

Critical Connections Ecological Services, Inc.

450 Main Street North, Suite 130, Stillwater, Minnesota 55082

Natural Resource Consulting

Landscape Ecology

Botanical Inventories

Threatened & Endangered Species Surveys

Greenway & Open Space Planning

Natural Community Restoration

Wetland Delineation & Permitting

Wetland Banking & Monitoring

Minnesota Land Cover Classification

Geographic Information Systems

Global Positioning Systems

Database Management & Development

Environmental Education July 23, 2019

Ms. Rebecca Haug Water Resources Manager City of Blaine 10801 Town Square Drive NE Blaine, MN 55449

RE: Proposed Scope of Work and Cost Estimate 2020 to 2029 Long Term Management and Monitoring Plan City of Blaine Branch 3 Wetland Mitigation Bank

Dear Ms. Haug:

As requested, Critical Connections Ecological Services, Inc. (CCES) has prepared the following scope of work and cost estimate for developing a long term (10 year) management and monitoring plan for City of Blaine Branch 3 Wetland Mitigation Bank Site. The Branch 3 Wetland Mitigation Bank is a 103-acre bank site located in Blaine, MN within the Blaine Wetland Sanctuary (see Figure 1). The established bank is owned and operated by the City of Blaine. As of the end of the 2015 growing season, five (5) years of required ecological restoration implementation and associated monitoring and reporting tasks were completed at the site meeting all maximum vegetation and hydrology performance standards. This performance allowed for the generation of all potential mitigation credits (53 credits). As is a required component of wetland mitigation banks and according to the Mitigation Banking Instrument (MBI) associated with the project, long term monitoring and management of the site must be completed by the City of Blaine. To complete this requirement effectively, a long term management and monitoring plan should be developed (and then implemented) over repeated ten year intervals. Much of this baseline planning work, and resulting management approach and recommendations developed for this first 10 year management interval will likely be repeated over subsequent management intervals beyond 2029.

The purpose of this scope of work is to outline and provide the necessary tasks, timelines, deliverables, and cost estimates for CCES to develop a long-term (2020-2029) management and monitoring plan that will address the requirements of the MBI and to manage the site in a manner that is in-line with the ecological goals and framework of the larger Blaine Wetland Sanctuary site as a whole.

The following tasks and approach are proposed to develop this 10 year management and monitoring plan. As we have discussed, when developing this plan, we would be assuming an

implementation timeline of ten years and an estimated implementation budget of \$150,000 over 10 years. This assumption of budget is a required input and is important even at this scoping phase, as overall implementation budgets determine the expected level of detail of the 10 year plan to be developed and implemented over the Branch 3 wetland mitigation bank.

I. Proposed Scope of Work:

Task 1: Review Existing Conditions (Field Observations and Monitoring Reports)

CCES ecologists will review past results of the five years of restoration and monitoring, the site's postrestoration (existing) condition, trends in high-performing and under-performing vegetation restoration areas, and overall site hydrology. CCES ecologists will verify these observations and trends with additional field visits to the site, as needed. These observations will set the baseline condition for establishing the foundation from which to begin work and for determining management needs and priorities in Task 2.

Not to Exceed Costs of Task 1:

Task 2: Determine Management Needs, Regulatory Obligations, Priorities, and Recommendations

Based on the observations in Task 1, CCES ecologists will determine ecological management needs of the site. CCES will determine the City's minimum regulatory requirements or obligations to manage the site based on the existing Final MBI agreement, final monitoring plan, and close-out condition of the site. CCES will review the site's current needs with City staff, council, and engineer to determine the scope of management to be included, and the timing and prioritization of any necessary tasks. This planning task will also include cost estimating for each potential management and monitoring task to be considered for implementation and variability of implementation costs over time. The scope and timing of tasks will be based on an "adaptive management" approach which can be adjusted according the site's response to management through time.

Not to Exceed Costs of Task 2:

\$3,000

\$4,500

Task 3: Develop and Finalize a Long Term (10 Year) Management and Monitoring Plan

Based on the scope and priorities and observations developed through Tasks 1 and 2, CCES ecologists will develop a 10 year management and monitoring plan for the Branch 3 Wetland Mitigation Bank site. The plan will be based on an "adaptive management" approach which can be adjusted according to the site's response to management through time. The plan will initially focus on establishing native-dominated vegetation within any lagging/fringe areas of the site, developing or sustaining a native species dominated cover over the entire site, and managing the site with prescribed fire at a frequency/return interval capable of sustaining high to moderate quality wet meadow vegetation (MN DNR native plant community type WMn82) throughout the site over time. The plan will also likely include spot herbicide applications that may be more frequent and wide-spread in the earlier years of management and less frequent and more isolated in the later years. Supplemental seeding may also be a necessary tool implemented within the site.

