

APPENDIX H
RESPONSE TO COMMENTS

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Comments on Rio Hondo TMDL

Received at the Rio Hondo, March 17, 2005 Public Meeting

Jai Cross
P.O. Box 612
Arroyo Hondo, NM 87513

COMMENT: The families on the Atalaya Acequia (and the other eight acequias on the Rio Hondo) use water from the Rio Hondo to recharge wells, water animals, and irrigate crops. The cumulative effects of even small nutrient excesses could damage their health, livestock, food, and traditional life styles.

NMED/SWQB Response: The current designated uses for the perennial reaches of the Rio Hondo Watershed include domestic water supply, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat, and secondary contact (NMAC 20.6.4.124). The total phosphorus and total nitrogen TMDLs have been calculated using the current New Mexico standard for plant nutrients and segment-specific, numeric criteria that have proven to be protective of the stream by maintaining water quality standards and fully supporting the designated uses along the Rio Hondo.

Received at the Rio Hondo, March 17, 2005 Public Meeting

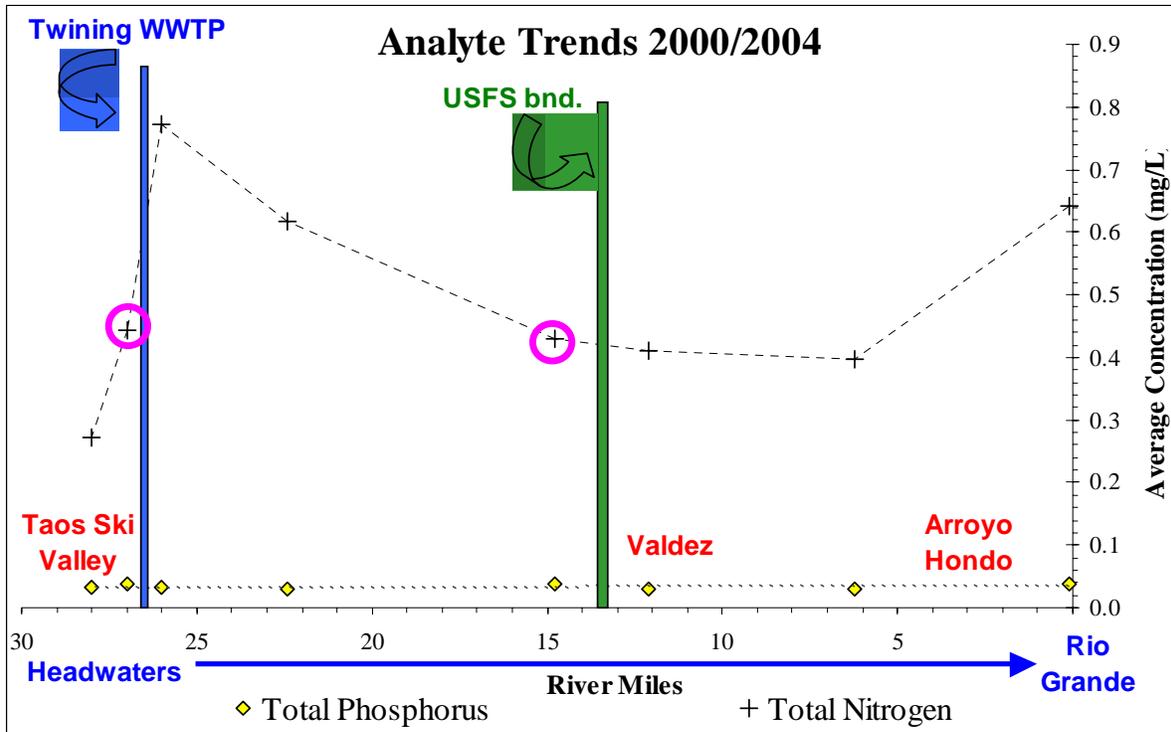
Phaedra Greenwood
P.O. Box 388
Arroyo Hondo, NM 87513

COMMENT: Dear Shelly, I am one of the downstream users of the Rio Hondo who depends on this water for domestic use. I have lived in the upper Hondo since 1971 and watched the river deteriorate. Yes, I do think it is cleaner than it was in 1981, but at Hondo 16 I am observing algal growth that indicates eutrophication. The last time I ate a trout from the river in Nov. 2004, the fish was slimy. I am not saying all this is coming from Taos Ski Valley, but since they already use 46%, to give them a plant double the size of the present one will preclude any growth downstream and use up your allocated 2% growth allocation. I agree there is much nonpoint pollution, but I am concerned that such a leap in growth at Taos Ski Valley will endanger the Rio Hondo. Please keep me informed. Thanks. Phaedra Greenwood

NMED/SWQB Response: Current design capacity for the WWTP is 0.95 million gallons per day (MGD). All calculations in development of these TMDLs used the proposed WWTP design capacity of 0.200 MGD. Since load is a function of concentration and discharge, all load calculations in the TMDL estimate treatment capacity in the future scenario, which accommodates projected growth through 2020 (see Section 8.0).

There are two potential contributors to nutrient enrichment in a given stream: excessive phosphorus and/or nitrogen. . Regarding phosphorus, the existing annual waste load allocation (WLA) for total phosphorus (TP) for this stream segment is 1.00 lbs/day as stated in the existing WWTP permit based on the 1981 analysis. The new WLA for TP, based on nutrient export calculations and background concentrations, is 1.47 lbs/day. Even though this draft TMDL calculated a higher TP waste load allocation than the current limit, the Village of Taos Ski Valley Wastewater Treatment Plant (WWTP) would like to maintain the current load (1.0 lbs/day) in their new NPDES permit. Clarification was added to the TMDL document (see page 27, Section 5.1.3). The Village of Taos Ski Valley WWTP will not increase phosphorus loading into the Rio Hondo watershed. The new WLA for total phosphorus will be 1.00 lbs/day, or 31% of the TMDL. The remaining 0.47 lbs/day will be set aside as part of the Margin of Safety.

Regarding nitrogen, data collected by the SWQB in 2000 and 2004 (graph shown below) reveal a spike in total nitrogen associated with the WWTP, but nitrogen concentrations decrease as the river flows downstream and the nutrients are assimilated into plant materials. By the time the water reaches the Forest Service boundary, TN concentrations are similar to those found above the WWTP (highlighted by pink circles). As the water flows past Arroyo Hondo, nitrogen concentrations increase again indicating an additional source of nitrogen entering the stream along this reach. In New Mexico, nonpoint sources are the most significant contributor to water quality exceedences; therefore, the best avenue to restore watershed health is to focus community efforts on a holistic approach to watershed protection.



The current average winter WWTP nitrogen loading is 14.23 lbs/day (average winter WWTP effluent concentration is 26.91 mg/L) based on effluent concentrations from the 2004 sampling survey conducted by the SWQB and the WWTP discharge flow reports. Given the proposed expansion and increase in discharge, the TMDL allocated 11.0 lbs/day total nitrogen to the WWTP. This is less than the current loading and will result in a maximum allowable effluent concentration of 6.5mg/L during the winter months (November through April). This is approximately four times lower than current effluent concentrations.

Received via U.S. Postal Service, March 21, 2005

Kathy Schlosser, P.E.
Taos Ski Valley WWTP
Design Engineer
The **Engineering** Company

COMMENT: This comment letter is written on behalf of the Village of Taos Ski Valley and The Engineering Co. The following comments are being submitted to the State of New Mexico after review of the Draft Total Maximum Daily Load (TMDL) for the Rio Hondo.

The Village of Taos Ski Valley is the current owner and operator of the wastewater treatment plant. Although Twining Water and Sanitation District is on record as the current permit holder, the District has been dissolved. Application for a new permit has been made in the name of the Village of Taos Ski Valley. The references in the TMDL document should be changed to reflect the change in ownership.

