations, and/or strategies that reflect the above-stated goals.
- B. To write down, where a written law is found necessary to address certain problems or goals, a XGFNG water law that reflects T̄silhqot’in laws, laws of the land, and values related to water.<sup>24</sup>



<sup>24</sup> “The legal order has existed and adapted to changes facing T̄silhqot’in society since its origins. Their tradition can and does provide responses to today’s problems facing the Nation.” (Source: 2020 Alan Hanna Thesis *Dechen ts’edilhtan: Implementing T̄silhqot’in Law for Watershed Governance*.)



“MY MOM TAUGHT ME THAT WHEN IT IS BERRY PICKING TIME THEY WANT TO HAVE THEIR LITTLE BABIES AND WHEN THEY WANT THEIR BABIES TO SLEEP A LITTLE LONGER, THEY TAKE THEIR BABIES OUT OF THE BASKET AND THEY JUST BATHE THEM IN THE CREEK. IT KIND OF LOWERS THEIR BODY TEMPERATURE. THEN ONCE THEY BATH THEM THEY PUT THEM BACK IN THE BASKET, THEY WRAP THEM UP, THEY PUT THEM TO BED, AND THE BABY WILL SLEEP FOR A LONG TIME SO THE MOTHERS CAN PICK BERRIES LONGER... ANOTHER THING THAT MY MOM TOLD ME WAS THAT IF YOU WANT YOUR BABY TO BE A STRONG PERSON YOU BATH THEM IN A CREEK UP IN THE MOUNTAINS AND YOU JUST TELL THEM TO BE STRONG. YOU HAVE TO DO THIS EARLY IN THE MORNING WHERE OUR ELDERS SAY THINGS ARE STRONG, WHERE THINGS ARE MORE POWERFUL, BECAUSE IT IS PROBABLY A FRESH NEW DAY. SO YOU JUST BATH THE BABY IN THE CREEK AND JUST TELL THEM TO BE A STRONG PERSON, SO THEY WILL GROW UP TO BE A STRONG PERSON, PROBABLY STRONG IN MIND, IN THEIR BODY AND IN THEIR SOUL.” — SUSIE LULUA

“WATER IS AT THE CENTRE OF OUR CONTINUING GENERATIONS.” — MICHELLE MYERS



# WATERSHED ACTION PLAN

“YOU TALK TO THE LAKE ABOUT WHAT YOU WANT TO HEAL...”  
— MADELEINE SETAH

This section, Table 2, summarizes a series of recommended actions recommended actions for the watersheds of the Xeni Gwet'in Caretaker Area. The actions described here were drawn directly from previous Xeni Gwet'in work and plans. An original exhaustive list of 148 actions from over 60 reports were grouped and consolidated, then categorized according to the goals and objectives outlined in the section above. The purpose of this exercise was to honour and respect the extensive work already completed by Xeni Gwet'in, and — rather than once again developing yet another set of recommended action items — to instead present those already identified by Xeni Gwet'in in an organized, prioritized framework. To prioritize them, each action was ranked on a scale of 1 to 5 for the following criteria:

1. Does XG already have a strong legal argument for taking this action?
2. Does this action assert XG authority on water-related decision making?
3. Does this action address the problems most important to the community?
4. Is this action reasonably achievable in terms of XG capacity/human resources?
5. Is this action reasonably achievable in terms of time to complete or establish it?

The resulting actions, ranked by these five criteria, were grouped into three categories in terms of impact: moderate, high and very high. The time, resources, capacity and personnel needed to carry out the many possible actions described here may vary over time, and pressures or priorities related to the watershed may also change. For that reason, in addition to the static table below in this report, we have also provided the table of action items with ranking criteria as a living database to the Xeni Gwet'in Nenqay Department, so that ranks and criteria can be updated and re-assigned periodically, in order to update and adapt priority actions.

**TABLE 2. WATERSHED ACTION PLAN**



**GOAL 1: To centre T̓ilhqot'in culture and healing in all of our watershed decision making.**

Item	Action	Impact
<b>Objective 1A. To maintain and celebrate our way of living, cultural traditions, and connection to water through spirituality, ceremony, and access to food and medicines.</b>		
1	Support young people on the land through guardian/ranger programs.	Very high
2	Identify ecologically and culturally important water bodies and prioritize them for management of their cultural and ecological value. (See list pf 24 of these important water bodies 05 DTP).	High
3	Coordinate watershed stewardship with Indigenous fire management programs and prescribed burning: <ul style="list-style-type: none"> <li>■ Low-intensity prescribed burns/fire that in turn prevent catastrophic wildfires and thus damage to the wetlands.</li> </ul>	High
<b>Objective 1B. To re-centre Xeni Gwet'in women as decision makers in connection to water and the land.</b>		
4	Identify and address barriers for women to be in decision making roles around water, and create opportunities for women, including: <ul style="list-style-type: none"> <li>■ Convene an XG women's group on water and table important water decision making with them.</li> <li>■ Support and fund women in the role of XG Rangers.</li> </ul>	Very high
5	Reinvigorate community culture and responsibilities to engage in ceremonies, including: <ul style="list-style-type: none"> <li>■ coming of age ceremonies.</li> <li>■ water and ts'eman ceremonies.</li> <li>■ (Commentary: should be annual, but lately they tend only to be convened in response to crises. This should be the responsibility of the community).</li> </ul>	High

