

Attachment B

Addendum to the Cultural Resource Review for the
Goose Prairie Marsh Enhancement Project EAW

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Mike Magner
DNR-Fish & Wildlife Archaeologist
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In the summer of 2015, the Minnesota DNR-Division of Fish & Wildlife Cultural Resources Program conducted a cultural resource reconnaissance survey in advance of a MNDNR proposal to re-align County Ditch 18 as it outlets from the Goose Prairie Marsh in Clay County. The proposal reviewed at that time also included installing a water control structure where the ditch passes beneath 115th Avenue, as well as raising the grade of this road to serve as a more effective levee (Figure 1). The investigations concluded that the undertaking had minimal potential to affect significant historic or archaeological properties, and a report was submitted to the Minnesota SHPO in September of 2015. The SHPO concurred with the findings of the cultural resource survey (SHPO referral number 2016-0065).

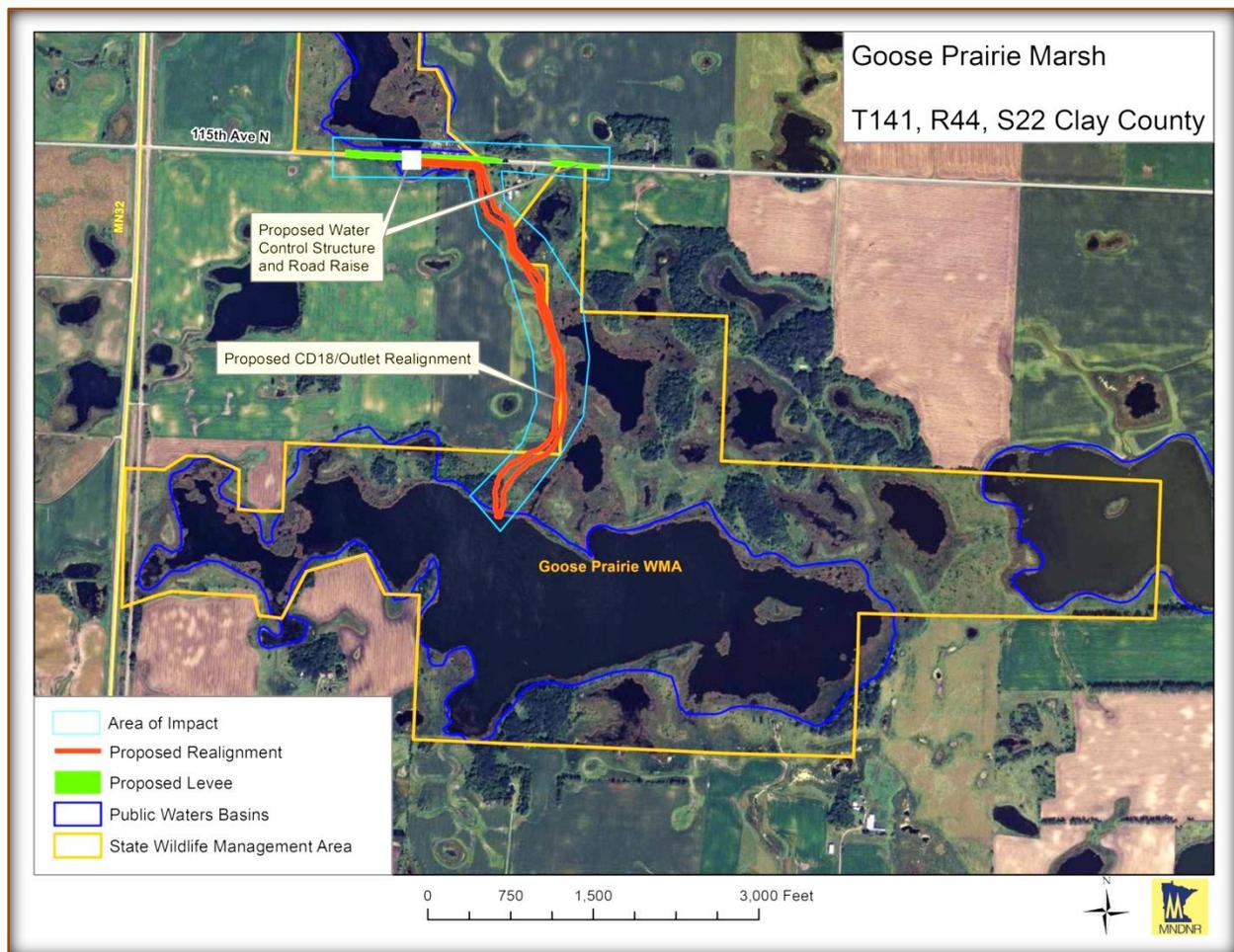


Figure 1. Goose Prairie Marsh Outlet Improvements Reviewed in the Summer of 2015.

2013 FSA Aerial Image

It has recently come to the attention of the Minnesota DNR-Division of Fish & Wildlife Cultural Resources Program that the Goose Lake Marsh Enhancement Project is larger in scope than what was reviewed in the summer of 2015. In addition to the re-aligned outlet and water control structure, the project will also include improvements at selected locations along approximately 3000 meters of existing ditch (Figure 2). Specifically, an under-capacity culvert, beaver dams, and sediment will be removed. The ditch improvements will enhance water conveyance northward from the proposed water control structure to the Section 11/14 line and eastward from the Goose

