

Kennebecasis Watershed Restoration Committee Year End Report – 2011



Prepared by:
Ben Whalen, Project Manager
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1.0 INTRODUCTION

The Kennebecasis Watershed Restoration Committee (KWRC) is composed of various provincial and federal departments, local municipalities and local interest groups. Beginning in 1994, the committee has worked on enhancing the general health of the Kennebecasis Watershed, focusing on water quality and fish habitat within the greater Kennebecasis Watershed (Figure 1). Surveys were completed to identify the type and

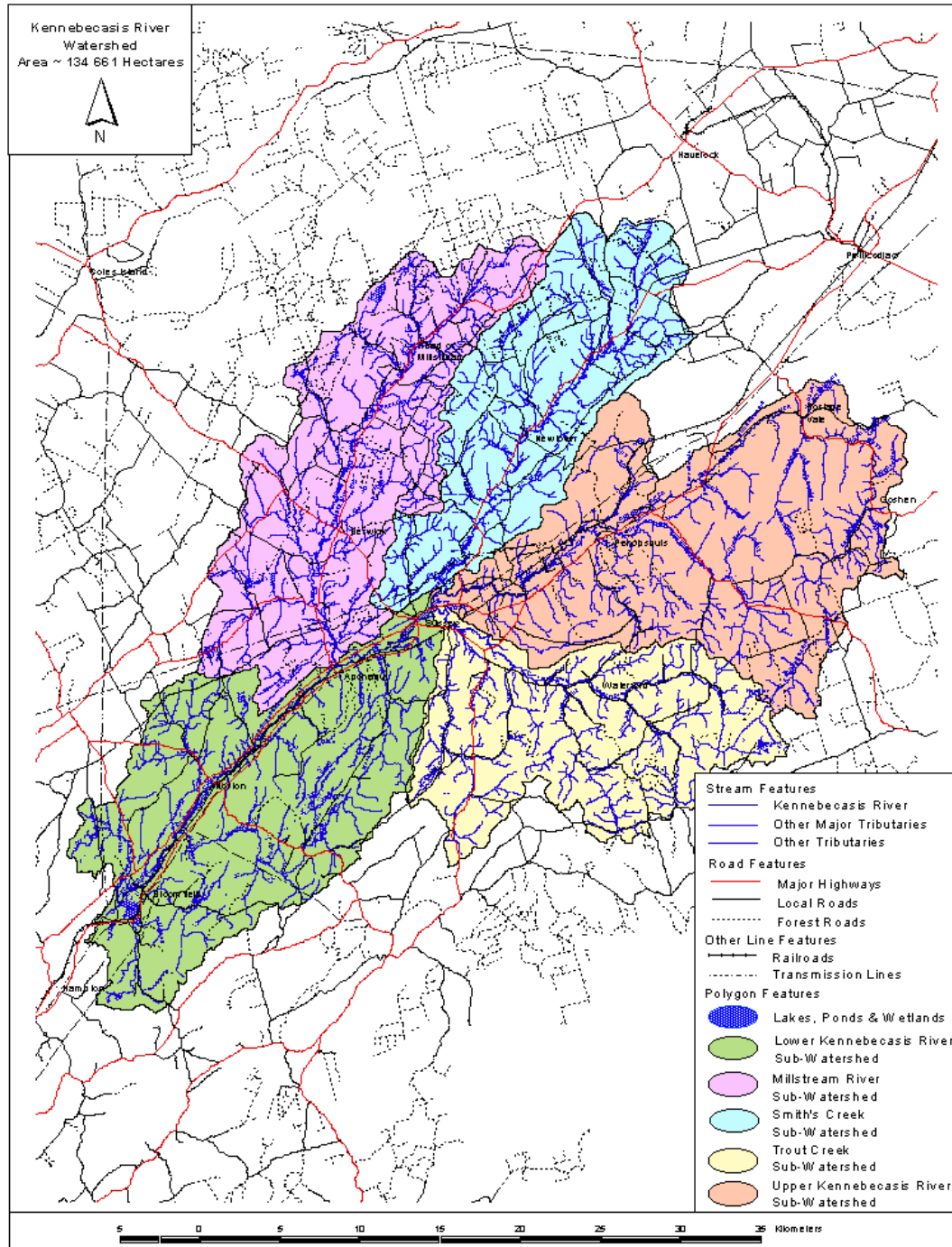


Figure 1: Map of the Kennebecasis Watershed showing the sub-watersheds.

location of major stream habitat problems, and guide in-stream work focused at addressing these problems and improving the aquatic conditions of the watershed. Work has been carried out to decrease erosion, enhance fish habitat, improve the riparian zone habitat and educate the public on environmental issues.

Since 1994, over 520 stream enhancement structures have been installed, 53km of fencing has been erected, 3.3km of banks have been stabilized, fish populations have been monitored and water quality assessments have been completed. The ultimate goal of the committee is to re-establish the natural habitat of the Kennebecasis Watershed in order to maintain clean, healthy waterways and properly functioning ecological habitats.

This report will outline the projects that the KWRC completed in 2011 as well as provide a brief overview of the financial status of the KWRC. This document is intended as an overview, further detail on each project can be found with the project reports which can be found in the appendix.

2.0 FINANCIALS

2.1 *Revenue and Funding*

Part of the reason for the great success experienced by the KWRC is our ability to continually attain funding. This in part is due to our great effort in applying to various sources for funding and by searching for new partnerships and project ideas. Our total revenue generated for 2011 was approximately \$214,316. Some of this funding was generated through contract work and will allow us to develop some more public engagement activities in the future.

A breakdown of our funding is provided in Table 1. It should be noted that more corporate funding was realized in 2011 but more effort can still be directed to this. This effort would likely result in a more sustainable approach to managing our watershed. The complete 2011 ledger can be found in Appendix B.

