

MANITOBA WATERSHED DISTRICTS PROGRAM

2020-21 ANNUAL REPORT



**MINISTER
OF ENVIRONMENT, CLIMATE AND PARKS**

Room 344
Legislative Building
Winnipeg, Manitoba R3C 0V8
CANADA

Her Honour the Honourable Janice C. Filmon, C.M., O.M.
Lieutenant Governor of Manitoba
Room 235 Legislative Building
Winnipeg MB R3C 0V8

Your Honour,

As Minister of Environment, Climate and Parks, I have the privilege of presenting the Annual Report of Manitoba's Watershed Districts Program for the year ending March 31, 2021, including audited financial statements for the same period.

The fiscal year 2020-21 was a year of transition, expansion and advancement for the program. The transition to watershed-based boundaries resulted in the 14 watershed districts adapting programs and governance to reflect their new names and their watersheds. Additional provincial funding also resulted in the expansion of the Assiniboine West and Central Assiniboine Watershed Districts. Manitoba formalized the participation of the Rural Municipality of Elton and the Municipalities of Whitehead and North Cypress Langford in these two districts through changes to the Watershed Districts Regulation.

This year also marked the first year of implementation of Growing Outcomes in Watersheds (GROW) by watershed districts. As a result of Manitoba's establishment of the Conservation, GROW and Wetlands GROW Trusts, watershed districts received an additional \$5M to implement GROW projects. These projects are aimed at working with Manitoba's agricultural producers to recognize their efforts in on-the-ground conservation, restoration and enhancement of ecological goods and services throughout agri-Manitoba that improve watershed health and resilience to a changing climate.

In January 2020, a Watershed Districts Infrastructure Working Group was formed to improve planning and delivery of infrastructure maintenance programs of the four watershed districts with a unique infrastructure mandate. The group has increased collaboration between the departments and districts, reviewed waterway infrastructure inventories, identified external funding available for projects and infrastructure planning, and provided infrastructure specific training.

Manitoba is a proud supporter of the Watershed Districts Program and the continued work watershed districts provide in improving watershed health and resilience. Through targeted investments in projects to improve water quality, enhance surface water management, safeguard drinking water sources, and protect sensitive wildlife and aquatic habitat, this partnership program continues its success.

Respectfully submitted,

Original signed by

Jeff Wharton
Minister of Environment, Climate and Parks



THE MANITOBA WATERSHED DISTRICTS PROGRAM

WATERSHED DISTRICTS IN MANITOBA

Manitoba's Watershed Districts Program enhances healthy and sustainable watersheds through land and water stewardship programs and partnerships. With funding from the Manitoba government and municipalities, locally-appointed watershed district boards make planning and management decisions to improve watershed health across most of municipal Manitoba.

VISION

The Watershed Districts Program will strive to create healthy watersheds to support watershed residents, the environment, and the economy for the present and the future.

MANDATE

Watershed districts lead integrated watershed management planning and play a key role in plan implementation. Through a shared governance model and citizen engagement, watershed districts deliver local solutions to complex issues – contributing to healthier, more resilient watersheds.