***NMED/SWQB Response:** References to Twining Water and Sanitation District (TWSD) in the TMDL document have been changed to the Village of Taos Ski Valley (VTSV) to reflect the change of ownership.*

COMMENT: According to the TMDL document, stream data was collected from the Rio Hondo for a period of nine months in 2004. However, it is not clear from the document how that data was analyzed and used to evaluate acceptable stream loadings. According to the TMDL, numeric targets have been adopted from the 1981 evaluation because they “have proven effective”. I would like to have more explanation of how that decision was made and how the new stream data supports that decision. It is not evident that the current condition of the river has been considered in the evaluation of the load calculations.

***NMED/SWQB Response:** The data were assessed using the Surface Water Quality Bureau’s Assessment Protocol, which can be found on the New Mexico Environment Department’s – SWQB website (<http://www.nmenv.state.nm.us/swqb/Library/index.html>).*

Based on this assessment, the Rio Hondo (South Fork to Lake Fork Creek) was not listed as an impaired reach in the 2004-2006 State of New Mexico Integrated Clean Water Act §303(d)/§305(b) Report. Since historical records show that this assessment unit was impaired for plant nutrients and current analysis indicates it is not impaired, it can be concluded that the TP

effluent limits that were enacted in the 1981 WLA were effective at reducing phosphorus pollution and improving stream water quality.

Nevertheless, there are two potential contributors to nutrient enrichment in a given stream: excessive phosphorus and/or nitrogen. In 1981, algal bioassays and laboratory analysis of ambient waters determined that the Rio Hondo was a phosphorus-limited system, which is why only a TP effluent limit was required in the NPDES permit. In 2004, algal bioassays and laboratory analysis indicated that under current conditions both nitrogen and phosphorus are driving the productivity of algae and macrophytes in the stream below the treatment plant (Appendix B). Therefore, to ensure that the narrative water quality standards are met along this stream reach, the SWQB staff wrote TMDLs for both TP and TN.

For this TMDL document the target concentrations for plant nutrients were determined based on 1) the presence of numeric and narrative criteria, 2) the degree of experience in applying the indicator, and 3) the ability to easily monitor and produce quantifiable and reproducible results. Specifically, the target values for plant nutrients were based a narrative criterion with numeric translators. The target concentrations were chosen because they are forthcoming segment-specific criterion for phosphorus and numeric translators for nitrogen based on recommendations in the 1981 Rio Hondo WLA, as opposed to EPA-recommended ecoregional criteria, and because they were consistent with the New Mexico State antidegradation policy.

COMMENT: The Rio Hondo is currently in attainment and according to the TMDL current limits have proven effective. That fact is not consistent with the extremely low total nitrogen limits that have been proposed. Again since the stream is currently in attainment and current nitrogen loadings in the river are acceptable, I propose an alternative methodology for determining the future waste load allocation for the WWTP and the stream's "numeric target".

The calculations for this approach would be as follows.

Non-point:	11.8 lbs/day (TMDL Table 5-2)
Background:	6.84 lbs/day (TMDL Table 5-2)
MOS:	1.6 lbs/day (TMDL Table 5-2)
WWTP:	14.23 lbs/day (calculated by TEC)
TMDL:	34.47 lbs/day

The growth factor would not be included in this calculation, because we are determining the present day loading on the river.

The current WWTP loading was calculated based on the total nitrogen concentrations determined by NMED in their 2004 sampling program coupled with the WWTP discharge flow reports. The attached spreadsheet details the calculations [see tables below].

To determine the future nitrogen load that should be allocated to the WWTP, subtract all other loads from the numeric target of 34.47 lbs/day, including the growth factor of 0.63 lbs/day. This leaves 13.6 lbs/day total nitrogen to be allocated to the WWTP. At 0.2 million gallons per day, an allowable 30-day average concentration is 8.15 mg/L, assuming 0-percent capture of septic systems.

**Village of Taos Ski Valley Wastewater Treatment Plant
Total Nitrogen Discharged**

Samples collected by NMED from TMDL Appendix A

Date	nitrate & nitrite mg/L	TKN mg/L	Total N mg/L
2/11/2004	28	1.14	29.14
2/26/2004	22	4.76	26.76
3/10/2004	13	27	40
3/24/2004	20	7.12	27.12
4/06/2004	17	1.1	18.1
4/21/2004	19	1.34	20.34
8/24/2004	27	0.343	27.343

VTSV WWTP flow records

Date	Total Daily Flow		Total N
	GPD	MGD	lbs/day
2/11/2004	42000	0.042	10.21
2/26/2004	91000	0.091	20.31
3/10/2004	66000	0.066	22.02
3/24/2004	72000	0.072	16.29
4/06/2004	57000	0.057	8.60
4/21/2004	47000	0.047	7.97
8/24/2004	16000	0.016	
Winter Average			14.23

NMED/SWQB Response: An approach similar to this was considered, but given the cultural importance of the Rio Hondo and the fact that bioassay results have shown a changing dynamic in the river over the past 20 years the SWQB felt a more conservative approach was warranted.

I look forward to NMED's response to these concerns.

Sincerely,
Kathy Schlosser, P.E.
Design Engineer
The **Engineering** Company

Received via U.S. Postal Service, March 24, 2005

Jim Levy
P.O. Box 1602
El Prado, NM 87529

COMMENT: I think that the presentation made by Ms. Lemon and Ms. Turner was too limited in scope to be of use to the public. It informed us of current levels of nitrogen and phosphorus in the Rio Hondo and potential future levels if the Taos Ski Valley is allowed to build a sewage treatment plant of 200,000 gallons of water usage a day. It did not address the question of the Ski Valley's poor record in operating their plant and what effects of poor operation might have on the river. Nor did it address the effects of the new plant on the Ski Valley's ability to grow, and thus to potentially outgrow the new plant, and the subsequent effects on down-stream users.

When asked about these issues, the presenters said that those are not their jobs; their jobs is to only assess the water. Each NM department takes this narrow view of its responsibilities in order to avoid addressing the larger and more realistic consequences of a new, larger plant and the growth that is sure to follow.

This situation requires a full Environmental Impact Statement that takes into account complex factors that NM Water Quality is not able to access.

NMED/SWQB Response: The mission of the SWQB is to preserve, protect and improve New Mexico's surface water quality for present and future generations. According data collected during the 2000 and 2004 water quality surveys, the Rio Hondo is currently meeting state standards for plant nutrients and was not listed on the 2004-2006 STATE OF NEW MEXICO INTEGRATED CLEAN WATER ACT §303(D)/ §305(B) REPORT for plant nutrients.

The NPDES permit program is responsible for the protection of surface water quality throughout the State by regulating point source discharges of pollutants to surface watercourses. Since the program's inception, EPA Region 6 based in Dallas, TX, has administered the program in New Mexico with assistance and oversight by the SWQB Point Source Regulation Section. New Mexico is currently pursuing state authorization for the program.

Federal laws provide the EPA with various methods of taking enforcement actions against violators of permit requirements. Equally important is how the general public can enforce permit conditions. The facility monitoring reports are public documents, and the general public can review them. If any member of the general public finds that a facility is violating its NPDES permit that a member can independently start a legal action.

The SWQB is not the ultimate decision-making authority with regards to whether or not the WWTP will expand or how the Village of Taos Ski Valley or private land owners choose to develop their land, but the SWQB can provide maximum allowable effluent concentrations that will continue to be protective of the river and ensure the river's designated uses continue to be supported.

Sent via Email, March 24, 2005 4:56 PM

Tom Harris
P.O. Box 313
Arroyo Hondo NM 87513

COMMENT: If non point sources of water pollution on the Rio Hondo are more significant than the point source of the Twining sewerage treatment plant, then the reason for the existence of those non point sources should be examined. (Runoff from ski trails, urban development , backyard use of fertilization/landscaping, parking lots, traffic, etc) and septic tanks of all those developments that have been built as a result of the existence of the ski resort. During the irrigation season of 2004, the growth of filamentous algae in acequia Madre del Llano has become more apparent. This plant is an indicator of dissolve nutrients in the water of the Rio Hondo. Acequias are becoming “ vegetated swales ”

NMED/SWQB Response: The SWQB agrees with this comment. As stated in the TMDL, individual wasteload allocations for construction activities covered under general permits were not possible to calculate at this time using available data and analysis tools. Loads that are in compliance with the general permits are therefore currently calculated as part of the load allocation. At this time, the SWQB does not have the tools, site-specific data, and/or resources to conduct the necessary detailed studies to be able to accurately determine waste load allocations from construction activities covered under general permits.

