Murray Creek Restoration Project

FRISP became involved with the Murray Creek Project through an introduction by Fraser Basin staff in the spring of 2008. The project has Wayne and 11 other local stewards in the community of Vanderhoof wanting to rehabilitate Murray Creek through promoting stewardship or "a common goal" approach. The group had applied but were declined at the concept level for 2008 Fraser Salmon and Watersheds Program Living River Funding to develop a watershed recovery plan.

Fraser Basin staff recognized the linkage between the groups desires and FRISP's advisors and programs abilities to assist with moving things forward through its past experience in forming recovery plans within the agricultural community. Through developing a funding partnership request with the BCCA's FRISP program, \$20000.00 dollars of was made available to get things started.

The original primary component, and most important to the community involved, was to dramatically improve water quality and to a lesser extent water security.

The secondary objective, which cannot be adequately accomplished without improved water quality, is the rehabilitation and/or improvement of fish habitat values within the watershed as a whole. The target fish species most relevant to this project is rainbow trout and, to a lesser extent, sockeye and Chinook salmon in the lower reaches near the mouth with the Nechako River. The key objective here is to increase the densities of rainbow trout using Murray Creek for their various life cycle stages.

The tertiary objective looks at the broader picture outside the Murray Creek Watershed. By Improving water quality and increasing habitat availability the overall ecological integrity of the Nechako River basin will be increased. Special consideration from this tertiary objective revolves around the endangered Nechako White Sturgeon and dwindling stocks of sockeye and Chinook salmon. All three of these species will benefit from improved water quality in the Murray Creek Watershed as its confluence with the Nechako River is located at some of the best spawning grounds for these species in the Nechako River.

One further objective of this project is to build a strong stewardship ethic through pride and ownership of the rehabilitation works within the Vanderhoof ranching community and the town as a whole and to create a template for future work within the region.

So what was Done?

Through meeting with Wayne, touring the watershed several times and through dialogue with other resource interests within the watershed I was better able to access how critical it would be in bringing the agriculture community onside. Like many small tributaries in the Province, long term land management for agriculture, forestry and recreation and human habitat has compromised the overall health of the system with over 80% of this system altered through human activity.

The ground work that Wayne and his committee have developed is commendable as they had started the consultation process and collection of data required in the development of a recovery plan but were looking for the linkage and funding to move ahead to get things moving on the landbase.

I asked Mike Wallis to assist me with the project due to his extensive background with developing similar projects in the southern interior. Mike through consultation with Wayne and some of his committee members developed a basic strategy to collect relevant data and start the process to involve landowner dialogue and ultimately a recovery plan.

Actions taken:

- Purchase of high resolution ortho-photo mapping so evaluation of potential impact areas could be compiled, land management activities identified and future monitoring evaluated through updated imaging. Maps have been provided to landowners so they can get a better understanding of were they are located and what their properties riparian corridor presently looks like from the air.
- Identification and one on one communication with major landowners in the watershed.
 Wayne and other committee members have worked with local ranchers and the local Cattlemen's Association discussing and promoting the concept of habitat restoration on Murray Creek and other local watersheds.
- The purchase of a full stream keepers kit for education and evaluation of Murray Creek. Streamkeeper's will be working with the school district to train 14 teachers this coming Easter break. The school is purchasing 2 kits as well so that local students can be educated while starting a baseline monitoring of water quality in Murray Creek and other tributaries in the Vanderhoof area.
- Wayne has held meetings and tours with possible funding partners like Alcan, District of Vanderhoof and Ducks Unlimited. The working committee is composed of a great source of expertise and has developed a great network of cooperation in the region.
- Purchase of a thermo sink water for demonstration site purposes. This project will be completed in the summer of 2009 through partnering with the new Environmental Farm Plan and a local rancher and hopefully other friends of the watershed. The project involves upgrading a pasture area through implementing cost effective upgrades starting with off stream watering. The riparian corridor will be upgraded by designing the area for alternate utilization that will increase the value or return to the landowner, while dramatically increasing the biodiversity level and health of the reach. This site will be photo monitored so that that incremental restoration can be recorded and shown to other landowners interested in seeing the results. Some may be new landowners while others may be ones that are hard sells and want to see results before moving ahead themselves. This project will be a key component in building awareness within the local agriculture sector.
- The design and purchase of a large education sign denoting the values of Murray Creek and the interested parties working to complete restoration. The sign will be erected this spring after the snow melts.
- The committee has communicated with Laura Grafton, local Environmental Farm Plan Advisor on assisting with projects once new program starts in April 2009.
- A final community meeting was held March 28 2009 in Vanderhoof to present information on working cooperatively to develop a watershed plan including planning, education and awareness, restoration activities and monitoring of progress.
 - The working committee engaged with 17 landowners to discuss priorities for future actions.
 - It was acknowledged through anecdotal evidence from long term landowners attending the meeting that fish and wildlife values had declined since the 1950's. This relates to the decline in fish abundance, beaver presence, riparian vegetation loss, bedload movement and changes to runoff and subsequent flow pattern. A comment by one older gentleman mentioned that he had previously

drank directly from the creek as a young man. When asked if he would drink from the creek now he preferred not to.

- The system hadn't changed much in the past 30 years though.
- Consensus was that Murray Creek could be improved by a number of priority actions:
- 1. Have landowners participate with the Environmental Farm Plan process.
- 2. Complete stream monitoring in conjunction with local schools and Streamkeeper's.
- 3. Have FRISP provide one on one dialogue and consultation with individuals considering completing or implementing Best Management Practices along their riparian corridors.
- 4. Technical working group to look at watershed management improvement opportunities within the Murray Creek system through partnerships and promotion of the common ground philosophy.
- 5. Technical committee will communicate with participants and the local community to improve the awareness of the Murray Creek Restoration imitative promoting positive changes being worked upon.

"Common Ground" approach FRISP applies to Agriculture: Sustainable utilization of our land base while conducting agricultural activities can be a complicated matter, as environmental sustainability must balanced with economics. I have found that if theirs one thing that is critical for a successful conversion of a poor land manager to an adequate or even expert one is ultimately is their ability to understand riparian function and the impacts that mismanagement can ultimately have on the bottom line.

Recognizing some traditional agriculture practices have negatively impacted the environment like many of our other society's activities can often be hard for people to acknowledge. Nobody likes being accused of doing something wrong especially when we've being doing it for so long and its seems to work so well.

Some refer to it as having the "eye" or others might refer to it as "using common sense" but the ability to foresee what will happen due to a possible series of management changes is critical if someone is to successfully implement a restoration project. FRISP hopes to continue assisting the Murray Creek Restoration groups efforts in this education process with the local agriculture community by helping to design and implement management changes to meet regulations or guidelines economically into 2009. Through this process of working directly with the landowners by providing extension services, we will be able to provide the reasoning behind the regulations, which brings about understanding. A workable solution is developed based upon the direct input of the landowner. Compliance is achieved and often, active stewardship is created as the rancher is empowered through knowledge.

Current members with Murray Creek Restoration Committee:

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