

The UVic-Community Living Lab Project – Supporting Indigenous-Led and Place-Based Eco-Cultural Restoration and Science Education

**Reclaiming ȚIKEL:
A ȚSÁNEĆ Community Restoration Project**

The word ȚIKEL can be translated to “bog” but, as a place name, it encompasses what used to be a wetland of ȚSÁNEĆ territory, the homeland of the ȚSÁNEĆ people. It was said to be a bountiful area for collecting foods, medicines and materials. Currently, ȚIKEL is a 25-acre plot of agriculturally zoned land newly purchased by the municipality of Central Saanich, near Victoria B.C. As a significant stakeholder in the future use of this land, the ȚSÁNEĆ School Board has requested to utilize some of this land as an ongoing ecological and cultural restoration site and classroom for our school. The politics of this important cultural landscape continue to this day; our restoration activities which commenced in January 2016 have been put on hold due to delays in riparian management issues. As a result, our team has turned to a similar wetland area in need of restoration at ŁÁU,WELNEW Tribal School to maintain the cultural learning and restoration skill development of this project.

As at ȚIKEL, one of the plants that historically flourished at our new restoration site is SXELE,ILĆ (Pacific Willow, *Salix lasiandra*), traditionally an important plant because the inner bark was used as the primary fibre for the making of reef-nets. The reef-net, known as SXOLE, is unique to ȚSÁNEĆ people and is a significant artifact of traditional ȚSÁNEĆ culture. In fact, ȚSÁNEĆ are known as Saltwater people because they used the SXOLE during the summer months to capture salmon in the channels of the Southern Gulf Islands, also part of traditional ȚSÁNEĆ territory.

The reefnet practice has taken on new life with ȚSÁNEĆ academics and language revivalists reclaiming this essential piece of their heritage. The reclamation of wetland areas and the practice of working with SXELE,ILĆ is an opportunity to renew these vital traditional practices.

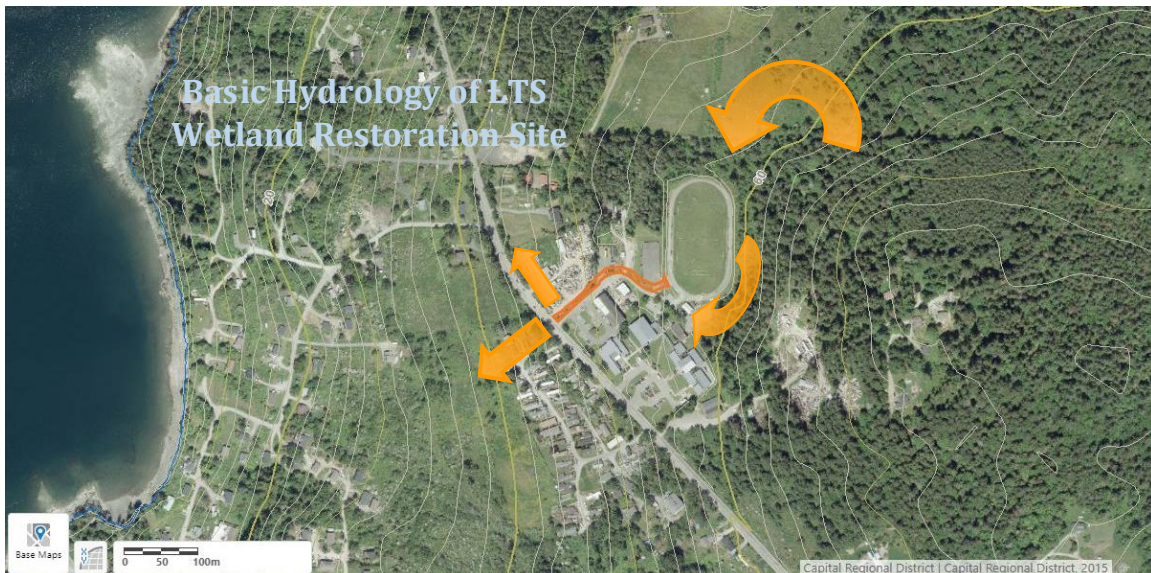
Project partners include Dr. Nick Claxton, PEPÁKEN HÁUTW Foundation and the ȚSÁNEĆ School Board. Students of ŁÁU,WELNEW Tribal School, ȚSÁNEĆ Leadership Secondary School and the Saanich Adult Education Centre will be carrying out most of the restoration activities led by Dr. Nick Claxton & Judith Lyn Arney (PEPÁKEN HÁUTW Ecosystems Coordinator).

