COON CREEK WATERSHED DISTRICT  
Request for Board Action

MEETING DATE: February 9, 2015  
AGENDA NUMBER: 21  
ITEM: Update of District AIS Plan and Strategy

POLICY IMPACT: Policy  
FISCAL IMPACT: Budgeted

REQUEST  
Review and discuss District AIS Plan and Strategy

BACKGROUND  
At the January 9, 2015 meeting, the Board was provided an update of aquatic invasive species at risk of introduction to the watershed and the status of State funds allocated to Anoka County. The Board encouraged staff to update the District AIS strategy and to prepare a plan for the use of these funds to present to the Board and ultimately to Anoka County.

The District strategy is discussed in the Comprehensive Watershed Management Plan under issue goals. The Comprehensive Plan commits the District to pursuing three goals:

**Goals**

6.1 To minimize the harmful ecological, economic and human health impacts of aquatic invasive species.

6.2 To be proactive in aquatic invasive species management through education and projects that improves lake and stream water quality and/or reduces the risk of entry of invasive species.

6.3 Control the spread of AIS and minimize their impacts on native habitats and species.

Current Efforts  
Current efforts to manage aquatic invasive species within the Watershed District have involved chemicals. Mechanical removal, either by hand with a scythe or with the help of "saw boats" which shred plants with rotating blades has been discussed. Recently, management approaches have changed and become more diverse to include everything from vector management, hyperspectral remote sensing, ozone treatment and K-12 education curricula to herbicides, electro-fishing, Internet sales precautions, PowerPoint presentations and equipment inspections.

Efforts to manage invaders living in and around water present a different set of challenges for containment and control and focus on preventing vectors from bringing in new species and on developing early detection networks.
The Watershed District has encouraged the best available science-based methods to prevent and reduce the unacceptable impacts caused by invasive species and thereby sustain the integrity and resilience of its water and aquatic ecosystems.

To achieve this, the District will pursue a comprehensive, integrated approach that highlights the district’s commitment to a timely response to the threat of invasive species by using resources effectively, efficiently, and safely and by engaging, communicating, and coordinating actions at all levels and across all areas of the Watershed District and with its partners.

A comprehensive and integrated systems approach relies on multiple risk management measures that independently reduce risk.

**Invasive Species Systems Approach Elements**
The Watershed District has focused on four key elements for invasive species management:

1. **Prevention**
2. **Early Detection and Rapid Response**
3. **Control and Management**
4. **Restoration and Rehabilitation**

These four elements are not separate and distinct from one another; they overlap and form an integrated adaptive approach for addressing invasive species. Furthermore, this strategy facilitates integrated funding for all four elements; none can stand alone. For example, early detection of a species is often paired with control actions, such as physically removing the invader or applying pesticides to eliminate it.

**Element 1.—Prevention.**
**Objective:** Keep invasive species out of the District’s water and related resources and identify potential introduction pathways for known threats.

The most effective strategy to protect lakes, waterways, and wetlands from invasive species is to prevent invasive species introduction and establishment. Containing known infestations is also important for blocking the spread of invasive species from infested lands to surrounding areas.

Coordination with the lake associations conducting treatments and the State regulatory agencies is important in understanding pathways for introductions, implementing quarantine regulations, and educating the public about invasive pest threats and how to prevent the spread of invasive species.

**Policy**
- The Watershed District will actively prevent the introduction and spread of invasive species that adversely affect the health and sustainability of District waters and related resources.
• The Watershed District will coordinate and cooperate with Minnesota Department of Natural Resources and Agriculture and other State and Federal agencies, as necessary, and will identify and inform the public about invasive species threats and their management.

• The Watershed District supports this element through monitoring, resource stewardship, active collaborative efforts, education and outreach activities, and the transfer of new technology and best management practices.

Actions
Watershed District prevention efforts include the following actions.

1. **P1—Identify, forecast, and prioritize invasive species threats.** Many invasive species are already established in the District but are not yet widespread. Knowledge of which species are already present in the state, eco-region, or district, or are likely to be introduced into these areas, can guide prevention efforts.

2. **P2—Identify high-risk pathways of movement and introduction.** Numerous pathways (or vectors) introduce exotic species, some of which might become invasive, to the District. Identifying pathways that pose the greatest risk for the introduction of invasive species and, if appropriate, following up with focused actions will help prevent introduction and spread.

