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## Uu-a-thluk Watershed Renewal Update to People's Assembly

November 3, 2020

This update highlights the main activities of the Huu-ay-aht Watershed Renewal (HWRP) between April 2020 and October 2020. This is Year 4 of the HWRP. The COVID-19 pandemic and the desire to safeguard everyone, especially Huu-ay-aht citizens, affected the HWRP's ability to implement some field programs. However, despite this, much was accomplished. The reduction in field work in 2020 enabled completion of several key assessment reports.

All HWRP field activities operated following COVID-19 precautions and safety measures including:

- Travelling in separate vehicles (per team)
- Sanitization stations and masks provided
- Masks worn when in close proximity
- Self-assessment and stay home if sick protocols followed

### 2020 Activities

1. The 2019 study year ended with the **coded wire tagging** (for monitoring ocean survival) of 194,000 Sarita Chinook salmon at the Nitinat Hatchery in March 2020. Unfortunately, the proposed tagging of an additional 295,000 Sarita Chinook in April was cancelled due to COVID-19.

2. The 2020 **Rotary Screw Trap (RST)** project to study young salmon migrations successfully operated in the Sarita River from February 20 to May 6, 2020. Crystal Clappis, Shannon Nookemus, Richard Nookemus, Leonard Nookemus, Amelia Vos, Katie Turner, Stephen Smith, and Stefan Ochman all participated in the study. The study was suspended on March 18 when the Province of BC shut-down non-essential services due to COVID-19. The study was restarted 10 days later on March 27 under strict COVID-19 protocols and operated 3 days per week until the end of the study on May 6.

Sarita juvenile Chinook migration included an estimated >200,000 naturally spawned Chinook salmon fry and an additional 490,000 hatchery spawned Chinook fry that were released by Nitinat Hatchery at Blenheim Bridge in May.



Juvenile salmon captured in the trap in Sarita R



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3. The stability, habitat characteristics and maintenance requirements for 85 **Large Woody Debris structures** constructed in the Pachena River and Rousseau Creek in 2019 was assessed under the direction of Marc Gaboury and Stefan Ochman and a Routine Evaluation Effectiveness (REE) report of the findings was prepared. All existing structures in the Pachena River and Rousseau Creek were meeting or exceeding performance objectives for structural condition and structural stability. Some structures in Pachena River and a tributary to Rousseau Creek, were not fully meeting physical and biological performance objectives. No maintenance measures were required.



Large woody debris structure in Pachena

4. Stefan Ochman prepared a report that documents 2018 results of the **evaluation of LWD and riffle structures** constructed in the late 1990s and early 2000s in Sabrina, Hunter, Sugsaw, Shaky Bill's and Rousseau creeks.



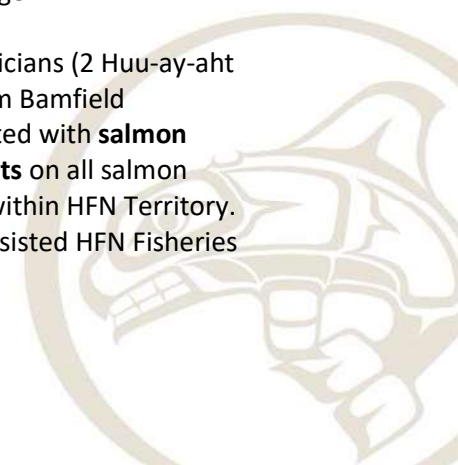
Preparing minnow traps for deployment

5. **Fish stream signs** were installed at crossings of fish bearing streams within the Hahuuti to inform travelers of where extra caution is warranted. These signs feature a yellow salmon designed by a Huu-ay-aht artist.



Crystal Clappis and new fish stream sign

6. Huu-ay-aht Fisheries technician Katie Turner and Stefan Ochman, with advice from Marc Gaboury, installed continuous **flow monitoring stations** in Rousseau Creek and upper Pachena River. These stations will monitor water levels and discharge.
7. Four HWRP technicians (2 Huu-ay-aht citizens and 2 from Bamfield community) assisted with **salmon escapement counts** on all salmon bearing streams within HFN Territory. The HWRP also assisted HFN Fisheries





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with **brood stock collection** for Sarita Chinook at Nitinat hatchery and chum and coho at Sugsaw hatchery.



Counting salmon in Rousseau creek

8. Huu-ay-aht FN technicians, Jeff Howard (Colquitz Engineering), and Rick MacDonald (CHARTWELL Consultants Ltd.) implemented remedial works for the **ł̓ł̓ł̓č̓is** ('**deep hole**') **side channel** in the lower Sarita River between 10 and 14 August.



Thlaa Thlaa Chis side channel

9. Meridian Forest Services conducted limited **road deactivation** work in 2020, primarily consisting of grass seeding in areas of work conducted in 2019.

10. Meridian Forest Services continued with **riparian area treatments** in the Sarita and Pachena watersheds. The main treatment in 2020 was brushing of the areas.



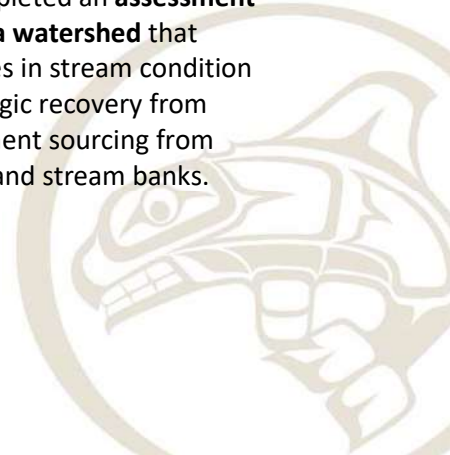
Newly protected cedar plantings

11. Forest Ecosystems Solutions completed a draft **Windthrow Evaluation strategy** to retain trees adjacent to valued habitats.



Example of windthrow

12. Glynnis Horel completed an **assessment of the South Sarita watershed** that considered changes in stream condition over time, hydrologic recovery from forestry and sediment sourcing from landslides, roads, and stream banks.





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South Sarita watershed

13. Forest Ecosystems Solutions completed preliminary calculations of **equivalent clearcut area** which serves as an indicator of hydrological impacts to watersheds from removal (and regeneration) of trees through logging. The report is currently being reviewed.
14. LGL Limited completed a draft report of **wildlife use** in the Sarita, Pachena and Sugsaw watersheds utilizing remote camera data from 2018 and 2019 paired with existing habitat mapping. The focus of the study is on the occurrence and distribution of key wildlife species including resident Roosevelt elk, Columbian black-tailed deer, gray wolf and cougar.



Black Bear

### Technical Reports

In total, 20 technical reports have been completed with several more near completion for the Watershed Renewal Program. Final reports are available for downloading from the Huu-ay-aht website (<https://huuayaht.org/watershed-renewal-project/>)

### Huu-ay-aht Employment

2020 was a difficult year for providing employment for Huu-ay-aht citizens due to COVID-19. However, for the few field programs that did run in 2020, all included Huu-ay-aht citizens (see above project reports). HFN Lands and Resources staff received very positive feedback from Watershed Renewal technicians on team dynamics and the nature of work.

