





Le Réseau des rivières du patrimoine canadien

RED RIVER A Canadian Heritage River

Ten-year Monitoring Report: 2007 – 2017

Prepared by

Manitoba Sustainable Development Parks and Protected Spaces Branch

for

The Canadian Heritage Rivers Board April 2018



Acknowledgements

This report was prepared by Manitoba Sustainable Development, with contributions from numerous individuals and organizations. Special thanks goes to Anne-Marie Thibert, outgoing Executive Director of Rivers West - Red River Corridor Association Inc., who provided photos and other input for the report. Manitoba Sustainable Development would also like to acknowledge the work of Rivers West and its partner organizations over the past ten years, and all they did to recognize, promote and sustain the Red River's cultural heritage, natural heritage and recreational values over the first decade of the river's designation to the Canadian Heritage Rivers System.



Over the course of thousands of years, the Red River played a significant role, first in the lives of Indigenous Peoples and subsequently, in the growth and development of Western Canada. It has been the site of numerous historical and cultural events, while also providing recreational opportunities and having a considerable influence on the area's natural landscape. On the basis of its strong cultural heritage values, the Red River was designated to the Canadian Heritage Rivers System (CHRS) in 2007.

The CHRS requires that a detailed monitoring report be prepared every ten years from designation to confirm that rivers continue to possess the natural, cultural and/or recreational values for which they were designated. This Ten-year Monitoring Report lists activities, events and research that occurred on the Red River since its designation to the CHRS. It describes the current condition of the river's natural heritage values, cultural heritage values, recreation values and integrity values, and notes any changes or threats to those values. The management actions identified in the management plan for the river are reviewed and their achievement assessed. Finally, benefits of CHRS designation are described.

A review of the Red River's cultural heritage, natural and recreational values indicates that there have been no significant changes to these values since CHRS designation in 2007. Countless numbers of events, activities and festivals have taken place in the river corridor over the past ten years, many with the intention of celebrating the Red River, its place in history and its importance to local communities. Archaeological and historic sites along the river continue to be recognized and protected, while many new river-based recreation facilities have been developed along the length of the corridor. Struggles with providing access points to the river persist, due to the challenges associated with fluctuations in water levels. Despite this, several new access points and/or launches have been created in recent years. In terms of natural values, the Red River corridor has seen relatively little change aside from normal occurrences

of channel migration and erosion. Riverbank stabilization projects have been undertaken in certain areas to address some issues with erosion. The identification of zebra mussels, an invasive species, in the Red River in 2015 is cause for concern, but to date has not resulted in any measurable impacts to the ecosystem or river-based infrastructure.

The management plan for the Red River was prepared in 2006. At that time, the intention was for it to be primarily carried out by Rivers West - Red River Corridor Inc., the non-profit organization acting as the CHRS river manager for the river. However, in late 2017 Rivers West was dissolved, so in future years it will fall to Rivers West's partners, the communities along the Red River and the Manitoba government to ensure that the Red River's heritage values continue to be recognized and supported, and the management plan for the river continues to be implemented. A review of the management plan indicates that some strategies and actions have been achieved and many others are ongoing. It remains to be determined which of these ongoing and/or not yet initiated actions will be continued following the dissolution of Rivers West.

Consideration of the benefits resulting from the Red River's CHRS designation shows that the majority of such benefits involve the celebration and appreciation of the river's heritage values, community participation in various events and activities, and the development of educational and promotional materials. This is consistent with the fact that the river was designated to the CHRS based on the strength of its cultural heritage values.

Based on the findings of this report, the natural heritage, cultural heritage and recreation values of the Red River have been determined to be intact and for the most part unchanged since CHRS designation in 2007. As such, the Red River is worthy of continued designation as a river of national significance within the Canadian Heritage Rivers System.



La rivière Rouge a joué un rôle important pendant des milliers d'années : premièrement dans les vies des Autochtones, et ensuite, dans le développement et la croissance de l'Ouest canadien. Elle a été le site de nombreux événements historiques et culturels, tout en offrant des possibilités récréatives et en influençant de manière importante le paysage naturel de la région. Grâce à ses solides valeurs patrimoniales et culturelles, la rivière Rouge a été intégrée au Réseau des rivières du patrimoine canadien en 2007.

Le Réseau exige qu'un rapport de surveillance détaillé soit préparé tous les dix ans à partir de la date de désignation afin de confirmer que les rivières possèdent toujours les valeurs naturelles, culturelles ou récréatives pour lesquelles elles ont été désignées rivières du patrimoine. Le rapport décennal de surveillance recense les activités et les événements qui se sont produits sur la rivière Rouge depuis sa désignation, ainsi que la recherche effectuée à son sujet pendant cette période. Il décrit l'état actuel des valeurs de patrimoine naturel et culturel, des valeurs récréatives et des valeurs d'intégrité et indique tout changement et toute menace à ces valeurs. Les mesures à prendre déterminées dans le plan de gestion de la rivière sont examinées et l'on évalue si elles ont été réalisées. Enfin, les avantages de la désignation du Réseau des rivières du patrimoine canadien sont décrits.

Un examen de l'héritage culturel et des valeurs naturelles et récréatives de la rivière Rouge indique qu'il n'y a pas eu de changement important à ces valeurs depuis que la désignation a été obtenue en 2007. D'innombrables événements, activités et festivals ont eu lieu sur le corridor de la rivière au cours des dix dernières années, et bon nombre avaient pour objectif de célébrer la rivière Rouge, sa place dans l'histoire et son importance aux collectivités locales. Des sites archéologiques et historiques le long de la rivière continuent d'être reconnus et protégés, tandis que bon nombre d'installations récréatives axées sur la rivière ont été aménagées tout au long du corridor. Les défis concernant l'offre de points d'accès à la rivière persistent à cause des difficultés liées aux fluctuations des niveaux d'eau. Malgré cela, plusieurs points d'accès ou de mise à l'eau ont été créés au cours des dernières années. En ce qui concerne les valeurs naturelles, le corridor de la rivière Rouge a subi relativement peu de changements à part la migration des chenaux et l'érosion naturelles. Des projets de stabilisation de la rive ont été entrepris à certains endroits afin de régler quelques problèmes d'érosion. La découverte de moules zébrées, une espèce envahissante, dans la rivière Rouge en 2015 donne lieu à des préoccupations, mais les moules n'ont pas eu jusqu'à maintenant de répercussions mesurables sur l'écosystème ou l'infrastructure de la rivière.

Le plan de gestion de la rivière Rouge a été préparé en 2006. À ce moment-là, le plan devait être mis en œuvre par l'Association du Corridor Rivière Rouge inc., l'organisme à but non lucratif qui servait de gestionnaire de la rivière relativement au Réseau. Toutefois, l'Association a été dissoute à la fin de 2017. Dans les années à venir, il reviendra donc aux partenaires de l'Association, aux collectivités situées le long de la rivière Rouge et au gouvernement du Manitoba de veiller à la reconnaissance et à l'appui continus des valeurs patrimoniales de la rivière, ainsi qu'à la mise en œuvre ininterrompue du plan de gestion. Un examen du plan de gestion indique que certaines stratégies et mesures ont été achevées, tandis que d'autres sont en cours. Il reste à déterminer quelles mesures parmi les mesures en cours ou les mesures qui n'ont pas encore été entamées seront continuées suivant la dissolution de l'Association.

L'étude des avantages découlant de la désignation de la rivière Rouge indique que la majorité des avantages comprennent la célébration et l'appréciation des valeurs patrimoniales de la rivière, la participation communautaire à des activités et des événements divers et l'élaboration de matériaux éducatifs et promotionnels. Cela est compatible avec le fait que la rivière a été intégrée au Réseau en fonction de la qualité de ses valeurs patrimoniales et culturelles.

Le rapport conclut que les valeurs de patrimoine culturel et naturel et les valeurs récréatives de la rivière Rouge sont intactes et principalement inchangées depuis la désignation en 2007. La rivière Rouge mérite donc la désignation continue de rivière d'importance nationale au sein du Réseau des rivières du patrimoine canadien.