The SWQB has previously discussed this issue with EPA Region 6, and both parties performed research to determine if there are any examples from other states on how to approach this issue with construction activities covered under general permits. There are no good examples at this time, but several states are developing methods of including stormwater runoff from construction activities in their TMDLs, but they are still in the early stages of development. Storm water discharges from construction activities are transient because they occur mainly during the construction itself, and often only during storm events. Therefore, protection of the receiving water is best addressed through individual Storm Water Pollution Prevention Plans that are required as part of the construction process.

In New Mexico, nonpoint sources are the most significant contributor to water quality exceedences; therefore, the best avenue to restore watershed health is to focus community efforts on a holistic approach to watershed protection. The Rio Hondo/Upper Rio Grande Watershed Group will be addressing various nonpoint sources when they develop a Watershed Restoration Action Strategy (WRAS). In addition, the SWQB will be conducting another intensive survey of the Rio Hondo watershed in 2008 to monitor and assess multiple biological, chemical, and physical water quality parameters of the perennial surface waters in this watershed. If the data from this survey indicate impairments then new TMDLs will be written accordingly.

COMMENT: There are documented occurrences of untreated sewage entering the Rio Hondo from the ski valley area. If ski valley sewage is under an EPA waste water permit, And untreated sewage enters the Rio Hondo, There appears to be a violation of the Permit.

NMED/SWQB Response: There are various methods used to monitor NPDES permit conditions. The permit requires the facility to sample its discharges and notify EPA and the state regulatory agency of these results. In addition, the permit will require the facility to notify EPA and the state regulatory agency when the facility determines it is not in compliance with the requirements of a permit. EPA and state regulatory agencies also will send inspectors to companies in order to determine if they are in compliance with the conditions imposed under their permits.

Federal laws provide EPA and authorized state regulatory agencies with various methods of taking enforcement actions against violators of permit requirements, whether or not those violations were accidental or intentional. For example, EPA and state regulatory agencies may issue administrative orders, which require facilities to correct violations and that assess monetary penalties. The laws also allow EPA and state agencies to pursue civil and criminal actions that may include mandatory injunctions or penalties, as well as jail sentences for persons found willfully violating requirements and endangering the health and welfare of the public or environment. Equally important is how the general public can enforce permit conditions. The facility monitoring reports are public documents, and the general public can review them. If any member of the general public finds that a facility is violating its NPDES permit, that member can independently start a legal action unless EPA or the state regulatory agency has already taken an enforcement action.

COMMENT: It is suggested that there is a serious need for comprehensive evaluation of the resource defined by the Rio Hondo and the associated drainage system. The Rio Hondo, certainly is not an unlimited resource. It is suggested that this limit has already been exceeded.

Historically, the cultural use of the waters of the Rio Hondo has been for Domestic and Agricultural purposes.

The State has subverted the use granted and authenticated by Treaty.

NMED/SWQB Response: Comments regarding water rights need to be directed to Office of the State Engineer (OSE) and the Interstate Stream Commission (ISC). The OSE and the ISC are separate but companion agencies charged with administering the state's water resources. The agencies have jurisdiction over the supervision, measurement, appropriation and distribution of essentially all surface and ground water in New Mexico, including streams and rivers that cross state boundaries.

The New Mexico Acequia Commission is comprised of a group of local acequia members appointed by the Governor to advise the state on matters affecting the acequia and ditch associations throughout New Mexico. Many acequias are in litigation for deciding water rights in their areas. The Commission makes recommendations to the committee assigned with reviewing applications for Acequia and Community Ditch funds, which are utilized by acequias for their adjudications.

Sent via FAX, March 25, 2005 9:15 AM

Mickey Blake
Taos Ski Valley, Inc.
P.O. Box 24603
El Prado, NM 87529

COMMENT: Very well run and informative meeting. I attended the first session. Draft TMDL is very thorough.

NMED/SWQB Response: Thank you for your comments and support.

Sent via Email and U.S. Postal Service, April 5, 2005 9:18 AM

Peter A. Vigil, District Manager
Taos Soil and Water Conservation District
P.O. Box 2787
Ranchos de Taos, NM 87557

COMMENT: The following comments are submitted on behalf of the Taos Soil and Water Conservation District. The comments refer to the version of the TMDL document that was available on the NMED web site on March 7, 2005 and includes information and clarifications from the public meeting in Taos on March 17, 2005. The general concern of the District is that the watersheds or stream segments be listed based on the best scientific data and that impairment decisions and eventual TMDL implementation actions be based on clear links between data and the causes of impairments. This relates to the specific concern that any proposed TMDL implementation actions that affect District actions or policies be in the overall best interest of the health of the target watershed.

The TMDL documents that were reviewed focus on nutrient impairment for the Rio Hondo segment in Taos County, New Mexico, from the confluence with the Rio Hondo South Fork, upstream to Lake Fork Creek. This segment is not currently listed as impaired on the New Mexico 303(d) list as reported to USEPA. The Department and the Surface Water Quality Bureau should be complimented on taking the extra step of reviewing the nutrient loading on a stream segment that is not listed and providing an improved scientific basis for any future permitting action that might impact this stream segment, specifically potential changes at the Twining Sanitation Plant in the Taos Ski Valley. However, the linkage between the existing waste load allocation for phosphorous for this stream segment and the TMDL should be explained in more detail in the document. Also, inclusion of a comparison between the current conditions in the Rio Hondo, expected future conditions and current loads from the treatment plant in comparison to possible future loads, with the proposed waste load allocation, would be helpful.

NMED/SWQB Response: Thank you for recognizing the SWQB's initiative in writing a TMDL for an unimpaired stream segment. The existing annual waste load allocation (WLA) for total phosphorus (TP) for this stream segment is 1.00 lbs/day. The new WLA for TP, based on nutrient export calculations and background concentrations, is 1.47 lbs/day. Even though this TMDL calculated a higher TP waste load allocation than the current limit, the Village of Taos Ski Valley Wastewater Treatment Plant (WWTP) would like to maintain the current load (1.00 lbs/day) in their new NPDES permit. Clarification was added to the TMDL document (see page 27, Section 5.1.3). The Village of Taos Ski Valley WWTP will not increase phosphorus loading into the Rio Hondo watershed. The following tables are the current and proposed TP effluent limitations for the Village's WWTP:

CURRENT WWTP Effluent Limitations

Total Phosphorus			
	Current Q_e	Current WLA	Current C_e
Month	(mgd)	(lbs/day)	(mg/L)
January	0.095	0.79	1.0
February	0.095	0.79	1.0
March	0.095	0.79	1.0
April	0.095	0.79	1.0
May	0.095	1.59	2.0
June	0.095	1.59	2.0
July	0.048	1.21	3.0
August	0.048	1.21	3.0
September	0.019	0.79	5.0
October	0.019	0.79	5.0
November	0.095	0.79	1.0
December	0.095	0.79	1.0
Annual	0.095	1.00	1.2

PROPOSED WWTP Effluent Limitations

Total Phosphorus			
	Proposed Q_e	Current WLA	NEW C_e
Month	(mgd)	(lbs/day)	(mg/L)
January	0.200	0.79	0.5
February	0.200	0.79	0.5
March	0.200	0.79	0.5
April	0.200	0.79	0.5
May	0.200	1.59	1.0
June	0.200	1.59	1.0
July	0.100	1.21	1.5
August	0.100	1.21	1.5
September	0.040	0.79	2.5
October	0.040	0.79	2.5
November	0.200	0.79	0.5
December	0.200	0.79	0.5
Annual	0.200	1.00	0.6

where Q_e is the WWTP effluent discharge in million gallons per day (mgd), WLA is the 1981 waste load allocation, and C_e is the WWTP effluent limit in milligrams per liter (mg/L).