PRINCIPLES

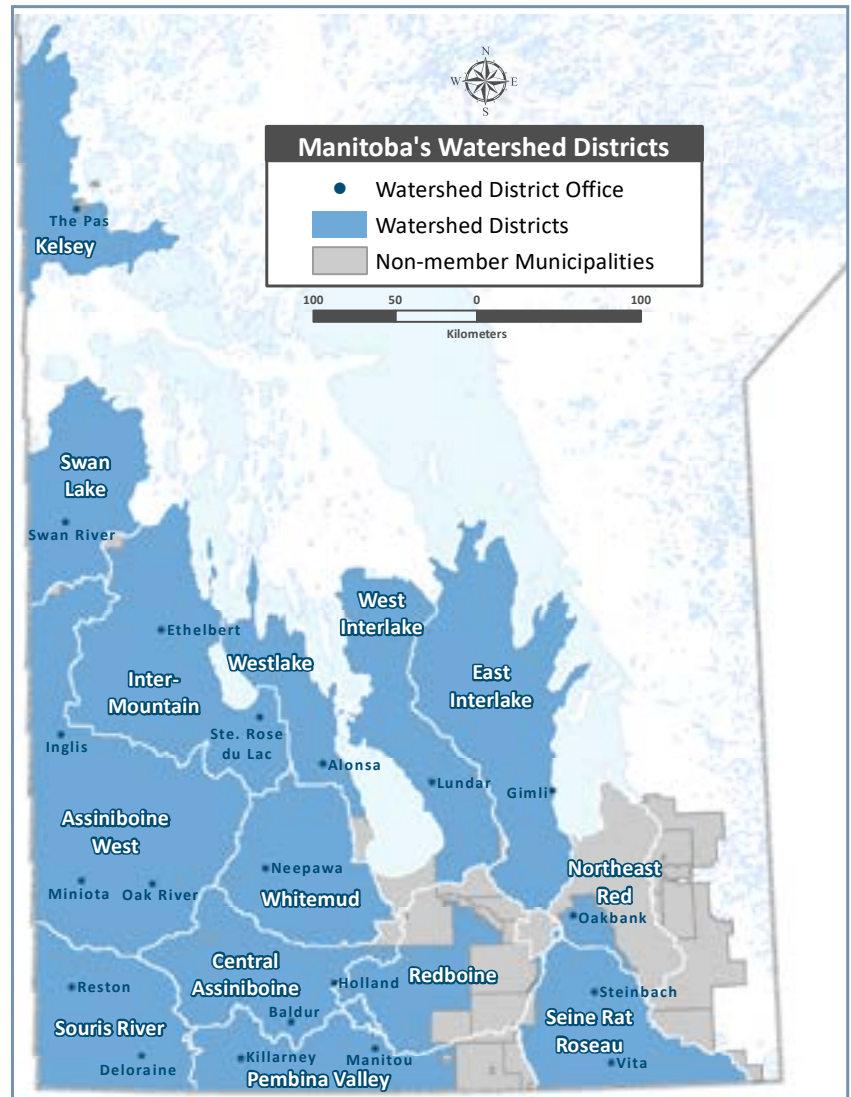
The Watershed Districts Program:

- functions as a partnership between levels of government and engages local citizens
- is cost-shared by provincial and municipal government partners
- is incentive-based and non-regulatory
- relies on local decision-making through local boards with support from technical experts to solve local issues
- uses watershed management planning to guide decision-making and programming

WATERSHED DISTRICTS IN MANITOBA

The Watershed Districts Program is a partnership between Manitoba and 105 municipal partners, with a long-standing history of local, grassroots decision-making to improve watershed health. On January 1, 2020, the program was modernized with new provisions under The Watershed Districts Act including the ability to enter into agreements with non-municipal entities. Watershed districts have begun utilizing these provisions through locally-led discussions with Indigenous communities.

In 2020-21, the program was expanded to include Whitehead as a new municipal partner, and to complete membership for existing partners Elton and North-Cypress Langford. Assiniboine West and Central Assiniboine Watershed Districts welcomed these new partners and are collaborating on watershed-based programming to address local watershed needs.



PROGRAM SPENDING BY ACTIVITY

Watershed district programming reflects provincial and local priorities. Watershed districts design programming to meet goals, objectives and actions identified in their integrated watershed management plans (IWMPs). Although programming and project types vary between individual watershed districts, programming generally falls within five main categories:

Surface Water Management

59%

Water retention, erosion control, wetland restoration and drain maintenance

Nutrient Reduction and Water Quality Protection

17%

Riparian area fencing, alternative watering systems, cover crops, forage establishment and grassed waterways

Natural Area Protection and Enhancement

14%

Wetland restoration and enhancement, tree planting, aquatic habitat restoration, nature trails and conservation agreements

Watershed Education and Awareness

6%

Water festivals, producer workshops, project tours, watershed health monitoring and development of IWMPs

Drinking Water Protection

4%

Source water protection activities such as wellhead remediation, abandoned well sealing and drinking water testing

PROGRAM FUNDING

Provincial Grant: \$5,469,500

The Manitoba government provides an annual grant to each watershed district to implement integrated watershed management plans in their local watersheds.

In addition, this year's grant provided \$50,000 for new integrated watershed management planning processes, bringing the total grant awarded to \$5,519,500.

Municipal Levies: \$1,823,167

Participating municipalities match provincial grant contributions at a 3 to 1 ratio, meaning municipalities provide \$1 for every \$3 the province contributes. Municipalities appoint members to watershed district boards to implement projects and programming relevant to their local watersheds.