Item	Action	Impact
<b>Objective 1C. To focus on healing our Xeni Gwet'in people and our watershed</b>		
6	Host events out on the land for Elders to come together with community members at important waterways to both celebrate and reinvigorate T̓silhqot'in ways of being with and language related to respect for water.	Very high
<b>Objective 1 D. To support our Xeni Gwet'in people, especially our young people, to spend time out on the land and within our watershed to reinvigorate our knowledge of T̓silhqot'in water laws and connection with the land and waters.</b>		
7	Support our young people out on the land and in the watershed: <ul style="list-style-type: none"> <li>■ (Re)connect younger XG generations with visits to culturally important sites and water sources.</li> <li>■ Support young people on the land through guardian/ranger programs.</li> <li>■ Support and convene educational workshops on traditions related to water.</li> </ul>	Very high
8	Develop a Youth Training Program for Land Leadership in order to retain the cultural and knowledge base of the community and other significant traditional knowledge through opportunities such as: <ul style="list-style-type: none"> <li>■ Culture camps and youth programming with a progression into youth Guardians and land leadership that furthers traditional knowledge while also teaching other skills for emerging young adults, including bush knowledge and skills, food security, human-animal co-existence.</li> </ul>	High
<b>Objective 1 E. To protect our culturally important sites and water sources.</b>		
9	Identify important sites/places/features and share knowledge across generations: <ul style="list-style-type: none"> <li>■ Develop an Elders program to identify and document burial/cremation sites and other cultural/heritage features (before the specifics are lost in time).</li> <li>■ Make community aware of the areas specified in the LUG: Sheep Mountain, Fish Lake, Tsylos Mt./Mt. Tatlow, Onion Lake, Graveyard Valley, Potato Mountain, Cremation sites.</li> <li>■ Promote teaching and sharing among the XG community about how to find springs and water sources to drink from, in the backcountry.</li> </ul>	Very high
10	Protect culturally and ecologically important sites: <ul style="list-style-type: none"> <li>■ Integrate the protection of cultural sites into relevant management plans, including: wild fire protection plans, flood protection plans, and access management plans.</li> <li>■ Physically protect culturally significant seasonal gathering/meeting/fishing/camping areas; historic village sites, homesteads &amp; cabins; Quigley holes (earth lodge sites); burial/cremation sites; sacred/spiritual areas.</li> <li>■ Protect cultural fishing sites e.g., fish spawning and rearing habitat, fish traps &amp; fish drying sites, fish camps.</li> </ul>	Very high



Item	Action	Impact
<b>GOAL 2: To maintain, and where necessary restore, a clean, intact watershed.</b>		
<b>Objective 2 A. To maintain unpolluted water bodies and headwaters within all of our watersheds that are clean enough to drink directly from and abundant.</b>		
11	<p>Address point source pollutants within and upstream of the watershed:</p> <ul style="list-style-type: none"> <li>■ Remove garbage that may leach toxic chemicals into water system (old cars, appliances, drums of chemicals, etc.);</li> <li>■ Establish a recycling depot in Nemaiah for toxic chemicals;</li> <li>■ Clean up debris and garbage from streams;</li> <li>■ Coordinate with all wilderness lodges activities and effluent in the XGCA ensuring all parties meet the Canadian Water Quality Standards;</li> <li>■ Test for leakage and address septic/sewer in the community and in dwellings near water bodies in the watershed;</li> <li>■ Educate boaters about boating waste.</li> </ul>	Moderate
12	<p>Educate Xeni Gwet'in members about water protection, stewardship and conservation, including topics such as:</p> <ul style="list-style-type: none"> <li>■ disposal of toxic chemicals;</li> <li>■ protection from livestock;</li> <li>■ water quality and pollution.</li> </ul>	Moderate
13	<p>First, coordinate with Dasiqox/Yunesit'in Guardians, Xeni Rangers, and TNG on water quality monitoring (e.g., water flow and temperature) first within and then beyond the Chilko and Taseko rivers. Then, establish, assess and monitor key indicators for overall watershed health (glaciers, surface water, groundwater and wetlands) centred around XG needs and T̓silhqot'in knowledge. Specifically, assess, create baseline data for, and monitor:</p> <ul style="list-style-type: none"> <li>■ key lake, river and stream levels for flooding;</li> <li>■ water quality of streams and lakes;</li> <li>■ water quality of drinking water sources.</li> </ul>	Moderate