2.2 *Overview of Expenses*

As in past years the greatest expense that the KWRC had in 2011 was for human resources. A breakdown of how our expenses were divided can be found in Table 2. The KWRC works to keep administration and consultation fees to a minimum and thru 2011 were successful at accomplishing that. It should be noted that insurance and permitting fees make up the bulk of the administration expenses, while contract and consultant fees are mainly short term work contracts with available individuals when needed.

Table 1: Revenue by funding source 2011

| Source | Revenue | % |
|----------------------|----------------------|--------------|
| NB WTF | \$ 43,887.00 | 20.5 |
| NB ETF | \$ 45,000.00 | 21.0 |
| EcoAction | \$ 40,000.00 | 18.7 |
| Student Subsidy | \$ 16,829.00 | 7.9 |
| Municipal | \$ 31,321.00 | 14.6 |
| Corporate | \$ 25,545.00 | 11.9 |
| Contract Services | \$ 5,723.00 | 2.7 |
| Sussex Fish and Game | \$ 2,500.00 | 1.2 |
| Other Grants | \$ 3,511.00 | 1.6 |
| TOTAL | \$ 214,316.00 | 100.0 |

Table 2: Breakdown of expenses in 2011

| ACCOUNT NAME | EXPENSES | % |
|---------------------|----------------------|--------------|
| HUMAN RESOURCES | \$ 102,190.59 | 53.4 |
| MATERIALS | \$ 49,579.65 | 25.9 |
| OFFICE/ADMIN | \$ 4,556.89 | 2.4 |
| EQUIPMENT | \$ 22,351.66 | 11.7 |
| OUTREACH/EDUCATION | \$ 9,899.85 | 5.2 |
| TRAINING | \$ 189.00 | 0.1 |
| CONTRACT/CONSULTANT | \$ 2,467.00 | 1.3 |
| TOTAL | \$ 191,234.64 | 100.0 |

3.0 HUMAN RESOURCES

In 2011 the KWRC was successful in attaining funding to hire 4 students. At the end of the summer these students worked a total of 59 weeks with some working more weeks than others. To supervise these students a Restoration Coordinator was hired for a total of 46 weeks. Chris McKnight returned to this position and his work led to a smooth summer period where a great deal of restoration work was completed. To oversee the projects Ben Whalen worked once again as the Project Manager and we were able to provide him with a full year of work.

4.0 ACTIVITIES

The year was full of a number of large projects and successful events. Some projects were completed, while others will be completed in subsequent years. The focus of our work, as is our custom, was restoration, but water sampling, habitat assessments, monitoring, and public education efforts all took up significant staff time as well. We continue to operate on three main pillars: 1. restoration and maintenance; 2. research, monitoring, and assessment; 3. outreach and education. Typically these activities take place within our watershed but more frequently we are reaching into a regional approach.

4.1 *Monitoring Efforts:*

With the broadening scope of industrial activities taking place in the Upper Kennebecasis sub-watershed, and more recently within our lower sub-watershed, water quality and habitat monitoring have become an important activity. Whether we simply observe something out of place while driving along the waterway or quantify something during a habitat assessment, our presence on the watershed is important. Our monitoring activities in 2011 are described below.

4.1.1 Water Sampling - Our water quality monitoring efforts in 2011 provided results for 15 sampling stations. The data was compiled and a report was produced that discussed in detail the results of this effort. Further to the full sampling the KWRC also partnered with Agriculture and AgriFoods Canada to attain temperature profiles on five sites. The real time data was collected, filtered and a report was completed for this as well. These reports can be found in the appendix.

4.1.2 Habitat Assessments – In 2011, the Kennebecasis Watershed Restoration Committee conducted habitat assessments on six tributaries throughout the watershed. This study was done in order to obtain baseline data on these streams and to identify any and all problem areas within these freshwater contributors. The data collected will be used to direct the restoration efforts of the KWRC as well as to establish a long term monitoring and management plan for these tributaries.

Through this assessment, information was collected on the physical characteristics, riparian conditions, as well as basic water quality parameters in 100 m increments. This data will build on data collected in 1994 when 285.5 km of stream were assessed as an initial study of the watershed and in 2009 when tributaries of the Lower Kennebecasis sub-watershed were assessed.

The report, which can be found in the appendix, discusses the issues, trends and concerns that were extrapolated from the review of the habitat assessment data collected in the field. The review was done by KWRC staff, committee members and other stakeholders. The 2011 data will be added to historical data collected on various other streams in 1994 and 2009. The results of the assessment were discussed individually by stream and recommendations were provided for each system.

Future efforts of the KWRC can be directed from the recommendations suggested in this report. The recommendations are not all inclusive but rather an overview of the monitoring activities that could be undertaken.

4.1.3 River Watch Activities/Snow Pack Monitoring – Following the success of the relationship created in 2010, the KWRC once again carried out RiverWatch and Snow Pack monitoring for DENV through 2011. KWRC staff also developed a more efficient manner to transfer data and photos to DENV via an ftp website. This was then used for each partner group engaged in this activity. This relationship has resulted in KWRC staff working through the winter monitoring snow depths and as the thaw started, taking weekly drives up and down the watershed to monitor ice breakup conditions. This activity is a great way to provide a more sustainable source of funding to the Committee and it is hoped that this relationship will continue into 2012 and beyond.



Photo 1: Staff takes a core sample to gauge moisture content and density of the snow.

4.2 *Restoration Efforts:*

Our long history and tested methods have created a reliable approach to habitat restoration in our watershed. In 2011 we embarked on developing some new tools for habitat restoration. During our 2010 culvert assessments it was noted that many farmers could benefit from having an installation team available to help them with not only fords but culverts and bridges as well. We also installed an alternate watering device for a beef farm which turned out to be very successful. Of course we also completed a great deal of riparian planting and some bank stabilization.