Additional Funding: \$5,359,215

Federal \$2,240,041
Additional municipal \$444,437
Additional provincial \$1,415,533
Non-governmental \$1,259,204

Additional funding is obtained from a variety of sources, including environmental organizations, industry, and government programs.

TOTAL PROGRAM FUNDING: \$12,651,882

PROVINCIAL GRANTS

Watershed District	Provincial Grant	Watershed District	Provincial Grant
Assiniboine West	\$703,000	Redboine	\$225,000
Central Assiniboine	\$408,000	Seine Rat Roseau	\$378,000
East Interlake	\$300,000	Souris River	\$440,000
Inter-Mountain	\$707,000	Swan Lake	\$225,000
Kelsey	\$188,000	West Interlake	\$201,500
Northeast Red	\$310,000	Westlake	\$308,000
Pembina Valley	\$376,000	Whitemud	\$700,000

2020-21 EXTERNAL PARTNERS

DISTRICTS RECEIVE ADDITIONAL FUNDING FROM A NUMBER OF EXTERNAL PARTNERS

FEDERAL GOVERNMENT

Agriculture and Agri-Food Canada
Canada Summer Jobs
Canadian Agricultural Partnership – Ag Action Manitoba
Environment and Climate Change Canada
Natural Resources Canada

PROVINCIAL GOVERNMENT AND CROWN CORPORATIONS

Conservation, GROW and Wetlands GROW Trusts
Manitoba Fisheries and Wildlife Enhancement Fund
Manitoba Hometown Greenteam

NON – GOVERNMENT ORGANIZATIONS

ALUS Canada
Ducks Unlimited Canada
Federated Co-operatives Ltd – Community Spaces
Federation of Canadian Municipalities
Lake Winnipeg Foundation
Manitoba Cattle Producers
Manitoba Forage and Grasslands Association
Manitoba Forestry Association
Nature Conservancy of Canada
Reston Area Community Foundation
Richardson Tundra
Swan Valley RISE

Other local organizations, community foundations, corporate sponsors and individual donors

In addition to these partnerships, many municipalities contribute more than the required matching funds in support of the high quality programs and projects completed by districts.

PROGRAM OUTCOMES



ENHANCED WATERSHED PLANNING

- Develops a shared vision and coordinated action for watersheds
- Provides funding for targeted, on-the-ground action to address local and provincial priorities
- Builds local capacity for cooperation, improved communication and local knowledge sharing
- Builds and strengthens local, provincial and federal partnerships



23

watershed management plans being implemented

4

new watershed plans in development

3

existing watershed plans under renewal



REDUCED IMPACTS OF FLOODING AND DROUGHT

- Improves watershed resiliency to adapt to a changing climate
- Targets and prioritizes water retention and peak flow reduction projects
- Identifies and co-ordinates surface water projects on a watershed basis
- Prevents and mitigates flood events
- Builds soil health and water retention capacity of soils
- Manages waterway networks to reduce flooding impacts, while considering the environment



65

water retention projects with 1,137 cubic decametres (927acre-feet) of storage created

198 km

of drains maintained or reconstructed

179

crossings replaced or repaired



IMPROVED LAND AND WATER MANAGEMENT PRACTICES

- Conserves and restores aquatic, riparian and prairie habitat
- Protects and enhances ecological goods and services
- Fosters linkages between land development planning and watershed planning
- Promotes sustainable land management



456 ha

of wetlands restored (1,126 acres)

92,012

trees planted

85 km

of shelterbelts established

HEALTHY AND RESILIENT WATERSHEDS • STRONG RURAL COMMUNITIES SUSTAINABLE AGRICULTURAL PRODUCTION



IMPROVED WATER QUALITY

- Implements projects to improve water quality and reduce nutrient loading
- Increases local capacity to monitor and understand trends in water quality
- Improves soil health and reduces the need for over-application of nutrients on agricultural lands
- Fosters collaboration between technical professionals and local land managers to improve water quality



PROTECTION OF DRINKING WATER

- Conducts source water protection planning for public drinking water systems
- Provides recommendations and implements actions to improve local drinking water quality
- Fosters collaboration between technical professionals and local people to monitor groundwater quality, assess groundwater issues and implement projects aimed at protecting local groundwater sources



PROSPEROUS RURAL DEVELOPMENT

- Provides direct injection of government funding into rural communities, increasing local ability to leverage additional sources of external funding
- Supports rural employment and local businesses
- Educates youth and local land managers
- Manages waterway infrastructure to support a productive agricultural landscape and rural development