Table of Contents

Acknowledgements	IFC
Executive Summary	i
Résumé	
Introduction	
Background	3
Methodology	4
Chronology of Events	5
Natural Heritage Values	11
Condition of Natural Values since 2007	12
Cultural Heritage Values	14
Condition of Cultural Heritage Values since 2007	13
Recreational Values	15
Condition of Recreational Values since 2007	15
Integrity Guidelines	
Management Plan Review	19
Benefits of Designation	25
Conclusions	26
Appendix A: CHRS Natural, Cultural and Recreational Integrity Values	27
References	28



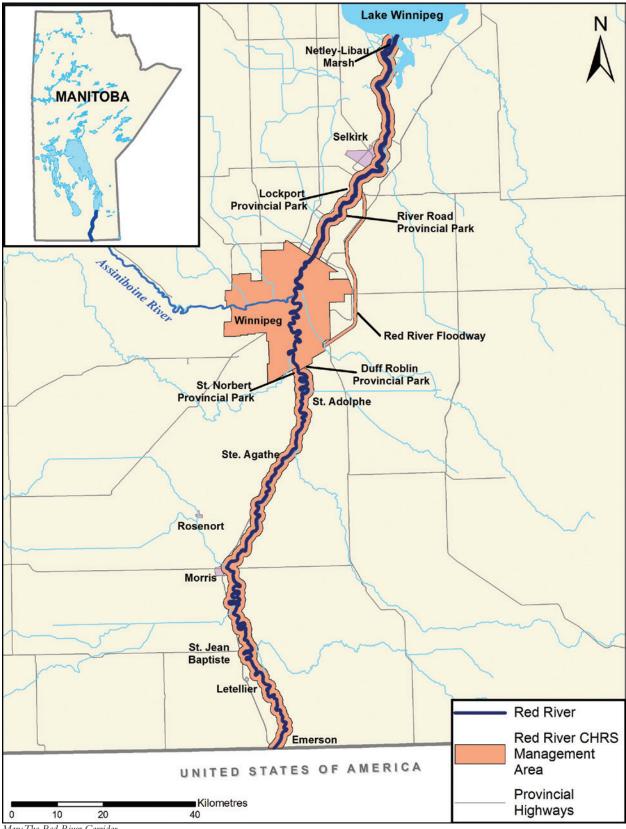


Manitoba's Red River was a central feature in the cultural and economic development of Western Canada, and played a significant role in Indigenous history for thousands of years before that. Over centuries, the river served as a transportation corridor first for Indigenous Peoples, followed by voyageurs, explorers, steamboat operators and many others. The Red River corridor has been the site of numerous significant historical events, and cultural and spiritual activities, as well as an important location for human habitation and the general daily life of the area's inhabitants. Based on these strong cultural heritage values, the Red River was designated to the Canadian Heritage Rivers System (CHRS) in 2007.

The CHRS is a national river conservation program established in 1984 by federal, provincial and territorial governments to help conserve and recognize Canadian rivers with exceptional natural, cultural and recreational heritage values. Rivers designated to the CHRS are subject to annual reviews, as well as more in-depth monitoring reports conducted every ten years from the year of designation. The ten-year reports are intended to review the state of the rivers and any changes or threats to the values for which they were nominated to the CHRS.

The objectives of the Red River Ten-Year Monitoring Report are to:

- Describe any significant events, research, actions and changes since the river was designated a Canadian Heritage River.
- Review the cultural heritage values for which the river was nominated, as well as the river's natural and recreational values. Also, identify any changes or threats to these values, and determine if the river continues to possess them.
- Review the integrity values of the river, identify any changes or threats to these values and determine if the river continues to possess them.
- Review the management actions prescribed in A Management Approach for the Red River in Manitoba (2006) and assess their level of achievement.
- Identify any river conservation, stewardship, economic, cultural or other benefits that have arisen as a result of the Canadian Heritage River designation.



Map: The Red River Corridor

^{2 |} Ten-year Monitoring Report: 2007 – 2017



The entire 175 kilometre (km) length of the Red River in Manitoba, from Emerson at the international border to Netley Marsh at Lake Winnipeg, is designated as a Canadian Heritage River. The majority of the management area for the river stretches out approximately 1.25 km from each bank of the river, representing the extent of the historic Red River river-lot settlement pattern found throughout the corridor. The management area also includes the City of Winnipeg and the Red River Floodway.

With its headwaters located at Lake Traverse in South Dakota, the Red River is the only major river on the Canadian prairies that flows in a northerly direction. It connects with numerous east-west flowing waterways and as such, was an important part of a major water-based transportation network in Canada and the northcentral United States. A particularly notable connection is with the Assiniboine River, which the Red meets at The Forks National Historic Site of Canada, located in downtown Winnipeg. The Red River Valley in southern Manitoba is both a highly productive agricultural area and significantly populated, with numerous urban centres and smaller towns located along or near the full length of the river.

The Red River has long been recognized as having played an important part in thousands of years of Indigenous Peoples' history in the area, and then helping to shape the history, culture and economic development of Western Canada. The river served as a resource and transportation corridor for Indigenous Peoples for millennia, and facilitated European exploration, fur trade and settlement. As a result, the Red is associated with numerous archaeological sites, historical events and notable historic figures.

Much of the Red River is accessible for shoreline and water-based recreation, as well as cultural and natural heritage appreciation. The river is very popular for angling, boating and ice-skating, and there is an abundant amount of parks, green spaces, trails and historic sites located along the river corridor. Lands along the river are a mix of public and privately-owned.

The Red River was nominated to the CHRS in 2005 and formally designated a Canadian Heritage River in 2007. Documents prepared as part of that process include the Canadian Heritage Rivers System Red River Background Study (1998), the Red River, Manitoba Prescreening Document (2003), the Nomination Document for the Red River in Manitoba (2005), and A Management Approach for the Red River in Manitoba (2006).

The nomination and designation process of the Red River was carried out by Rivers West - Red River Corridor Association Inc. (Rivers West), with the support of the Manitoba government. Rivers West was a not-for-profit, non-government organization with a mandate and vision focused on a co-operative planning approach towards managing Red River heritage and tourism resources. For the first ten years of the Red River's designation to the CHRS, Rivers West served as the CHRS River Manager for the Red River, carrying out and supporting numerous cultural and recreational activities in the river corridor, as well as developing promotional and educational materials and undertaking CHRS obligations, such as the preparation of annual monitoring reports for the river. However, gradual decreases in funding affected the sustainability of the organization, and in 2017 the decision was made to formally dissolve Rivers West. From this point forward, the role of CHRS River Manager for the Red River is to be carried out by Manitoba Sustainable Development. The Red River Basin Commission will be storing Rivers West archival materials, maintaining some of the organization's Internet presence and taking on some of the tourism-related aspects that were part of Rivers West's mandate.



Several methods were used to gather information for this report. These included:

- review of the Red River annual monitoring reports prepared between 2007–2016
- review of the Red River nomination documents and management plan
- a literature review of relevant research, articles and reports
- inquiries made to individuals knowledgeable about activities on the river

Based on the information gathered through the above methods, a table was prepared summarizing Red River-related activities, research and events since the river's CHRS designation in 2007. Changes and threats to the river's natural, cultural and recreational values, as well as the CHRS integrity values, were assessed. The actions recommended in the management plan for the Red River were reviewed for an assessment of their degree of implementation, and the benefits of the river's CHRS designation were identified.



Rendez-Vous on the Red Canada 150 Event



Table 1 lists notable Red River-related events, actions, research or studies that occurred since designation in 2007.

TABLE 1: Chronology of Events since 2007

	Significant Events, Actions, Research or Studies 2007-2017	
Numerous community events and festivals were held along the river corridor on an annual basis.		
	Numerous research studies were published with a focus on the Red River and/or using the Red River as a model for other similar rivers. Certain studies are highlighted in the appropriate years below.	
	Red River skating trail is open in winter months (opening and closing dates dependent on weather conditions) starting at the Forks National Historic Site in Winnipeg and extending down the Red and Assiniboine rivers.	
	Periodic flooding of the Red River continued to affect riverbank stabilization throughout the corridor. Riverbank stabilization efforts, utilizing various methods such as the planting of trees and native plants in conjunction with the installation of rip rap, was conducted at various locations along the river corridor.	
	Red River Basin Commission international conference was held annually in January in Fargo, North Dakota or Winnipeg, MB.	
	Winter Fishing Festivals periodically took place in communities, including Selkirk, Lockport and Emerson.	
	Winnipeg Trails: various trail and greenway-related events were held in the river corridor.	
-	 power outages or sewer blockages, occurred multiple times per year. The City of Winnipeg reports on these incidents. Sewer overflow events are also monitored. Notable occurrences include: 2011: From October 7 to mid-November, 50-60 million litres of partially treated sewage waste flowed daily into the Red River from the South End Water Pollution Control Centre as a result of a malfunction of the treatment plant. It was determined that this resulted in no threat to fish in the river, but fecal coliform counts in the Red River exceeded the recommended levels for swimming. As a result of the incident, measures and equipment were put in place that allowed plant staff to promptly detect and deal with future similar situations. 2016: An accidental sewage leak in mid-January sent roughly five million litres of untreated waste into the Red River. The cause of the leak was lumber lodged in a diversion pipe. A report from the City of Winnipeg's water and waste department indicated that the city averages 22 combined sewage overflows through each of its 79 outflows (locations where pipes overflow directly into the city's Red, Assiniboine and Seine rivers), resulting in an estimate of approximately 900 million litres of sewage going into the rivers annually. Options to reduce sewage overflows, including infrastructure upgrades or enhancements, were under consideration and estimated to cost over \$1 billion. 	
	The City of Winnipeg conducted regular monitoring during the open water season to measure the health of the city's waterways, including the Red River. A variety of parameters are tested, including nutrients, dissolved oxygen and bacteria. Monitoring is conducted at six locations on the Red River, ranging from the south floodway to the Lockport bridge.	
	Duff Roblin Provincial Park was established at the Red River Floodway Inlet Control Structure. The park was created to commemorate former Manitoba Premier Duff Roblin and two visionary achievements attained during his tenure: construction of the Red River Floodway and the establishment of a province-wide system of provincial parks.	
_	A fish passage study was conducted at the Red River Floodway Inlet Control Structure (ICS). Findings included that with the current operating rules, fish movement was not inhibited during critical life stages. However, fish passage could be affected if the floodway operating rules were changed so that the ICS were to be continually operated through the open water season.	