Table 3: Tree Planting Effort in 2011

Total Trees Planted in 2011

| Subwatershed | Landowner | # Trees Planted | Est. Area Restored (m2) |
|--------------------|-------------------------------|-----------------|-------------------------|
| Trout Creek | Walker, P | 540 | 810 |
| | McGibbon, J | 980 | 1470 |
| | Town of Sussex (Magnolia Ave) | 698 | 1047 |
| | Anderson, B | 383 | 574.5 |
| Millstream River | Moffatt, S. | 540 | 810 |
| | Wesselius, C. | 315 | 472.5 |
| Smith's Creek | Daynes, S&J | 1129 | 1693.5 |
| | King, R. | 1356 | 2034 |
| | Coggar, J. | 2415 | 3622.5 |
| | Mason, G. | 574 | 861 |
| | McDermott, J. | 1217 | 1825.5 |
| | Clain, D. | 69 | 103.5 |
| Lower Kennebecasis | Secord, L | 787 | 1180.5 |
| | Lissen, K | 970 | 1455 |
| | Bettle, D. | 225 | 337.5 |
| | | 12198 | 18297 |

- 4.2.1 Riparian Zone Planting: Tree planting is an activity that likely allows us to attain the best bang for our buck. We utilize students to plant trees along with various other tasks. We utilize volunteers to plant trees and teach them about healthy ecosystems at the same time. In 2011 the KWRC had a number of sites where we planted trees to improve riparian conditions and buffer stream temperatures. Our Water and Willows events were well attended and we managed once again to propagate and plant 5000 willows as a result of this effort. Local nurseries once again added to our tree count through donations of tree stock and we also had funds to purchase a significant amount of trees. Table 3 provides details on the number of trees planted by site. This brings our total number of trees planted up over 210,000.
- 4.2.2 Riparian Fencing Effort: Planting trees, in a lot of instances, would be futile without restrictive fencing that control livestock and keeps them from grazing newly planted tree stock. The KWRC aids farmers in the initial installation of this fencing with the understanding that in the future they will maintain the fence. We ask cooperative landowners to sign a landowner agreement that commits them to this sustainable effort. In 2011 we undertook fencing projects along Smith's Creek at Keohanlane Farms and on an unnamed tributary on land owned by Cogmore Farms. The total length of fence installed in 2011 was

approximately 1.2km bringing our total length of fence installed to more than 53km.

4.2.3 Bank Stabilization: Our habitat assessment report in 1994 revealed that a large percentage of the stream banks in the Kennebecasis Watershed were heavily eroded. Since that time we have been working at stabilizing as many of these banks as possible. With various techniques to stabilize these banks staff consult with DFO to ensure that the best method for each site is being utilized. In 2011 the KWRC engaged the Town of Sussex to stabilize an eroding bank along Ward's Creek. The erosion of this bank was threatening the shoulder of Magnolia Avenue and the Town actually approached the KWRC to seek assistance in completing the stabilization of this 3m high, 25m long, eroding stream bank. Rock armoring in association with rock groynes and riparian planting efforts completed enhanced this site and all partners were happy. Before the KWRC agreed to complete armoring on Magnolia we needed to ensure we also had support to complete a riparian enhancement project with John McGibbon. This farmer has supported us in the past with little to no reward and since work on the Magnolia site may have impacted his land, we utilized the funding from the Town of Sussex to attain funding to enhance an additional 95m of severely eroding stream bank, including more rock groyne installations. Further bank stabilization work was completed in association with the enhancement of 3 stream crossings and a boat launch and that work will be discussed in those sections of the report.

4.2.4 Stream Crossing Projects: This year marks the first time where the KWRC deviated away from hardened ford style crossings and



Photo 2: Picture of the bridge built at Kurihipi Station.

completed 2 culvert installations as well as the construction of a bridge. Consultation with the Southern NB Wood Co-op aided in the development of these projects. One 36" culvert was installed along a 1st order tributary to the Smith's Creek to aid Keohnalane Farms access a crop/grazing field.

Kurihipi Station, a sheep farm in the upper Smith’s Creek, received the other culvert as well as the bridge crossing.

4.2.5 Alternate Watering Source: Clean water for livestock is a huge benefit for livestock health and thus the farms bottom line. This past summer saw the KWRC install a bank of six nose pumps for a beef farm in the Smith’s Creek sub-watershed. A video was produced to highlight the project and it has been viewed many times. Due to the size and tendencies of beef cattle it was necessary to design a strong platform for the bank of nose pumps and the project was viewed as a large success by Agriculture and Agri Foods Canada and their Provincial counterparts.

4.2.6 Boat Launch Enhancement: The Apohaqui Lower Millstream Recreation Council approached the KWRC about improving the canoe access at Jones Memorial Park in 2010. In 2011 funding and resources became available to make this project happen. The small boat launch was stabilized using blasted rock material, an



Photo 3: The access road, sign, and stabilized boat launch at Jones Memorial Park in Apohaqui.

improved access road was created, and a site sign was installed informing people of the “boat it in boat it out” concept. This park will provide a great location for future educational and recreational events.

4.3 Public Engagement

Our public engagement efforts through 2011 were varied not only in audience, but in scope, and reach. We continued to be active regionally on riparian health issues in agriculture by providing a number of presentations, including one in Truro for Agriculture and Agri Foods Canada. Our 2011 “Water and Willows” events were a huge success as were our shoreline clean-ups as outlined above. We provided more than 11 presentations and garnered more than 320 volunteer hours from various groups and reports on these presentations and activities are included in the appendix of this report.



Photo 4: KWRC Chair, Dean Toole, illustrates cutting willow whips to some of the volunteers during our Water and Willows harvest in March 2011.