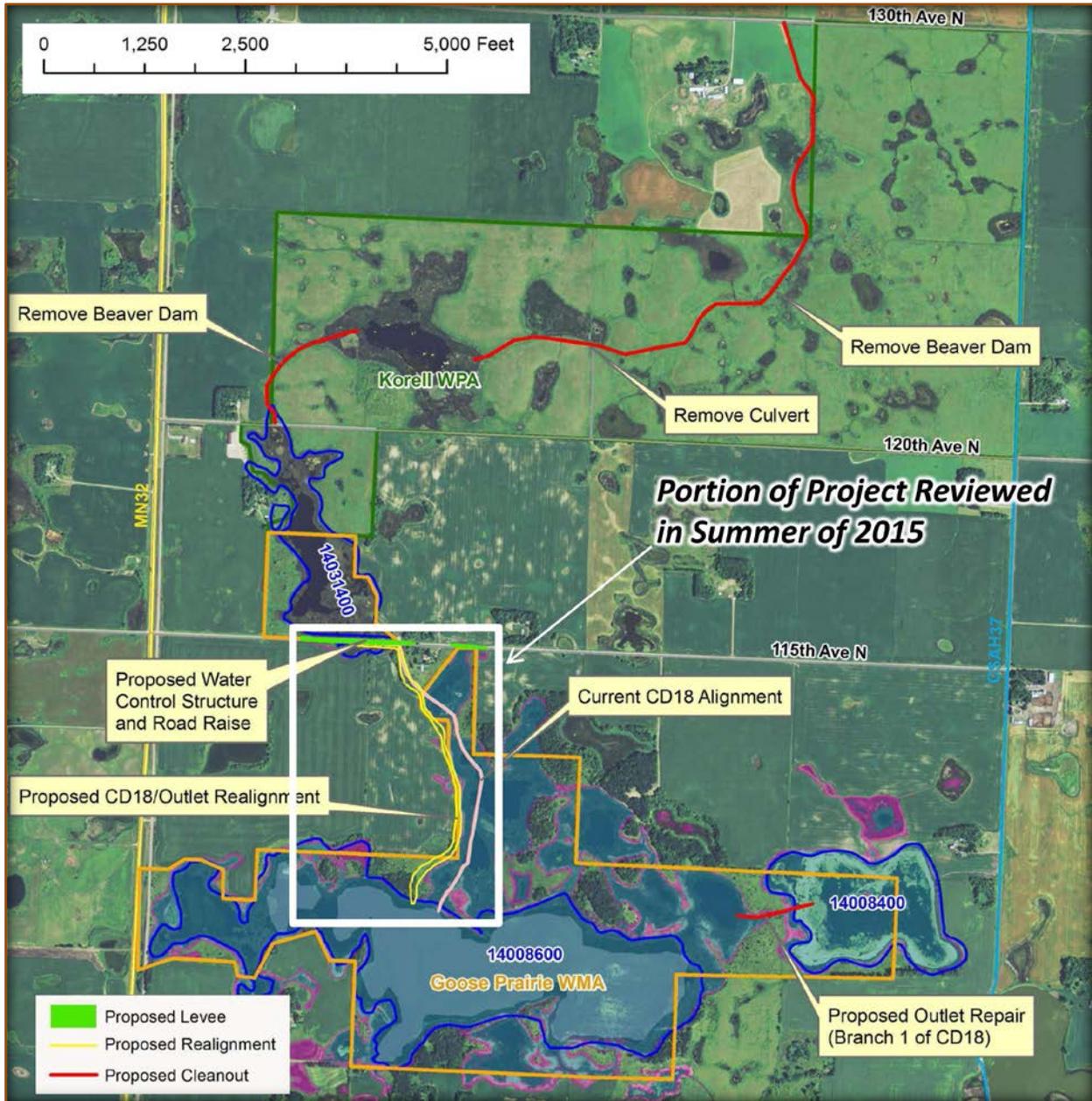


Figure 2. Expanded Goose Prairie Marsh Enhancement Proposal.

2013 FSA Aerial Image

Prairie Marsh to a 60-acre wetland basin. Inasmuch as this aspect of the project was not reviewed as part of the original cultural resource survey, additional cultural resource review was conducted to assess whether the proposed ditch clean-out could potentially impact cultural resources.

County Ditch 18 drains the Goose Prairie Marsh northward to the Wild Rice River. Archival research suggests the ditch was likely excavated around the beginning of the twentieth century; the alignment is marked as a ditch on the 1909 county plat. The original specifications were for an approximately four-foot-deep ditch with a six-foot-wide bottom and 2:3 backslopes. Total bank-to-bank width would have been approximately 18 feet (Figure 3). Much of the ditch was routed through pre-existing wetland basins.