Year	r Significant Events, Actions, Research or Studies 2007-2017			
	In an amendment made in March, 2008 to the federal Museums Act, the Canadian Museum for Human Rights was created as a national museum. A groundbreaking ceremony was held at the site in December 2008. The museum site is adjacent to The Forks National Historic Site, at the junction of the Red and Assiniboine rivers. Archaeological digs were conducted at the site in 2008 and 2009.			
2008- 2015	Operation clean-up: 25 km of riverbank was cleaned on both sides of the Red River, from Winnipeg to north of Selkirk.			
2009	A concept plan was prepared for Kenosewun Interpretive Centre and Museum in Lockport. The centre contained historical artifacts and explored the impact of the Red River's St. Andrews Rapids on Indigenous cultures.			
	Significant spring flood occurred along the Red River. This was the fourth highest on the Red River in Manitoba, since 1826.			
	The \$100,000 Trailheads project in Winnipeg was completed. This offered recreational and interpretive opportunities to river users.			
	Manitoba announced a grant of \$300,000 to Ducks Unlimited Canada to restore the province's two largest marshes: Netley-Libau Marsh on Lake Winnipeg and Delta Marsh on Lake Manitoba. Restoration of the Netley-Libau and Delta marshes was guided by a working group led by the Manitoba government, with representatives from several partner agencies.			
2009- 2012	The International Institute for Sustainable Development (IISD), along with partners, initiated a study to improve understanding of how the Netley-Libau Marsh reduced nutrient loading and improved water quality in Lake Winnipeg . Goals of the project included expanding research associated with IISD's Netley-Libau Nutrient-Bioenergy project, and building support for future efforts to restore ecosystem integrity to the marsh. Site research was conducted in 2009. In 2010, the Manitoba government announced an associated pilot project at the marsh to explore ways of preventing pollutants from entering Lake Winnipeg.			
2009- 2013	The École St. Avila School Ground Greening Project was launched in 2009. Funding was received toward a bio-retention system to use sloped ditches, filtration and native prairie grasses to help manage storm water and curb nutrient runoff. The project received a 2013 Manitoba Excellence in Sustainability Award.			
2009- 2017	The International architectural exposition was launched in 2009 for the design of warming huts to be located on the Red River skating trail. After the first couple of years the exposition became a significant design competition. The competition attracts entries from across the world and receives significant international media attention. Winning huts are constructed on the river near the end of January and remain on the river until the end of the skating season.			
2010	Kenosewun Interpretive Centre and Museum was closed indefinitely due to health and safety concerns (mould) following repeated water damage over many years. The centre was slated for removal from the site.			
	The full mitigation plan at the site of the planned Canadian Museum for Human Rights was completed.			
	TransCanada Trail work continued along the Red River Corridor (Crow Wing Trail, Winnipeg Trails and Red River North Trail).			
	Find Gold on the Red: A clue-based contest was held from June through August in the Red River Valley to encourage people to discover cultural, heritage and recreational values in various communities.			
	The French version of Historic Places of the Red River Corridor Resource Guide, manual, CD and teaching tools was launched in September.			
	Manitoba introduced The Upper Fort Garry Heritage Provincial Park Act in 2010, with the intent of proclaiming the site of Upper Fort Garry (a Hudson's Bay Company trading post located near the convergence of the Red and Assiniboine rivers) as a provincial park. In May, the Friends of Upper Fort Garry (FUFG), a volunteer, charitable organization, unveiled plans for the park and a proposed interpretive centre. A joint University of Manitoba and University of Winnipeg archaeological field school was conducted at the site in May-June.			
	An Obelisk depicting the Red River's flood history was erected in the Town of Rosenort.			

^{6 |} Ten-year Monitoring Report: 2007 – 2017

Year	Significant Events, Actions, Research or Studies 2007-2017			
	Development of a Marina Development Plan for the City of Selkirk was initiated, and progressed over the next several years.			
	Development of a Marina Development Plan for Lockport was initiated, and progressed over the next several years.			
	The Manitoba government announced a pilot project at Netley-Libau Marsh , in partnership with the International Institute for Sustainable Development and the University of Manitoba, to explore ways of preventing pollutants from entering Lake Winnipeg.			
2011	A recreational complex along the Red River at Ste. Agathe was completed in April 2011.			
	Manitoba Parks, Rivers West and partners produced a series of Canadian Heritage River posters , including one for the Red River. The posters presented information about the rivers and were intended to help inform Manitobans on this aspect of the province's cultural and natural history. The posters were distributed to individuals and communities interested in the rivers, with an official launch in June.			
	Significant spring flooding occurred in Manitoba. It was the sixth highest flood on the Red River in Manitoba since 1826. The high stage of the peak in Winnipeg ranked as the third largest in the past 150 years.			
	An archaeological dig was completed at the site of the Canadian Museum for Human Rights.			
	The Lagoon Interpretation Project in Emerson, Manitoba included the planting of over 300 native tree species.			
	A French version of the Habitat Means Home Resource Guide, manual, CD and teaching tools was launched in March 2011.			
2011- 2012	Bicentenary of the Red River Settlement: A committee formed in 2011 with events held throughout the year, including the launch of a commemorative stamp by Canada Post at historic Ross House (the first post office in Western Canada), an academic symposium at the Dalnavert Museum, displays at the Hudson's Bay Company Archives and a special exhibit at the Manitoba Museum. Sixteen events were held in 2012, which were attended by Lord Selkirk (from Scotland), descendants of the settlers, and those who were representative of all who were in the Red River settlement 200 years ago.			
2011- 2016	The Amazing Tree Quest was launched in partnership with the Manitoba Forestry Association on June 1, 2011. The goal was to get people to find, measure, photograph and nominate trees in various categories to the Heritage Tree program, with the main objective to protect and conserve Manitoba's heritage and important trees. The event took place June through Labour Day, with winners identified during National Forest Week (third week in September annually).			
2012	Crow Wing Trail: There was ongoing trail development and maintenance, upgrading of the web site and development of several looped trail maps.			
	Red River North Trail: The extension of the Winnipeg Trails system continued, with trail development from the Perimeter Highway to Birds Hill Provincial Park, as well as an active transportation overpass into the park.			
	Duff Roblin Parkway Trail officially opened in 2012. The 52 km trail runs the length of the Red River Floodway from Duff Roblin Provincial Park in St. Norbert to Lockport. The trail supports multi-use, non-motorized, four-season recreational opportunities along the floodway, including walking, hiking and biking in the summer, and cross-country skiing and snowshoeing in winter.			
	The Fort Dufferin swinging bridge in Emerson (which was destroyed after the 2010 flood) was reconstructed, along with construction of a boat dock.			
	Cartier Recreational Park, Ste. Agathe: Fully-serviced sites for recreational camping were added on the site of the Manitoba Flood Interpretation Centre.			
	The Water on the Land – Sustainable Stormwater Management Resource Guide was launched on World Water Day, March 22, 2012.			
	A conceptual plan was completed for the development of a 0.4 hectare riparian reserve at The Forks in Winnipeg. Several partners, including Rivers West, supported this project.			