- 4.3.1 Fly Fishing Workshop: A new and truly successful event for the KWRC, our “Beginner’s Fly Fishing Workshop” was aimed at engaging new anglers and giving them a strong basis of conservation minded angling to start with. They were provided with fly casting techniques, a run down on gear and tackle, and educated on the benefits and rewards of catch and release angling, especially in our “No Kill” section of river.
- 4.3.2 Shoreline Clean Ups: We hosted a “Great Canadian Shoreline Clean Up” event in September where we had almost 40 volunteers come out and help out. The end result saw more than 1115kgs of litter and trash removed from 2.5km of the Trout Creek sub-watershed. Earlier in the spring we also coordinated a morning clean up for a Sussex Middle School class which collected 90kgs of litter from 600m of Trout Creek near the school.
- 4.3.3 Farmers Coffee Break: In an effort to engage more farmers and educate them on our restoration efforts and how we can aid them, the KWRC had staff visit local farms with a thermos of coffee and a questionnaire. The results had 18 farmers sign a completed questionnaire while 4 others were interviewed. Issues and concerns were noted and efforts will be made to address some of these while continuing to work with those who cooperated with us.
- 4.3.4 Biodiversity Monitoring: Following the development of our “Riparian Bird Survey Manual” and our “Riparian Vegetation

Assessment Manual” we engaged two groups to conduct a test on these tools. The Kennebecasis Naturalist Society and New Brunswick Community College – Miramichi, Environmental Technology program each conducted a study for us using the manuals. Both groups appreciated the opportunity to get involved and engage in the outdoor activity. The assessment manuals were deemed modestly successful and the data collected can be used over time to assess the health of our riparian zone restoration sites.

4.3.5 Water and Willows Events: Our “Water and Willows” event is

held over two events. A harvest and planting component.

This is where we attain our 5000 willow strikes for our seedling stock. Oddly our harvest event, held in March



Photo 5: Participants at the 2011 Water and Willows harvest event in Berwick.

when there is still snow on the ground, usually has a

better participation than our planting event in June or early July. Both events in 2011 were successful and reports on these events can be found in Appendix E.

5.0 COOPERATIVE LANDOWNERS

A number of landowners were engaged in KWRC activities throughout 2011. We were able to complete projects for a number of them and will continue to build those relationships moving forward. It is important to acknowledge the contribution of these cooperative landowners when ever possible and the KWRC attempts to do this through our site signage and our social media outlets and news media coverage. Table 4 shows the landowners who we worked with in 2011 in an effort to improve the ecological health of our great watershed.

6.0 CONCLUSION

The number of restoration sites keeps growing, the number of landowners and partners gets longer, and the number of people reached is harder to count. This past year

Table 4: Landowners engaged in 2011 by sub-watershed

| Landowner | Sub-watershed | Work Completed |
|--|----------------------------|---|
| Jack Coggar | Smith's Creek | Fencing and riparian planting |
| Keohanlane Farms (Reg and Patricia King) | Smith's Creek | Fencing, culvert, planting, alternate watering source |
| Kurihipi Station (Jason and Sarah Daynes) | Smith's Creek | Two crossings, planting |
| George Mason | Smith's Creek | Planting |
| Danny Clain | Smith's Creek | Planting |
| Apohaqui Lower Millstream Recreation Council | Millstream River | Stabilized boat launch |
| Sean Moffett | Millstream River | Planting |
| Milkstream Farm (Ron and Coralee Wesselius) | Millstream River | Planting |
| John McGibbon | Trout Creek | Stabilized bank, planting |
| Town of Sussex | Trout Creek | Stabilized bank, planting |
| Walkerville Farms (Paul and Jim Walker) | Trout Creek | Planting |
| Bill Anderson | Trout Creek | Planting |
| Ken and Carolyn Lisson | Lower Kennebecasis | Planting |
| Lloyd Secord | Lower Kennebecasis | Planting |
| Don Bettle | Kennebecasis Bay Composite | Planting |

has added to our success. Staff has been moving towards creating a biography of each of our restoration sites and this will make it easier for us to see, just how much we have accomplished in our 15 years of work. We continue to take small, progressive, strides that conserve the health of our watershed and its surrounding ecosystems.

Public value is slowly being realized as more people turn to our organization to speak to them about environmental projects. Our continued input on the various Environmental Impact Assessments and re-zoning applications and our willingness to direct people towards strong, dependable information on environmental issues that impact our watershed are garnering attention and respect from all sides of the debate. Our ability to collaborate and facilitate healthy and positive discussions on the issues facing our watershed will help us to continue to move forward with support from all sides.

In the upcoming year we will strive to keep our focus on the three pillars that allow us to continue to stand for strong watershed management. Watershed restoration efforts will continue as we seek to further improve our methods while reducing our overall costs. Watershed monitoring in this time of environmental and climate shift is important and we need to investigate how we can mitigate the natural and man made changes. To effectively do this we need to understand how our hydrological system is shifting and thus we will look at flow and discharge monitoring. Public Education and Outreach is crucial to our long term success. We need to educate the public on where our

watershed is and how various actions in the watershed can positively or negatively impact them. A greater effort may need to be made in engaging municipal governments and aiding them towards better management of their surface water infrastructure.

Sustainable funding is needed to ensure the long term survival of the KWRC. Our long history is still fragile given our year to year project scenario and the Committee needs to seek out new partners and models that will allow them to continue the restoration effort while also providing long term value to our various partners. This may require a slight shift in our structure but it will strengthen our commitment and the increase the confidence of our current funding partners.

APPENDIX A

**Kennebecasis Watershed Restoration Committee
Members**

Kennebecasis Watershed Restoration Committee

MLA Kings East

Town of Sussex

Village of Sussex Corner

Royal District Planning Commission

Potash Corporation of Saskatchewan

Department of Fisheries and Oceans

Kings County Soil and Crop Improvement Association

N.B. Soil and Crop Improvement Association

N.B. Department of Natural Resources

N.B. Department of Agriculture and Aquaculture

N.B. Department of the Environment

N.B. Department of Transportation

Sussex Fish and Game Association

Canadian Forest Service

Town of Hampton

APPENDIX B

2011 Complete Ledger

APPENDIX C

2011 Water Quality Monitoring Report

APPENDIX D

2011 Habitat Assessment Report

Kennebecasis Watershed Restoration Committee

APPENDIX E

**Volunteer and Presentation Events
Tabular Report
2011**



Volunteer Event Report Form

DATE: November 3, 2011
 REPORTER: Chris McKnight

| | | |
|-----------------|------------------------|---|
| Event Location: | Various riparian Areas | |
| Project Name: | Riparian Bird Count | |
| Coordinates | N | W |

| | | |
|------------------------------------|-----------------------------|---|
| Activity Undertaken (check one) | Stream Clean Up | |
| | Riparian Planting Event | |
| | Habitat Assessment | x |
| | Water Sampling | |
| | Public Meeting/presentation | |
| | Other | |

| | |
|---|---------------------------------------|
| Number of people present | 2 |
| Number of groups represented (please name groups) | 1 – Kennebecasis Naturalist Society |
| Number of hours volunteered | 3 |
| Result of Effort (# of trees planted, km of stream cleaned, etc.) | 300 metres of riparian area assessed. |
| Estimated cash value of volunteer effort | \$45 |

COMMENTS ON EVENT: Volunteers were assessing the composition and density of birds within riparian areas of different vegetative composition.