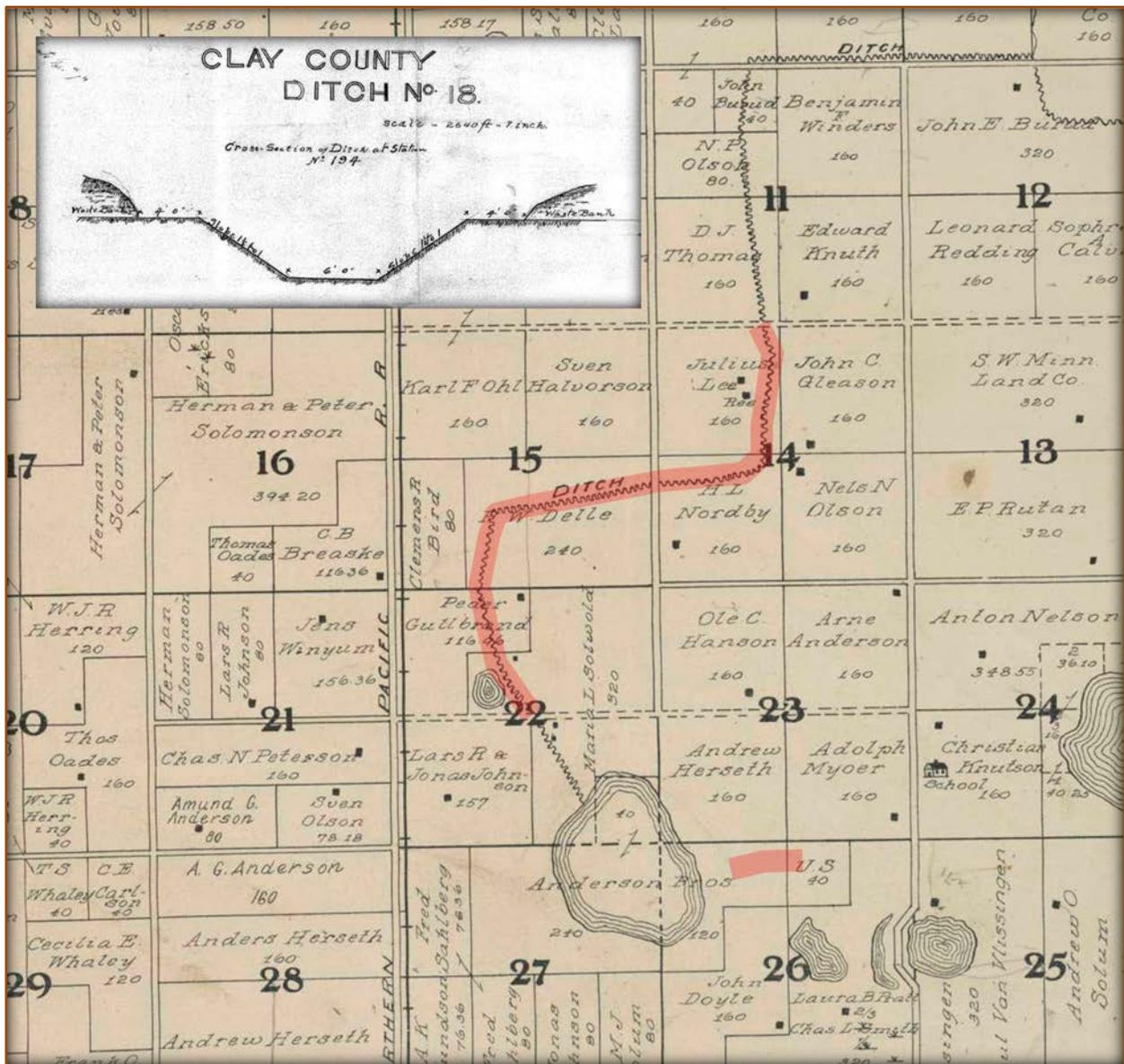


Figure 3. County Ditch 18 Depicted on 1909 Township Plat with Original Ditch Profile Inset.

Potential ditch clean-out segments highlighted in red.

The Archaeological Site database maintained by the OSA was consulted to determine whether heritage sites have been documented near the ditch segments to be improved as part of the Goose Prairie March Enhancement project. The records review revealed that no heritage sites have been recorded near the project corridor. In addition, historic aerial photography depicts no buildings or other potentially significant constructions within or near the project corridor. The historic images indicate that much of the terrain along the County Ditch 18 alignment has long been uncultivated, evidently too wet to be arable.

The proposed ditch improvements were also reviewed for potential effects to as-yet undocumented cultural and historic properties. This review—utilizing historic and contemporary aerial photography and LiDAR topographic analysis—indicates that the ditch segments to be impacted are distinct and deeply incised, suggesting the ditches have been dredged or otherwise cleaned out repeatedly since initially dug over a century ago (Figure 4). Bank-to-bank widths are seven meters or more throughout the length of the project corridor. It therefore appears that the corridor to be potentially impacted by the proposed ditch clean-out should be confined to the existing ditch profile. Removing debris and culverts from the ditch would have minimal potential to significantly affect undisturbed, upland soils. Furthermore, the beaver dam and culvert removal locations appear to be associated with historically saturated or wetland areas with minimal potential for intact cultural deposits. The proposed ditch clean-out therefore does not appear to meet the definition of an "undertaking with the potential to affect historic properties" for purposes of Section 106 of the National Historic Preservation Act (NHPA).

Cultural resource reconnaissance survey has demonstrated that the proposed outlet ditch re-alignment, water control structure installation, and 115th Ave. N. grade raise are unlikely to impact historic or archaeological resources. Landscape analysis and archival research suggests that the proposed ditch clean-out is also unlikely to impact cultural resource sites. It is recommended that the Goose Prairie Marsh Enhancement proceed without further cultural resource considerations.

