

**Riparian Vegetation Management Task Force
Annual Report
June 30, 2020**

(Submitted by Nebraska Department of Agriculture on behalf of Task Force)

Task Force Overview and Status

The Riparian Vegetation Management Task Force (RVMTF) was created in statute to bring multiple partners and stakeholders together to address the concern of invasive plants obstructing Nebraska’s river basins. LB 1038, signed into law by Governor Pete Ricketts on April 18, 2016, created the framework for the Task Force to address the riparian needs of the state and continues the efforts started by LB 701 by the Nebraska Unicameral on April 26, 2007.

Sections 3 and 4 of the legislative bill addressed the requirements for the Task Force, including the requirement for an annual report that shall be submitted electronically to the Governor and the Legislature by June 30, each year. Sections 1 and 2 of the legislation created a separate grant program for management of riparian vegetation and tasked the Nebraska Department of Agriculture (NDA) with management of this program.

During the course of the Task Force’s existence, the group has met twelve times.

Meeting dates and locations:

March 8, 2017.....	Kearney, Nebraska
May 31, 2017.....	Alda, Nebraska
July 27, 2017.....	Chadron, Nebraska
October 5, 2017.....	Waterloo, Nebraska
January 25, 2018.....	Lincoln, Nebraska
March 8, 2018.....	Ainsworth, Nebraska
September 9, 2018.....	Gibbon, Nebraska
December 19, 2018.....	Lincoln, Nebraska
March 19, 2019.....	Scottsbluff, Nebraska
June 19, 2019.....	Alma, Nebraska
September 18, 2019.....	Grand Island, Nebraska
December 18, 2019.....	Plattsmouth Nebraska
March 19, 2020.....	CANCELLED DUE TO COVID-19

Seven work groups were created during the May 2017 meeting to assist the Task Force in identifying the fundamental needs to carry out the goals and objectives of the legislation. These groups solicit input from non-Task Force members. However, any recommendations will be delivered by the Task Force.

The work groups include:

- Goals, Objectives and Reports
- Vegetation Management and Treatment
- Survey and Monitoring
- Education and Awareness
- Funding and Incentives
- Streambed Ownership
- Vegetation Water Use

Work Groups

Task Force Goals, Objectives and Reports Work Group

LB 1038 states the task force shall develop and prioritize riparian vegetation management goals and objectives, analyze the cost effectiveness of available vegetative treatment and develop plans and policies to achieve such goals and objectives. It further states an annual report shall be submitted to the Governor and Legislature by June 30, of each year.

Actions –

1. Develop recommendations on vegetation management goals, objectives and priorities.
2. Recommend the content of preliminary recommendations and final report to the Governor and legislature, and
3. Provide guidance on preparation of the preliminary recommendations and final report utilizing the inputs of the other work groups and the task force.

Vegetative Management and Treatment Work Group

This work group should determine what vegetative management actions are needed to meet the vegetation management goals and objectives.

Actions -

1. Recommend proactive management and control strategies using the adaptive management approach that utilizes the best techniques currently available.
2. Estimated cost for initial and follow-up control, removal and management.
3. Analyze cost effectiveness of control, removal and management options.
4. Develop Templates and Protocols for Control, Revegetation and Rehabilitation, Monitoring and/or long term Management and Maintenance.

Survey and Monitoring Work Group

Identifying the extent and location of invasive plant problems is essential for effective planning. It is also important to monitor, document and evaluate the control and management efforts. This is key in the use of an adaptive management approach.

Actions –

1. Summarize past and current management and control efforts.
2. Evaluate past and current management and control efforts.
3. Identify the extent and location of invasive vegetation using available information.
4. Recommend a system for on-going survey and monitoring of management and control efforts.

Education and Awareness Work Group

Since almost all the riparian areas and streambeds are privately owned, riparian vegetation management is dependent upon aware and receptive landowners. A riparian vegetation management plan will not get accomplished without the awareness and commitment of the landowners and the public. It is critical that we have an aggressive education and awareness campaign about the importance of riparian areas and the increasing impacts of invasive plants on these areas. It is essential that the riparian landowners, the general public and decision makers be aware of the need for riparian vegetation management and supports it. They need to be kept informed of task force activities and have a chance for input.

