

TROUT POWER, INC.

Comment and Study Requests to Federal Energy Regulatory Commission Jarvis Power Project Scoping Document, Docket P-3211-009

October 25, 2017



Trout Power, Inc. is a 501(c)(3) organization whose mission is to educate and inspire people to steward our rivers and streams; and to honor clean water not by its clarity, but by the wild trout that live in it.

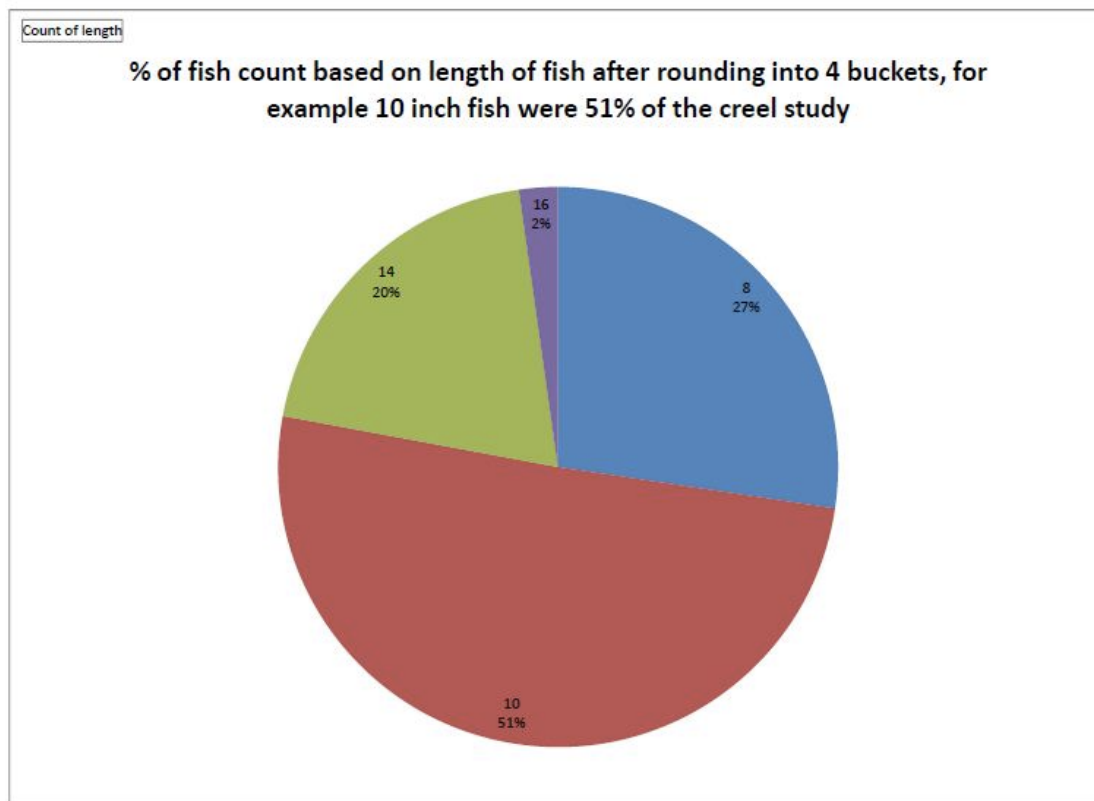
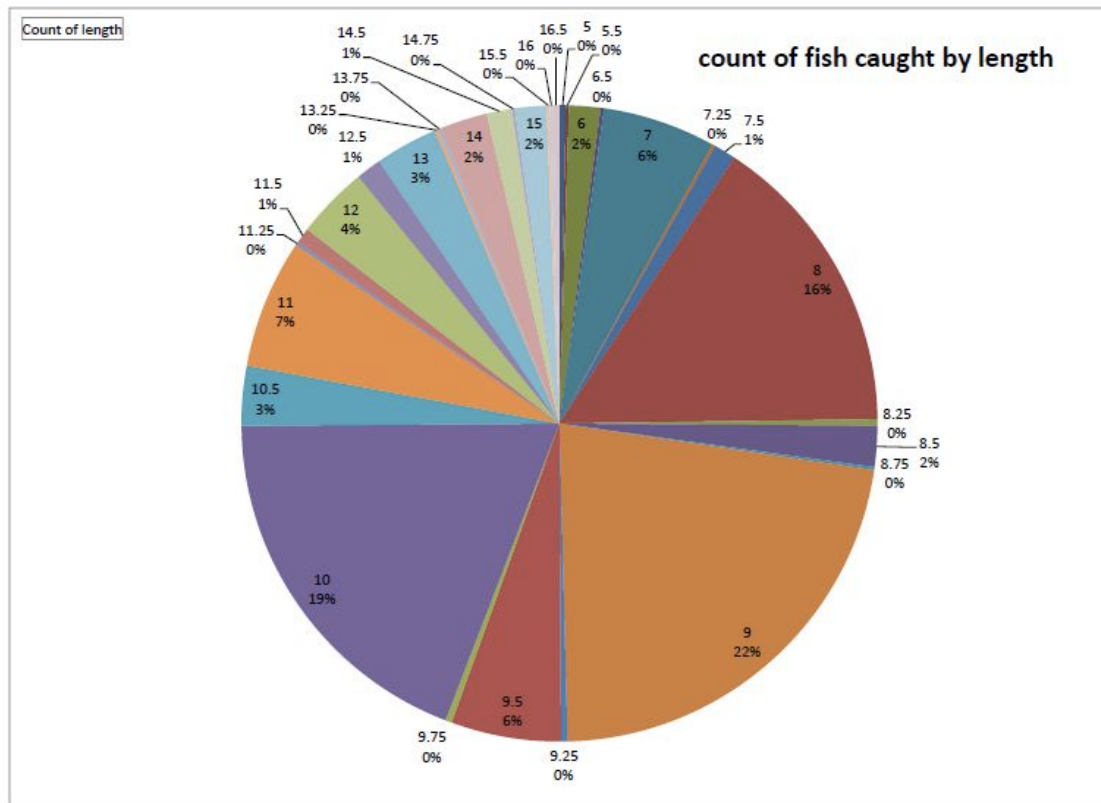
Wild trout thriving in a stream are a definitive benchmark for clean water. Trout Power is built upon helping communities find that balance in their rivers and streams so that all may prosper together. Trout Power launched for the purpose of demonstrating to the communities along the West Canada Creek and Hinkley Reservoir that the health of the ecosystem is reflected in the number and quality of the trout in the stream.