Volunteer Event Report Form

DATE: November 1, 2011
 REPORTER: Chris McKnight

| | | |
|-----------------|------------------------|---|
| Event Location: | Various riparian Areas | |
| Project Name: | Riparian Bird Count | |
| Coordinates | N | W |

| | | |
|------------------------------------|-----------------------------|---|
| Activity Undertaken (check one) | Stream Clean Up | |
| | Riparian Planting Event | |
| | Habitat Assessment | x |
| | Water Sampling | |
| | Public Meeting/presentation | |
| | Other | |

| | |
|---|---------------------------------------|
| Number of people present | 2 |
| Number of groups represented (please name groups) | 1 – Kennebecasis Naturalist Society |
| Number of hours volunteered | 2 |
| Result of Effort (# of trees planted, km of stream cleaned, etc.) | 300 metres of riparian area assessed. |
| Estimated cash value of volunteer effort | \$30 |

COMMENTS ON EVENT: Volunteers were assessing the composition and density of birds within riparian areas of different vegetative composition.



Volunteer Event Report Form

DATE: June 10, 2011
 REPORTER: Chris McKnight

| | | |
|-----------------|--------------|---|
| Event Location: | Trout Creek | |
| Project Name: | Stream Sweep | |
| Coordinates | N | W |

| | | |
|------------------------------------|-----------------------------|---|
| Activity Undertaken (check one) | Stream Clean Up | |
| | Riparian Planting Event | |
| | Habitat Assessment | x |
| | Water Sampling | |
| | Public Meeting/presentation | |
| | Other | |

| | |
|---|---|
| Number of people present | 11 |
| Number of groups represented (please name groups) | 1 – Sussex Middle School-Grade 8 students |
| Number of hours volunteered | 2 |
| Result of Effort (# of trees planted, km of stream cleaned, etc.) | 600 metres of Trout Creek was cleaned by student volunteers. 200 lbs of debris was removed from the stream. |
| Estimated cash value of volunteer effort | \$330 |

COMMENTS ON EVENT: This annual event has students from the Sussex Middle School volunteer their time to clean up litter from a section of Trout Creek.



Volunteer Event Report Form

DATE: November 20, 2011
 REPORTER: Chris McKnight

| | | |
|------------------------|------------------------|---|
| Event Location: | Various riparian Areas | |
| Project Name: | Riparian Bird Count | |
| Coordinates | N | W |

| | | |
|---------------------|-----------------------------|---|
| Activity Undertaken | Stream Clean Up | |
| (check one) | Riparian Planting Event | |
| | Habitat Assessment | x |
| | Water Sampling | |
| | Public Meeting/presentation | |
| | Other | |

| | |
|---|---------------------------------------|
| Number of people present | 2 |
| Number of groups represented (please name groups) | 1 – Kennebecasis Naturalist Society |
| Number of hours volunteered | 2 |
| Result of Effort (# of trees planted, km of stream cleaned, etc.) | 300 metres of riparian area assessed. |
| Estimated cash value of volunteer effort | \$30 |

COMMENTS ON EVENT: Volunteers were assessing the composition and density of birds within riparian areas of different vegetative composition.



Volunteer Event Report Form

DATE: Saturday, September 24, 2011

REPORTER: Ben Whalen

| | | |
|--|---|---|
| Event Location: Behind Baird's Plaza, Sussex, NB | Trout Creek | |
| Project Name: 2011 Great Canadian Shoreline Cleanup | Removal of litter and garbage from along banks of Trout Creek between Leonard Drive and Hwy 1 | |
| Coordinates | N | W |

| | | |
|------------------------------------|-----------------------------|---|
| Activity Undertaken (check one) | Stream Clean Up | X |
| | Riparian Planting Event | |
| | Habitat Assessment | |
| | Water Sampling | |
| | Public Meeting/presentation | |
| | Other | |

| | |
|--|--|
| Number of people present | 38 |
| Number of groups represented (please name groups) | 3 - St Paul's Scout Troop, Sussex Girl Guides, Kennebecasis Naturalist Society |
| Number of hours volunteered | 3 X 38 = 114 |
| Result of Effort (# of trees planted, km of stream cleaned, etc.) | 4 shopping carts and a great deal of litter removed from Trout Creek, including the remains of one of our vandalized signs. Removed more than 1115kg of waste from 2.5km of Trout Creek. |
| Estimated cash value of volunteer effort | 114hrs x \$15/hr = \$1710 |

COMMENTS ON EVENT: This event, as in previous years, was a big success. KWRC Staff were able to find resources and project partners that kept the costs of this project to virtually nothing. Bayview Credit Union covered the tipping fees while Sun Nurseries covered the groceries for the event.