Year	Significant Events, Actions, Research or Studies 2007-2017		
2012- 2013	Vision 2030 – Master Plan for Red River Corridor: Rivers West, in partnership with the Economic Development Council for Manitoba's Bilingual Municipalities, initiated the development of a Master Plan for the corridor in January 2012. A consultant was hired in 2012 to develop the plan, with stakeholders engaged in the process throughout the year. The vision document was endorsed in March 2013.		
	As part of federal budget cuts, in 2012, Parks Canada ceased interpretive services at Riel House , a National Historic Site located on the Red River in Winnipeg. However, in 2013, the Louis Riel Institute began providing school tours and interpretive programming at the site, with funding from the Manitoba Metis Federation.		
	City of Winnipeg's Waterfront Master Development Plan: This 25-year vision plan for Winnipeg's waterfront was completed in Summer 2012 and endorsed by the City of Winnipeg Council in 2013.		
	University of Manitoba to South St. Vital Active Transportation Link Pedestrian Crossing: Public consultation was held in 2012 on a conceptual design study to identify options and a location for a pedestrian and cycle crossing over the Red River in Winnipeg, to connect St. Vital with Fort Garry in the vicinity of the University of Manitoba. A consultant's report was prepared in 2013, with the conclusion that the best possible locations for a crossing are at Henteleff Park and the St. Amant Centre.		
2012- 2014	Rivers West developed the Red River – It's Floods and Floodway Tour , which highlighted the infrastructure, stories, and natural values of the Red River from Emerson to Lake Winnipeg, including a Flood Watch Tour along the river.		
2013	Management Plans were completed for Lockport Provincial Park, River Road Provincial Park, St. Norbert Provincial Park, and Hyland Provincial Park, which are all located in the Red River corridor.		
	Rivers West's new Strategic Plan was approved by the Board of Directors in November of 2013.		
2013- 2014	A Party on the River Trail was held in February.		
	St. Norbert 'Inside the Dike' Bioretention and Community Development Project: Phase 1 of this project began in September 2013 and was completed in Fall 2014. Rivers West was part of a coalition aiming to reduce excess stormwater in an environmentally sustainable manner, through the development of bioretention systems; contribute to improving and educating the public on the health of the Lake Winnipeg watershed; and simultaneously, integrate engaging community spaces and amenities to improve, expand and maximize community activities on the site. Tree beds along the north end of the St. Norbert Farmers' Market site were created for 20 trees, a bioswale was excavated and three vehicular accesses were installed over the bioswale.		
	The three remaining Red River cruise ships stopped operating in 2013 and 2014. High water levels and other operational issues had been a challenge. Smaller tour boats continued to operate.		
2013- 2015	Rivers West organized Canadian Rivers Day festivities in partnership with the Canadian Paddling Association.		
2013- 2016	Meeting Place Community Signage Strategy initiated: This project arose through Rivers West's Vision 2030 document and proposed the development of signage that will be homogenous to all communities along the Red River Corridor. The signage is to be erected at popular community meeting places and include maps, lists of services, etc.		
2013- 2017	Actif Epica: This new annual winter race was launched in February 2013. Racers from around the world bike or run 130 km of unforgiving temperatures, brutal winds and bare landscapes starting in St. Malo, Manitoba along the Crow Wing Trail, along the Red River to The Forks in Winnipeg.		
	RAW:almond , a temporary pop-up winter restaurant located on the river ice at The Forks, was launched in 2013. The restaurant was a great success in its first year and grew to attract renowned international chefs and significant media attention.		
2014	FAM Tours: Two familiarization tours were organized in June in Selkirk and in communities south of Winnipeg, to showcase historical, cultural, recreational and tourism attributes along the Red River.		
	#SUPTHERED – Paddling Up the Red with Ace Burpee: This event took place on August 22. Ace Burpee, a well-known local radio DJ, paddled up the Red River as a fundraising event and to create awareness of recreation on the Red River and the challenges of limited access to the river from its banks.		

Year Significant Events, Actions, Research or Studies 2007-2017

The Upper Fort Garry Heritage Provincial Park Act came into force in 2014. An unveiling was held at the park in October 2014. Construction continued at the site.

A **Water on the Land – Stormwater Video-clip** was produced to complement the Sustainable Stormwater Management Guide.

Design of Fishway at the Red River Floodway Inlet Control Structure: The objective of this study was to investigate design alternatives that could be incorporated in the structure to improve fish passage, without affecting the flood protection infrastructure if the operating rules were to change. The study also developed a preliminary design and cost estimate for a fishway, should one be required in the future as a result of ongoing operation of the floodway during open water season. This study followed up on earlier related work, including a fish passage study conducted in 2009 and a Fishway Alternative Review Workshop held in 2010.

River trail development in Ste. Agathe, Manitoba: A trail was developed along the Red River in the town, with links to the Red River Flood Interpretation Centre and Cartier Park.

The Canadian Museum for Human Rights opened in September.

The Lake Winnipeg Foundation's Science Advisory Council held a **Netley-Libau Marsh Restoration Workshop**.

2014- Monthly News Bulletins were distributed by Rivers West via email to contacts and stakeholders. These2017 were used to promote events and actions occurring along the Red River Corridor.

St. Boniface Riverbank / Tache Promenade Development: Rivers West worked in collaboration with a number of stakeholders and landowners to further develop and enhance the riverbank between Esplanade Riel and the Norwood Bridge in Winnipeg, beginning in 2014. The Winnipeg Foundation committed \$1 million and the City of Winnipeg invested in monitoring the Tache Promenade riverbank. Development of a boardwalk and enhancements to the St. Boniface Cathedral Pier along Tache Avenue are planned. Funding was granted in 2017, with plans for the promenade, including a walkway, public art and a lookout tower built on the St. Boniface side of the Red River, overlooking the Canadian Museum for Human Rights and The Forks, as well as downtown Winnipeg. The project will also involve riverbank stabilization. Completion of the promenade is expected in 2018.

St. Adolphe East Dike Expansion: A public open house was held in St. Adolphe in September, 2014 for the planning of the St. Adolphe East Dike Expansion Area. The subject area comprises approximately 160 hectares, with a land use of 120 hectares. The expansion of the East Dike is expected to provide existing homes and commercial businesses with improved flood protection, as well as allow the town to accommodate future growth and economic opportunities. The expansion project was officially launched in June 2015, with development continuing in 2016 and 2017.

2015 The presence of **zebra mussels** was confirmed in the Red River, with mussels found near Selkirk.

Upper Fort Garry Provincial Park officially opened in August 2015. The opening included the launch of a mobile app for interpretation of the site.

Study published: **Background to flood control measures in the Red and Assiniboine River Basins**. The purpose of this paper was to provide context to flooding in Manitoba, with a consideration of how flooding, flood damage and the impact on citizens of Manitoba have been mitigated by permanent flood protection works.

The City of Winnipeg **shut down the Alexander Docks** site due to safety concerns. The area is notable for having been a gathering place during the 1919 general strike, and the dock itself, built in 1929, was once an important shipping and transportation hub for Winnipeg. However, ice storm damage over multiple years eventually rendered it unsafe for public access and beyond repair.

Captain Kennedy Heritage House was closed due to structural issues and associated public safety concerns. The gardens remained open to the public, but the tea house and museum inside the building were closed. Manitoba Sustainable Development began a process of reviewing options for repairing and re-opening the building.

2015- 2017	Drag the Red began informally in 2015, with volunteers coming together to dredge the Red River in the summer, with the hope of finding evidence related to cases of missing persons.
2016	Construction of the Heritage Wall at Upper Fort Garry Provincial Park was completed, with the sound and light show premiering in November 2016.