Item	Action	Impact
14	<p>Develop an action plan and identify best practices to encourage and facilitate low impact ranching and hayfield irrigation in order to protect riparian areas. Nemaiah creek is a particular concern.</p> <ul style="list-style-type: none"> <li>■ Assess options to keep cattle and motorized vehicles out of riparian areas and fish habitat throughout the caretaker areas of the Yunesit'in and Xeni Gwet'in communities. Options may include the continuation of riparian fencing, or alternatives that are less expensive and less restrictive to wildlife;</li> <li>■ Ensure livestock has access to water to support our traditional ranching way of life;</li> <li>■ Explore sustainable ways to improve drainage systems to maintain hayfields and ranges productivity but avoid run-off and eutrophication in streams and lakes, or changing the organic matter in soils, potentially leading to compaction;</li> <li>■ Identify low impact irrigation practices;</li> <li>■ Develop policies and standards to guide low impact irrigation.</li> </ul>	Moderate
<b>Objective 2B. To continue holistic management of watershed as our Xeni Gwet'in people have always done.</b>		
15	<p>Implement a freshwater protected area (akin to a marine protected area) or a Wild Rivers/Wild Waters Zone for the north Chilko—potentially in line with DTA.</p> <ul style="list-style-type: none"> <li>■ Assess the feasibility and barriers to establishing a pristine wilderness river in the north Chilko as per the XG LUG);</li> <li>■ Gauge XG community interest in this approach;</li> <li>■ Develop standards for river-based uses.</li> <li>■ Develop standards for shoreline uses.</li> <li>■ Implement tenures to manage users.</li> </ul>	Moderate
16	<p>Work with partnering agencies to establish, share, and maintain weather stations or rainfall monitoring equipment in several key locations in the XGCA.</p>	Moderate
<b>Objective 2C. To align our work on protection of water bodies with climate resilience and advocacy.</b>		
17	<p>Contract out climate analysis and interpretation (e.g., PCIC) for hydrological projections and/or land/water that is relevant to the XG community and decision makers.</p>	Moderate
18	<p>Undertake water use conservation measures in Nemaiah Valley (as needed), including:</p> <ul style="list-style-type: none"> <li>■ Implement water conservation measures (reduced water usage techniques);</li> <li>■ Repair pipe, faucet and toilet leaks in homes in the Nemaiah Valley;</li> <li>■ Install low flow faucets and toilet tank boosters in homes in the Nemaiah Valley;</li> <li>■ Examine the need for water reservoirs/cisterns to store peak flows for drier times of year/summer.</li> </ul>	Moderate

Item	Action	Impact
19	Develop a Flood Protection Plan for high risk areas near homes, roads and cultural sites. <ul style="list-style-type: none"> <li>■ Revisit the steps for Flood Protection Planning as outlined in the Xeni Gwet'in CBA Plan;</li> <li>■ Acquire flood protection supplies and equipment from partnering agencies as needed.</li> </ul>	Moderate
20	Collect baseline data for key glaciers (including ice mass of the Klokon) in the XGCA. <ul style="list-style-type: none"> <li>■ Check whether detailed glacial data is being gathered by other agencies (e.g., World Glacier Monitoring Service or U.S. Geological Survey);</li> <li>■ Form partnerships with agencies with resources to monitor glaciers;</li> <li>■ Train local XG community members or Rangers/Guardians to monitor glaciers.</li> </ul>	Moderate

“WE HAVE OUR BERRIES AND OUR MEDICINE PLANTS, AND OUR GRASS THAT THE WILD ANIMALS DEPEND ON TO SURVIVE, THE BEARS, THE DEER, AND THE MOOSE, ALL THE WILDLIFE IN THE FOREST. AND MINING, IF THERE WAS MINING IN OUR COMMUNITY, IT WOULD POISON ALL OUR WATERS. IF THEY POISON ALL OUR WATERS, THEN THEY WOULD POISON ALL OUR WILDLIFE, OUR FISHES AND OUR WATERS, OUR COMMUNITY WOULD BE POISONED.” – EILEEN WILLIAM



Item	Action	Impact
<b>GOAL 3: To take care of the habitat of all of our relations on the landscape as we always have.</b>		
<b>Objective 3A. To protect the sustainability and health of fish and aquatic life within our watersheds and downstream, and therefore all of our kin who depend on them.</b>		
21	<p>Implement a comprehensive fishery management plan that includes most if not all of the Xeni Gwet'in fishery sites for monitoring, assessment and enhancement.</p> <ul style="list-style-type: none"> <li>■ Coordinate upstream protection of spawning grounds with relevant First Nations and municipalities;</li> <li>■ Conserve fish stock as per plan set out in Xeni CBA Plan (e.g., Limit commercial, recreational and subsistence fishing if stocks continue to decline; Limit fish catches to large fish only) in the DTA;</li> <li>■ Coordinate the implementation of LUG Guidelines for First Nation Commercial Fishing;</li> <li>■ Revisit and implement the recommendations of the 2008 Xeni Gwet'in Caretaker Area Fisheries Enhancement Projects (e.g., re-assess spawning creek and road crossing ford on tributary of Onion Lake);</li> <li>■ Establish and enforce buffers around riparian areas, lakeshores, and wetlands for any land clearing activities (e.g., forestry, road-building);</li> <li>■ Gather and streamline baseline data on water quantity flows/quantity (gained from monitoring) to inform decision making and policies.</li> </ul>	Moderate
22	<p>Conduct a secondary investigation of groundwater in first in Nemaiah, Chilko Lake and Taseko Lake area and then beyond. May include:</p> <ul style="list-style-type: none"> <li>■ Detailed description of the site to test a conceptual hydrologic model;</li> <li>■ Preparation of water-table contour maps;</li> <li>■ Running aquifer tests to determine hydraulic conductivity and specific yield;</li> <li>■ Site reconnaissance visits and interviews;</li> <li>■ Preparation of a conceptual hydrogeologic model.</li> </ul>	Moderate
23	<p>Convene a team of experts to address invasive animal species (e.g., crayfish).</p> <ul style="list-style-type: none"> <li>■ Explore partnership with the Province of BC on invasive animal species;</li> <li>■ Assess the urgency of risk of current and potential invasive animal species;</li> <li>■ Identify and evaluate the necessary actions;</li> <li>■ Implement actions to mitigate damage and risk of invasive species.</li> </ul>	Moderate

