

Introduction

The City of Afton is fortunate to have within its boundaries many unique natural resource features. Having these features ironically brings about unique challenges for the City and its residents also. To begin the process of addressing these natural resource opportunities the City commissioned a Natural Resource Inventory. First and foremost this study inventoried natural resource features citywide. This NRI included Landscape features which included identification of plant communities and wildlife habitat, and ecological values. Detailed information on this is found in the companion report City of Afton Natural Resources Inventory – Natural Community Assessment.

The following report is the City of Afton Natural Resource Inventory -Water Resources Evaluation. The principle author of this report is the Washington Soil and Water Conservation District (SWCD), in cooperation with the Lower St. Croix Valley Watershed District. This report provides an evaluation on hydrologic resource features including surface and ground water. This report addresses water flow patterns and areas (watersheds), water quality, groundwater sensitivity based on soils and geology, and erosion potential within watershed areas. In major drainage areas of the City, determined to be Valley Creek, Kelles Coulee, and Trout Brook, on site inventorying was conducted to evaluate attributes of the hydrologic system. This was done to evaluate the health of the hydrologic system.

In addition to this Natural Resource Inventory report cataloging results of our investigations, it also provides technical recommendations on priority resources and actions. This was included to provide a basis to commence discussion by City officials and citizens on existing features, and protection and improvement opportunities. This should be viewed as a technical guideline, to identify priority issues and features, for the City of Afton to select the issues which warrant further investigation.

The Washington SWCD hopes that this report is the starting point for the City of Afton to implement activities to protect, enhance, and conserve the natural resources of the City of Afton.