66

surface water quality sites tested

18

erosion control structures established

18

grassed waterways created

26

streambank and gully stabilization projects completed

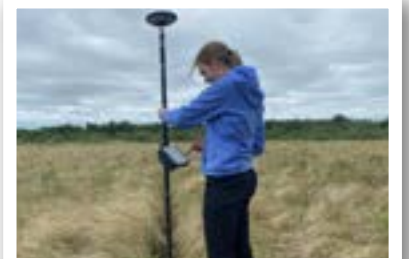


852

private wells tested

179

abandoned wells sealed



21

tours and demonstrations with 136 attendees

57

producers with Environmental Farm Plans

50

full-time and 31 part-time and seasonal staff employed

2020-21 PROGRAM ACTIVITIES

Activity	Projects	Sites	Storage (dam ³)	km	Hectare	Head of Cattle	Trees	Attendees
Surface Water Management								
Assessment – flow and retention studies	86							
Erosion control – in-channel or gully	30							
Erosion control – streambanks	14							
Infrastructure – inventory	28	1,713						
Infrastructure WD – brushing and mowing	254			1,646				
Infrastructure WD – crossing maintenance	151							
Infrastructure WD – crossing replacement	28							
Infrastructure WD – drain maintenance	131			191				
Infrastructure WD – drain reconstruction	7			7				
Management – beaver impacts	140							
Urban rain garden	1							
Water control works applications reviewed	60							
Water control works applications submitted	52							
Water retention – project maintenance		23						
Water retention – gated culvert		4						
Water retention – large dams (>50 dam ³)	2		200					
Water retention – small dams (<50 dam ³)	63		937					
Nutrient Reduction and Water Quality Protection								
Buffer strips	35				119			
Grassed waterway	18				23			
Livestock – pasture pipeline	15			10		1,260		
Livestock – riparian area fencing	34			46		3,895		
Livestock – alternative watering systems	56					7,765		
Livestock – confinement relocation	10					350		
Livestock – crossings	22					1,230		
Livestock – rotational grazing	2				106	210		
Livestock – runoff control		3						
Soil health – cover crops, polycrops	36				2,019			
Soil health – forage seed	106				2,525			
Soil health – salinity seed	24				157			
Soil health – soil testing		60						
Drinking Water Protection								
Abandoned well sealing	179							
Drinking water testing		852						
Well establishment	14							
Well head remediation		1						
Well shock chlorination		34						

Activity	Projects	Sites	Storage (dam ³)	km	Hectare	Head of Cattle	Trees	Attendees
Natural Area Protection and Enhancement								
Conservation agreements	2				177			
Conservation corridors	454				2,175			
Duck nesting structures		7						
Fish enhancement – lake aeration		3						
Fish enhancement – rearing ponds or stocking	3							
Habitat lease	37	362			1,215			
Riparian and aquatic assessments	1	15		0				
Trails and property maintenance	37			75				
Trees – community tree nursery	2						500	
Trees – field and property shelterbelts				85			25,836	
Trees – private woodlot management	6				271			
Trees – seedlings provided	800						63,290	
Trees – tree planting	18						2,886	
Wetlands – constructed	3				10			
Wetlands – enhanced	9				29			
Wetlands – restored	31				456			
Wetlands (temporary) – conservation	161				316			
Watershed Education and Awareness								
Best management practice research	2	10						
Composters	38							
Eco-tourism	8							
Events – banquets and watershed functions	5							200
Events – tours and demonstrations	21							136
Events – youth education	21							1,167
Information – aerial surveys	64			95				
Information – brochures	16	27,650						
Information – Environmental Farm Plan workshops	2							39
Information – Geographic Information System (GIS)	233							
Information – producers with Environmental Farm Plans								57
Information – project or interpretive signs	39							
Information – video or documentary	13							
Information – website and social media	40							
Monitoring – benthic invertebrates	1	5						
Monitoring – groundwater		89						
Monitoring – surface water quality		66						
Rain barrels	65							
Water use conservation planning	1							

CUMULATIVE PROGRAM OUTCOMES

OVER THE LAST FIVE YEARS, WATERSHED DISTRICTS HAVE ACHIEVED THE FOLLOWING:



REDUCED IMPACTS OF FLOODING AND DROUGHT

Watershed districts have built 208 water retention projects since 2016 with 5,617 decametres (4,553 acre-feet) of water storage capacity. In addition, watershed districts have implemented 145 erosion control, 41 gully stabilization, and 79 streambank stabilization projects, reducing soil erosion and impacts to water quality.