24	<p>Bring together, update, and maintain data collection on important fish and fish habitat and cultural fishing areas within the watershed, including:</p> <ul style="list-style-type: none"> <li>■ Fish spawning and rearing habitats;</li> <li>■ Cultural/harvesting sites: fishing, gillnet fishing, fish drying sites, and fish camps;</li> <li>■ Critical habitat for fish;</li> <li>■ Wilderness fisheries lakes with pristine/limited access;</li> <li>■ Ecologically unique refugia (e.g. Teztan Biny);</li> <li>■ Fish and fish habitat in local lakes and streams within the Caretaker Area.</li> <li>■ Identify where planting riparian plants could improve fish habitat; evaluate need and effectiveness; where impact will be significant, bolster the local fish populations through riparian planting of appropriate plant/tree species.</li> </ul>	Moderate
25	<p>Monitor impacts on water bodies and fish habitat, including:</p> <ul style="list-style-type: none"> <li>■ Effects of range/livestock for upstream runoff, contamination and erosion of streams and wetlands;</li> <li>■ Identify where culverts block fish passage;</li> <li>■ Replace culverts to allow fish passage;</li> <li>■ Identify where beaver dams block fish passage;</li> <li>■ If necessary install beaver dam bypasses for fish passage.</li> </ul>	Moderate
26	<p>Consult experts on invasive weeds (mainly from boat hulls and propellers):</p> <ul style="list-style-type: none"> <li>■ Explore partnership with the Province of BC on invasive weeds;</li> <li>■ Assess the urgency of risk of current and potential invasive weeds in local waters;</li> <li>■ Identify and evaluate the necessary actions;</li> <li>■ Develop an action plan for addressing/preventing problems.</li> </ul>	Moderate
<b>Objective 3B. To ensure the sustainability and health of grizzly bears in our watershed, as well as our other relations.</b>		
27	Coordinate with access management plan to regulate and reduce boat presence in the north Chilko.	Very high
28	Update, establish, and communicate Commercial Bear Viewing Guidelines in LUG including allocating priority sites and areas in the grizzly bear management plan.	High
29	(Re)examine and establish parameters around public grizzly bear viewing (with a possible user fee).	High
30	Implement or continue bear monitoring in relation to ts'emán and spawning area monitoring (e.g., numbers, distribution, effects of human or habitat disturbances).	High
31	Coordinate with the actions and protocols laid out in the Dasiqox Grizzly Stewardship Framework (e.g., concerns around bear viewing; Critical Habitat Protection; Climate change adds wildcard impacts from changes to snow packs, water sources and wetlands, and the timing and productivity of berries and other food plants.).	Moderate



PHOTO: SAM BEEBE/FLICKR COMMONS

Item	Action	Impact
<p><b>GOAL 4: To build capacity on water governance within the XGFNG and our Xeni Gwet'in community, while centring T̓ìlhqot'in knowledge in our watershed decision making.</b></p>		
<p><b>Objective 4A. To maintain and revitalize our T̓ìlhqot'in knowledge, cultural practices, and stewardship related to water and waterways.</b></p>		
32	Map traditional/sacred sites but keep the information confidential (i.e., don't identify or mark them on site; keep information buffered and randomized in any mapped outputs.)	High
33	Request that Provincial Government spend more time and funding on determining the status of numerous land and aquatic based species resident in the Xeni Gwet'in Caretaker Area. <ul style="list-style-type: none"> <li>■ Develop information sharing collaboration with provincial government monitoring.</li> </ul>	Moderate
<p><b>Objective 4B. To use our traditional knowledge is alongside science to guide stewardship of our watershed.</b></p>		
34	Develop capacity in community to collect, manage, and use spatial data for the Caretaker Area, to support decisions related to the watershed and land use: <ul style="list-style-type: none"> <li>■ Place names: continue to map place names in the watershed (TNG project already underway), and develop XG capacity to use that map data.</li> <li>■ Ts'eman spawning areas mapping, including seasonal habitats.</li> <li>■ Range management mapping as relates to water.</li> <li>■ Aquifer maps for the Chilko watershed, including updated of groundwater wells map.</li> </ul>	High
35	Increase the capacity of XG staff to restore and enhance land and aquatic systems in the Title lands. (i.e., hire, train, and equip XG staff/contractors to restore degraded lands, fence, manage livestock/wildlife and aquatic systems in Title lands.)	High