There are many invasive plant information and education activities by numerous groups, but there is no overall plan, campaign or directed effort that identifies target audiences and desired end results utilizing all appropriate strategies, combines and coordinates efforts of all potential partners, or fully utilizes professional information and education specialists.

Actions –

1. Provide recommendations on how to keep public informed of task force activities and a framework for public input.
2. Review current invasive plant information and education activities.
3. Recommend a framework for a coordinated information and education campaign.

Funding and Incentive Program Work Group

As indicated in the background information for the Streambed Ownership Work Group the riparian owners own to the center of the stream in all rivers. Most of these owners are not taxed on the streambed and are not receiving any income from this land. There are other owners that are receiving some economic return or are receiving some beneficial use such as recreational, hunting; fishing or it is being managed by public and private interests for the benefit of wildlife, endangered species, plant diversity or natural areas. There is an increasing demand for purchasing stream beds for recreation, hunting and fishing. While all owners (public and private) are responsible for the control of state designated noxious weeds.

Actions –

1. Determine if funding is needed to provide incentives, support and assistance to accelerate control, removal and management efforts where there are public benefits.
2. Determine the potential federal, state and local sources of funding of incentive programs.
3. Determine funding needs.
4. Make recommendations as to state and other funding needs.

 **Vegetation Water Use Work Group**

There needs to be a better understanding of the water consumptive use by native plants and non-native plants in riparian areas.

Actions –

1. Provide information to the task force on current information on native and non-native plant water consumptive use.
2. Determine what is needed to develop a better understanding of consumptive use of riparian vegetation.

Grant Program

As noted earlier, sections 1 and 2 of LB 1038 created a grant program for management of riparian vegetation and placed the responsibility for this program with the Nebraska Department of Agriculture. This serves as a natural administrative location for the grant program as NDA already has an existing structure in place in association with its authority over the state Noxious Weed Program.

The Nebraska Legislature appropriated funding for FY2018/19 and FY2019/20. Each fiscal year was approved for \$456,000.00. During FY2018/19, grant funding requests were \$646,522.00. The projects that were funded FY2018/19 were reduced to stay within the appropriations of the Legislature. The following year (FY2019/20) grant funding requests were \$571,102.00. The projects that were funded FY2019/20 were reduced to stay within the appropriations of the Legislature. Details of funding reductions are outlined in each respective funding cycle.

The following is a summary of funded projects for FY2018/19 and FY2019/20.

2018/19 Riparian Vegetation Management Grant Summary

Twin Valley Weed Management Area

Eastern Republican & Little Blue Riparian Improvement Project (18/19-01)

Total Dollars Requested: \$100,000.00 Total Dollars Funded: \$90,000.00

The highly successful Eastern Republican & Little Blue Riparian Improvement Project continues ongoing efforts to eradicate invasive species, control vegetation in stream channels, and improve riparian habitat along the Republican and Little Blue Rivers and their tributaries within six of the Twin Valley Weed Management Area (TVWMA) counties. Control efforts are conducted in a holistic manner, utilizing a full range of mechanical, biological and chemical tools. TVWMA has undertaken this project over recent years to improve stream flow along the Republican and Little Blue Rivers to help enable Nebraska to meet its water delivery obligations to Kansas, to restore and maintain into the future a healthy river system and prevent wasteful degradation of water resources, to improve riparian habitat including re-planting beneficial species, as well as including pollinators, and to increase public awareness of the best practices that can be used to properly manage riparian lands.

