

RUSH CREEK HEADWATERS SUBWATERSHED ASSESSMENT



WHAT IS A SUBWATERSHED ASSESSMENT (SWA)?

A subwatershed assessment is a detailed evaluation of how much stormwater and pollutants such as sediment and nutrients runs off the land within an area of interest. A SWA uses a fine-scale model that can predict runoff down to the field level. Specialized software tools and field assessments can then help identify the best pollutant-reducing practices to implement and where they will have the most impact. After review with local landowners, the end result is a series of detailed maps showing the recommended practices, and a set of actions, costs, and pollutant reductions expected.

WHY DO A SUBWATERSHED ASSESSMENT (SWA)?

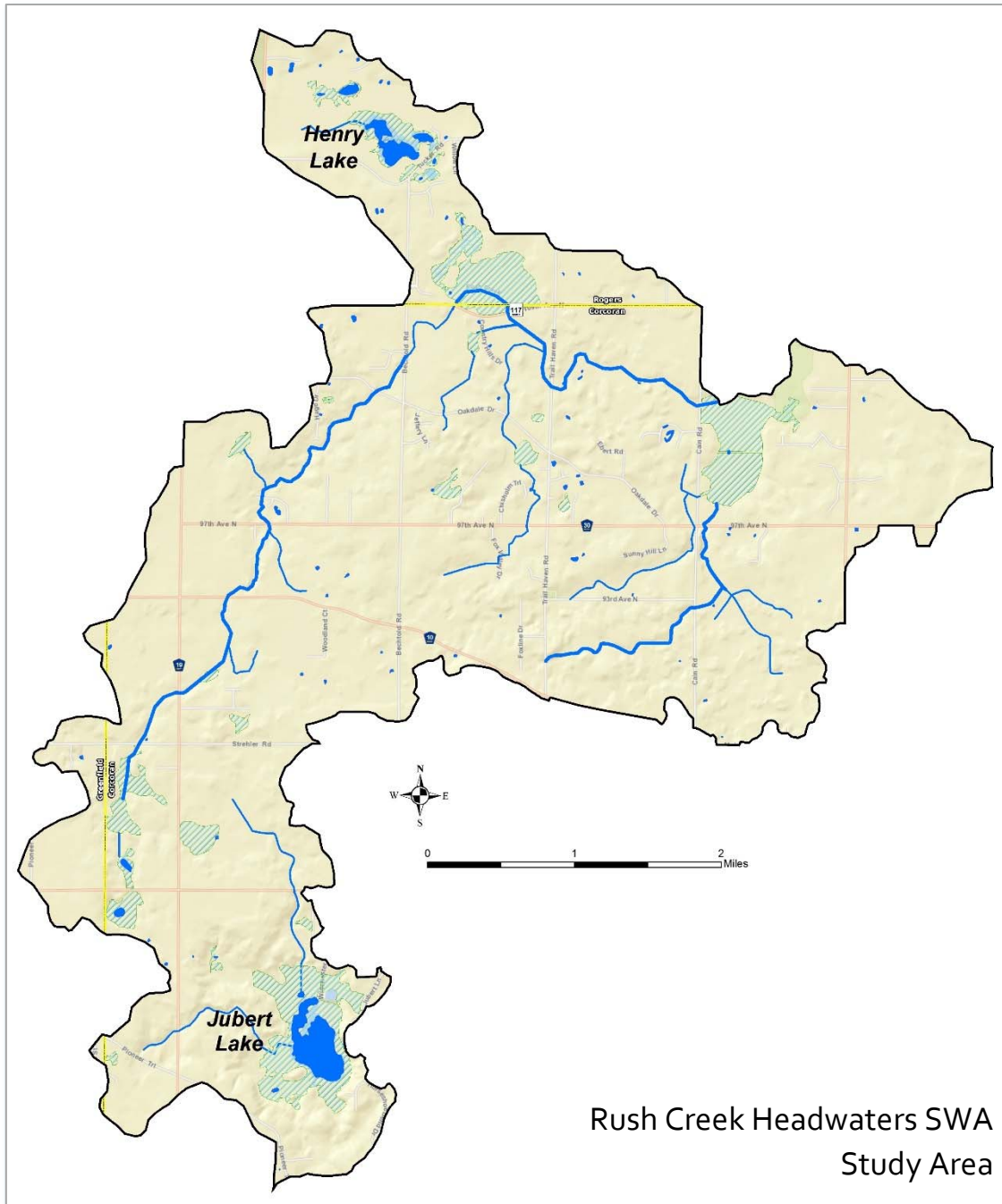
Several of the lakes and streams in the Elm Creek watershed do not meet state water quality standards and the cities are required to reduce the amount of pollutants conveyed to them. The subwatershed assessment (SWA) will “zoom in” on land in the area that is the headwaters for Rush Creek and the Rush Creek South Fork, including Henry Lake and Jubert Lake, to identify possible practices to reduce those pollutants, and then review those with land owners to see which are most feasible. The team completing the SWA includes city, watershed, hydrology, engineering and agricultural management specialists who know this area and will include landowners who can bring their practical knowledge and expertise to the SWA.

The SWA will look at both agricultural and developed areas, and will also include a review of Rush Creek itself for streambank erosion and opportunities for in-stream practices.

The results of the SWA will be used to help landowners, cities, and other interested parties find the best, most cost-effective ways to improve water quality in Rush Creek and Henry and Jubert Lakes. The SWA will also be helpful in applying for grant funding to help landowners and cities undertake voluntary pollutant-removing practices.



An example of practices that could be considered for this field, including contour buffer strips (purple lines), grass waterways (green lines), and small basins for water and sediment control (orange polygons and lines).



The Study Area is 19.75 square miles, most of which is in the city of Corcoran. Rush Creek rises from a wetland complex in the northwest quadrant of the County Road 19 and County Road 50 intersection. The Area includes about seven miles of Rush Creek. There are two lakes in the Study Area: Henry Lake in the city of Rogers, and Jubert Lake in Corcoran. Henry Lake is an Impaired Water, with excessive nutrient concentrations causing poor water quality. Jubert Lake is the headwaters of the Rush Creek South Fork. It, too, has poor water quality, but has not been officially designated an Impaired Water. Rush Creek is an Impaired Water for excess *E. coli* bacteria and low dissolved oxygen, and high nutrient levels are stressing the biotic community.