Trout Power Studies on W. Canada Creek

Trout Power conducted creel studies through a catch and release fishing tournaments utilizing single, barbless hooks. These studies were conducted in 2012, 2013, and 2014 on the West Canada Creek and its tributaries. Each fish was photographed, measured, and mapped. The goal was to determine whether wild and holdover fish exist in the West Canada and its tributaries.



In 2012 our focus was on comparing the upper stretch of the Creek or the Trophy Section and the lower section. We were looking for populations of fish. What we found was that because the creel study targeted most inches, tactics were used to just catch any fish. We learned that our stream is healthy, but is mostly a put and take fishery, meaning nearly all the fish caught were stocked. This was determined by the DEC and Trout Power. In 2013, we were looking for large fish that are able to spawn in both the trophy section and below the trophy section. We found that the average trophy fish in the regulated catch and release section is over 16 inches, and in the section where you can keep fish 16" was considered a trophy.



In 2014, we studied the tributaries to West Canada Creek. The hypothesis was that with the water being regulated by a dam on the Creek for hydropower, the cold water spawning refuge was in the tributaries. This hypothesis was validated in documented wild brook and brown trout caught in the tributaries, as well as discovery of brown trout fry at the confluence of Cincinnati Creek.

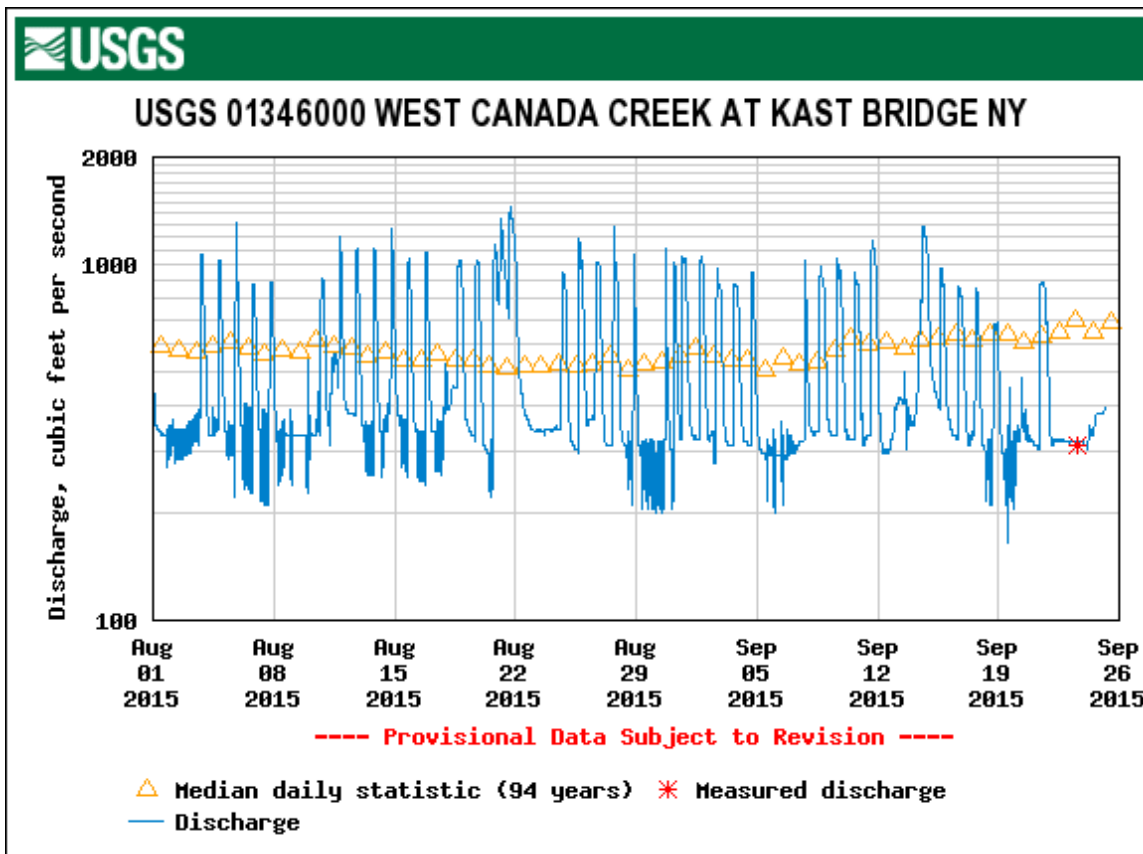
However, as positive a sign that there are wild trout in the tributaries, it is alarming that the same wild trout are not present in the main stream. The lack of wild trout and spawning activity in the creek proper suggests that the hydrology of the creek is not allowing fish to spawn in the creek itself, but instead is forcing them into the tributaries to carry out spawning activity.

The studies conducted by Trout Power proved that the West Canada Creek can sustain large trout, but something is preventing these fish from spawning. Studies have shown that the water is clean and that there are sufficient invertebrates present to support the fish (there is some anecdotal evidence from talking to fellow fly fishermen that suggests that mayfly, stonefly, and caddis hatches have not been as consistent or as plentiful as they have been in the past). With regard to water temperature, Trout Power did water temperature studies that proved that temperatures were within the range required to support trout populations.



It is our belief that drastic flow changes and mismanagement of the water system to generate hydropower is disrupting trout spawning activity and may even be affecting hatches and lifecycles of invertebrates.