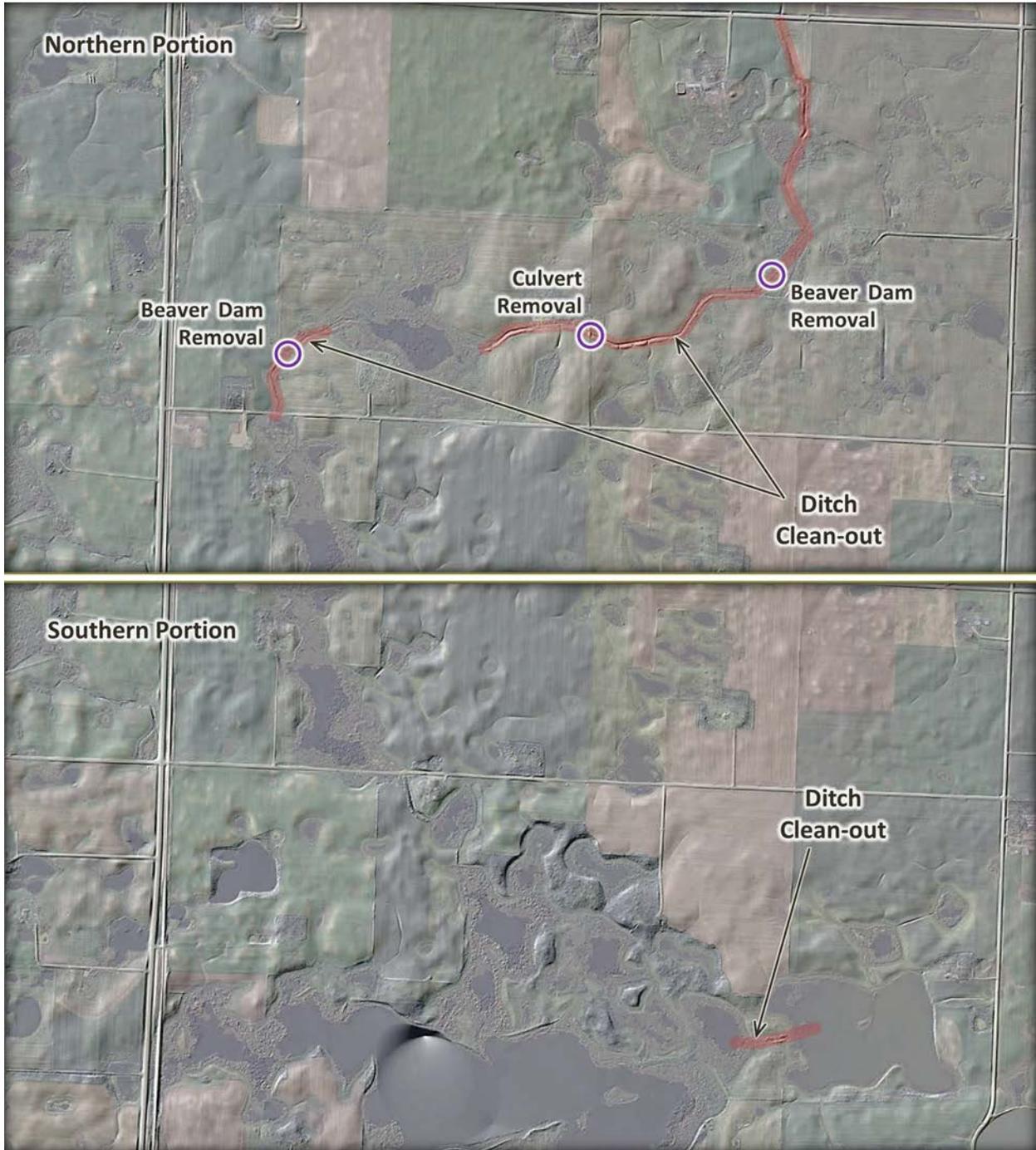


Figure 3. Aerial Views of the Proposed Ditch Clean-out Corridors.

2010 FSA Photograph enhanced with hill shading.