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| DATE : | November 25, 2013 |
| TO : | Greg Van Eeckhout  North Watershed Section  Watershed Division |
| FROM : | Mark Gernes and Steve Heiskary  Surface Water Monitoring Section  Environmental Outcomes Division |
| PHONE : | 297-3363 |
| SUBJECT : | Reclassification of Clifford Lake to a wetland |

Clifford Lake (21-0003) in Douglas County, Minnesota is located south of the City of Osakis. In 2006 Clifford Lake was listed as an impaired shallow lake for aquatic recreation based on failure to meet shallow lake eutrophication standards. Since 2009 the Pollution Conrol Agency (PCA) has used a weight of evidence approach including several physical, chemical, biological and administrative attributes to differentiate lakes, shallow lakes and wetlands. In previous documents you presented a weight of evidence synopsis of these physical, chemical, biological and administrative characteristics for Clifford Lake which has suggested it may best be classed as a wetland. Your gridded depth measurements collected through the ice in Feb. 2012 confirmed the max depth of Clifford Lake to be 3.5 ft. This physical depth data strongly supports a wetland classification. In our professional judegement the depth data in addition to the other characateristics you presented justify classifying and manging 21-0003 (Clifford Lake) as a wetland which will likely result in it being delisted as an impaired shallow lake. As you know we do not currently have nutrient criteria for wetlands in Minnesota.

Even if 21-0003 is reclassified as a wetland and subsequently delisted as an impaired shallow lake, it would still be appropriate to support additional watershed management actions which may have the potential to improve 21-0003 as a wetland. Reductions in nutrient loading to and within this waterbody will benefit the watershed including downstream listed lakes Fallie and Osakis as well as this wetland. Thus it would be appropriate to continue working with the PCA Muncipal Division staff regarding the future options for managing the City of Osakis treated wastewater which is currently discharged to Clifford Lake and also seek opportunities to reduce nonpoints pollutant loadings as well.

If it would be helpful to have additional data for future evaluations of this wetland and this watershed, PCA wetland biologists in the South Biological Monitoring Unit would be willing to begin monitoring water level fluctuations (stage) and chemistry grab samples in 21-0003 during 4-5 field visits per year during the field season. This work could begin in spring 2014. Feel free to contact Mark G. to discuss this possibility further, if you feel this additional data would be helpful for future management determinations.