To improve water flow and reduce flooding, four watershed districts with a waterway infrastructure management mandate have replaced or repaired 977 culvert and bridge crossings since 2016.



IMPROVED LAND AND WATER MANAGEMENT PRACTICES

Since 2016, watershed districts have installed over 240 km of riparian fencing and 217 off-site watering systems to exclude over 60,000 cattle from riparian areas, improving water quality and riparian habitat.

Watershed districts have established 1,535 km of shelterbelts and planted almost half a million trees over the last five years.



PROTECTION OF DRINKING WATER

Over the last five years, watershed districts have sealed almost 1,000 abandoned wells and conducted 4,900 drinking water tests to safeguard private drinking water sources.

In the past five years, watershed districts have held 390 tours and producer workshops, educating more than 5,300 participants on healthy soil and water management practices.

WATERSHED MANAGEMENT PLANNING

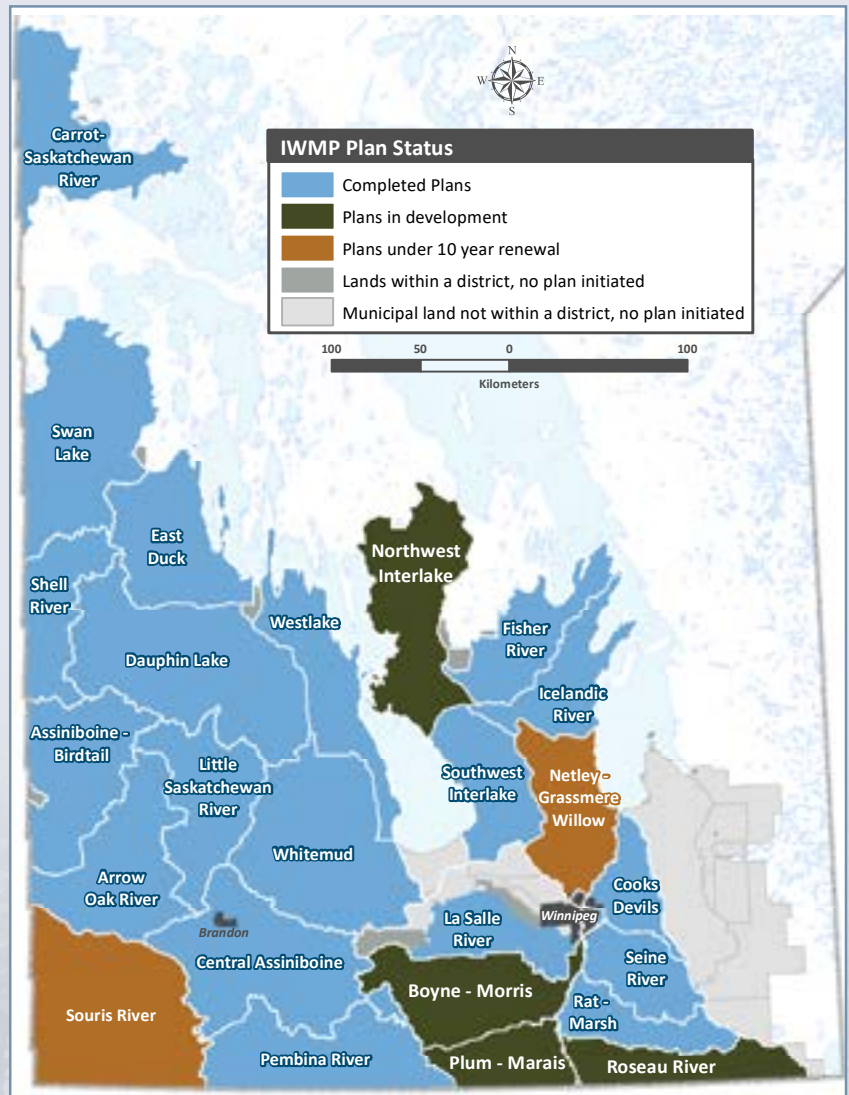
Watershed management plans provide a decision-making framework for the protection, restoration and management of water, aquatic ecosystems, and drinking water sources. The planning process engages watershed residents, stakeholders and government to identify and prioritize watershed issues, gather and analyze local, technical, and traditional knowledge, and develop recommendations to address priority issues in targeted areas. Plan implementation is shared by watershed districts, all levels of government, stakeholder organizations and watershed residents.