COMMENT: It is understood that the estimates of non-point source contributions to the nutrient load entering the Rio Hondo are based on export coefficients from published literature and that the most conservative coefficients were selected. This process most likely results in an overestimate of the contributions from these sources. However, the District remains uncomfortable with the small (5%) margin of safety assigned to the loading estimates. The documents that provide details of the export coefficients should be provided to allow consideration of all factors that were not considered (i.e. slope) and to allow a determination, if in fact these coefficients would remain conservative under all conditions. Additionally, since the margin of safety is based on a protocol (verbal communication, March 17, 2005), that protocol should also be included in the document for review.

NMED/SWQB Response: The SWQB believes that the combination of relatively conservative numeric targets and source estimates creates an overall Margin of Safety that is adequate to

account for uncertainty in this analysis. The Margin of Safety (page 32, Section 6.0) was reworded to explain, in more detail, the conservative assumptions and explicit uncertainties that were fundamental in this analysis. A TMDL is generally divided into a Load Allocation for nonpoint sources, a Waste Load Allocation for point sources, and a Margin of Safety for uncertainties. This analysis went one step further and also allocated the load to background and future sources. The background allocation amounted to 17% for total phosphorus and 21% for total nitrogen. This allotment was set aside for current, ambient conditions and was not lumped into the LA, as was done in the past when suitable reference reaches were not known and background conditions could not be established. The separation of background load from the LA gives added reassurance that nonpoint source loads are more appropriate for the system and that applicable water quality standards will continue to be attained.

The documents that provide details on the export coefficients were footnoted under the respective tables and were listed in the references (Section 13.0).

COMMENT: Specifically, the District has concerns about the manner in which the nitrogen load from septic systems was estimated. It is unclear if the chosen export coefficients would apply in a linear manner to the larger systems included in the nitrogen loading estimates. Also it is not clear if the chosen export coefficient is appropriate and conservative for steep slopes and highly transmissive soils of Taos Ski Valley. Furthermore, not all systems are discussed, specifically the status of contributions from the Taos East Condominiums, located just upstream of the Rio Hondo South Fork are not discussed.

NMED/SWQB Response: The SWQB consulted with both the NMED Field Office in Taos and the Ground Water Quality Bureau when researching the number of septic systems in the valley. According to this research, there are a total of 77 Liquid Waste Disposal Permits and 2 Ground Water Discharge Permits issued by NMED for septic systems in this assessment unit. As stated in the text of the draft TMDL, the Liquid Waste Disposal Permits are issued to on-site systems that discharge less than 2000 gallons per day, whereas the Ground Water Discharge Permits are for on-site systems that discharge greater than 2000 gallons per day. The only permittees that were identified by name were the Austing Haus and the Inn at Taos Ski Valley.

The use of export coefficients to estimate septic loads was the best available method given the available dataset and given that detailed watershed models have not been developed for the Rio Hondo watershed. The export coefficient selected for septic systems assumes that all septic tanks are operating properly and that all tanks discharge periodically. In addition, it was assumed that all permitted tanks were within 100 yards of the stream. The results provided an approximation of the loading to the Rio Hondo watershed. However, the SWQB concedes that there may be households, businesses, or multifamily housing units that have illegal, undocumented, or malfunctioning septic systems. Unfortunately, the SWQB currently does not have the tools, site-specific data, and/or resources to conduct the necessary detailed studies to be able to accurately determine all groundwater contributions from septic systems in the valley.

COMMENT: However, even with these concerns the District supports the concept of trading non-point loads from septic systems to point source loads for the treatment plant, especially the phased approach proposed to allow time for the infrastructure installation and verification of transfer of the loads. However, it seems that the treatment plant should not be given credit for the full load. This position is based on three facts, (1) the load estimates from the non-point sources is assumed to be conservative, (2) overestimating the actual nitrogen load particularly from residential septic systems, the treatment plant should be capable of providing more efficient removal of the nitrogen than septic systems, and (3) the complete load for nitrogen to the stream, with the 5% margin of safety and 2% growth allowance has been completely allocated. This transfer from non-point to point source discharge, if allowed with some fixed percentage allocated for the transfer of septic systems loads to the treatment plant would increase the buffer in the receiving water and potentially result in a net improvement to the water quality as opposed to the status quo.

Also, the District would encourage the Bureau and The Village to explore other opportunities for trades that would result in a net benefit to the receiving water body. For example, improvements to the existing parking facilities could be proposed by the Village for approval by NMED staff, which would result in additional waste load being eliminated that could be transferred to the point source discharge category. This could again, be at some reduced allocation to preserve the assimilative capacity and health of the receiving water. This would also likely reduce loading in other categories, such as sediment and some organic pollutants that are not currently of concern for the Rio Hondo, but which should always be considered in non-point discharges.

NMED/SWQB Response: The SWQB agrees with these comments. The Draft TMDL includes a section on trading to encourage creative, alternative solutions to maintaining water quality standards given the current growth projections. Water quality trading in the Rio Hondo watershed should be discussed by key parties, such as dischargers in the watershed, federal, tribal, state, and local governments, local businesses, as well as local citizen and interest groups. It is up to the individual trading committees to determine the nature of the trading activity, identify the environmental problem associated with the trading, establish the types of trading that will occur (ex: point/point, point/nonpoint), and agree on the trading ratios that will apply. Water quality trading is voluntary, however all sources that choose to participate in trading will have to adhere to accountability mechanisms established by the trading program to ensure that promised pollutant reductions are generated.

In conclusion the District is supportive of this effort to maintain the Rio Hondo as a high quality water body and looks forward to working with you and other staff from the Environment Department on this and other projects on Taos County.

Sincerely,
Peter A. Vigil, District Manager
Taos SWCD

Received via U.S. Postal Service, April 6, 2005

Joanie Berde
Carson Forest Watch
P.O. Box 15
Llano, NM 87543

COMMENT: On behalf of the Carson Forest Watch citizen's group, the following comments on the Draft TMDL for the Rio Hondo at Taos Ski Valley and Village –

- 1) While we strongly support getting TMDL limits for all stream systems in New Mexico, we are concerned that the limits being proposed may not be adequate to protect water quality in the Rio Hondo – especially downstream water quality.
- 2) The cumulative effects of all users that could impair water quality were not adequately addressed in the Draft TMDL. Direct and indirect uses including future development in TSV were not adequately addressed.
- 3) The resulting effluent from future TSV growth and new treatment plant were not adequately addressed in the Draft. The Draft failed to analyze how sewage treatment plants work at such high altitudes such as Taos Ski Valley. We are concerned regarding the effectiveness of sewage treatment in such extreme weather conditions as 10,000' altitude. There was no data in the Draft TMDL to support statements that the TMDL limits being proposed will be adequate for the Rio Hondo – esp. since effluent levels will likely double in the future.

***NMED/SWQB Response:** As stated in the TMDL, individual waste load allocations for construction activities covered under general permits were not possible to calculate at this time using available data and analysis tools. Loads that are in compliance with the general permits are therefore currently calculated as part of the load allocation. The SWQB does not have the tools, site-specific data, and/or resources to conduct the necessary detailed studies to be able to accurately determine waste load allocations from construction activities covered under general permits.*

The SWQB has previously discussed this issue with EPA Region 6, and both parties performed research to determine if there are any examples from other states on how to approach this issue with construction activities covered under general permits. There are no good examples at this time, but several states are developing methods of including stormwater runoff from construction activities in their TMDLs, but they are still in the early stages of development. Storm water discharges from construction activities are transient because they occur mainly during the construction itself, and often only during storm events. Therefore, protection of the receiving water is best addressed through individual Storm Water Pollution Prevention Plans that are required as part of the construction process.

