CRYWA Water Source



Carrot River Valley Watershed Association

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Spring 2021

The Carrot River Valley Watershed Association Inc. (CRVWA) is dedicated to preserving and maintaining the character and integrity of the watershed through education and awareness. We are proud to be a local, grassroots, non-profit organization serving our members:

City of Melfort Town of Carrot River Town of Arborfield Town of Wakaw Village of Lake Lenore RM of Tisdale No. 427 RM of Connaught No. 457 **RM of Moose Range No.486 RM of Kinistino No.459 RM of Invergordon No.430 RM of Hoodoo No.401** RM of Fish Creek No.402 **RM of Humboldt No.370** RM of St.Peter No.369 **RM of Pleasantdale No.398 RM of Nipawin No.487** RM of Star City No.428 **Melfort & District Wildlife** Federation **Tisdale Wildlife Federation Cudworth Wildlife Federation**

Cudworth Wildlife Federation Pasquia Regional Park Wakaw Lake Regional Park Authority

Kipabiskau Regional Park Resort Village of Wakaw Lake Resort Village of Tobin Lake St.Peter Conservation & Development Authority Arborfield Conservation & Development Area Authority Moose Range Conservation & Development Area Authority

New members are always welcome to add their voices to protecting our watershed by joining the CRVWA. Contact us for more information.

Native Species in the Garden

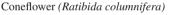
This past year has brought many people closer to the outdoors and nature. This is a great way to "reset" and appreciate the small things in life. When spending time outside and looking at your garden or potential garden it is important to keep native species in mind as opposed to invasive or even ornamental species. Native plants will provide a healthy habitat for pollinator species. Pollinators include butterflies, bees, beetles, small mammals, basically any species that carries pollen to different plants. Pollinators are essential for growing many fruits and vegetables, and they have been constantly declining over past years. As such, it makes sense to plant a garden that will be conductive to them.

To find native species you can ask your local nursery but keep in mind these plant species may be a ornamental and may not be local to Saskatchewan. If you wish to collect more information about native species, the internet is a good tool. Saskatchewan is quite lucky in the sense that there are native prairie species and native boreal species. Think back to a native prairie landscape or a native forest stand without any human interactions. These are the species best suited for pollinators, mammals and native birds. The Native Plant Society of Saskatchewan will lead you to Blazing Star Wildflower Seed Company, Prairie Originals, and Alberta Native Plant Council, or you can type these companies directly. Each site shows the seeds that they offer and there are different packs that can be bought, such as pollinator seeds, wildflower seeds, bee seed kits, etc. It's especially important to remember that native species are not the same as ornamental species. The latter of which are just decorative, they do not serve a purpose other than to look pretty. Whereas native species not only look attractive, but they also serve an environmental purpose. Native species are more resilient to the climate, require less rigorous care and make your soil healthy. They will most likely not need pesticides to survive and that is a huge benefit for the environment. A bit of a controversial topic is that a lawn is not native. Grass is a mono-culture, meaning that there is only one type of plant in that landscape. A flaw to a mono-culture is that if a disease where to enter it would kill the species and no diversity would be left. Native prairie grassland and native forests are essential for birds and insects to thrive and survive. Where as grass is for human purpose and pleasure. To help reduce mono-cultures a homeowner can plant diverse native species. If there is a larger demand for native species more and more nurseries will start to include these.

Native species such as coneflower support miner bees, digger bees, bumble bees, honeybees, skippers, checkered beetles. They are also deer resistant and can reseed easily. Solomon's Seal plants have pollinators such as carpenter bees, sweat bees, digger bees, green sweat bees, and bumble bees. These plants spread slowly and have a long life. Buffalo grass is like strawberry in the sense that the plant will spread runners and they are good for dry areas. Buffaloberry has small red berries that are sour but good for jelly. Invasive species like Purple loosestrife will choke out desired wetland vegetation and cause a loss of diversity in the area. Russian Knapweed will choke out native vegetation and cause loss of diversity. Field Bindweed chokes out vegetation and it makes harvesting crops and forages difficult. Scentless Chamomile will also choke out native vegetation and loss of diversity.

Native Plants







Buffalo Grass (Buchloe dactyodies)

Invasive Plants



Purple Loosestrife (Lythrum salicaria)



Scentless Chamomile (*Matricaria perforate*)

Canada



Solomon's Seal (Polygonatum biflorum)



Buffaloberry (Shepherdia argentea)



Purple Prairie Clover (Dalea purpurea)



Field Bindweed (*Convolvulus arvensis*) A - Vine-like stems spreading over the

ground.

B - Flowers turn pink with age



Russian Knapweed (Acroptilon repens)

This project was undertaken with the financial support of the Government of Canada.