Item	Action	Impact
36	Revitalize and/or expand the scope of the Guardian/Ranger Program to include monitoring and stewardship activities. (This may include actions such as hiring, training more Guardians, differentiating between compliance/enforcement and monitoring/stewardship, etc.) Suggested roles for Guardian/Rangers include: <ul style="list-style-type: none"> <li>■ Supporting fisheries protection;</li> <li>■ Managing public access in the Caretaker Area, especially during summer months;</li> <li>■ Fisheries Guardian Program for the XGCA (similar to the Parks warden program currently in place);</li> <li>■ Monitoring and education to prevent and record bear-people conflicts;</li> <li>■ Enforcement on issues such as jetboating, fishing regulations, mushroom hunting in burn areas.</li> </ul>	High
<b>Objective 4C. To improve the capacity and knowledge base of our watershed and water-related decision making and opportunities in our community and in the XGFNG and staff.</b>		
37	Create training and career opportunities for XG Rangers around coordinated watershed work—specifically inclusion on the external work being done for XG, for example the 2020 Forestry Strategic Plan.	High
38	Consider watershed friendly ecotourism hosted by XG (e.g., non-motorized use of backcountry areas suitable for adventure & wilderness tourism; whitewater rafting, boating, guided fishing).	Moderate



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Item	Action	Impact
<p><b>GOAL 5: To coordinate, integrate, and communicate our watershed decision making with Xeni Gwet'in work and T̓ilhqot'in Nation Government work.</b></p>		
<p><b>Objective 5A. To coordinate our watershed decision making with all Nenqay and XGFNG work</b></p>		
39	<p>Create near-term and long-term watershed plan implementation capacity including:</p> <ul style="list-style-type: none"> <li>■ Securing funding for continuity of watershed work, staff, rangers, training, and to carry out near-term actions.</li> <li>■ Developing additional XG management and implementation capacity for the watershed strategy.</li> <li>■ Clarifying relationship with TNG on watershed and fisheries management support (i.e., funds, staffing, access to information, negotiation support, roles and responsibilities).</li> </ul>	High
40	Harmonize watershed planning and regulations with the XG access management regulations.	High

Item	Action	Impact
41	<p>Develop and implement a filing and archiving system for XG documents, recordings, and maps (e.g., title case, language and knowledge recordings by family including security and access, previous reports, maps, photos):</p> <ul style="list-style-type: none"> <li>■ Partner with other agencies as necessary to secure expertise, funding, personnel, training, and other resources;</li> <li>■ Identify various types of information and recordings, plus potential uses (e.g. decision-making, Nenqay management, education and knowledge continuity, etc.);</li> <li>■ Prioritize filing and archiving (e.g., valuable knowledge from elders, media that degrade or break down over time);</li> <li>■ Digitize information and document necessary and relevant to decision-making and stewardship of Nenqay; and</li> <li>■ Develop capacity and procedures for staff and leaders to access and refer to that information when making decisions.</li> </ul>	Moderate
42	<p>Subject forestry-related activities to water quality and flow standards, including:</p> <ul style="list-style-type: none"> <li>■ Road-building, landings and skid roads (e.g., erosion, drainage patterns, diversion, culverts);</li> <li>■ Site treatment and slash burning;</li> <li>■ Replanting and brushing;</li> <li>■ Herbicide application;</li> <li>■ Forestry-related harvesting as it pertains to water (e.g., landslides/erosion, sedimentation; flooding).</li> </ul>	Moderate
43	Address/coordinate with forestry-related fire mitigation/fuel reduction as it pertains to water (e.g., snow pack modification, forest cover, run-off, loss of organic matter).	Moderate
<b>Objective 5B. To improve communication between XGFNG and our community about water decision-making.</b>		
44	Include a water section in every newsletter that informs citizens of actions being taken, and what they should themselves look out for.	Very high
45	Create a forum and/or online space for citizens to voice concerns about water, and what they are seeing/experiencing.	Very high
46	Regularize communication to XGFN members to keep informed on restrictions and guidelines, and to continue knowledge sharing with younger generations on protecting water, not contaminating water, the value of water, access protocols, bear viewing protocols, etc.	Very high
47	<p>Create a council of XG citizens (i.e., advisory forum or group) to inform and advise on water and land decision-making.</p> <ul style="list-style-type: none"> <li>■ Identify and convene XG people with unique knowledge and opinions to inform water and land decision making.</li> <li>■ Regularize accessible communication between XG advisory group, XG leadership, and the broader community to create a stronger community voice on land and water management issues.</li> </ul>	High

Item	Action	Impact
<b>Objective 5C. To maintain or build new meaningful partnerships and communication plans with other T̓ìlhqot'in communities, especially those overlapping watersheds and sub-watersheds, on watershed decision making.</b>		
48	Communicate XG policies and protocols to visitors/campers/vacationers on protecting water, not contaminating water, the value of water, access protocols, bear viewing protocols, etc.). <ul style="list-style-type: none"> <li>■ Via website before their visit;</li> <li>■ Via signage out on the lands/waters: communicate XG policies and protocols to all land/water users on protecting water, not contaminating water, the value of water, access protocols, bear viewing protocols, etc.</li> </ul>	Very high
49	Build strategic partnerships to support watershed goals and actions (e.g., other First Nations, universities/researchers, and water/environmental organizations).	High
50	Coordinate with TNG fisheries for support, data collection, science, and policy support.	High
51	Finalize cumulative effects system and coordinate it with monitoring: <ul style="list-style-type: none"> <li>■ Prioritize using T̓ìlhqot'in knowledge to identify early warning triggers for management intervention;</li> <li>■ Coordinate intervention responses;</li> <li>■ Coordinate with monitoring of fish.</li> </ul>	Moderate