Nebraska Weed Management Area Coalition

Rapid Response to Early Detection of Invasive Plant Species and Education Outreach
(18/19-02)

Total Dollars Requested: \$476,967.00 Total Dollars Funded: \$303,400.50

The Nebraska Weed Management Area Coalition (NEWMAC) is made up of 10 Weed Management Areas (WMA's) throughout Nebraska that bring together landowners, agencies and organizations in a geographical area to coordinate efforts and expertise against newly recognized non-native invasive weed species. Due to successful statewide noxious weed control projects, weed superintendents have seen an overall decline in the number of infested acres, from 1.5 million acres in 2005 to 895,000 acres in 2017. This decline has been seen even with the addition of five new species to the State noxious weed list. NEWMAC recognizes the need to ensure these noxious species continue to be treated. However, we also recognize the need for continued surveying and control of new invasive species that have the potential to become widespread problems. NEWMAC is requesting funding to 1) treat invasive species that were documented in 2017 by surveys and monitoring; 2) continue supporting the Weed Watch publication and create new invasive species brochures; 3) implement biocontrol along the Niobrara River in Rock and Keya Paha counties for leafy spurge and purple loosestrife; and insects in Dawes, Sheridan, and Sioux counties for common mullein; and 4) survey for plants designated by the Nebraska Invasive Species Council as

Watch List species. All of these objectives assist in enhancing Nebraska's native biodiversity and natural beauty.

WMA's participating in this grant project are: Panhandle Research Integration for Discovery Education (PRIDE), Sandhills Weed Management Area (SWMA), Middle Niobrara Weed Awareness Group (MNWAG), West Central Weed Management Area (WCWMA), Five Rivers WMA, and Platte Valley Weed Management Area (PVWMA). Control and survey work will be implemented in the Niobrara, North Loup, Middle Loup, South Loup, and Platte River basins. The Weed Watch publication is distributed in 7 of Nebraska's WMA's and the Watch List brochures will benefit WMA's and County Weed Superintendents statewide.

Lower Platte Weed Management Area

LPWMA Aerial and Ground Follow Up Watershed Protection Plan (18/19-03)

Total Dollars Requested: \$69,555.00 Total Dollars Funded: \$62,599.50

The Lower Platte Weed Management Area (LPWMA) controlled over seven hundred fifty acres of Noxious and invasive plants within the project area in the fall of 2017 through aerial application. The LPWMA will conduct July follow up surveys using programming dollars from Natural Resource Districts to map new infestations and follow up aerial applications.

The LPWMA is requesting funding to complete aerial application on Lancaster County tributaries, the Salt Creek and Oak Creek, in 2018. The LPWMA will utilize a special use "congested area" permit to conduct aerial application in and around the city Lincoln, NE.

This application will control acres of phragmites on these tributaries that went untreated in 2017. These areas are still relatively small in size; the aerial application will be an effective tool this season and these acres will be cost-shared with Lancaster County landowners on these tributaries.

The LPWMA conducts its projects on both a landscape level and on a watershed level. County Weed Control Superintendents are actively involved in surveying riparian areas. At the upstream edge of the Weed Management Area, the Platte County Superintendent has identified new areas of phragmites and invasive plants that will be priorities to control this season as part of the annual aerial application. The LPWMA is seeking funding to control these riparian areas within the Platte River channel in Platte County. The LPWMA is also requesting funding to survey and control small areas by airboat ground applications within the Platte River channel along the one hundred and twenty miles of river within the WMA.

The LPWMA is requesting reimbursement of administrative costs through this grant.

The LPWMA now carries an insurance policy and will incur administrative costs. These costs are outlined in the budget section of the application and there is an attachment for the insurance policy.

2019/20

Riparian Vegetation Management Grant Summary

Middle Niobrara Weed Awareness Group

Rapid Response to Early Detection of Invasive Plant Species and Educational Outreach
(19/20-01)

Total Dollars Requested: \$55,000.00 Total Dollars Funded: \$0.00

MNWAG was formed in 2001 as a result of various agencies realizing on overlapping of weed management activities along the Niobrara River corridor. MNWAG assists local landowners to become aware of the potential threat of noxious and invasive weeds along the Niobrara River corridor. The Niobrara National Scenic River stretches one mile on each side of the river for 76 miles from the Borman Bridge near Valentine to the east end of the Rock and Keya Paha county line. MNWAG is seeking funding to continue cost share spraying with the landowners. MNWAG is offering chemical at a reduced price to landowners to be able to spray on noxious and invasive weeds along the Niobrara River corridor. This has been an extremely beneficial tool to the landowners to be able to reduce their levels of noxious weeds. MNWAG is also seeking funding for the utilization of a helicopter and air boat to survey and spray noxious weeds in the areas that are hard to access. This is done at no cost to the landowners. We utilize the helicopter where necessary but we have been given permission from the National Park Service to implement an air boat on areas of the river where the helicopter is a distraction to tubers and endangered species.