Furthermore, all calculations in development of this TMDL used the projected plant design capacity of 0.200 MGD, instead of the current design capacity of 0.095 MGD. Consequently, all flow calculations in this TMDL estimate treatment capacity in the future scenario, which

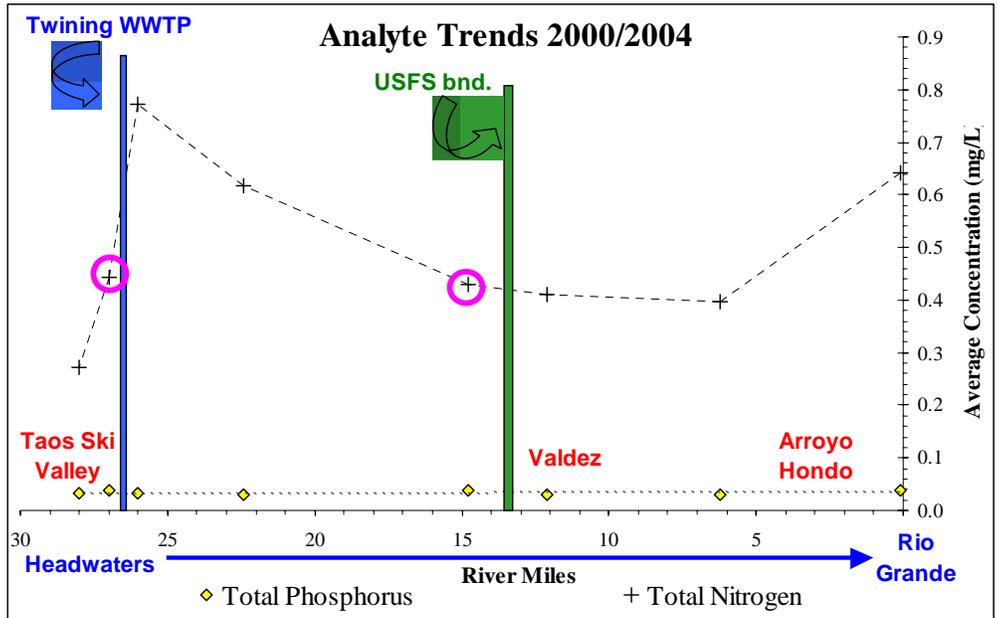
accommodates projected growth through 2020 (see Section 8.0). Future projections also indicate that nonpoint sources of phosphorus will more than likely increase as the Village of Taos Ski Valley continues to grow and develop. Therefore, in addition to the projected growth that was integrated into the TMDL calculations, two percent of the TMDL was set aside for a growth allocation (GA), as a placeholder for unknown or future sources of nutrients.

COMMENT:

- 4) The Draft TMDL did not adequately address Taos Pueblo usage concerns – esp. ceremonial and traditional cultural use. This stream is critical for the ongoing practice of Taos Pueblo spiritual and cultural life and the strictest TMDL limits should be imposed for the Rio Hondo.

- 5) Finally – downstream water users and uses were not adequately provided for in the Draft TMDL. Acequia use, community agricultural use, and recreational use were not adequately analyzed. This was an important public concern, and the TMDL needs to address how the limits being proposed will impact downstream water quality.

NMED/SWQB Response: The current applicable designated uses for the perennial reaches of the Rio Hondo Watershed include domestic water supply, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat, and secondary contact (NMAC 20.6.4.124). Target nutrient loads for the Rio Hondo were calculated based on the critical 4Q3 low flow values, forthcoming segment-specific numeric criteria for phosphorus, numeric translators for nitrogen based on recommendations in the 1981 Rio Hondo WLA, and a conversion factor that is used to convert to lbs/day. These TMDLs were calculated for the upper Rio Hondo and are designed to protect the stream by maintaining water quality standards and fully supporting the designated uses.



Regarding nitrogen, data collected by the SWQB in 2000 and 2004 (graph shown below) reveal a spike in total nitrogen associated with the WWTP, but nitrogen concentrations decrease as the river flows downstream and the nutrients are assimilated into plant materials. By the time the water reaches the Forest Service boundary, TN concentrations are similar to those found above the WWTP (highlighted by pink circles). As the water flows past Arroyo Hondo, nitrogen concentrations increase again indicating an additional source of nitrogen entering the stream along this reach. Since water flows downstream, if water quality standards are being maintained in the upper reaches of the Rio Hondo then they should also be maintained in the lower reaches of the Rio Hondo unless there are additional nonpoint source inputs of nutrients to the stream and/or environmental factors (i.e. water diversions, temperature increases, etc.) that encourage the growth of nuisance algae.

COMMENT:

- 6) Also, much more needs to be done regarding the monitoring of the Rio Hondo in the future – to ensure compliance with TMDL limits.

NMED/SWQB Response: The SWQB will be conducting another intensive survey of the Rio Hondo watershed in 2008 to monitor and assess multiple biological, chemical, and physical water quality parameters of the perennial surface waters in this watershed. If the data from this survey indicate impairments then new TMDLs will be written accordingly.

In addition, the NPDES permit program is responsible for the protection of surface water quality throughout the State by regulating point source discharges of pollutants to surface watercourses. Since the program's inception, the EPA has administered the program in New Mexico with assistance and oversight by the SWQB Point Source Regulation Section. Congress provided a process and encouraged the states to develop and implement the program [CWA §101(b)]. New Mexico is now pursuing state authorization for the program.

Federal laws provide EPA with various methods of taking enforcement actions against violators of permit requirements. Equally important is how the general public can enforce permit conditions. The facility monitoring reports are public documents, and the general public can review them. If any member of the general public finds that a facility is violating its NPDES permit, that member can independently start a legal action.

Thank you.
Sincerely,
Joanie Berde
Carson Forest Watch

Sent via Email, April 11, 2005 9:41 AM, 12:29 PM

Sent via FAX, April 11, 2005, 9:57 AM

Received via U.S. Postal Service, April 11, 2005

Sent via Email, April 12, 2005, 9:47 AM

NMED/SWQB Response NOTE: Several Arroyo Hondo residents, Amigos Bravos, and the Rio Pueblo/Rio Embudo Watershed Protection Coalition submitted the following comments in multiple formats. The bodies of these comments were the same and will be addressed at the same time. The introductions are as follows:

Larry Frank
Resident of the Rio Hondo Watershed
P.O. Box 290
Arroyo Hondo, NM 87513

Mark Schiller & Kay Mathews
Rio Pueblo/Rio Embudo Watershed
Protection Coalition
Box 6 El Valle Rt.
Chamisal, NM 87521

INTRODUCTION: As a resident of the Rio Hondo Watershed, [*As members of the Rio Pueblo/Rio Embudo Watershed Protection Coalition,*] I would like to communicate a number of concerns about the draft TMDL document for the Rio Hondo. The Rio Hondo has significant cultural, economic, and ecological value to residents of the Watershed and New Mexico. Good water quality is integral to all of these values and therefore it must be restored and protected. I urge the New Mexico Environment Department to consider the following issues when finalizing the TMDL.

The entire process of assessing potential impacts to the river is flawed by only looking at a portion of the river. All too often government regulatory agencies fragment their evaluation of potential impacts in order to avoid looking at the cumulative impacts of their decisions. The only way to access the full range of impacts to the river is to look at the river as a whole.

The downstream communities not only predate the Village of Taos Ski Valley, they predate the sovereignty of the United States Government. As such, their pre-existing uses of the river, irrigating crops, watering domestic stock and, in the case of Taos Pueblo, ceremonial practices, must be given special consideration when formulating TMDLs for upstream areas.

NMED/SWQB Response: The SWQB agrees that the monitoring, assessment, TMDL development, and watershed protection activities should be in the best interest of the target watershed. The mission of the SWQB is to preserve, protect and improve New Mexico's surface water quality for present and future generations. SWQB works collaboratively with stakeholders, such as federal, tribal, state, and local governments, local businesses, and point source dischargers in the watershed, as well as local citizen and interest groups to help protect and improve the biological, chemical, and physical integrity of surface waters in the State of New Mexico.