As of 2021, watershed districts have completed 23 first generation watershed management plans. There are an additional four first generation plans and two second generation plans in development.

As integrated watershed management plans reach their 10-year lifespan, Manitoba is working with watershed districts to renew completed watershed management plans. The Souris River Integrated Watershed Management Plan is the first “second generation” plan initiated in Manitoba, building on previous watershed plans completed for the East Souris River Watershed in 2006 and the West Souris River Watershed in 2012.

In 2020-21, the East Interlake Watershed District initiated a renewal of two completed plans, the Netley-Grassmere and Willow Creek Integrated Watershed Management Plans under one new planning process. Additionally, the Pembina Valley Watershed District initiated a first generation watershed management plan in the Plum-Marais watershed. Both watershed districts received a \$20,000 planning grant from the Manitoba government to support the development of these plans.

Recognizing a need for better management of surface water for flooding and drought in a changing climate, a \$10,000 planning grant was awarded to Inter-Mountain Watershed District to develop an enhanced surface water management plan for a portion of the Dauphin Lake watershed. This pilot approach will focus on reviewing drainage infrastructure, planning for water retention, and enhancing surface water management planning for future planning processes. For more information on integrated watershed management planning progress across Manitoba, please visit www.manitobawatersheds.ca



GROWING OUTCOMES IN WATERSHEDS (GROW) – YEAR ONE HIGHLIGHTS

Growing Outcomes in Watersheds (GROW) is Manitoba’s approach to ecological goods and services (EG&S) delivery. Priority outcomes for GROW are improved watershed resilience to the impacts of a changing climate through a reduction in flood and drought vulnerability and improved water quality through sediment and nutrient management. Co-benefits of GROW include improved on-farm water management, enhanced sustainable agricultural production, improved biodiversity and habitat, and carbon sequestration and storage.

As delivery agents for GROW, watershed districts are ideally positioned to develop and deliver programs that support actions identified in local watershed management plans. Each district delivering GROW has established a Local GROW Committee with representation from agricultural producers, watershed district members, technical experts and other partners.

Overall, Local GROW Programs offered by watershed districts include the following types of activities for local landowners:

- Water retention
- Wetland conservation, restoration and enhancement
- Riparian area conservation, restoration and enhancement
- Buffer establishment (ex: shelterbelts)
- Upland area conservation, restoration and enhancement (ex: grassland conservation, soil health improvement)



Many successful projects were initiated locally by producers and watershed districts in 2020-21, GROW’s first year of implementation. Local GROW Committees focused on projects that were consistent with local integrated watershed management plans, while ensuring a collaborative partnership with local producers. Proposals approved in 2020-21 included conservation of over 3,200 acres of existing Class 1 and 2 wetlands, enhancement of 488 acres of existing wetlands of all classes, and restoration of 347 acres of former wetlands. Additionally, over 4,000 acres of riparian area were proposed for conservation, restoration, and enhancement projects, and approximately 5,600 acres of upland areas, including grasslands, were targeted in Local GROW Programs. Hundreds of producers and landowners were engaged in initial discussions with watershed districts about these GROW initiatives in 2020-21.



GROW AND CONSERVATION TRUST FUNDING

In 2019-20, through an initial investment of \$102M by the Manitoba government, the GROW Trust and Wetlands GROW Trust were established. Similar to the Conservation Trust, the GROW Trusts are managed by The Winnipeg Foundation with resulting interest administered by the Manitoba Habitat Heritage Corporation. The three Trusts provide funding to watershed districts for Local GROW Program delivery, including project establishment funds and landowner incentive payments. In 2020-21, Manitoba Habitat Heritage Corporation allocated over \$5.3M to watershed districts, of which \$1.48M was proposed for incentive payments to producers for the provision of ecological goods and services over the terms of the GROW contracts. The trust funding model solidifies funding for GROW and conservation-based programming in perpetuity. These funds will go toward projects that will continue to build watershed health and resilience in Manitoba, delivered by watershed districts.