Item	Action	Impact
<p><b>GOAL 6: To communicate, and where necessarily write down, our T̓silhqot̓'in laws and laws of this land in the form of policies, protocols, regulations, strategies, and/or laws.</b></p>		
<p><b>Objective 6A. To write down, where necessary, XGFNG water policies, protocols, regulations, and/or strategies that reflect the above-stated goals.</b></p>		
52	<p>Consider developing and/or implementing XG regulations/policies on:</p> <ul style="list-style-type: none"> <li>■ Allocation of ts'eman harvests, both non-T̓silhqot̓'in and T̓silhqot̓'in (see Nisga'a managed fishery);</li> <li>■ Angling fishery (use the guidance of the protocols already created in XG LUG);</li> <li>■ Fishing protocols (protocols created already in LUG) (e.g., fish away from spawning beds and not during spawning season).</li> </ul>	High
53	<p>Consider developing consultation protocols and applicable XGFN conservation rules and standards to be followed by Crown decision makers when reviewing applications for land and/or water use in or impacting the Caretaker Area that involve the release of chemicals or other pollutants that may compromise water quality (including fire retardant, effluent, and DFO/MOE fertilizing, testing and conducting research in XGCA lakes and rivers).</p> <ul style="list-style-type: none"> <li>■ Develop internal decision-making and permitting process/protocol for XGFN to respond to consultation and situations on this matter;</li> <li>■ Communicate new rules, expectations, protocols to relevant agencies (i.e., Crown government ministries, industry, landowners, etc.).</li> </ul>	High
54	<p>Develop policies that reflect the Water Use Guidelines set out in the XG Land Use Guidelines.</p>	High
55	<p>Develop protocols and conservation rules for non-XG visitors and tour operators. Then, communicate those rules/protocols to Crown decision makers and the expectation that tour operators may not be licenced if they won't abide by the protocols/rules.</p>	High

Item	Action	Impact
56	Water license allocation and revocation by the Province should be closely monitored by XGFNG to ensure that minimum flow requirements for aquatic life are adhered to on any streams and lakes in the Caretaker Area (given the threats of climate change and acceleration of drought).	Moderate
57	Develop XG regulations/policies to guide management of a sustainable food fishery.	Moderate
<b>Objective 6B. To write down, where a written law is found necessary to address certain problems or goals, a XGFNG water law that reflects T̓ilhqot̓in laws, laws of the land, and values related to water.</b>		
58	Consider XG regulations/laws that protect cultural assets, springs, and water bodies of cultural spiritual importance.	Very high
59	Develop laws and supporting policies to protect wildlife and habitat in riparian areas and water bodies, including: <ul style="list-style-type: none"> <li>■ Restrictions on human bear viewing activities and/or access to lands and waters used for bear viewing (e.g., specify seasons/times/hours);</li> <li>■ Protection of spawning grounds, bear feeding habitat, and movement corridors;</li> <li>■ Preventing habituation of bears;</li> <li>■ Finalize operational guidelines for bear viewing within the Upper Chilko River corridor.</li> </ul>	High
60	Create, adopt, and communicate a XG water law for the CTA and/or the Chilko watershed. <ul style="list-style-type: none"> <li>■ Consider laws, regulations, policies that protect the watershed from industrial developments including: <ul style="list-style-type: none"> <li>○ Mining/exploration;</li> <li>○ Hydro-electric development;</li> <li>○ Water diversion.</li> </ul> </li> </ul>	Moderate
61	Make a plan for dispute resolution for private landowners, the Crown, and other non-T̓ilhqot̓in water users in the area related to water laws, policies and human activities use that is based on T̓ilhqot̓in ways.	Moderate
62	Prohibit industrial logging and mining in the XGCA.	Moderate
63	Consider formally recognizing legal rights of water as a living entity (e.g., river personhood, NZ example).	Moderate
64	Prohibit any commodification or commercial removal of freshwater (e.g., water sales, bottling).	Moderate
65	Explore the option of a bilateral agreement management agreement (nation-to-nation) with Province/Canada on water to manage and protect water resources and establish a master agreement that sets out the terms of the relationship (akin to the Bilateral Water Management Agreements between BC-Yukon-Canada, etc.).	Moderate