According data collected during the 2000 and 2004 water quality surveys, the Rio Hondo is currently meeting state standards for plant nutrients and was not listed on the 2004-2006

STATE OF NEW MEXICO INTEGRATED CLEAN WATER ACT §303(D)/ §305(B) REPORT for plant nutrients. Since water flows downstream, if water quality standards are being attained in the upper reaches of the Rio Hondo, as indicated by this data, then they should also be attained in the lower reaches of the Rio Hondo unless there are additional nonpoint source inputs of nutrients to the stream and/or environmental factors (i.e. water diversions, temperature increases, etc.) that encourage the growth of nuisance algae.

The current applicable designated uses for the perennial reaches of the Rio Hondo Watershed include domestic water supply, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat, and secondary contact (NMAC 20.6.4.124). Target nutrient loads for the Rio Hondo were calculated based on the critical 4Q3 low flow values, segment-specific numeric criteria for phosphorus, numeric translators for nitrogen based on suggestions in the 1981 Rio Hondo WLA, and a conversion factor that is used to convert to lbs/day. These TMDLs were calculated for the upper Rio Hondo and are designed to protect the stream by maintaining water quality standards and fully supporting the designated uses throughout this reach.

Rachel Conn
Amigos Bravos
P.O. Box 238
Taos, NM 87571

INTRODUCTION: As a statewide river conservation organization based in Taos, Amigos Bravos, Friends of the Wild Rivers, would like to submit the following comments on the draft TMDL document for the Rio Hondo. In New Mexico, issues of water quality and quantity are integral to all aspects of life. The cultural and ecological survival of the communities of New Mexico is intricately tied to our rivers, acequias and other water bodies and we strongly support efforts to curb pollution to our waters through strong TMDL documents with enforceable implementation plans. We have organized our comments into a number of general topic areas:

NMED/SWQB Response: The SWQB understands your concern and appreciates your commitment to improving the health of watersheds statewide. The SWQB agrees that the monitoring, assessment, TMDL development, and watershed protection activities should be in the best interest of the target watershed. The mission of the SWQB is to preserve, protect and improve New Mexico's surface water quality for present and future generations. SWQB works collaboratively with stakeholders, such as federal, tribal, state, and local governments, local businesses, and point source dischargers in the watershed, as well as local citizen and interest groups to help protect and improve the biological, chemical, and physical integrity of surface waters in the State of New Mexico.

IMPLEMENTATION PLAN

Where are the guarantees that this TMDL document is not merely a paper exercise? Amigos Bravos holds that TMDLS, including their implementation plans, should be written as enforceable documents. On page 38 the TMDL states "Implementation of BMPs within the watershed to reduce pollutant loading from NPS will be encouraged." How will the Environment Department encourage BMPs? The implementation plan should include detailed plans as to

what types of BMPs will be encouraged, and ideally required, to meet water quality standards. TMDLs, should be written with equal focus on presenting data on current conditions *and* implementing plans to clean up the river. Most TMDL documents are heavy on data on the current conditions and the target conditions but lack detail on how to get to that target. Two pages out of forty-five is not giving TMDL implementation adequate attention.

NMED/SWQB Response: The SWQB concurs that TMDLs may be more effective if they could be written as 100% enforceable documents. The final “TMDL Rule” published in the Federal Register July 13, 2000, would have given states the authority to regulate nonpoint source discharge under the TMDL program. This rule was subsequently withdrawn due to intense pressure from the regulated community. As such, SWQB does not have the authority other than those noted in the Assurances section of the document to regulate nonpoint sources.

Even so, SWQB believes TMDLs are not merely paper exercises. There are several required elements in TMDLs, per EPA guidance, which is why the TMDL itself is heavy on current conditions and target conditions. TMDLs are the guiding document for development of Watershed Restoration Action Strategies (WRAS) by local stakeholders with assistance from the SWQB Watershed Protection Section (WPS). The WRAS is in essence the TMDL Implementation Plan, or phase 2 of the TMDL process. The WRAS provides details on the type and location of BMPs based on local stakeholder knowledge, individual stakeholder interest, and the technical restoration expertise of WPS staff that will best address the impairments detailed in the TMDL. Development of the TMDL and WRAS opens up funding opportunities through the Clean Water Act 319 program to implement these BMPs in the watershed. SWQB has and will continue to encourage BMP implementation through technical assistance during the development of the WRAS, as well as technical assistance during development, implementation, and monitoring of CWA 319 projects.

ALGAL GROWTH

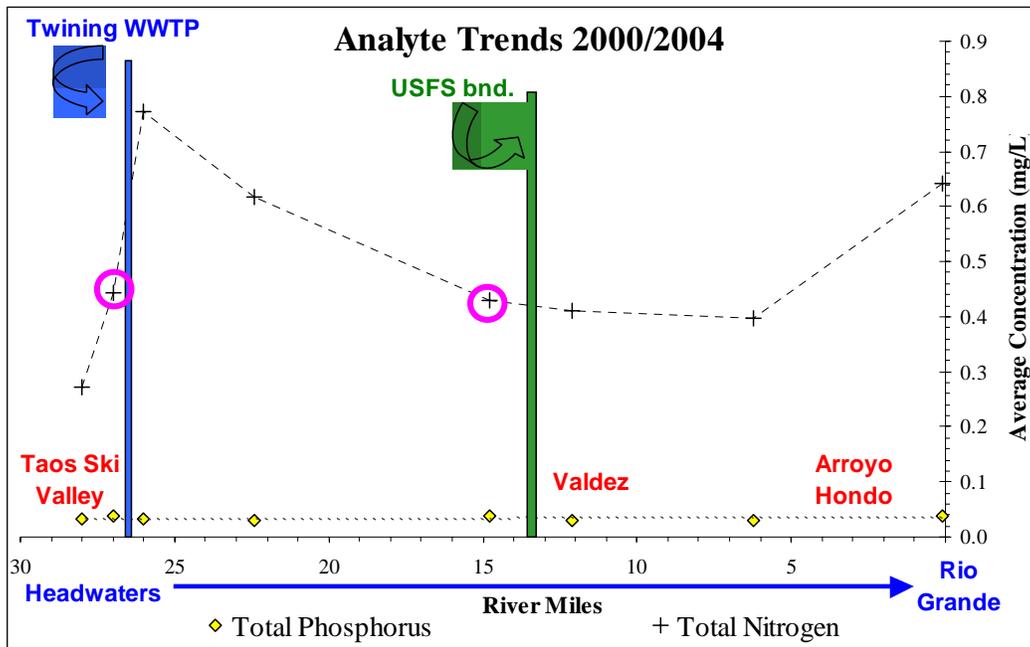
Numerous community members have commented on the increase of algal growth in Rio Hondo, both in their acequias and in the Rio Hondo right at the Forest Service boundary. Because they have observed this algal growth at the Forest Boundary, before it flows through downstream communities, it is believed that the increased growth is due to nutrient loading upstream. Perhaps nutrients are being transported during storm events and are not being monitored since most, if not all, monitoring takes place during non-storm conditions. The issue of algal growth needs to be further examined.

NMED/SWQB Response: According data collected during the 2000 and 2004 water quality surveys, the Rio Hondo is currently meeting state standards for plant nutrients and was not listed on the 2004-2006 STATE OF NEW MEXICO INTEGRATED CLEAN WATER ACT §303(D)/§305(B) REPORT for plant nutrients.

Regarding nitrogen, data collected by the SWQB in 2000 and 2004 (graph shown below) reveal a spike in total nitrogen associated with the WWTP, but nitrogen concentrations decrease as the river flows downstream and the nutrients are assimilated into plant materials. By the time the water reaches the Forest Service boundary, TN concentrations are similar to

those found above the WWTP (highlighted by pink circles). As the water flows past Arroyo Hondo, nitrogen concentrations increase again indicating an additional source of nitrogen entering the stream along this reach. Since water flows downstream, if water quality standards are being maintained in the upper reaches of the Rio Hondo then they should also be maintained in the lower reaches of the Rio Hondo unless there are additional nonpoint source inputs of nutrients to the stream and/or environmental factors (i.e. water diversions, temperature increases, etc.) that encourage the growth of nuisance algae.

