9.0 IMPLEMENTATION OF TMDLS

9.1 NPDES Permitting

Mora Mutual Domestic Water and Sewerage Works Association (MMDWSWA)

Currently the Village has 110 active hookups to the wastewater collection system that delivers untreated wastewater to the lagoon system. Additionally, within the service area, there are estimated to be 177 septic tanks. The MMDWSWA's existing WWTP is an aerated lagoon system that is not designed to treat wastewater for TP or TN removal. The village is currently working with an engineering firm to make improvements to the collection system and to reline the existing lagoons. These improvements will not improve the plant's ability to treat for TP or TN. Alternative methods of treatment must be considered by the MMDWSWA in order to meet or address the nutrient impairment in the Mora River. Funding of treatment facility modification or replacement needs some consideration in this TMDL.

One potential source of funding to carry out a project that embraces the intent of the WLA is the New Mexico Clean Water State Revolving Loan Fund program administered by NMED's Construction Program Bureau. The State of New Mexico Statewide Water Quality Management Plan Work Element 5 (adopted by the WQCC December 17, 2002 and approved by the USEPA April 16, 2003) notes that "…[a]s specified at 40 CFR 130.12(b), CWA Section 201 funding can only be awarded to DMAs [Designated Management Agencies] that are in conformance with the statewide Water Quality Management Plan (WQMP)." The MMDWSWA is a not currently a Designated Management Agency (WQMP Work Element 5). If the Association chooses to become a DMA, the first part of the above requirement has been met. As this WLA is a part of the WQMP, funding will be contingent on, among other factors, conformance with this part of the plan as well. This WLA recognizes the technological and economic challenge of meeting the nutrient effluent limitations presented herein and as discussed below and therefore provides two options for the MMDWSWA WWTP.

As noted above the facility discharges to the Mora River under authorization of an NPDES permit. Federal regulations (40 CFR 130.12(a) and 40 CFR 122.44(d)(1)(vii)) clearly require that NPDES permits must be consistent with the WLA of an adopted and approved TMDL. Thus it important to provide direction on implementation of the WLA such that effluent limits and schedules can be readily incorporated within the structure of a permit.

The New Mexico WQS (Subsection J of 20.6.4.12 NMAC) states it is the policy of the WQCC to allow schedules of compliance in NPDES permits where facility modifications need to be made to meet new water quality based requirements.

Option 1.

The facility will be required to meet the WLA. This option would necessitate that the MMDWSWA contract with an engineering firm to develop a Preliminary Engineering Review (PER) of a WWTP design that would meet the WLA. Once the design is completed, the Association would then need to construct and operate the WWTP.

A compliance schedule for completion of the PER, plant construction, and completion of the project will be:

- Interim Effluent Limits from the date of permit issuance through the completion of construction (not to exceed 4 years)
- Monitor and report TP and TN by 3-hour composite, not less than once per two weeks
- Final Effluent Limits after completion of construction of the New WWTP where the 30-day average concentration based limit (mg/L) by the facility design flow (MGD) x 8.34:
  - ➔ TP = 0.013 lbs/day (30-day average), 0.03 mg/L (30-day average), [30-day avg x 1.5] = 0.045 mg/L (daily max) measured by 3-hour composite, not less than once per two weeks.
  - ➔ TN = 0.165 lbs/day (30-day average), 0.38 mg/L (30-day average), [30-day avg x 1.5] = 0.57 mg/L (daily max) measured by 3-hour composite, not less than once per two weeks

Option 2.

Cluster Systems for wastewater treatment are an alternative to the centralized treatment of the existing aerated lagoons. The Cluster Systems offer a management solution that will eliminate the effluent discharge to the Mora River. Instead of discharging effluent to the river, the final dispersal of treated wastewater would be to leach fields and possibly to agricultural reuse. The NMED CPB and GWQB both support this option for wastewater treatment for the MMDWSWA.

A compliance schedule for completion of the PER, Cluster System construction, and completion of the project will be:

- Interim Effluent Limits from the date of permit issuance through the completion of construction (not to exceed 4 years)
- Monitor and report TP and TN by 3-hour composite, not less than once per two weeks
- Final Effluent Limits from 4 years and 1 day from the data of permit issuance through the end of the permit:
  - ➔ TP = 0.00 lbs/day (30-day average), 0.00 mg/L (30-day average), [30-day avg x 1.5] = 0.00 mg/L (daily max) measured by 3-hour composite, not less than once per two weeks.
  - ➔ TN = 0.00 lbs/day (30-day average), 0.00 mg/L (30-day average), [30-day avg x 1.5] = 0.00 mg/L (daily max) measured by 3-hour composite, not less than once per two weeks

In the event that MMDWSWA proceeds with this option, and after completion of construction, when the new treatment system is operational, the resulting WLA for the Mora River will be Zero for the WWTP. At that time, NMED may recalculate the WLA for the Mora National Fish Hatchery and Technology Center.