Class 1 and 2 wetlands, the smaller, temporary wetlands that appear on the landscape after spring snowmelt and after summer precipitation events, perform valuable ecological services such as water and nutrient retention and provision of wildlife habitat. However, Class 1 and 2 wetlands are extremely vulnerable to drainage. To counteract this vulnerability, GROW offers incentives to landowners that agree to keep these important wetlands in place. Through Local GROW Programs, landowners can receive payments for their commitment to conserve these wetlands on the landscape. Local GROW Programs saw positive uptake in conservation of Class 1 and 2 wetlands in 2020-21, and momentum continues to build. More information can be found at www.manitobawatersheds.ca



CLIMATE RESILIENCY: IT'S WHAT DISTRICTS DO!

Predicted impacts of climate change in Manitoba include increased variability in precipitation, earlier and higher peak stream flows, increased number of high heat days and more extreme climatic events like floods and droughts. Many Manitoba communities have begun to experience these impacts and recognize the importance of planning and preparing for these types of events. Informed and responsible water management decisions will become more and more important in the future.

Watershed districts throughout Manitoba play a key role in climate resiliency. Districts strive to deliver locally developed programs that protect and enhance watershed health, conserve ecological goods and services and build strong working relationships and partnerships. Many of the programs and activities that watershed districts deliver contribute to climate adaptation and mitigation. Implementing programming that addresses vulnerability to droughts and floods, improves agricultural sustainability, protects drinking water, and improves water quality is the essence of Manitoba's Watershed Districts Program.

Integrated watershed management plans are developed and implemented by watershed districts. A watershed management plan is a holistic approach that considers the impacts of climate change and presents watershed-based solutions and on-the-ground actions targeted to local watershed needs. Through coordinated actions outlined in these plans, watershed districts work with various stakeholders to implement projects that improve water retention capacity, restore and conserve important natural habitat like wetlands, forests, and native grasslands, reduce susceptibility to soil erosion, and many other projects that enhance adaptation and reduce vulnerability to the impacts of climate change. The development, implementation and renewal of integrated watershed management plans by all stakeholders is important to ensure that Manitobans work together to manage water in a way that increases the resilience of the watershed to a changing climate.

2020-21 MUNICIPAL PARTNERS

105 MUNICIPALITIES ARE PARTNERS IN THE WATERSHED DISTRICTS PROGRAM

VILLAGES

Dunnottar
St. Pierre – Jolys

TOWNS

Carberry
Carman
Minnedosa
Neepawa
Niverville
Ste. Anne
Stonewall
Swan River
Teulon
Virten
Winnipeg Beach

CITIES

Brandon
Dauphin
Morden
Selkirk
Steinbach

MUNICIPALITIES

Alonsa
Arborg
Argyle
Armstrong
Bifrost – Riverton
Boissevain – Morton
Brenda – Waskada
Brokenhead
Cartier
Cartwright – Roblin
Clanwilliam – Erickson
Coldwell
Cornwallis
Dauphin
Deloraine – Winchester
De Salaberry
Dufferin
Ellice – Archie
Elton
Emerson – Franklin
Ethelbert
Fisher
Gilbert Plains
Gimli
Glenboro – South Cypress
Glenella – Lansdowne
Grahamdale
Grandview
Grassland

Grey
Hamiota
Hanover
Harrison – Park
Kelsey
Killarney – Turtle Mountain
La Broquerie
Lakeshore
Lorne
Louise
McCreary
Minitonas – Bowsman
Minto – Odanah
Montcalm
Mossey River
Mountain
Norfolk Treherne
North Cypress – Langford
North Norfolk
Oakland Wawanesa
Oakview
Pembina
Piney
Pipestone
Portage la Prairie
Prairie Lakes
Prairie View
Reynolds
Riding Mountain West
Ritchot

Riverdale
Roblin
Rockwood
Rosedale
Rossburn
Rosser
Russell Binscarth
Sifton
Souris – Glenwood
Springfield
St. Andrews
St. Laurent
Stanley
Ste. Anne
Ste. Rose
Stuartburn
Swan Valley West
Taché
Thompson
Two Borders
Victoria
Wallace – Woodworth
West Interlake
West St. Paul
Westlake – Gladstone
Whitehead
Woodlands
Yellowhead

PROVINCIAL WATERSHED SUPPORT

The Watershed Planning and Programs Section (Water Branch) of Environment, Climate and Parks administers and manages the Watershed Districts Program under the authority of The Watershed Districts Act. The section also coordinates and supports watershed management planning as outlined in The Water Protection Act.

For more information, please visit www.manitobawatersheds.ca or call 204-945-6784