The SWQB agrees that the issue of algal growth needs to be further examined. The SWQB applied for an EPA 104(b)(3) Grant for FY 2004 to identify all dischargers and their respective contributions of nutrients within the Rio Hondo watershed, to determine the overall potential impact of these dischargers, and to revise/develop total maximum daily load (TMDL) planning documents for nutrients. The EPA did not select SWQB's proposal for funding. Unfortunately, the SWQB currently does not have the tools, site-specific data, and/or resources to conduct the necessary detailed studies to be able to accurately determine site-specific nutrient loading from storm events. However, the SWQB is in the process of developing a more appropriate ecoregional approach to nutrient criteria. In addition, the monitoring and assessment section of the SWQB has also devised an intensive, integrated, weight-of-evidence approach to nutrient assessment that is still in draft form.



The SWQB will be conducting another intensive survey of the Rio Hondo watershed in 2008 to monitor and assess multiple biological, chemical, and physical water quality parameters of the perennial surface waters in this watershed. By 2008, the nutrient criteria development should be completed and the weight-of-evidence nutrient assessment should be approved. If the data from this survey indicate nutrient impairments then new TMDLs will be written accordingly.

RESIDENTS OF ARROYO HONDO:

Tom Harris

Cliff Baine

Charlie Rendon

Isabelle Rendon

Elena Rendon

Leonardo A. Ortiz

Mark Kramer

Fernando Martin

and Robert Fies

NOTE: There were 18 other signatures on the document that could not be listed because they were illegible.

INTRODUCTION: As a resident of the Rio Hondo Watershed, I would like to communicate a number of concerns about the draft TMDL document for the Rio Hondo. The Rio Hondo has significant cultural, economic, and ecological value to residents of the Watershed and New Mexico. Good water quality is integral to all of these values and therefore it must be restored and protected. I urge the New Mexico Environment Department to consider the following issues when finalizing the TMDL.

NMED/SWQB Response: The SWQB agrees that the monitoring, assessment, TMDL development, and watershed protection activities should be in the best interest of the target watershed. The mission of the SWQB is to preserve, protect and improve New Mexico's surface water quality for present and future generations. SWQB works collaboratively with stakeholders, such as federal, tribal, state, and local governments, local businesses, and point source dischargers in the watershed, as well as local citizen and interest groups to help protect and improve the biological, chemical, and physical integrity of surface waters in the State of New Mexico.

According data collected during the 2000 and 2004 water quality surveys, the Rio Hondo is currently meeting state standards for plant nutrients and was not listed on the 2004-2006 STATE OF NEW MEXICO INTEGRATED CLEAN WATER ACT §303(D)/ §305(B) REPORT for plant nutrients.

GENERAL COMMENTS SUBMITTED BY RESIDENTS OF ARROYO HONDO, AMIGOS BRAVOS, AND THE RIO PUEBLO/RIO EMBUDO WATERSHED PROTECTION COALITION:

I [We] have organized our comments into a number of general topic areas:

LOCATION OF PUBLIC MEETING

Many residents in the Rio Hondo Watershed were not able to make it to the public meeting at the Juan I. Gonzales Agricultural Center in Taos. Time and time again, public meetings are held in locations outside of the affected community. I [Amigos Bravos] urge[s] you to plan all future meetings either at the Arroyo Hondo Community Center or at the Arroyos del Norte School. It takes approximately half an hour to get from Arroyo Hondo to the Agricultural Center and many residents who are interested in water quality in the Rio Hondo but too busy to spare an hour of driving time were not able to attend the meeting.

NMED/SWQB Response: Considering the cultural, ecological, and economical concerns regarding this TMDL and considering that multiple communities from throughout the

watershed (and beyond) were interested in this Draft TMDL document, the SWQB decided to hold the meeting in a central, unbiased location that would be able to accommodate the number of people that we had anticipated to come to the meeting. Individuals from Santa Fe, Chamisal, Taos Ski Valley, El Prado, Arroyo Hondo, Questa, Taos, and Ranchos de Taos attended the public meetings. In addition, to accommodate a scheduling conflict that arose at the last minute due to weather, SWQB held two back-to-back 2-hour meetings to discuss the draft TMDLs with as many stakeholders as possible.

IMPACT ON INFRASTRUCTURE IMPROVEMENTS IN DOWNSTREAM COMMUNITIES

I [Amigos Bravos] am [is] concerned about the impact this TMDL will have on the ability of downstream communities to build wastewater treatment facilities. This is an environmental justice issue that needs to be addressed. Because of the restriction on installing new septic tanks on land that is less than an acre, many members of the community are forced to pay to have their sewage hauled. This is an unreasonable economic burden on an already economically strapped community that could be alleviated by a publicly funded wastewater treatment facility. In the current TMDL, it is unclear what waste load allocation is saved for potential downstream activities like new point sources.

NMED/SWQB Response: The Draft TMDL was written for the Rio Hondo (South Fork to Lake Fork Creek). All nutrient allocations associated with this document apply only to this assessment unit. If the downstream communities in other assessment units, such as Valdez and Arroyo Hondo, wish to install a wastewater treatment plant(s) then they will have the option to do so given that they have followed the appropriate procedures for obtaining a National Pollutant Discharge Elimination System (NPDES) permit for said plant(s).

VILLAGE OF TAOS SKI VALLEY'S WASTE LOAD ALLOCATION

It is unreasonable that the Village of Taos Ski Valley receives the entire waste load allocation (pollution from point sources) for the upper Rio Hondo. This amounts to 46% of *all* nutrient pollution (non-point, background and point sources) in the river. Why should one entity be allowed to create 46% of all allowable pollution in the river?

NMED/SWQB Response: The only existing point source on this assessment unit is the NPDES-permitted wastewater treatment plant owned and operated by the Village of Taos Ski Valley. If there were multiple point source dischargers in this assessment unit, the waste load allocation (WLA) would have been divided accordingly. However, because there is only one point source discharger, it receives the entire WLA.

Regarding phosphorus, the total phosphorus WLA and MOS were adjusted to reflect the state of New Mexico's antidegradation policy. The existing annual waste load allocation (WLA) for total phosphorus (TP) for this stream segment is 1.00 lbs/day. The new WLA for TP, based on nutrient export calculations and background concentrations, is 1.47 lbs/day. Even though the Draft TMDL calculated a higher TP waste load allocation than the current limit, the Village of Taos Ski Valley Wastewater Treatment Plant (WWTP) would like to maintain the current load in their new NPDES permit (1.00 lbs/day). Therefore, the Village of Taos Ski Valley WWTP will not increase phosphorus loading into the Rio Hondo watershed, consistent with the State of New Mexico's antidegradation policy. The new WLA for total phosphorus will be

1.00 lbs/day, or 31% of the TMDL. The maximum allowable WWTP effluent concentration will decrease from 1.0 mg/L to 0.5 mg/L during the most stringent winter months (November through April). The remaining 0.47 lbs/day will be set aside as part of the Margin of Safety.

Regarding nitrogen, the total nitrogen loading from the Village of Taos Ski Valley WWTP will actually decrease as a result of this Draft TMDL. The current average winter WWTP nitrogen loading is 14.23 lbs/day (average winter WWTP effluent concentration is 26.91 mg/L) based on effluent concentrations from the 2004 sampling survey conducted by the SWQB and the WWTP discharge flow reports. Given the proposed expansion and subsequent increase in discharge, the Draft TMDL allocated 11.0 lbs/day total nitrogen to the WWTP. This is less than the current loading and will result in a maximum allowable effluent concentration of 6.5mg/L during the most stringent winter months. This is approximately four times lower than current effluent concentrations.

POLLUTION FROM CONSTRUCTION SITES

The TMDL does not account for the potentially substantial impacts from stormwater running off of construction sites. The upper Rio Hondo is experiencing a drastic increase in development that will potentially be increased more if the attempts of the wastewater treatment facility to double its capacity are successful. Storm Water Pollution Prevention Plans (SWPPPs) developed under the General Storm Water Construction permit and referred to in the TMDL are *not*, as suggested by the TMDL, adequate for controlling all pollution from construction sites. The TMDL itself states that the Storm Water Pollution Prevention Plans (SWPPPs) developed under the General Storm Water Construction Permits (CGP) “minimize” impacts to water quality. Coverage under the CGP and the related SWPPPs do not *eliminate* impacts to water quality. Therefore, the TMDL should allocate at least some waste load allocation to pollution from stormwater running off construction sites that are covered under the General Construction Storm Water Permit, and some load allocation to construction sites not covered under the general permit.