## APPENDIX A: DOCUMENTS REVIEWED

Year	Title
1989	Nenduwh Jid Guzitin Declaration
1997	Ts'il?os Provincial Park Master Plan
1997	Ts'il?os Provincial Park Master Plan Appendix
2002	Securing Tourism's Future in the Chilko Lake Area
2004	Towards Culturally and Ecologically Sustainable Land Use in the Chilko River Watershed
2005	(Part 1) Proposed Access Management Plan for Xeni Gwet'in First Nations Caretaker Area
2005	(Part 2) Proposed Access Management Plan for Xeni Gwet'in First Nations Caretaker Area
2006	Xeni Gwet'in Human Use Areas Project
2006	Wilderness Tourism Grid Definition of Management Zones
2007	XGFN Quality Water Management Plan Summary
2007	XGFN Fisheries Assessment and Enhancement Planning Project
2008	XGFN Stream Crossing Assessment
2009	XGFN XGCA Water Quality RefMan and Sampling
2009	Chilko River Watershed Roundtable
2010	Xeni Gwet'in Community-based Climate Change Adaptation Plan
2010	Glaciers of the Xeni Gwet'in Caretaker Area: Glacier Inventory and Recent Change
2010	XGFN Chilko Roundtable Management Summary
2010	Review of Xeni Gwet'in Chilko Roundtable Watershed Plan
2010	XGFN XGCA Fisheries Enhancement Projects
2010	Xeni Gwet'in Sustainable Agriculture Strategy
2011	Xeni Gwet'in Ecosystem-Based Conservation Plan
2011	A Review of Groundwater Resources in the Xeni Gwet'in First Nation Caretaker Area
2012	T'silhqot'in Legal Traditions Report
2013	Xeni Freshwater Aquaculture Feasibility Study Final
2013	Xeni Gwet'in Range Management Plan
2013	XGFN Presentation Extensive Aquaculture Feasibility Study
2014	Xeni Gwet'in Land Use Guideline Development and Skills Training Initiative
2014	XGFN XG Freshwater Aquaculture Feasibility Study
2014	The Xeni Gwet'in Vision for Sustainable Development
2015	Xeni Gwet'in Fisheries Job Creation Program
2015	Xeni Gwet'in First Nation Fishery Work Experience Program

2015	Ecosystem-based Management Planning in Land & Resource Management- Aquaculture
2016	Dasiqox Tribal Park Strategy Report
2016	Xeni Gwet'in First Nation Comprehensive Community Plan
2017	Dasiqox Tribal Park Forest Harvest Scenarios
2017	Xeni Gwet'in-Chilko Grizzly Bear-People Management Plan
2017	TTT Discussion about DTA Access Principles
2018	Community Vision and Management Goals for Dasiqox Tribal Park
2018	T̄silhqot'in Cumulative Effects Management Plan_DRAFT
2018	Bear Viewing Management Plan
2018	Summary of Xeni Gwet'in Fisheries Projects 2006-2018
2019	Grizzly Stewardship Framework - Dasiqox
2019	Interim Sustainability Guidelines for the Upper Chilko Corridor
2019	SUMMARY Interim Sustainability Guidelines for the Upper Chilko Corridor
2019	Xeni Gwet'in Land Use Presentation
2019	T̄silhqot'in Nation Wildlife Law
2019	Reclaiming the Origins of Our Next Generation
2019	Xeni Gwet'in Forest Strategy Summary of Recommendations
2020	T̄silhqot'in Implementation Workshop Summary
2020	Summary of Trip - Tsilhqotin Implementation February 2020
2020	Final Report: T̄silhqot'in Water Law
2020	Xeni Gwet'in Land Use Plan Assessment and Roadmap
2020	Outline/Vision for ?Esdilagh Water Law
2020	Elhdaqox Dechen Tsedilhtan (Sturgeon River Law)
2020	Province Tsi Deldel First Nation GB Management Plan Engagement Letter
2020	(Alan Hanna Thesis) Dechen ts'edilhtan: Implementing T̄silhqot'in Law for Watershed Governance
2020	Chilko River VORR Presentation
2020	Xeni Gwet'in Forest Management Strategy 2020-2024
2020	UN submission-water crisis by T̄silhqot'in Nation
2020	Nenqay Department July 2020 Session
?	SUMMARY of Proposed Access Management Plan for Xeni Gwet'in First Nations Caretaker Area
?	Land Use Management Policy Recommendations
?	Xeni Declaration of Natural Environment Stewardship

## APPENDIX B: LIST OF PARTICULARLY IMPORTANT WATER BODIES

- |                        |                       |                          |
|------------------------|-----------------------|--------------------------|
| 1. Chilko Lake         | 11. Bidwell Creek     | 21. Little Fish Lake     |
| 2. Miracle/Mirror Lake | 12. Konni Lake        | 22. Big Lake             |
| 3. Edmonds Creek       | 13. Rainbow Creek     | 23. Cochin Lake          |
| 4. Yohetta Lake        | 14. Long Meadow Creek | 24. Tatlow Creek         |
| 5. Tsuniah Lake        | 15. Tsucha Lake       | 25. Lingfield Creek      |
| 6. Taseko Lake         | 16. Lastman Lake      | 26. Nemiah Creek (mouth) |
| 7. Beece Creek         | 17. Wolf Track Lake   | 27. Robertson Creek      |
| 8. Chaunigan Lake      | 18. Big Onion Lake    | 28. Carrot Creek         |
| 9. Brittany Creek      | 19. Little Onion Lake | 29. Elkins Creek         |
| 10. Choelquoit Lake    | 20. Fish Lake         | 30. Klokon Creek         |



## APPENDIX C: WILDFIRE AND HYDROLOGY OF THE WATERSHED

### *Post-Wildfire Hydrologic Concerns and Recommendations for Salvage Logging in the Southern Interior*

*Rita Winkler, Research Hydrologist, FLNRORD, Province of BC, Kamloops February 6, 2018*

Wildfire and associated salvage logging can have a significant effect on hydrologic processes at both the stand and watershed scales. Loss of forest cover following wildfire generally results in:

- increased precipitation reaching the ground (rain and snow),
- decreased transpiration,
- the potential for increased soil moisture, and
- the potential for increased runoff.