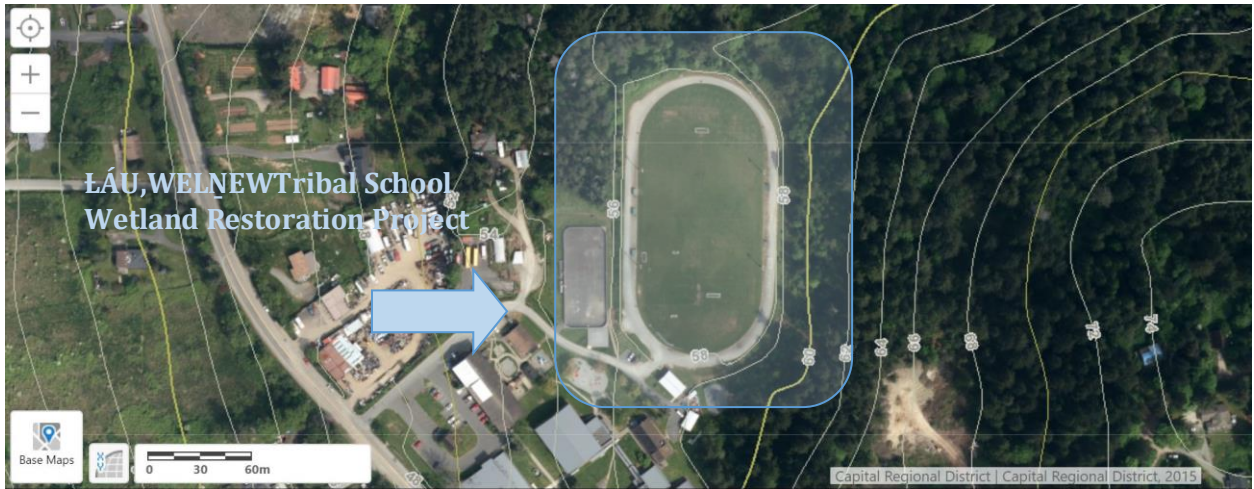
ŁÁU,WELNEW Tribal School Wetland Restoration Site

This restoration site is located around the sports field at ŁÁU,WELNEW Tribal School (Brentwood Bay, BC). The forest area upslope of the main work area is mainly populated by JSÁY (Douglas fir, *Pseudotsuga menziesii*), PEPKIYOS IŁĆ (snowberry, *Symphoricarpus albus*), DAKE IŁĆ (salal, *Gaultheria shallon*), as well as our feature plant SXELE,IŁĆ. The ecosystem was likely initially disturbed during the construction of the sports field, creating an opportunity for Scotch broom (*Cytisus scoparius*) and Himalayan blackberry (*Rubus discolor*) to invade the site.



There is a water drainage around the running track, continuing down along the slope toward West Saanich Rd, creating an excellent location for STA,KEN (cattail, *Typha latifolia*) and SÇELEL (tule, *Schoenoplectus acutus* and common rush, *Juncus effusus*). These plants are not currently dwelling on this site due to the artificially constructed nature of this drainage, however the composition of the intact ecosystems near the project area are good indicators that such plants would thrive in this location.





The vision for this project is the revitalization of this important ecosystem on school grounds, which represents an incredible complement to the cultural and ecological teachings already taking place at ŁÁU, WELNEW Tribal School. The project can be carried out in phases, each year tackling a new section of the project area.



Restoration Activities

Invasive Species Removal

Restoration activities at this site will first include invasive species removal. Participants will use hand tools (shovels, loppers, pruning saws, secateurs) to remove as much of the invasive species as possible. Himalayan blackberry roots can be dug out wherever possible after removing the long thorny canes. However, due to a long taproot, digging out Scotch broom roots can often create enough disturbance of the soil to negatively impact the integrity of a slope site or disrupt a sensitive ecosystem. As we have a 2m slope on this site, we will monitor the impact of digging out Scotch broom roots and, if soil degradation appears likely, we will cut the broom stems to the ground and return in following years to cut any sprouts until the energy in the root systems are exhausted and the plant decays in the soil.

Invasive species removal is best done in late autumn, winter and early spring as the soil is more workable for digging and the risk of spreading viable seeds from the invasive plants is significantly reduced.

Planting & Propagation

There are many opportunities for direct planting of propagative materials at this project site. SĀELE,ĪĆ (willow) stakes can be cut from various locations around WŚÁNEĆ territory, including the Horticulture Centre of the Pacific where students visited during the earlier phase of this project. SĀA,ĪEN (cattail) rhizomes can be also be harvested from this location and any other where they are thriving in profusion. Common rush can also be transplanted directly after division of its rhizome clumps, while the rhizomes of tule (SĀELEL is recorded as the SENĆOFEN name for both tule and common rush) can be cut into pieces and submerged in water until they form roots before being planted directly on site.

Monitoring and Maintenance

As with any restoration site, monitoring and maintenance will be vital to the long term success of the restoration work. The first priority is to monitor for the recurrence of invasive species at this site and remove them regularly. Fortunately, the principles of traditional stewardship, which include respectful food and medicine harvest, in combination with the educational objectives of this project at TIKEL, will create many opportunities for students and community members to return to this site in order to actively steward the LÁU,WELNEW Tribal School Wetland Restoration Project.

Curriculum Development

Throughout the restoration process, we will be documenting our efforts and developing effective curriculum to integrate cultural and ecological elements of this project into the learning structures already in place at the Tribal School. The interconnections between language and land, traditional ecosystem stewardship, ecological science, and ethnobotany will be illustrated in these documents and presented via pepakenhautw.com and the Living Lab website. In this way, our curriculum development will have immediate benefit to the students at the Tribal School and provide a template for the education community across this region and beyond.

2019-2020 Timeline

September - November 2019	project meetings and consultations curriculum development invasive plant removal
December 2019	reefnets/willow workshops
February 2020	invasive plant removal reefnets/willow workshops curriculum development
March 2020	harvest propagative materials and plant directly on site
April - September 2020	site monitor, plant propagation reefnets/willow workshops curriculum development

Judith Lyn Arney

Nov 15, 2018