Ce project a été réalisé avec l'appui financier du gouvernement du Canada



Fisheries and Oceans P Canada C

ans Pêches et Océans Canada

Lake Superior holds 10% of the worlds fresh surface water.



AFTER

Boot cleaned and can move to

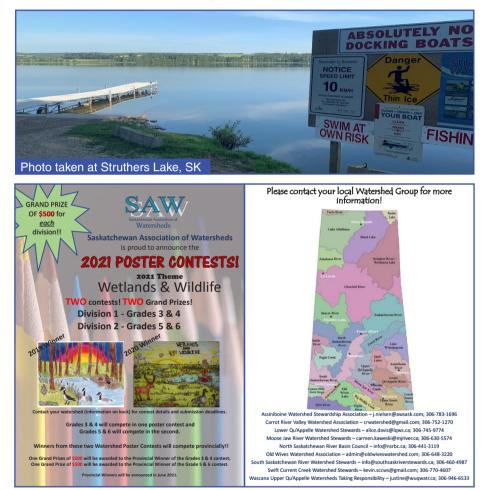
a new site without introducing

invasive species.

Aquatic Invasive Mussels Monitoring Program Update

This past summer, Carrot River Valley Watershed CRVWA, monitored lakes within the Watershed for Aquatic Invasive Species. Placing substrate samplers in Codette Lake, Tobin Lake, Struthers Lake, Wakaw Lake, Lucien Lake, Kipabiskau Lake, Greenwater Lake. Volunteers at Wakaw Lake also placed substrate sampler at various places within Wakaw Lake. The Clean, drain, dry signage was posted at all docks, if you see a lake listed above that does not have a sign please give the CRVWA a call. The CRVWA is to areas such as lower fishing lake and even further to put the substrate samplers in the water.

With summer just around the corner Clean, Drain Dry for watercrafts is back in full swing. So far Saskatchewan has been diligent in cleaning their watercrafts and no invasive mussels were found in lakes last summer. It is important to continue with Clean, Drain, Dry this coming



summer because invasive zebra mussels will cause problems for the lakes of Saskatchewan should they arrive here. The mussels will cause drainage problems, can ruin beaches, attach to watercrafts, spread through currents and waves and harm fisheries. They will cost the province of Saskatchewan millions of dollars to fix and attempt to remove them.

If you see a substrate sampler hanging from the dock at any of the above listed lakes, feel free to give the CRVWA a call, to learn about the importance of keeping our water free from invasive species.

This project we have partnered with, Fish and Wildlife Development Fund.



Clean your Gear!

Not only is it important to Clean, Drain, Dry your watercrafts but people sometimes forget that the clothes and vehicles pick up invasive plant species and spread them to new areas where they will inhabit and take over the native species. See the before and after of what your footwear should like when you move to a different site location.

following years.



Boot needs to be cleaned to prevent potentially invasive species from transferring to a new site.

Poster Contest

importance of water testing and why it is important.

The CRVWA is putting on another Poster Contest for elementary schools in the carrot river watershed. Schools have until May 15th, 2021 to send in their posters with the theme of Wetlands and Wildlife to the CRVWA. Give us a call if you have any questions on the poster contest at 306-752-1270 or check out our website for more information. You can email us the posters or if you prefer to drop them off in person please give us a call, so we know when to except you and follow Covid-19 protocols.

they do allows us to have records of what the Phosphorus levels are in the selected waterbodies.

This data will allow further research analysis, and how we can manage for our waterbodies in the

It is also important to get the younger generation involved in water testing and phosphorus testing.

Students can use apps that have been downloaded to phones or a tablet and record the results of

water testing. The water rangers have a water test kit that is very user friendly. The results are

entered into the app and are put in a large database where other schools or communities can see the

results from other waterbodies. The CRVWA is hoping to continue to go to schools and explain the

Phosphorus Testing on the Carrot River

The Carrot River Valley Watershed has partaken in phosphorus testing over the past few years with the Lake Winnipeg Basin Fund Initiative. The North Saskatchewan River Basin Council, the South Saskatchewan River Watershed Stewards and Swift Current Creek Watershed Stewards have also been collecting water samples.

Phosphorus is one of the many nutrients needed for healthy plant growth. Plants absorb the phosphorus from the soil to the extent that they need. The concern arises when there is an excess of phosphorus in the water. Herbicides, insecticides fertilizers etc. are used in agricultural and urban areas and this excess can lead to runoff into nearby waterbodies. When there is an increase in nutrients in waterbodies this can lead to Eutrophication. Eutrophication can cause many problems for the waterbody and for humans in some cases. With the Lake Winnipeg Basin Initiative, the work



One drop of oil can render up to 25 Liters of water unfit for drinking.