Volunteer Event Report Form



DATE: December 7, 2011
REPORTER: Chris McKnight

| |
|--|
| Event Location: Trout Creek sub-watershed (Upper Wards-Impacted Millbrook-Restored, Lower Wards-Healthy) |
| Project Name: Riparian Vegetation Assessment 2011 |
| Coordinates: N 45° , W 065° |

| | | |
|---|-----------------------------|---|
| Activity Undertaken (check one) | Stream Clean Up | |
| | Riparian Planting Event | |
| NBCC Students (Environmental Technology) assessed the riparian vegetation within 3 sites throughout the Trout Creek sub-watershed | Habitat Assessment | x |
| | Water Sampling | |
| | Public Meeting/presentation | |
| | Other | x |

| | |
|---|---|
| Number of people present: 11 | |
| Number of groups represented (please name groups): 1 New Brunswick Community College – Environmental Technology program | |
| Number of hours volunteered: 15 x 11 people = 165 hours x \$15/hr = \$2475 | |
| Result of Effort (# of trees planted, km of stream cleaned, etc.) | 1500 m ² of riparian area assessed (3 Sites x 100m long x 5 m wide). Volunteers assessed species composition and abundance of woody vegetation along 3 pre-selected sites. Travel: 220 km (between Sussex and Miramichi) x 2 vehicles = 880km x \$0.39/km = \$ 343.20 Lodging: \$120/room (4 adults / room) x 3 rooms = \$362.73 |
| Estimated cash value of volunteer effort | \$ 3,180.93 |

COMMENTS ON EVENT: Students and their teacher came to Sussex for 2 days. They assessed the 3 sites, collected and compiled the data, and will provide the KWRC with the raw data and with a report at the end. They will also plan to provide comments and suggestions for future collaborations.



Volunteer Event Report Form

DATE: Sunday, June 12, 2011

REPORTER: Ben Whalen

| | | |
|-----------------|-------------------------------------|---|
| Event Location: | Walkerville Farms | |
| Project Name: | 2011 Water and Willows Planting Day | |
| Coordinates | N | W |

| | | |
|---------------------|-----------------------------|---|
| Activity Undertaken | Stream Clean Up | |
| (check one) | Riparian Planting Event | X |
| | Habitat Assessment | |
| | Water Sampling | |
| | Public Meeting/presentation | |
| | Other | |

| | |
|---|--|
| Number of people present | 10 |
| Number of groups represented (please name groups) | No specific groups were represented at the event |
| Number of hours volunteered | 2.5hrs/person X 10people = 25hours |
| Result of Effort (# of trees planted, km of stream cleaned, etc.) | 924 willow seedlings planted |
| Estimated cash value of volunteer effort | \$300 |

COMMENTS ON EVENT:

The event was modestly attended with some positive advertising in the Kings County Record. A picnic type of atmosphere was created with the addition of the cook tent and this drew attention of those passing by.



Volunteer Event Report Form

DATE: March 19, 2011
 REPORTER: Ben Whalen

| | | |
|-----------------|------------------------------------|---|
| Event Location: | Berwick Corner | |
| Project Name: | Water and Willows Harvest Day 2011 | |
| Coordinates | N | W |

| | | |
|------------------------------------|-----------------------------|---|
| Activity Undertaken (check one) | Stream Clean Up | |
| | Riparian Planting Event | |
| | Habitat Assessment | |
| | Water Sampling | |
| | Public Meeting/presentation | |
| | Other | X |

| | |
|---|--|
| Number of people present | 46 |
| Number of groups represented (please name groups) | Scouts, KNS, SFG, |
| Number of hours volunteered | 46X3 = 138 |
| Result of Effort (# of trees planted, km of stream cleaned, etc.) | A number of willow strikes were collected and 4 trays of willows were struck by the volunteers. The effort will result in our 5000 willow seedlings being ready for June |
| Estimated cash value of volunteer effort | 138hrs X \$10/hr = \$1380 |

COMMENTS ON EVENT: This event, thanks to the partnership with RBC and Canada Water Week, was a huge success. Everyone had some fun and learned about riparian ecology and tree planting techniques.
 The event had press coverage and we promoted it well through our social media outlets.



Volunteer Event Report Form

DATE: Monday, May 16, 2011
 REPORTER: Chris McKnight

| | | |
|-----------------|---|--------------|
| Event Location: | Wards Creek | |
| Project Name: | Planting along Wards Creek – Sussex 4H Club | |
| Coordinates | N 45°43.279 | W 065°30.261 |

| | | |
|---------------------|-----------------------------|---|
| Activity Undertaken | Stream Clean Up | |
| (check one) | Riparian Planting Event | X |
| | Habitat Assessment | |
| | Water Sampling | |
| | Public Meeting/presentation | |
| | Other | |

| | |
|---|--|
| Number of people present | 8 |
| Number of groups represented (please name groups) | 1 (Sussex 4H Club) |
| Number of hours volunteered | 1.5 |
| Result of Effort (# of trees planted, km of stream cleaned, etc.) | 30 Black Spruce seedlings 28 Red Spruce seedlings 30 White Pine seedlings 78 TOTAL |
| Estimated cash value of volunteer effort | 1.5 hrs x 8 people x \$15/person = \$180 |

COMMENTS ON EVENT: Most of the volunteers were the adults (only 3 youth attended). This may be attributed to the steady rain throughout the day and the event. Volunteers seemed interested in the event, and willing to participate in a similar event in the future.

Public Presentation Report Form



DATE: July 20, 2011
PRESENTER: Ben Whalen,

| | | |
|------------------------------------|--------------------------|---|
| Presentation Location: | Sussex Elementary School | |
| Presentation Subject/Title: | Basic Watershed Ecology | |
| Coordinates | N | W |

| | |
|--|---|
| Number of people present | 13 |
| Group Presented To | Elementary School aged kids and camp Councillors for Camp Horizon |
| Handouts provided | 13 – KWRC Agriculture Services pamphlet 13 – KWRC ATV Awareness Pamphlet 13 – KWRC “This not This pamphlets 13 – WTF Lisence plate promos, stickers and pencils 1 CCNB “Down by the River” poster |
| Funding for Presentation provided by? | WTF Conservation Demonstration 2011 |

COMMENTS ON EVENT:

This presentation was to a kids French day camp. I was able to give the presentation in English. Nine kids and 3 student councillors were on hand for the 40minute presentation and all the kids were able to focus for that length of time. All kids were from the Sussex area.