Year	Significant Events, Actions, Research or Studies 2007-2017
Teal	Public information sessions were held by Bike Winnipeg on the potential for a pedestrian-cycling bridge over the Red River in Winnipeg, between the Seven Oaks and Kildonan Drive neighbourhoods.
	Study published: Age, Growth, and Mortality of a Trophy Channel Catfish Population in Manitoba, Canada . More than 14,000 catfish were tagged on the Manitoba portion of the Red River as part of the study, with more than 700 returns reported from anglers. The study was a partnership between Manitoba and the University of Nebraska-Lincoln. Tagged fish have been found in Grand Forks and as far south as the Sheyenne River. The study determined that conservative harvest regulations appear to be preserving the desired age structure and size structure of channel catfish in the lower Red River, and that this may provide insight into unique management possibilities for other systems.
2016- 2017	A group gathered at the Alexander Docks in Winnipeg to bless the Red River with traditional drumming and a smudging ceremony . The ceremony is intended to honour people who have lost their lives in the river.
	A riverbank stabilization project on Lyndale Drive in Winnipeg was initiated in 2016 and completed in 2017. The project involved replacing an aging retainer wall with rock fill columns, as well as roadway replacement, a lower bank granular trail with seating and a limestone terrace.
2017	In March Rivers West - Red River Corridor Inc. announced the Board's decision to dissolve the organization due to a lack of funding and resulting inability to continue operations. Dissolution was completed in late 2017. Elements of Rivers West's strategic plan and mandate will be passed to Rivers West members and stakeholders, and remaining educational and promotional materials were distributed to relevant agencies and organizations.
	As part of the CHRS Canada 150 Project, Rivers West held Rendez-Vous on the Red in June. The event, conducted in partnership with La Brigade de la Rivière Rouge, involved a canoe paddle from St. Jean-Baptiste to The Forks in Winnipeg, from June 22 to 24. Rendez-Vous on the Red included overnight stops in Ste. Agathe and St. Norbert, where communities were invited to join in a barbeque and evening celebration, with cultural and musical programming. The general public was invited to join in the final paddle leg from St. Norbert to The Forks on the morning of June 24, with the event culminating in a gun salute by La Compagnie de La Vérendrye and the ringing of the St. Boniface Cathedral bells. Approximately 25 canoes participated in the event, with over 60 paddlers. In addition, there were over 150 people in the crowd to cheer on the paddlers and witness the closing salute at the St. Boniface Cathedral. The event attracted significant local media attention.
	Study published: Quantifying seasonal variation in total phosphorus and nitrogen from prairie streams in the Red River Basin, Manitoba, Canada. A three-year study (2010, 2013 and 2014) was conducted to identify temporal and spatial patterns in phosphorus and nitrogen concentrations and loads in 11 sub-watersheds of the Red River Valley in relation to human activity on the landscape. The study found that stream water nutrient concentrations are associated with human activity on the landscape whereas nutrient loads are largely influenced by hydrologic events, suggesting that different types of beneficial management practices are needed for protection of instream ecological processes negatively affected by high nutrient levels, versus reduction of nutrient export to downstream receiving bodies, such as Lake Winnipeg.
	The City of Winnipeg and The Forks held public consultations in June regarding the future of the Alexander Docks site .
	Canoeing and kayaking events were held on the Red River in July and August for the 2017 Canada Summer Games .
	A new canoe/kayak launch on the Red River was opened in October. The launch is located in Crescent Park in Winnipeg, and was a joint project between the City of Winnipeg, the Province of Manitoba and Crescent Park Rescue. Its purpose is to improve river access and encourage use of the waterway. The launch includes a removable aluminum alloy gangway and floating canoe/kayak dock, a

The Red River Basin Commission hosted **Marsh Day at Netley-Libau Marsh** in October, offering guided boat tours of the marsh and information sessions at Netley Creek Provincial Park about the issues the marsh faces and how it could be restored. Over 50 people participated in the event.

concrete block and paving stone walkway and platform, and a new park bench. The project also involved

re-grading and reinforcement of the shoreline.



Although not nominated to the CHRS based on its natural heritage values, the Red River does have several notable natural values. These include:

- a natural landscape, originating with the recession of Glacial Lake Agassiz approximately 8,000 years ago
- a curving, sinuous channel pattern incised within a broad, level plain of glacial lake clays
- continuing hydrological and ecological processes, including:
 - bank erosion and slumping
 - remnant meander scars and oxbow lakes
 - adjacent wetlands and marshes
 - severe periodic flooding
- numerous riverside parks, and other areas worthy of natural heritage appreciation, including riverbottom forest communities and Netley-Libau Marsh
 - Netley-Libau Marsh is one of the largest freshwater wetlands in Canada, is designated an Important Bird Area and is a candidate for designation as a Manitoba Heritage Marsh. However, the structure, function and health of the marsh has deteriorated in the past several decades due to drainage, dredging and other water management activities.
- Numerous species of plants, mammals, birds and fish are found in the area of the river corridor, including several that are considered rare or of concern (with species status' listed below, current as of September 2017).
 - Over 60 native and non-native fish species are known to inhabit the Red River in Manitoba, with the most abundant of these being channel catfish, sauger, goldeye, white sucker and freshwater drum. Notable fish species include:
 - silver lamprey listed as a species of special concern by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC)

- bigmouth buffalo listed as a species of special concern under Canada's Species at Risk Act (SARA) and COSEWIC
- chestnut lamprey listed as a species of special concern under SARA
- silver chub listed as a species of special concern under SARA
- Notable plant species include:
 - jack-in-the-pulpit, false indigo, field thistle and red-root flatsedge – all considered rare or very rare in Manitoba
- Notable bird species include:
 - chesnut-collared Longspur listed as threatened under SARA and COSEWIC, and endangered under Manitoba's Endangered Species and Ecosystems Act (ESEA); breeding status is rare
 - red-headed woodpecker listed as threatened under SARA and COSEWIC, and threatened – breeding uncommon under MB ESEA
 - yellow rail listed as a species of special concern under SARA and COSEWIC
 - burrowing owl listed as endangered under SARA, COSEWIC, and MB ESEA; breeding status in Manitoba is critically imperilled
 - bobolink listed as threatened under COSEWIC
 - barn swallow listed as threatened under COSEWIC
 - whip-poor-will listed as threatened under SARA, COSEWIC and MB ESEA
 - eastern wood-pewee listed as a species of special concern under COSEWIC
 - chimney swift listed as threatened under SARA, COSEWIC and MB ESEA; breeding status is rare

- least bittern listed as threatened under SARA and COSEWIC, and endangered under MB ESEA; breeding status is rare
- bank swallow listed as threatened under COSEWIC
- Notable amphibian, reptile and other types of species include:
 - riverine clubtail (dragonfly) listed as endangered under COSEWIC
 - snapping turtle listed as a species of special concern under SARA and COSEWIC
 - northern leopard frog listed as a species of special concern under SARA and COSEWIC
 - mapleleaf mussel listed as endangered under SARA and MB ESEA

Condition of Natural Values since 2007

There have been no significant changes in the condition of the Red River's natural values since designation in 2007. Channel migration and erosion continue to occur naturally, while human influences on the river corridor, such as land use and development, riverbank stabilization in urban areas, and the operation of infrastructure such as the Red River Floodway, are also ongoing. Various research studies conducted in the past ten years have contributed to an increased knowledge about particular species in the river corridor and their management, as well as flood management. Species sightings recorded over the past ten years have contributed to an expanded list of rare and of concern species known to exist in the river corridor (see above). However, it should be noted that the addition of species to the list is due to

improved data and should not be interpreted as meaning that these species did not exist in the Red River corridor prior to 2007.



Fishing at Lockport Provincial Park

Some concerns do exist regarding the potential for loss of wetland areas in the river corridor to remove beneficial services, such as run-off filtration and flood control. However, since 2007, there have been no specific sites where this has been identified as a new problem. Concerns persist about the structure and health of the Netley-Libau Marsh, but several studies and work toward restoration have been undertaken over the past decade. The identification of zebra mussels, an invasive species, in the river in 2015 is cause for alarm, but has not yet resulted in any noted impacts to the ecosystem or river-based infrastructure.

It is worth noting that periodic sewage leaks and permitted overflows continue to occur in the Red River, with some in the last ten years being on a large scale. The City of Winnipeg is currently considering options for upgrading infrastructure to significantly reduce these occurrences, but it will take several years before any such changes can be fully implemented.



At the time of its nomination, the Red River met all of the CHRS cultural heritage values guidelines. The cultural heritage values of the river include:

- Archaeological evidence of $\pm 6,000$ years of Indigenous Peoples' settlement and use of the river.
- the river as a major historic trade and travel route to Western Canada and the heart of North America
- Numerous National Historic Sites, historic buildings, spiritual sites and culturally-associated sites are situated along or near the river. These include The Forks National Historic Site at the junction of the Red and Assiniboine rivers, Fort Dufferin, Riel House National Historic Site, St. Boniface Cathedral, the Grey Nun's Convent National Historic Site, the Exchange District National Historic Site, Fort Gibraltar, Lower Fort Garry National Historic Site, Captain Kennedy Heritage House, St. Andrews Anglican Church and Rectory National Historic Sites and St. Peter's Anglican Church Dynevor Rectory.
- early European exploration and travel along the river in the early 1700's, including by Pierre Gaultier de Varennes, Sieur de La Vérendrye, with the Red River serving as the route to first contact with the Canadian prairie region by European explorers
- various Hudson's Bay Company and Northwest Company fur trade forts and posts situated along the river, including Upper Fort Garry, Fort Gibraltar and Lower Fort Garry, representing the period from the late 1700's to the late 1800's
- the establishment of the Red River Colony by Lord Selkirk and Scottish settlers in 1812. This was the centre of European culture and commerce in the Canadian west for the next 50 years.
- river lot settlement patterns and examples of riverside homesteads, agricultural settlement and water extraction and use
- steamship travel and the major movements of

goods and people along the Red River in the 1800's

- major events in immigration and settlement, including the arrival of Mennonites to the Red River in 1875
- riverside trails, rail lines, roadways and bridges developed in relation to the river.
- significant Canadian examples of military conflict and expeditions, including the Red River Resistance and the Wolseley Expedition, and the Northwest Mounted Police March West, originating from Fort Dufferin at Emerson
- outstanding examples of surveying and boundary related themes, including the International Boundary Commission, originating at Fort Dufferin, and the Red River as a trans-boundary river flowing into Canada from the United States
- St. Andrews Lock and Dam (the largest 'Camere curtain' bridge and dam in the world)
- the Red River Floodway and several major flood events, including the 1997 Flood of the Century