Fresh water from lakes, rivers and groundwater is our primary source of drinking water and is essential to human health and sanitation.



Agricultural Water Management Strategy

Responsible drainage allows landowners to manage water while addressing the impacts on neighbours and the environment.

Why is a new approach needed?

Drainage has been a key part of settling Saskatchewan. It has made land available for communities, roads, crops and resource development. However, poorly designed projects can have negative impacts, including:

- local to large-scale downstream flooding and infrastructure damage
- degraded water quality from erosion and increased contaminants
- negative impacts on wildlife habitat.

Many of these problems can be avoided. We consulted with the public, stakeholders, and agricultural producers to develop this new approach to drainage management in Saskatchewan. It's intended to achieve the benefits of drainage while managing the risks.

What is the new approach?

The new approach is about approvals (all drainage needs an approval) and networks. In drainage networks, groups of producers and other landowners work together to operate a drainage project that drains into an adequate outlet.

A coordinated approach creates efficiencies for both effectively draining land and reducing impacts. Producers and other landowners may work together by forming a formal organization such as a Conservation and Development Authority (C&D).

What will the new approach achieve?

The new approach means that:

- landowners are able to operate their drainage works for the term of the drainage approval, and if they sell their land the drainage approval will transfer with the title.
- negative impacts from drainage will be reduced through mitigation conditions on approvals.

How will the new approach affect me?

- All drainage needs an approval. Over a period of time, all drainage works need an approval *regardless of when they were built*. No unapproved works are grandfathered. Drainage works built pre-1981 also need an approval.
- New types of permission to use land. When draining, the proponent must have permission to move water onto, or across, any other person's land to the point of adequate outlet. The most secure form of land permission is a registered easement. Permission to use land can also be obtained through joint applications or written agreements.
- Drainage approvals will consider how to reduce impact and will reflect the risk involved. Approval holders will be required to use best practices in design and construction of works to reduce impacts of drainage. The types of mitigation conditions will depend on the size of the project and where it is located in the province.
- Approval holders may be required to install and operate structures to control the release of water from a drain. In order to prevent drained water adding to flood peaks, higher risk activities will be required to install permanent flow restriction structures, such as suitably sized culverts or gates.
- Approval holders may be required to retain some surface water or storage space for water. In order to prevent drainage adding to flood peaks, higher risk activities may be required to permanently retain a portion of the surface water they wanted to drain as wetland or dead storage (ability to fill).
- **'Qualified persons' (QPs) will assist landholders to prepare drainage applications.** Drainage applications (especially in networks) are complicated because they often involve many legal parcels and landowners. Landowners should expect to hire a qualified person for assistance in most cases.

• WSA's response to drainage complaints now focuses on achieving compliance. When WSA receives a request for assistance, we will confirm that there are drainage works and whether they are approved. If they are not approved the owner of the works has a period of time to obtain an approval or be required to close the works.

How will the new approach be implemented?

Local producers in high priority areas provided feedback that helped form the approach now being implemented.

WSA is focusing on approvals in high priority areas where we have received Requests for Assistance. In 2017 we are working on approval of a number of large network projects.

Work in these areas will involve the local watershed group to help implement the new drainage approval process for both new and existing works.

We will work with landowners to achieve compliance with the new regulations.

What funding is available?

The Farm Stewardship Program (FSP) offered by the Ministry of Agriculture provides eligible producers with financial assistance to implement Beneficial Management Practices (BMPs) in three priority areas – water, climate change and biodiversity. Landowners bringing existing, unapproved drainage works into compliance may be eligible.



Fresh water is often sacred and at the centre of all life for Indigenous peoples.



A significant amount of Canada's renewable freshwater supply is not easily accessible, since 60% is stored in ice, or flows north into the Arctic Ocean, away from the majority of the population.

Canadian Agricultural Partnership (CAP)

Canadian Agricultural Partnership is a five-year investment plan from the federal and provincial government to help Saskatchewan agriculture.

FRWIP: Farm and Ranch Infrastructure Program is designed to develop secure and sustainable agricultural water sources such as dugouts, wells, and pipelines.

FSP: Farm Stewardship Program is to help producers implement beneficial management practices (BMP). A BMP is an agricultural management practice that positively impacts long-term economic and environmental viability of agricultural production and minimizes negative impacts and risk to the environment.

The basic eligibility required: Saskatchewan Producer, 18 years or older, make a minimum of \$50 000 gross farm income. Need a premise identification number PID number if you own livestock. The projects must be started on or after April 1, 2018 and the deadline for applications is December 31, 2022

There are multiple BMPs you can apply for please contact CRVWA 306-752-1270 or 306-920-8166 for more information about FRWIP and FSP's applications and rebates.



Canada has about 25% of the world's wetlands- the largest wetland in the world.