Public Presentation Report Form

DATE: October 11-12
PRESENTER: Ben Whalen

| | | |
|------------------------------------|---|---|
| Presentation Location: | Fundy Model Forest Building/Restoration Sites | |
| Presentation Subject/Title: | Habitat Restoration Workshop | |
| Coordinates | N | W |

| | |
|--|---|
| Number of people present | 17 |
| Group Presented To | Various watershed groups and associated partners |
| Handouts provided | 16 Restoration site bios for Walkerville, Magnolia, John McGibbon, and Bairds Plaza sites |
| Funding for Presentation provided by? | ETF Increasing Dialogue 2011/ WTF Cons Demo/EcoAction |

COMMENTS ON EVENT:

The Fundy Model Forest hosted a great habitat restoration workshop as a follow up to the Inner Bay of Fundy Salmon Workshop. With our history of completing restoration work we were asked to provide a couple of sites for a tour day. A number of groups from across the Maritimes attended the workshop and our presence will help us increase our profile and hopefully lead to further partnerships down the road. It was also a learning event for us as Ron Jenkins from Parish Geomorphic provided the classroom tutorial that resulted in some good discussion as well.

Public Presentation Report Form



DATE: October 29, 2011
PRESENTER: Ben Whalen

| | | |
|------------------------------------|---------------------------------------|---|
| Presentation Location: | Waterlution Tour Bus and Ward's Creek | |
| Presentation Subject/Title: | Waterlution Workshop | |
| Coordinates | N | W |

| | |
|--|---|
| Number of people present | 25 |
| Group Presented To | Waterlution (Youth leaders for the protection of surface water) |
| Handouts provided | 25 Restoration site bios for Walkerville, Magnolia, John McGibbon, 40 ATV brochures 40 Farm Dialogue pamphlets 40 BMP for Riparian Zones in NB |
| Funding for Presentation provided by? | ETF Increasing Dialogue 2011/WTF Cons Demo |

COMMENTS ON EVENT:

We were approached by the Atlantic Waterlution group to provide two sites that would be included as part of a tour day for their workshop. The focus for the workshop was planning and preparing for climate change and our sites would represent rural area challenges. I discussed with the group the importance of healthy riparian zones for the protection of wildlife and to mitigate surface water impacts during rain events. I also focused on the value of stabilized fording sites versus bridges or culverts based on economics and environmental constraints.

I led the discussion towards the importance of partnerships, stakeholder involvement, and community and government buy in. Stated how watershed groups are valuable community assets that not only restore and monitor watershed health, but also improve community values and engagement.

The group toured Walkerville Farms and our Magnolia Avenue restoration sites and had lots of great questions. The overall feeling was that they were impressed with the work of the KWRC and many will take some good discussion points back to their communities.



Public Presentation Report Form

DATE: December 9, 2011

PRESENTER: Ben Whalen

| | | |
|------------------------------------|---|---|
| Presentation Location: | Sussex Christian School | |
| Presentation Subject/Title: | Volunteering and Working in a Watershed | |
| Coordinates | N | W |

| | |
|--|---|
| Number of people present | 31 |
| Group Presented To | SCS Outdoor Leadership Course |
| Handouts provided | WTF Stickers This not This pamphlet KWRC Ag Services pamphlet |
| Funding for Presentation provided by? | ETF |

COMMENTS ON EVENT: This class was well engaged and truly interested in volunteering with the KWRC. The instructors are keen to organize a spring stream sweep or planting day customized for that class. There were many questions on fishing regulations, water quality issues, and how to get involved.

Public Presentation Report Form



DATE: December 8, 2011
PRESENTER: Ben Whalen

| | | |
|------------------------------------|--|---|
| Presentation Location: | SRHS | |
| Presentation Subject/Title: | Agricultural Impacts on Watershed Health | |
| Coordinates | N | W |

| | |
|--|---|
| Number of people present | 22 |
| Group Presented To | SRSB Ag 120 class |
| Handouts provided | WTF Stickers This not This pamphlet KWRC Ag Services pamphlet |
| Funding for Presentation provided by? | ETF |

COMMENTS ON EVENT: This class was not well engaged and is an elective and therefore student interest is difficult to maintain. Overall some students were engaged and listened intently with a few questions being asked. Mr. Reicker is interested in future presentation as more students attend the class in the future. Created a presentation for this class and it is saved on file.

Public Presentation Report Form



DATE: November 25, 2011

PRESENTER: Ben Whalen

| | | |
|------------------------------------|-----------------------------|---|
| Presentation Location: | Mill Brook Restoration Site | |
| Presentation Subject/Title: | Ecosystem and Habitats | |
| Coordinates | N | W |

| | |
|--|----------------------------|
| Number of people present | 27 |
| Group Presented To | SCS Grades 9-12 |
| Handouts provided | none |
| Funding for Presentation provided by? | WTF Biodiversity Classroom |

COMMENTS ON EVENT: The Sussex Christian School, Courtney Glidden, has asked if we could provide their outdoor pursuits class with field day and hike. I had agreed with the original intent to hike around Walkerville Farms. High water levels meant I had to shift and take them to the Mill Brook restoration site. We hike along the flood plain behind the Sussex Corner Elementary School, around Herb's Ponds and then across the agriculture fields of Harley Hunt and Anthony Habraken. Discussions on floodplain values, riparian vegetation, biodiversity or birds and tree species, invasive, naturalized, and native species, fish species and habitats, stream dynamics, and restoration techniques took place.