3. **P3—Identify vulnerable ecosystems.** Knowing which resources are the most threatened by a particular invasive species and what the impacts are on an ecosystem will help prioritize detection and management efforts.

4. **P4—Improve cooperative efforts.** Invasive species prevention requires the efforts of multiple agencies, organizations, communities, and individuals. Crucial steps for establishing effective cooperative efforts include identifying local and regional partners, actively participating in cooperative efforts, and helping to identify and obtain sufficient and appropriate funding to support prevention activities.

5. **P5—Recommend, program, and implement appropriate actions to prevent introduction and establishment of target invasive species.** Local, State, regional, and Federal actions are important in preventing the movement of invasive species. Once high-risk invasive species and their pathways are identified, actions should be taken to prevent their establishment.
Element 2.—Detection.

Objective: Survey to detect new invasive species and monitor existing priority species.

Detection and monitoring are critical components of an effective management program. They provide the basis for control and management including rapid response. Using risk assessments and pathway analysis, detection efforts for priority species can be directed towards high-risk areas. When early detection is combined with other management tools, such as rapid response, it leads to a more effective invasive species management approach.

Policy

• The Watershed District will see to develop and implement efficient survey and monitoring tools and technologies as needed to facilitate earlier detection of invasive species and rapidly assess their potential impact on water and related resource health.

• As necessary and appropriate, the Watershed District will coordinate with State and local government and private cooperators.

Actions

Watershed District detection actions include the following:

1. D1—Survey effectively to detect new invasive species and monitor priority species. Discovery and correct rapid identification of newly arrived species is critical for their eradication. Early detection and continued monitoring of established species are critical to slowing their spread.

2. D2—Evaluate the extent and severity of invasive species infestations and assess their potential impacts. Delimiting the extent of an infestation is important for selecting appropriate control actions. Invasive species infestations that are widespread might need to be treated differently than small or isolated infestations that can be eradicated.

3. D3—Report invasive species detection findings in standardized databases. Access to information on invasive species distribution is important when determining management actions. Information from detection and delimiting surveys should be entered into standardized databases as they become available, so that information can be shared quickly and widely. All invasive species inventories and infestation maps will be shared among land management and regulatory agencies, States, and other partners to monitor population trends and treatment effectiveness.

4. D4—Develop tools and techniques to detect and monitor invasive species. Improving the availability and effectiveness of detection tools will help achieve
earlier detection of new infestations and lower eradication and management costs. Less costly and more effective monitoring tools will facilitate improved efficiencies in invasive species management.

**ISSUES/CONCERNS**

**Key Success Indicators:** Paramount to success is the District’s ability to
1. Prioritize activities;
2. Establish and implement performance measures; and
3. Assign roles,
4. Execute responsibilities,
5. Hold people accountable across staffs.

**Prioritization of Actions:** Prioritizing programmatic and invasive species-specific activities is necessary to effectively use the resources available. Setting priorities will be an iterative process using the best available science and information to facilitate decision making. A suite of the following factors offers one approach for establishing priorities:
1. Availability of effective prevention, detection, monitoring, and control methods;
2. Availability of funds;
3. Resources at risk;
4. Potential for invasive species spread;
5. Likelihood of success will be considered in assessing risk and setting priorities.

Of these factors, prevention and EDRR are, in general, recognized as the most efficient and cost-effective strategies for addressing invasive species. Ordering invasive species management priorities will occur at all levels of the Watershed District.

**Aquatic Invasive Species Issue Team:** Anoka County should establish an Aquatic Invasive Species Issue Team composed of a core group of program coordinators from:
1. Anoka County
2. Anoka Conservation District.
3. In addition, the members of the AISIT should include a multidisciplinary set of local staff representing a range of programs.

The AISIT would perform the following functions:

a) Coordinate across all programs to identify and evaluate significant invasive species issues and problems affecting the County.
b) Provide coordinated policy direction to organizations interested in or working on AIS issues.
c) Identify and evaluate the capabilities and limitations to manage and research invasive species issues and problems.
d) Develop strategic recommendations and solutions to address significant invasive species issues and problems.
e) Collaborate with external organizations or agencies (such as MDNR or D of Ag), as might be needed, to address invasive species issues and problems.

f) Formulate and direct priority actions associated with invasive species research and management activities

RECOMMENDATION
Comment, Correct
Receive Update