Monitoring will likely be annual or biennial in frequency, but only as needed, extensive reporting will not be a requirement. In the later years of the ten year plan, there may be some years where minimal management will be needed or prescribed. CCES anticipates that the implementation of this management plan will result in a high-quality, fire-managed site that requires little additional inputs after 10 years, with the exception of prescribed fire on a 4 to 7 year return interval, as funding and site conditions allow.

Not to Exceed Costs of Task 3:

Task 4: Meetings, Correspondence and Collaboration with City Staff, Council, Boards and Area Residents:

This task accounts for the time and resources necessary for meeting and conferring with City staff, Agency staff (BWSR, USACE, RCWD), and the Blaine Natural Resources Conservation Board when developing the plan, identifying the scope, prioritizing tasks, and publishing the plan. In addition, this task accounts for any public meetings, presentations, or written communications required to communicate the plan to interested City residents, including citizens that support or oppose active restoration and management of the Blaine Wetland Sanctuary's various management areas.

Not to Exceed Costs of Task 4:

Task 5: Additional Services (As Needed):

CCES can provide additional services and expertise outside of this proposed scope of work, and as needed and requested by the City of Blaine. This may include additional technical tasks, meetings and correspondence, or other tasks identified through the completion of the project that are outside of or exceed the scope provided above. Additional services will not be provided without prior approval from City staff.

Costs Associated with Task 5:

II. Summary of Tasks and Cost Estimate (August 1 through January 31, 2020):

Total Not to Exceed Costs:	\$24,450
Boards, Area Residents and Community Groups	\$5,000
Task 4: Meetings, Correspondence and Collaboration with City Staff, Council,	
Task 3: Develop and Finalize Long Term (10 Year) Restoration and Monitoring Plan	\$12,450
Task 2: Determine Management Needs, Regulatory Obligations, Priorities, & Recommendations	\$3,000
Task 1: Review Existing Conditions (Field Observations and Monitoring Reports)	\$4,500

\$12,450

As Needed

\$5,000

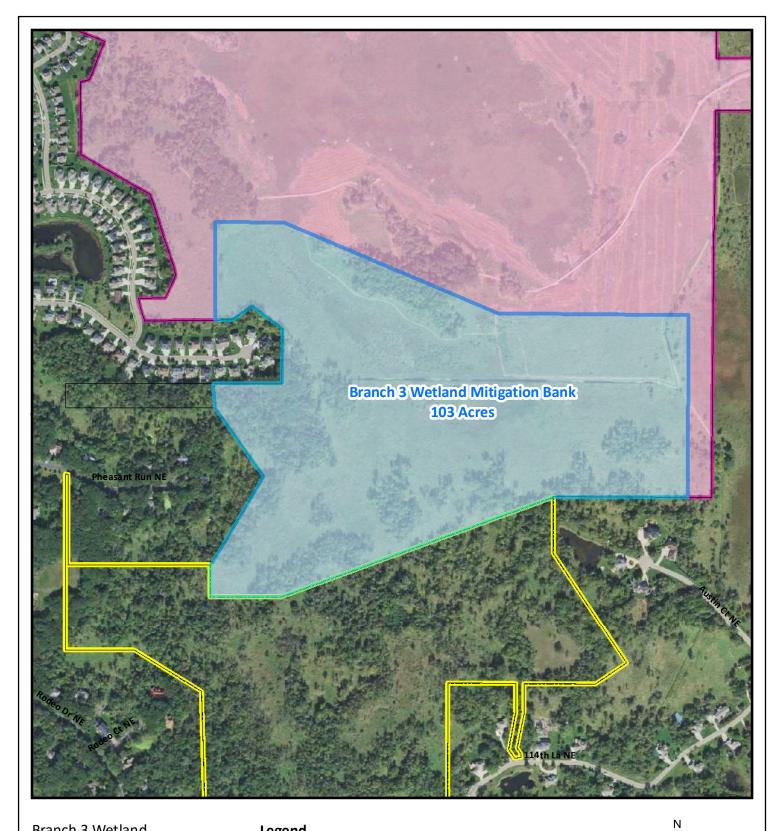
Proposed Scope of Work and Cost Estimate 2020 to 2029 Long Term Management and Monitoring Plan Branch 3 Wetland Mitigation Bank, Blaine, MN July 23, 2019

CCES would like to thank the City of Blaine for the opportunity to provide this proposed scope of work to develop a 10 year management and monitoring plan for the 103-acre Branch 3 Wetland Mitigation Bank site. CCES is able to begin work on this project immediately following receipt of a signed agreement and authorization to proceed from the City of Blaine. If you have any questions regarding this proposal, please feel free to contact me at your earliest convenience.

Respectfully submitted,

Critical Connections Ecological Services, Inc.

Jason J. Husveth, MS Principal Ecologist



Branch 3 Wetland Mitigation Bank Scope of Work Long Term Management & Monitoring Plan July, 2019

Legend



BWS Southern Portion Branch 3 Wetland Mitigation Bank Site 7 Wetland Mitigation Bank