Condition of Cultural Heritage Values since 2007

The cultural heritage values of the Red River have remained intact in the first decade since the river's designation to the CHRS. The numerous archaeological and historic sites along the river corridor continue to be protected, interpreted and celebrated, and additional archaeological investigations occur periodically, providing potential opportunities for increased recognition and protection. A positive change to the river's cultural heritage values was the designation of Duff Roblin Provincial Park in 2008, which was intended partially to commemorate construction of the Red River Floodway. The completion of several management plans for provincial parks situated on the river will also provide direction for the longterm management of their heritage resources and other values.

In recent years, greater attention has been given to the Red River as a site of current spiritual significance to individuals and communities along the river corridor, particularly Indigenous Peoples. Although some of this attention is associated with the tragic issue of missing and murdered Indigenous women, community groups or activities such as Drag the Red have brought people together and highlighted the role, both positive and negative, that the Red River plays on a daily basis in the lives of people who live along the river corridor.



2016 Archaeological Dig in Lockport Provincial Park



Although not nominated to the CHRS based on its recreational values, the Red River does have several notable recreational values. These include:

- internationally recognized channel catfish and walleye sport fishery
- opportunities for a wide range of river-based recreational experiences in both urban and rural settings, including:
 - power boating, canoeing, kayaking and rowing
 - walking, hiking and cycling on riverside pathways and trails
 - day use and picnicking in riverside parks and at other attractions
 - human heritage appreciation at historic sites and other locations
 - a variety of winter activities, including crosscountry skiing, ice skating, ice fishing and snowmobiling
 - numerous festivals and other community activities and events

Condition of Recreational Values since 2007

Over the past ten years the Red River has continued to be a popular destination for yearround recreation opportunities. Many new riverbased recreation facilities have been developed in communities along the river corridor in the years since designation, such as the Duff Roblin Parkway Trail, which runs the length of the Red River Floodway and provides opportunities for multiuse, four-season recreation, and recent river trail development in the community of Ste. Agathe.

Numerous development plans for specific areas of the river corridor have been prepared, with implementation in progress in some cases. Also, park management plans were completed for several provincial parks located on the river, providing direction for their long-term management and public use. The past decade has seen an increase in the number of winter events taking place on the Red, with an associated increase in popularity and profile. Activities such as the annual international architectural competition for the design of skating trail warming huts and RAW:almond, the annual pop-up restaurant on the ice, have attracted worldwide attention.



New Canoe Launch at Winnipeg's Crescent Park (City of Winnipeg Facebook page)

Another positive addition to the river's recreational values was the designation of Duff Roblin Provincial Park in 2008. The Meeting Place Community Signage Strategy, initiated in 2013, will also enhance river values by linking communities located along the Red River corridor, and improving cultural and recreational experiences and facilities.

Despite these positive additions to the Red River's recreational values, there are some challenges associated with recreating on the river. Water quality continues to limit the river's capability to provide water-contact recreation, although this does not prevent people from water-skiing in the summer months, as well as canoeing, kayaking and stand-up paddle boarding. Struggles also continue with creating access points to the river that can withstand fluctuating conditions. Rain and flood events cause water-level fluctuations that make it difficult to construct docks or other types of access facilities that can withstand the sudden and/or

seasonal changes. This also had a negative impact on the operation of larger cruise ships on the river; the three remaining ships stopped operating in 2013 and 2014.

The closure of the Alexander Docks site in Winnipeg in 2015 due to safety concerns, had a negative impact on accessing the river. However, public consultations have been held regarding the future of the site and the area is expected to be revitalized. The closure of the Kenosewun Interpretive Centre and Museum had a negative impact on the interpretation and celebration of Red River heritage in the Lockport area. However, this impact should be only temporary, as redevelopment of the site is planned for the future.



Lockport Lock and Dam

Table 2 summarizes changes and threats to Red River's natural, cultural and recreational heritage values since 2007. Values which have not been subject to any change are not listed in the table.

TABLE 2: Changes and Threats to Red River Natural, Cultural and Recreational Heritage Values	
since 2007	

Values	Description of Change in Value	Reason for Change	Actions Taken in Response		
Natural Values					
Biotic Environments – Aquatic Ecosystems	Zebra mussels found in the river in 2015. This is a potential threat to aquatic ecosystems, but no change has been recorded to date.	N/A	In response to the threat of invasive species province-wide, the Manitoba government introduced aquatic invasive species legislation under The Water Protection Act and Aquatic Invasive Species (AIS) regulations in November 2015. The AIS regulations were amended in 2017. The legislation includes general instructions (clean, drain, dry and dispose) and specific, stricter provisions to prevent the introduction and spread of AIS in Manitoba by watercraft, ORVs and water-related aircraft, such as float planes and water bombers.		
Recreational	Values				
Boating	Site-specific changes to river access at various points along the river (e.g., closure of Alexander Docks in 2015; opening of new Crescent Park launch in 2017).	Management actions; various site-specific reasons for closures or developments.	No actions required.		
Water- associated Activities	Positive change: Many new river-based recreation facilities have been developed in communities along the river corridor in the years since designation (e.g., Duff Roblin Parkway Trail).	Management actions; various site- specific reasons for developments.	No actions required.		
Winter Activities	Positive change: The frequency and profile of winter recreation events on the Red River have increased.	Greater emphasis on winter recreation opportunities and appreciation; increased marketing and national and international attention.	No actions required.		
Human Heritage Appreciation	Negative change: Kenosewun Interpretive Centre and Museum closed indefinitely in 2010.	Management action taken due to health and safety concerns (mould).	Redevelopment of the site planned for the future.		
	Positive change: Designation of Duff Roblin Provincial Park in 2008 resulted in increased opportunity for human and natural heritage appreciation, specifically in terms of commemoration of the construction of the Red River Floodway.	N/A	No actions required.		



In order to be designated a Canadian Heritage River, a river and its immediate environment must meet certain natural, cultural and recreational integrity values. At the time of its designation, the Red River did not satisfy all of the CHRS natural or recreational integrity values, and so was nominated solely on the basis of its outstanding cultural heritage values. A review of the CHRS cultural integrity values has confirmed that the Red River continues to hold those values it satisfied at the time of designation, and that they have been subject to no changes or threats.



See Appendix A for a comprehensive list of CHRS integrity values.



The Red River designation document, A Management Approach for the Red River in Manitoba, was prepared in 2006. The management plan describes goals, objectives and management strategies and actions for the river's cultural heritage, natural heritage and recreational values.

When the plan was written, the intention was for its goals, objectives and management actions to be primarily undertaken by Rivers West (unless otherwise noted), as the agency with the lead role for managing and conserving the cultural heritage values of the Red River. For the first decade of the river's designation, this intention was realized, as Rivers West played a leading and important role in promoting and managing Red River heritage and tourism resources. The organization developed and supported numerous cultural and recreational events and activities in the river corridor, and helped to ensure that the Red River's cultural heritage and other values were celebrated and enhanced. However, with the dissolution of Rivers West in late 2017, it will fall to Rivers West's partners, the communities along the Red River and the Manitoba government to ensure that the Red River's heritage values continue to be recognized and supported, and the management plan for the river carried out. It will be necessary for the management plan to be re-evaluated and updated in consideration of this change in management structure. This exercise has not been carried out as part of this ten-year monitoring report.

Table 3 lists the management actions and strategies from the designation document, as originally written, and reports on their degree of achievement, whether by Rivers West or other agencies or organizations. Many of the actions and strategies are listed as ongoing. It remains to be determined which of these will be continued, following the dissolution of Rivers West.