Southwest Weed Management

Western Republican River Basin Riparian Habitat Improvement Project
(19/20-02)

Total Dollars Requested: \$80,000.00 Total Dollars Funded: \$76,141.60

The Western Republican River Basin Riparian Habitat Improvement Project goals are to eradicate invasive species, remove undesirable vegetation from the river and creek channels and improve water quality and native habitat along riparian corridors. These efforts will include the Republican River, Medicine Creek, Frenchman and other tributaries in the western Republican River basin. Best management practices and landowner input will be evaluated to determine methods of control and eradication within the seven-county area comprising SWWM. These efforts will result in improved riparian zones, restored natural habitat and improve water quality and flow assisting in Nebraska maintaining compliance with the Republican River Compact. Public meetings,

development of a website and brochures will increase public awareness providing additional benefits.

Twin Valley Weed Management Area
Eastern Republican & Little Blue Riparian Improvement Project
(19/20-03)

Total Dollars Requested: \$100,000.00 Total Dollars Funded: \$95,177.00

The highly successful Eastern Republican & Little Blue Riparian Improvement Project continues ongoing efforts to eradicate invasive species, control vegetation in stream channels and improve riparian habitat along the Republican and Little Blue Rivers and their tributaries within six of the Twin Valley Weed Management Area (TVWMA) counties. Control efforts are conducted in a holistic manner, utilizing a full range of mechanical, biological and chemical tools. TVWMA has undertaken this project over recent years to improve stream flow along the Republican and Little Blue Rivers to help enable Nebraska to meet its water delivery obligations to Kansas, to restore and maintain into the future a healthy river system and prevent wasteful degradation of water resources, and to increase public awareness of the best practices that can be used to properly manage riparian lands.

Platte Valley Weed Management Area
Invasive Plant Species Control along the Central Platte River
(19/20-04)

Total Dollars Requested: \$222,000.00 Total Dollars Funded: \$211,292.94

During the draught years of 2000-2006, invasive species infested and formed thick monocultures within the Platte River of central Nebraska reducing flow conveyance, reducing wildlife habitat, increasing water consumption by invasive vegetation and reducing the ability of irrigators to divert Platte river flows. With the thousands of acres of infestation, lack of defined ownership and herbicide restrictions/need of specialized vehicles for application landowners cannot effective control the invasive vegetation. Platte Valley and West Central WMAs have collaborated on this issue since 2008 and have shown great steps, but yearly maintenance and expansion of control on remaining acres is needed along with implementing cost share program to private landowners. Along with direct control by WMA, a cost-share program is being implemented to assist landowners to control invasive species within riparian zones. WMAs will implement an Early Detection and Rapid Response approach on new invasive plant species being detected along the Platte River.

Nebraska Weed Management Area Coalition
Outreach and Educational Materials for Invasive Riparian Species Control
(19/20-05)