Mora National Fish Hatchery and Technology Center

The Mora National Fish Hatchery and Technology Center is currently not designed to treat effluent for TN and TP. The facility will need to develop and implement treatment to meet the new effluent requirements that will result from this TMDL.

A compliance schedule will be included in the NPDES permit for the facility to meet the new effluent requirements.

- Interim Effluent Limits from the date of permit issuance through the completion of treatment modification (not to exceed 4 years):
- Monitor and report TP and TN by 3-hour composite, not less than once per two weeks
- Final Effluent Limits from 4 years and 1 day from the data of permit issuance through the end of the permit:
  - ➔ TP = 0.122 lbs/day (30-day average), 0.03 mg/L (30-day average), [30-day avg x 1.5] = 0.045 mg/L (daily max) measured by 3-hour composite, not less than once per two weeks.
  - ➔ TN = 1.540 lbs/day (30-day average), 0.38 mg/L (30-day average), [30-day avg x 1.5] = 0.57 mg/L (daily max) measured by 3-hour composite, not less than once per two weeks

9.2 WRAS and BMP Coordination

In this watershed, public awareness and involvement will be crucial to the successful implementation of these plans and improved water quality. Staff from SWQB will work with stakeholders to provide guidance in developing the Watershed Restoration Action Strategy (WRAS). The WRAS is a written plan intended to provide a long-range vision for various activities and management of resources in a watershed. It includes opportunities for private landowners and public agencies in reducing and preventing impacts to water quality. This long-range strategy will become instrumental in coordinating and achieving constituent levels consistent with New Mexico's WQS, and will be used to prevent water quality impacts in the watershed. The WRAS is essentially the Implementation Plan, or Phase Two of the TMDL process. The completion of the TMDLs and WRAS leads directly to the development of on-the-ground projects to address surface water impairments in the watershed.

SWQB staff will assist with any technical assistance such as selection and application of BMPs needed to meet WRAS goals. Stakeholder public outreach and involvement in the implementation of this TMDL will be ongoing. Stakeholders in this process will include SWQB, and other members of the WRAS. SWQB will actively pursue engagement with land owners, ranchers and acequia associations as stakeholders in the implementation of this TMDL.

Implementation of BMPs within the watershed to reduce pollutant loading from nonpoint sources will be encouraged. Reductions from point sources will be addressed in revisions to NPDES

discharge permits. SWQB will communicate to designated federal land management agencies the intent of the TMDL and desire that BMPs be developed through the above coordination process.

9.3 Time Line

Table 9.1 details the proposed implementation timeline.

9.4 Clean Water Act §319(h) Funding Opportunities

The Watershed Protection Section of the SWQB provides USEPA §319(h) funding to assist in implementation of BMPs to address water quality problems on reaches listed as category 4 or 5 waters on the Integrated §303(d)/ §305(b) list. These monies are available to all private, for profit and nonprofit organizations that are authenticated legal entities, or governmental jurisdictions including: cities, counties, tribal entities, Federal agencies, or agencies of the State. Proposals are submitted by applicants two times a year through a Request for Proposal (RFP) process and require a non-federal match of 40% of the total project cost consisting of funds and/or in-kind services. Funding is available for both watershed group formation (which includes WRAS development) and on-the-ground projects to improve surface water quality and associated habitat. Further information on funding from the CWA §319 (h) can be found at the SWQB website: http://www.nmenv.state.nm.us/swqb/.

Table 9.1 Proposed Implementation Timeline

Implementation Actions	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**
Public Outreach and Involvement	X	X	X	X	X	X	X	X
Form watershed groups	X	X						
TMDL Development					X	X	X	X
WRAS Development				X	X	X		
Revise any NPDES permits as necessary (currently EPA Region 6)			X					X
Establish Performance Targets				X				
Secure Funding			X	X				
Implement Management Measures (BMPs)			X	X	X	X	X	X
Monitor BMPs			X	X	X			
Determine BMP Effectiveness					X	X	X	X
Re-evaluate Performance Targets						X	X	X

9.5 Other Funding Opportunities and Restoration Efforts in the Canadian River Basin

Several other sources of funding existing to address impairments discussed in this TMDL document. NMED's Construction Programs Bureau assists communities in need of funding for WWTP upgrades and improvements to septic tank configurations (such as the design of cluster systems). They can also provide matching funds for appropriate CWA §319(h) projects using state revolving fund monies. The USDA Environmental Quality Incentive Program (EQIP) program can provide assistance to private land owners in the basin. The USDA Forest Service aligns their mission to protect lands they manage with the TMDL process, and are another source of assistance. The BLM has several programs in place to provide assistance to improve unpaved roads and grazing allotments.