Management Plan Actions and Strategies	Degree of Achievement (Ongoing, Not initiated, Partially Initiated, Completed)	Actions and Comments
Cultural Heritage Values Goal: Preserve and develop additional benefits economic and recreational bases, and the rural		e resources, including their history, traditional
Work with Manitoba Culture, Heritage and Tourism and Parks and Natural Areas Branch, local governments, First Nations, organizations and associations to preserve and promote existing and potential cultural heritage attractions	Ongoing	Numerous promotional and educational products and strategies have been developed; heritage sites in the river corridor continue to be preserved and protected.
Enhance cultural and heritage interpretation and education (theming) through tour packages, interpretive signage and brochures.	Ongoing	Interpretation and education is ongoing at certain sites, or has occurred on a one-time basis at other sites for specific events. Work to improve signage at certain locations is ongoing.
Create heritage experiential hands-on opportunities for preservation.	Partially initiated	Such experiences have been made available in certain locations (e.g., St. Clements).

TABLE 3: Red River Management Plan Actions and Degree of Achievement

Management Plan Actions and Strategies	Degree of Achievement (Ongoing, Not initiated, Partially Initiated, Completed)	Actions and Comments
Develop a heritage resource geographic information system (GIS) inventory, including all significant cultural, natural, recreational values and visual resources for reference in heritage planning, interpretive program development and marketing by Rivers West and all Management Partners.	Partially initiated	Individual communities along the river corridor have undertaken a GIS inventory (e.g., St. Clements). CHRS initiated work on the 'Story Map' project in 2017, which will result in a detailed online GIS and visual inventory with information on all of the Red River's cultural, natural and heritage values.
Undertake research that identifies opportunities for the hands-on historic site rehabilitation and long term learning opportunities for citizens, interest groups, students and others.	Previously ongoing	
Natural Heritage Values Goal: Through the use of greenways, enhance, its scenic landscapes, fish and wildlife, forest a		he natural heritage of the Red River, including lity of land, water and air.
Advocate and support initiatives that contribute to the improvement of water quality in the Red River. Continue to work with Manitoba Water Stewardship, Manitoba Habitat Heritage Committee, etc. to improve riparian health, contribute to the watershed planning and management approach, and advocate for riverbank stabilization and riparian restoration.	Ongoing	Rivers West led or contributed to numerous initiatives focused on water quality, riparian health, watershed management and/or riverbank stabilization (e.g., Stormwater Management Guide; Tache Promenade development).
Develop a contiguous greenway along the river that links with greenway initiatives from the American States of North Dakota, Minnesota and South Dakota, for the purposes of flood mitigation, protection of habitat, to absorb or prevent pollution, maintain open space and protect riverbank resources. Increase land devoted to greenway development through programs such as Conservation Agreements and the Manitoba Protected Places Program, or Ecological Reserves Program, by 10 per cent per year.	Partially initiated	Greenway initiatives have been supported; 10 per cent target not achieved.
In co-operation with landowners, municipalities, Manitoba Conservation and conservation organizations (e.g., Nature Conservancy of Canada, Manitoba Habitat Heritage Corporation) implement a Greening the Red campaign, promoting greenway riparian vegetation conservation or reestablishment.	Partially completed	The Greening the Red campaign was implemented in the early years of the river's designation. Promotion of re- vegetation of the river corridor is ongoing.
Work with Manitoba Education, Citizenship and Youth to develop educational programs regarding interpretation of natural areas, flooding and conservation.	Completed	Several educational programs and curriculum guides have been developed (e.g., Habitat Means Home; Historic Places of the Red River; Red River Basin Water Systems).

 $20~\mid$ Ten-year Monitoring Report: 2007 – 2017

Management Plan Actions and Strategies	Degree of Achievement (Ongoing, Not initiated, Partially Initiated, Completed)	Actions and Comments
Develop specific properties (e.g., Shay property) as conservation pilot projects.	Not initiated	Note that this example is referring to the Jennifer and Tom Shay Ecological Reserve.
Develop access and facilities to promote natural areas such as Netley Marsh as wildlife viewing areas.	Partially initiated	Work has been undertaken to improve facilities for accessing the river corridor. Netley Marsh is not currently promoted.
Undertake a biodiversity study and mapping inventory of significant ecological features (in co-operation with conservation agencies).	Not initiated	
Support initiatives to stabilize riverbanks, reduce erosion, clean-up the riverbank and channel, and restore riparian habitat. Extend the Operation Clean-Up program to at least one new municipality in the River corridor. In addition, seek one new sponsor for the program each year.	Ongoing	Rivers West supported or led numerous initiatives focused on riverbank stabilization, restoration and clean-up (e.g., Tache Promenade development). Operation Clean-Up was held for several years, but targets for new municipalities and sponsors were not met.
Develop a quarterly newsletter on riparian greenways and habitats and various programs available to assist landowners, when sufficient and relevant information is available to communicate.	Not initiated	Rivers West did not develop a newsletter with this focus. For a period of time, such a newsletter was produced by Green Manitoba.
Recreational Values Goal (1): Develop community infrastructure to support access to the river, in order to enhance recreational and development opportunities compatible with the natural and cultural values of the Red River.		
Host at least two meetings per year with stakeholders to co-ordinate the development of a planned greenway and trail along the Red River.	Partially initiated	Regular meetings have been held on various topics, including greenways and trails.
Facilitate the creation of a multi-use trail system linking communities along the Red River and the development of land- based trails and linkages to other existing trail systems. Complete one priority trail linkage each year.	Partially initiated	Trail development has been continually supported and expanded. The target of one linkage per year has not been achieved.
Increase the length of greenways and trails by two kilometres per year.	Not initiated	Focus has not been on length added per year.
Support the Manitoba Recreational Trails Association in promoting the Trans Canada Trail.	Ongoing	
Develop visionary, comprehensive community plans focusing on culture and heritage values, access, products and promotion, for communities or regions requiring such planning.	Ongoing	Numerous communities have prepared plans, or have plans in progress.
Support the development of access points to key sites along the river. Build or restore at least two access points each year.	Ongoing	The development and improvement of access points has continually been advocated for and supported. The numbers of new access points have not been tracked.

Management Plan Actions and Strategies	Degree of Achievement (Ongoing, Not initiated, Partially Initiated, Completed)	Actions and Comments
Develop, maintain and publicize an inventory of public access areas and lands (including conditions and facilities) within the corridor.	Achieved	This information is available through the Routes on the Red web page and brochures, although it has not been recently updated.
Support the development of access and launch facilities and supporting signage.	Ongoing	The development and improvement of launch facilities has continually been advocated for and supported.
Advocate for new business incentives, tax credits and for the re-structuring of the current tri-government funding arrangements.	Previously ongoing	This will no longer be a priority, with Rivers West stepping down from the role of river manager.
Goal (2): Develop commercial tourism produc compliment the other goals identified for River		ed River valley that are compatible with and
Complete and maintain an inventory of Red River tourism products.	Completed	A number of tourism products are catalogued on the Rivers West website.
Support opportunities for general product development.	Completed	Numerous tourism products have been supported and developed over the years.
Targeted product development has occurred, including product linked to community infrastructure pilot projects (facilitated initially by Rivers West).	Ongoing	Rivers West supported various community projects.
Provide support to tourism-related entrepreneurs, including business skills development, support for the development of an administrative and reservation system, and marketing assistance. Undertake research to measure and evaluate successes.	Not initiated	
Implement a quality standards program.	Completed	This was conducted by Travel Manitoba and the Manitoba Tourism Education Council.
Work with Management Partners to develop and promote tour programs that link Red River cultural and heritage attractions throughout the corridor.	Completed	Tour programs were promoted through Routes on the Red and other initiatives.
Host an annual workshop with tour operators, tourism suppliers, etc., to develop tour packages on the Red River corridor. Facilitate collaboration among package tour providers and Travel Manitoba.	Partially initiated	Rivers West supported and facilitated collaboration in various ways.
Develop new tour products, including winter season, flood protection infrastructure, river-bottom forest or two- nation vacation products (collaborate with U.S. tour operators and providers).	Ongoing	New tour products are continually developed.
Develop packages that lend themselves to be marketed to sports events and conventions, as the need arises.	Completed	This is done by Travel Manitoba and other tourism associations.