Total Dollars Requested: \$37,000.00

Total Dollars Funded: \$0.00

The Nebraska Weed Management Area Coalition (NEWMAC) is made up of several Weed Management Area groups. Our goal is to share resources, funds and expertise to bring together landowners, county, state and federal agencies in noxious and invasive weed control issues. While noxious weeds is not always a very popular topic, the control of noxious weeds is a very important topic. As per the Nebraska Noxious Weed Act, controlling noxious weeds is the duty of Nebraska landowners and homeowners. As important as the control is, the education and awareness of noxious and invasive weed information is vital. Since 2008, The Weed Watch has been published twice a year as a collaborative effort to focus on noxious and invasive plant identification, information and proper control methods. This 12-page color publication will be delivered to over 100,000 households in 57 Nebraska counties. The paper is published at the Kearney Hub in Kearney, and distributed to local newspapers, or picked up and distributed by the eight Weed Management Areas that work together. In the past two years, NEWMAC has published five invasive weed brochures that focused on absinth wormwood, houndstongue, common and cutleaf teasel, sulphur cinquefoil and common mullein. These brochures have been distributed statewide to weed superintendents, NRD offices, county and state entities, etc., to help with identification and control efforts. As part of the 2019-2020 grant request, we would like to create two more brochures, highlighting two more species of concern.

Members of NEWMAC that will be part of this grant project are Panhandle Research Integration for Discovery Education (PRIDE), Sandhills Weed Management Area (SWMA), Middle Niobrara Weed Awareness Group (MNWAG), West Central Weed Management Area (WCWMA) and Platte Valley Weed Management Area (PVWMA).

Upper Niobrara White Natural Resources District
Vegetation Management on the Upper Niobrara River
(19/20-06)

Total Dollars Requested: \$30,000.00

Total Dollars Funded: \$28,558.19

The Upper Niobrara River supplies surface water for several individual appropriators and the Mirage Flats Irrigation District. Several wells along the river rely on the alluvial aquifer, too. Average stream flows at the upper end of the reach are approximately 4 cubic feet per second (cfs) and increase to approximately 24 cfs above Box Butte Reservoir. The Nebraska Department of Natural Resources has designated the Upper Niobrara River as fully appropriated. Landowners have expressed concern over the monoculture of cattails that have infested the river in several areas. The cattails consume several acre feet of water annually and completely encompass the river channel causing flow obstructions. The purpose of this project is to work with willing landowners to manage the cattails where consumptive use is reduced, and a free-flowing river channel is returned. Along with the cattails, any other noxious weeds that

are detected, such as yellow flag iris or purple loosestrife, will be treated and the appropriate weed management authority notified. The funds will be utilized to purchase aquatic-labeled herbicide and work with a local contractor to treat the targeted areas. The project timeline is one year.

Lower Platte Weed Management Area
LPWMA Post-Flood Monitoring and Control Project
(19/20-07)

Total Dollars Requested: \$47,102.00 Total Dollars Funded: \$44,830.27

The priority this year for the LPWMA is to adequately survey and control these new locations of phragmites and other inclusive invasive vegetation to prevent the establishment of permanent sandbars and water loss to these species. The LPWMA is seeking funding to complete an airboat survey and control work in the Platte River as well as funds to survey the Elkhorn River and tributaries in Dodge, Sarpy and Douglas Counties. This requested funding is only a portion of the project as the Weed Management Area has already completed a two day helicopter invasive plant survey of the lower Platte River as well as a survey of tributaries in Lancaster County. Landowners and the Natural Resource Districts will again cost-share application work in the main channel of the Platte River. The LPWMA is seeking funding for application work on Platte River tributaries only. The LPWMA requests funding for its annual insurance policies; the WMA will provide all other administrative fees including dues income for hosting monthly meetings and maintaining equipment. Additionally, the LPWMA plans to sponsor one local FFA chapter to survey one stretch of the Lower Platte River this season. Funds will go directly to the chapter for survey and monitoring equipment and transportation to and from the site. Findings will be distributed by the FFA chapter and by the Weed Management Area once the project is completed.

Summary

Project managers have adapted well to the challenges they have had to face. Spring 2019 flooding changed the landscape of many of the riparian areas which impacted how and when they could access river systems. During the last half of 2019 five projects were able to resume in somewhat of a normal fashion and complete needed activities until winter. Spring 2020 looked promising until COVID-19 almost halted any control efforts. Projects adapted and were able to finish the fiscal year completing most projects in a timely fashion.

The Task Force continues to gather and collect information and data. The Task Force applauds the people managing these projects for the amount of work they are accomplishing and the use of match funds and partners to protect Nebraska's natural resources. This volume of work could never be achieved without the funding and support provided by the Legislature.