The current state of West Canada Creek is that water levels can change as frequently as three times per day and by as much as a foot at a time. There is no consistency to these changes, as the releases are done to generate power on demand when prices are highest without regard for how this affects the health of the stream. The Creek is supposed to have a minimum flow of 160 CFS (a volume that itself should be reconsidered), but the in-stream flows often drop below 160 CFS. The impact this has on fish and their forage can be dramatic, particularly in periods of hot weather and insufficient precipitation.



A sedimentation study, flow study, and evaluation of the volume of the Reservoir and stream need to be conducted. Given that these studies have not been conducted in some 80 years, perhaps modern methodologies and standards will lead to conclusions that would support beneficial changes to the activities affecting the watershed.

After carrying out all appropriate studies, we are hopeful that the operating diagram that governs releases will be revisited and appropriate changes will be made to support a healthy aquatic ecosystem on the stream.

We would further suggest that relicensing of the Jarvis Project be conducted in view of the upcoming relicensing of the downstream Prospect and Trenton Dams controlled by Brookfield Renewables projects scheduled to begin relicensing in the next 7 months in order to develop a comprehensive operating diagram, and with due consideration for the conclusions of the studies recommended below to ensure adequate, consistent flows and

to protect various riparian interests of landowners, the local outdoor recreation economy, and the health of the aquatic ecosystem..

It's simple. If fish can spawn and wild fish can survive in the stream, the stream is healthy. We ask that the Commission not ignore this important bio indicator, but use it in assessing what steps must be taken to ensure that this historic stretch of water is preserved and protected.

Given our concerns stated above, Trout Power recommends the following studies:

Study Recommendations

Bypass Flow Study(s)

River Flow Study(s)

Fish Community Survey

Water Quality Monitoring Study -- chemical (D.O., etc) and thermal (temp changes)

Reservoir Hydrologically Connected Ponds Study

Flow Regulation / Fluctuation Impacts Study

Shoreline Erosions Survey -- one for river, one for reservoir (due to water level changes)

Reservoir Aquatic Resource Assessment

River Aquatic Resource Assessment

Recreation Inventory

Archeological Resource Study

Wetland Survey

Invertebrate Survey