Management Plan Actions and Strategies	Degree of Achievement (Ongoing, Not initiated, Partially Initiated, Completed)	Actions and Comments
Advocate for an efficient and effective approvals process for private tourism development.	Previously ongoing	
Goal (3): Market and promote the Red River	valley as a tourism destinatio	M.
Develop a marketing plan for the Red RiverValley region in Manitoba.	Ongoing	This is done in partnership with tourism associations.
Develop an annual communications plan for the Red River Valley. Develop themed marketing brochures, highlighting and linking the attractions and resources of the valley under the brand Routes on the Red.	Ongoing/completed	Routes on the Red brochures were developed. An annual communications plan has not been prepared in recent years.
Develop and maintain an interactive Internet site.	Completed	
Encourage the development of trans- border and two-nation vacation initiatives.	Previously ongoing/ Completed	This is done by Travel Manitoba and other tourism associations.
Undertake research respecting issues relevant to the Red River corridor and tourism (e.g., catastrophes such as flooding), and how this impacts local perceptions, how this is best addressed, and how to turn catastrophes into opportunities.	Ongoing	Relevant research is conducted on an ongoing basis by various agencies.
Support festivals, events and programming that support the goals and objectives of Rivers West in promoting the River.	Ongoing	
Support the development and promotion of agri-tourism, adventure travel and ecotourism opportunities throughout the corridor.	Ongoing	
Implement a signage program.	Ongoing / Completed	The Meeting Place Community Signage Strategy was initiated in 2013.
Conduct an annual contest to increase public knowledge of Rivers West, Routes on the Red tourism information, and Red River region attractions and values.	Partially completed	Contests such as Find Gold on the Red and the Amazing Tree Quest were implemented for several years.
Host an annual familiarization tour focusing on the attractions of the Red River Valley.	Partially completed	Two familiarization tours were organized in 2014.
Develop informational material on Red River access points and recreational opportunities.	Ongoing	
Advocate with Manitoba Transportation and Government Services for improved tourism product way-finding signage in the region.	Previously ongoing	

Management Plan Actions and Strategies	Degree of Achievement (Ongoing, Not initiated, Partially Initiated, Completed)	Actions and Comments	
Goal (4): Support tourism development and implementation through education and capacity building.			
Develop curriculum materials for Kindergarten to Senior 4 levels in collaboration with Manitoba Education, Citizenship and Youth and other partners.	Completed	Several educational programs and curriculum guides have been developed.	
Develop partnerships with post-secondary institutions and educators.	Not initiated		
Develop capacity building through training and orientation programs for communities and tourism operators.	Not initiated		
Advocate with Manitoba Culture, Heritage and Tourism for the building of community and municipal capacity for cultural heritage awareness and interpretation.	Previously ongoing		



A requirement of the Canadian Heritage Rivers System – Principles, Procedures and Operational Guidelines is for decadal monitoring reports to report on conservation, stewardship, economic, cultural and other benefits resulting from CHRS designation. As the Red River was designated to the CHRS based on its cultural heritage values, the majority of the benefits associated with its designation involve the celebration and appreciation of the river's heritage values, community participation in various events and activities, and the development of educational and promotional materials.

Table 4 lists the benefits of CHRS designation that have been identified for the Red River.

Type of Benefit	Description		
Cultural	 The designation has encouraged numerous events and celebrations over the years, which have brought citizens and communities together. Interpretive, educational and other products produced as a result of the designation, promote greater appreciation of the river, its values and history. 		
Recreational	 The designation has led to the implementation of numerous projects intended to facilitate and improve recreational opportunities on or along the Red River, such as: community signage strategy (installation of trailheads and maps) advocacy for and installation of more river access points Numerous events have been held to involve community members in the celebration of the Red River's cultural and recreational values, such as: 2017 Canada 150 Project: Rendez-vous on the Red brought together approximately 25 cances with over 60 paddlers, as well as over 150 people in the crowd to cheer on the paddlers and witness the closing salute at the St. Boniface Cathedral. 		
Educational	 Numerous educational programs and communications products have been produced, including: Rivers West and partners produced the Stormwater Management Guide and video as a resource to raise awareness and to educate people on the importance of keeping stormwater on the land. Rivers West developed four curriculum guides to help Canadian teachers incorporate the Red River in their lesson planning. The designation has encouraged the production of materials such as a promotional and educational poster. The Manitoba Parks website includes a page with information on the CHRS and Manitoba's Canadian Heritage Rivers. 		

TABLE 4: Benefits of Canadian Heritage River Designation for the Red River



Based on the findings of this report, the natural heritage, cultural heritage and recreation values of the Red River have been determined to be intact, and for the most part, unchanged since CHRS designation in 2007. As such, the Red River is worthy of continued designation as a river of national significance within the Canadian Heritage Rivers System.

Overall Assessment

The designation of the Red River as a Canadian Heritage River should remain in place.



APPENDIX A: CHRS Natural, Cultural and Recreational Integrity Values

1. NATURAL INTEGRITY VALUES

- The nominated section is of sufficient size to include significant representations of all of the natural processes, features or other phenomena that give the river its outstanding natural value.
- The nominated section includes those ecosystem components which contribute significantly to the provision of habitat for species in need of protection.
- There are no human-made impoundments within the nominated section.
- All key elements and ecosystem components are unaffected by impoundments located outside the nominated section.
- The water in the nominated section is uncontaminated to the extent that its natural aquatic ecosystem is intact.
- The natural aesthetic character of the nominated section is free of, or not adversely affected by, human developments.

2. CULTURAL INTEGRITY VALUES

- The nominated section is of sufficient size to include significant representations of all of the features, activities or other phenomena that give the river its outstanding cultural value.
- The visual character of the nominated section enables uninterrupted appreciation of at least one of the periods of the river's historical importance.
- The key artifacts and sites comprising the cultural values for which the river is nominated, are unimpaired by impoundments and human land uses.
- The water quality of the nominated section does not detract from the visual character or the cultural experience provided by its cultural values.

3. RECREATIONAL INTEGRITY VALUES

- The river possesses water of a quality suitable for contact recreational activities, including those recreational opportunities for which it is nominated.
- The river's visual appearance is capable of providing river travelers with a continuous natural experience, or a combined natural and cultural experience, without significant interruption by modern human intrusions.
- The river is capable of supporting recreational uses without significant loss of, or impact on, its natural and cultural values or its visual character.

References

Reports, Articles and Literature:

- Blais, E., Rannie, W., Clark, S.P., Dow, K., Stadnyk, T., Wazney, L. 2016. Background to Flood Control Measures in the Red and Assiniboine River Basins. Canadian Water Resources Journal.Vol. 41(1-2), pp. 31-44.
- CBC News. Winnipeg faces at least \$1.2B tab to stop sewage from flowing into rivers. Feb.01, 2016. Retrieved from: http://www.cbc.ca/news/canada/manitoba/water-waste-sewage-overflowswinnipeg-1.3428815
- Grosshans, R.E., Venema, H.D., Oborne, B. 2015. Advancing Netley-Libau Marsh Restoration Efforts: Cattail biomass and nutrient survey of Netley-Libau Marsh. International Institute for Sustainable Development. Retrieved from https://www.iisd.org/sites/default/files/publications/advancing-netleylibau-marsh-restoration-efforts.pdf
- KGS Group. Conceptual Engineering Study for Fish Passage at the Red River Floodway Inlet Control Structure. Prepared for Manitoba Floodway Authority. 2008.
- KGS Group. Design of Fishway at the Red River Floodway Inlet Control Structure Preliminary Design Report. Prepared for Manitoba Floodway Authority. 2014. Winnipeg, Manitoba.
- MMM Group Limited. Conceptual design study to identify options (including a gondola and a pedestrian and cycling bridge) for a pedestrian and cycle crossing of the Red River to connect St.Vital with Fort Garry in the vicinity of the University of Manitoba. Prepared for: City of Winnipeg. October 2013. Retrieved from http://winnipeg.ca/clerks/fippa/records/062016/1604355ResponseandRecords.pdf
- Rattan, K.J., Corriveau, J.C., Culp, J.M., Yates, A.G., Chambers, P.A. 2017. Quantifying seasonal variation in total phosphorus and nitrogen from prairie streams in the Red River Basin, Manitoba Canada. Science of the Total Environment, Vol. 575 p. 649 659.
- Siddons, Stephen F., Pegg, Mark A., Hogberg, Nick P., Klein, Geoff M. 2016 Age, Growth, and Mortality of a Trophy Channel Catfish Population in Manitoba, Canada. North American Journal of Fisheries Management.Vol. 36, Issue 6, p. 1368–1374.

The Stonewall Teulon Tribune. Tour sheds light on 'tragic' state of Netley-Libau Marsh. Oct. 19, 2017.

Background Studies and Planning Documents:

Canadian Heritage River System - various annual reports.

Canadian Heritage River System. 2016. Principles, Procedures and Operational Guidelines.

Nomination Document for the Red River in Manitoba (2005)

A Management Approach for the Red River in Manitoba (2006).

^{28 |} Ten-year Monitoring Report: 2007 – 2017