In addition, depending on burn severity, soil properties, and vegetation type, a water repellent (hydrophobic) soil layer may form. Where this occurs, soil permeability will be reduced thereby increasing surface runoff as well as the potential for erosion.

Where the burned area is extensive, watershed-scale effects may include:

- increased streamflow (both annual yield and peak flows),
- advanced timing of snowmelt generated flows and prolonged low flows, and
- degraded water quality (physical, chemical, and biological).

The magnitude of post-fire hydrologic change is affected by:

- the timing and magnitude of post-fire rainfall and/or snowmelt,
- burn severity, extent, and distribution,
- watershed characteristics such as slope, aspect, forest cover, soils and geology,
- hydraulic connectivity,
- past forest disturbances, and
- recovery of vegetation, slopes and channels.

In general, where burn severity is low, measurable hydrologic response is unlikely. However, in areas with moderate to high burn severity, both local and downstream hydrologic changes can be significant in the years prior to vegetation recovery. The largest changes in streamflow timing and magnitude and in water quality are likely to occur:

- during intense rainstorms and during rapid melt of an above normal snowpack after a wet fall,

- in areas with high drainage densities, including streams and roads,
- in smaller watersheds where runoff concentration times are short,
- in watersheds without lakes or wetlands to attenuate flow,
- where runoff across the watershed becomes synchronized,
- in higher snowfall areas with mature spruce and sub-alpine fir dominated forest cover,
- where hydrophobic soil conditions occur,
- where runoff is concentrated from gentle onto steep slopes, and
- where surface runoff and erosion occurs along slopes and roads directly connected to streams.

Salvage logging, as well as pre-fire and fire-fighting related disturbance, may compound fire-related hydrologic change through:

- removal of remaining green vegetation,
- soil disturbance,
- alteration of natural flow paths,
- diversion of water along roads,
- riparian disturbance,
- poorly designed stream crossings,
- lack of road maintenance,
- removal of barriers that reduce cattle access to streams, and
- increased public access to slopes and streams.

Salvage plans should:

- focus on areas with little or no remaining green vegetation, maximize tree retention in areas where snowmelt dominates the hydrologic regime, and protect the understory,
- avoid riparian areas, whether black or green and regardless of stream classification, in order to protect channel banks and minimize cattle access to streams,
- avoid areas of erodible soil, hazardous terrain, and steep (>40%) slopes, and minimize soil disturbance,
- time harvest according to ground conditions, for example, in areas with hydrophobic soils consider harvesting during dry periods to break up the water repellent layer and in other areas schedule harvesting during snow-covered seasons to minimize soil disturbance,

- leave (or place) wood on the ground, thus increasing roughness which interrupts surface runoff and sediment delivery to streams and restricts cattle movement to and along streams,
- minimize stream crossings and maximize cross drains along roads,
- develop road monitoring/maintenance plans, including annual field reviews of all ditches and culverts to ensure they are fully functional prior to spring snowmelt, and
- decommission roads as soon as possible to reduce the potential for erosion and sediment generation, including damage caused by recreational access.

Moderate to high intensity wildfires can result in substantial hydrologic change at both the stand and watershed scales. These changes may be compounded by past disturbances and post-fire salvage logging. Both localized and watershed-wide hydrologic change can have a significant effect on downstream values such as water quality and quantity, stream channel stability, infrastructure, public safety, and aquatic ecosystem health.

Watershed assessments should be undertaken prior to logging in order to understand the risks to downstream values and to identify the opportunities for minimizing risk, including the potential for runoff desynchronization in the design of salvage and leave areas, road and drainage management, access restrictions, riparian area protection and recovery of vegetation, slopes and channels.

“WE ARE ALL GOING TO DIE IF WE DON’T SMARTEN UP AND RESPECT WATER. WE CAN’T TAKE WATER FOR GRANTED, THAT IT IS GOING TO ALWAYS BE THERE FOR US, WE HAVE TO HELP KEEP IT FRESH. [...] IF WE RESPECT WATER, IT TAKES CARES OF THE LAND AND ANIMALS, AND HUMANS. WITHOUT WATER, WE WOULD NOT HAVE ALL THAT. PEOPLE LIVE WHERE THERE IS WATER. ANIMALS GO WHERE THERE IS WATER. OUR PLANTS – OUR MEDICINE PLANTS, OUR BERRIES – GROW WHERE THERE IS WATER.” – DINAH LULUA



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