Public Presentation Report Form



DATE: November 17, 2011

PRESENTER: Ben Whalen, Chris McKnight

| | | |
|------------------------------------|-------------------------------------|---|
| Presentation Location: | Sussex Elementary School | |
| Presentation Subject/Title: | Science East's "Evening of Science" | |
| Coordinates | N | W |

| | |
|--|--|
| Number of people present | 75 |
| Group Presented To | General public |
| Handouts provided | On hand were "Waterfront landowners Guide" "This not This" KWRC ATV pamphlet, DNR ATV pamphlet, BMP Manual, WTF license plates |
| Funding for Presentation provided by? | WTF Biodiversity Classroom |

COMMENTS ON EVENT: I had approached Science East after hearing they were organizing this event to ask if we could be part of it. They were glad to have us join the event. It was a public event held in conjunction with the Elementary school's parent teacher night. No mechanism was in place to count people coming through the interactive displays area but it was estimated that the KWRC staff engaged 75 individuals of varying ages. Staff had a t-shirt and hat on display and encouraged those interested in volunteering to sign a sheet and provide their email. Through this effort 14 names were gathered with the winner of the draw being Alaina Lockhart. This was a great event that required approximately 8 hours of staff time. This time includes preparation of handout materials and running slide shows, booth set-up and the two hour event attendance.

Becky Geneau from Science East was happy with the turn out and with our getting involved. I suggest the KWRC engage them for future such events within our watershed.

Public Presentation Report Form



DATE: September 14, 2011

PRESENTER: Ben Whalen

| | | |
|------------------------------------|--------------------------------------|---|
| Presentation Location: | Timberland Motel and Restaurant | |
| Presentation Subject/Title: | Community Cooperation and Partnering | |
| Coordinates | N | W |

| | |
|--|---|
| Number of people present | 13 |
| Group Presented To | Sussex Valley ATV Club |
| Handouts provided | 13 – KWRC ATV Awareness Pamphlet 13 – WTF Lisence plate promos, stickers |
| Funding for Presentation provided by? | ETF Increasing Dialogue 2011 |

COMMENTS ON EVENT:

After a number of conversations with the past (Ted Sparkes) and current (Jeff Branscombe) presidents of the SVATV I was invited to come in a provide the group with a presentation on what the KWRC does and how we complete our projects. I stressed the community stewardship and partnership with a goal of developing a trail maintenance pilot project with the group at Turkey Hollow (Trout Creek sub-watershed.)

The presentation was relaxed and well received and I hope that in the near future we will be able to work with the group to carry out a trail realignment, run-off control, and crossing project.

PowerPoint presentation saved on file (Presentations – SVATV presentation 14 09 11)



Public Presentation Report Form

DATE: July 13 & 14, 2011

PRESENTER: Ben Whalen, Murray Somers, Chris McKnight

| | | |
|------------------------------------|--|---|
| Presentation Location: | St. John's United Church Center, Kennebecasis River @ McCully Station | |
| Presentation Subject/Title: | Beginner's Fly Fishing Workshop | |
| Coordinates | N | W |

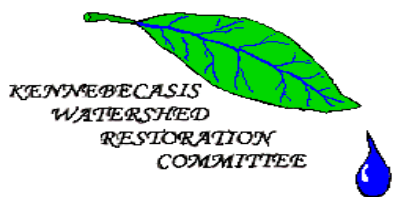
| | |
|--|--|
| Number of people present | 20 |
| Group Presented To | Workshop participants |
| Handouts provided | 20 – KWRC Agriculture Services pamphlet 20 – KCRSWC Illegal Dumpsite bookmarks and reusable grocery bags 20 – KWRC ATV Awareness Pamphlet 20 – WTF Lisence plate promos and pencils |
| Funding for Presentation provided by? | WTF Conservation Demonstration 2011 |

COMMENTS ON EVENT:

The objective of this event was to engage new people in the sport of fly fishing and promoting conservation minded angling techniques such as catch and release and barbless hooks. The river portion of the event was hosted in the "No Kill" section of the Kennebecasis River and all participants were provided a preliminary discussion on the value and benefits of conservation angling. Prizes and a barbeque were part of the workshop and registration was free but capped at 20 participants. Enough interest in the event meant some people were turned away and a second event should be considered.

Pictures can be found on Facebook and a registration list serve was created to help participants keep in touch and find other angling enthusiasts. Many of the participants also expressed an interest in aiding in other activities undertaken by the Kennebecasis Watershed Restoration Committee.

Public Presentation Report Form



DATE: May 26, 2011
PRESENTER: Ben Whalen

| | | |
|------------------------------------|--------------------------------|---|
| Presentation Location: | Sussex Regional High School | |
| Presentation Subject/Title: | Ecosystems of the Kennebecasis | |
| Coordinates | N | W |

| | |
|--|--|
| Number of people present | 24 |
| Group Presented To | 122/123 Environmental Science Class |
| Handouts provided | 24 – KWRC Agriculture Services pamphlet 24 – KCRSWC Illegal Dumpsite bookmarks 24 – KWRC ATV Awareness Pamphlet 24 – WTF Lisence plate promos and pencils |
| Funding for Presentation provided by? | WTF Conservation Demonstration 2011 |

COMMENTS ON EVENT:

The teacher of this class, Ms. Robyn Byers, is interested in taking part in the biodiversity classroom. The students were partially engaged with some there only to gain a science credit. I stressed the need to stop littering and how that impacts ecosystems and economy and how ecosystem health is connected to everything and how we have to be responsible for our actions.

Public Presentation Report Form



DATE: May 24, 2011
PRESENTER: Ben Whalen

| | | |
|------------------------------------|----------------------------------|---|
| Presentation Location: | Golden Jubilee Hall, Lower Level | |
| Presentation Subject/Title: | Introduction to the KWRC | |
| Coordinates | N | W |

| | |
|--|--|
| Number of people present | 28 |
| Group Presented To | Fundy Silveradoes |
| Handouts provided | 4- Waterfront property owner guide 30 – KWRC Agriculture Services pamphlet 6 – Angling Creel Report booklets 30 – KCRSWC Illegal Dumpsite posters |
| Funding for Presentation provided by? | WTF Conservation Demonstration 2011 |

COMMENTS ON EVENT:

The group is a men's seniors group with a diverse crowd likely all over 55. We were well received and should add a contact for our volunteer events. If we can get them engaged in our clean ups and planting events they would be a good resource.