## **Cowichan Lake and River Stewardship Society**



**November 2016 Newsletter** 

## 2016 Drought Forces the Lowest Summer River Flows Ever



Once again summer drought caused serious problems for the health of our river and lake. The lack of rainfall in April and May and an early melting snowpack resulted in a very rapidly declining lake level. If we had maintained our normal protocol for spring river flows of 25 cubic meters per second (CMS) in May and 15 CMS in June, we would have run out of water in July. The decision was made to reduce flows to 4.5 CMS on May 28 and hold it there all summer for the first time ever. This required a massive fry rescuing effort as the river ramped down over a 2 week period. Well coordinated crews moved tens of thousands of salmon and steelhead fry from rapidly drying pools into safer areas in the river.

We did get some rain this summer but it was never enough to stop the

declining lake level. The preferred summer flow is 7 CMS but the decision to maintain the 4.5 CMS flows extended

our water supply into September when the lake reached historical low levels. Catalyst installed emergency pumps to move water over the weir as we approached zero storage in late September. The 20 submersible pumps were tested and could easily provide 4.5 CMS to the river. Just days before zero storage was reached the early October rains arrived. The pumps were quickly removed and the lake level shot up over the weir in a matter of days. Continued heavy October rains allowed the salmon migrations to begin and the salmon showed up in great numbers. Our chinook run was double expectations at nearly 10,000 fish counted. There were also very good returns of coho and chum salmon.



Once again we dodged a bullet and our river survived very difficult summer conditions. Efforts are continuing to reconstruct the weir to provide more summer water storage. Catalyst, CVRD representatives and Cowichan Tribes have been meeting with Provincial and Federal authorities to try to find a formula that will allow the construction of a new weir that can store more water in the summer and better manage river flows. Catalyst is looking at the possibility of increasing summer storage by 30 cm using temporary flash boards on top of the existing weir in 2018.





wrapped up in September. Over the three years of the program we have restored 7,200 square meters including nearly a kilometre of shoreline. We have planted a total of 4394 plants and have an average survival rate of 81.3% which is extraordinary considering the plants have to endure poor soil conditions, summer drought and winter storms as well as predation from elk, deer and even beavers. We restored 8 properties this year, encompassing 1722 square meters and 209 meters of shoreline. We first removed invasive species and replaced them with 693 plants and 230 live stakes. Our volunteers continued the visits to riparian properties knocking on 112 doors and interviewed property owners resulting in 53 completed riparian surveys.



The 8th Annual River Cleanup was held on August 20th in scorching 34 degree heat. We changed our location to Central Park in Lake Cowichan this year and about 100 volunteers helped to clean the river from the weir all the way to Sandy Pool Park. We noticed a dramatic decline in the volume of junk and bottles retrieved from the river this year. Much of what was found were items like cell phones, sunglasses and shoes, items that were probably not intended to be discarded. It seems the message is getting out to the tubers that they should take their junk and bottles out of the river with them and respect the beautiful and clean river we all cherish. The bottle drive associated with the cleanup netted about \$400 for the Society.

Cowichan Lake water quality monitoring continued this year over 19 weeks in the summer. Lake water temperature peaked at 22.5 degrees in August this year, significantly lower than last year when it hit 24 degrees. Water clarity was very good this year without the algae bloom we had last summer. All data was submitted to the BC Lake Stewardship Society.

**CLRSS founding President Gerald Thom** was posthumously honoured by the Canadian Heritage Rivers Association at their annual conference in Saskatoon in October. He was recognized for his tireless efforts to support and enhance the health of our river and lake. Genevieve Singleton attended and received a beautiful hand carved paddle signifying the award and has given it to Gerald's widow Caroline.



Join us online at <u>www.cowichan-lake-stewards.ca</u> Facebook <u>www.face-book.com/cowichanstewards</u>

President Leroy Van Wieren and all CLRSS Board Members thank you for your support and interest in the Cowichan Lake and River Stewardship Society. Join us as we continue to work hard to protect our lake and river for future generations.