NMED/SWQB Response: The SWQB agrees with this comment. As stated in the TMDL, individual wasteload allocations for construction activities covered under general permits were not possible to calculate at this time using available data and analysis tools. Loads that are in compliance with the general permits are therefore currently calculated as part of the load allocation. The SWQB does not have the tools, site-specific data, and/or resources to conduct the necessary detailed studies to be able to accurately determine waste load allocations from construction activities covered under general permits.

The SWQB has previously discussed this issue with EPA Region 6, and both parties performed research to determine if there are any examples from other states on how to approach this issue with construction activities covered under general permits. There are no good examples at this time, but several states are developing methods of including stormwater runoff from construction activities in their TMDLs, but they are still in the early stages of development. Storm water discharges from construction activities are transient because they occur mainly during the construction itself, and often only during storm events. Therefore, protection of the receiving water is best addressed through individual Storm Water Pollution Prevention Plans that are required as part of the construction process.

In New Mexico, nonpoint sources are the most significant contributor to water quality exceedences; therefore, the best avenue to restore watershed health is to focus community efforts on a holistic approach to watershed protection. The Rio Hondo/Upper Rio Grande Watershed Group will be addressing various nonpoint sources when they develop a Watershed Restoration Action Strategy (WRAS). In addition, the SWQB will be conducting another intensive survey of the Rio Hondo watershed in 2008 to monitor and assess multiple biological, chemical, and physical water quality parameters of the perennial surface waters in this watershed. If the data from this survey indicate impairments then new TMDLs will be written accordingly.

SEPTIC TANKS

Under the draft TMDL, when septic tanks are transferred over to the treatment plant, their whole load transfers as well, even though the treatment facility treats the sewage better than the septic tanks. This means that the treatment facility will be getting a net gain of load for every septic tank that goes online. This net gain could then be used either to not treat the sewage as efficiently or to discharge more volume of sewage (if the NPDES permit allows additional capacity). I [Amigos Bravos] recommend[s] that NMED develop a formula to calculate an accurate percentage of pollution load assigned to septic tanks that will then be added to the wastewater treatment facility. The present one-to-one exchange does not make sense.

NMED/SWQB Response: The Draft TMDL includes a section on trading to encourage creative, alternative solutions to maintaining water quality standards given the current growth projections. Water quality trading in the Rio Hondo watershed should be discussed by key parties, such as dischargers in the watershed, federal, tribal, state, and local governments, local businesses, as well as local citizen and interest groups. It is up to the individual trading committees to determine the nature of the trading activity, identify the environmental problem associated with the trading, establish the types of trading that will occur (ex: point/point, point/nonpoint), and agree on the trading ratios that will apply. Water quality trading is voluntary, however all sources that choose to participate in trading will have to adhere to accountability mechanisms established by the trading program to ensure that promised pollutant reductions are generated.

Thank you for the opportunity to comment on the draft TMDL. Amigos Bravos also appreciates the flexibility of the Surface Water Quality Bureau in hosting two back-to-back meetings to accommodate the public. We look forward to your response to our comments.

Thank you for your consideration.

Sent via Email, April 12, 2005 9:37 AM

Pamela D. Harris
POB 313
Arroyo Hondo, NM 87513
(505) 776-1482

COMMENT: I have lived at 109 Hondo Seco Road in Arroyo Hondo, NM for five years. My family has lived in the Taos valley for thirty years. Upon our retirement we moved to Taos in 1998 and purchased our home in Arroyo Hondo on March of 2000. We have a home on the placita as well as a small twelve acre farm with cattle and sheep about a mile down valley from our home. This is the place we chose to live and stay until our death. The agrarian life style in the valley, the culture, and the closeness of its' community are the main reasons for our choice. We love our home and community. I have two major concerns as a land owner and ground water or acaquia water rights holder I would like to address in this letter.

The first concern is the expansion of the Taos Ski Valley Sewer Treatment Plant. I agree that the treatment plant needs to be updated because it is no longer serving the purpose of not polluting the Rio Hondo and our valley. We have lived in Arroyo Hondo for five summers and the summer of 2004 was the first time we experienced a major pollution problem in the form of large amounts of Filamentous Algy in the Acaquia Madra del Llano which runs behind our house. We live in upper Arroyo Hondo not far from the comporta or intake for the acaquia. The first four summers we lived here children from the placita swam and fished in the acaquia off of our bridge all summer long. Last summer the acaquia was so thick with Algy no one wanted to touch it and when the water was switched to another part of the ditch the sun caused the Algy to smell so strongly that I was unable to sit out in our yard. It stunk like an polluted lagoon. I called the Taos Acaquia Association and made a complaint and also called one of our commissioners, Al Kaplan. I also went up to the part of the river before it enters agricultural land at the bottom of Taos Ski Valley to see if there was any Algy to be found there. It was heavy in that area as well. I reported this information as part of my phone conversations with Taos Acaquia Association and Al Kaplan. .

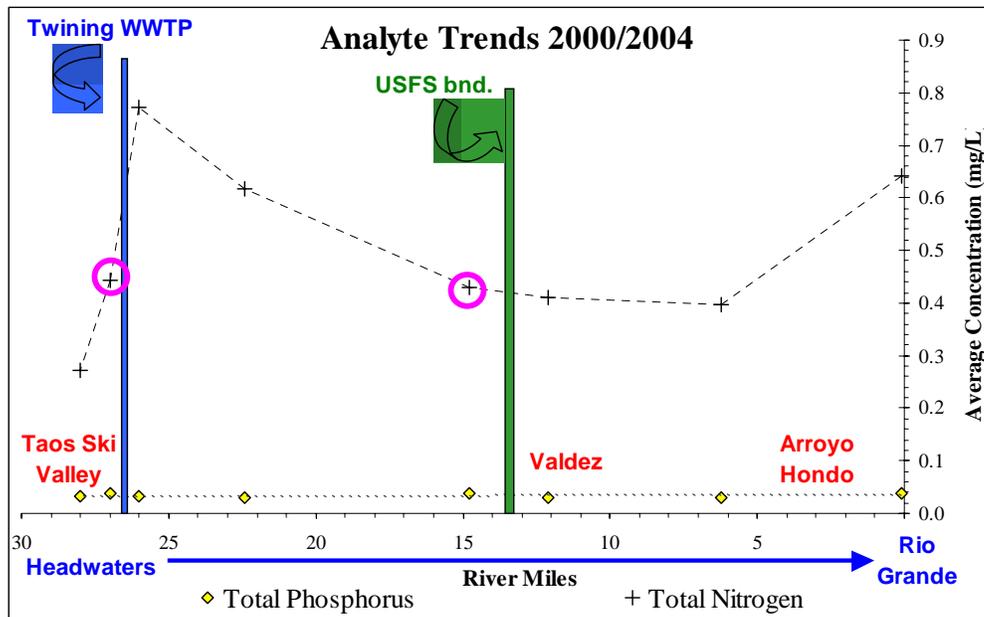
I can not understand how the nutrient levels at Taos Ski Valley can be so reportedly low under the circumstances. Under your current permit , my understanding is that you are not testing for nitrogen or fecal matter. Can this be the reason? Your nutrient levels are very low. How can this be? It takes nutrients to make the Algy grow. This summer was the first one in the five years since we have been here where we had sufficient water flow to satisfy almost all the water users. Before that the water was lower and ran much slower which should have been more conducive to Algy growth.

Does Ski Valley know when you are taking the samples? How can you account for the changes? Ski Valley will be using the new system to develop more land. The higher density will make the situation worse both because of the effluence from the treatment system and because of the parking and land cover density. Can't more study be done before it is irreversible?

NMED/SWQB Response: The SWQB understands your concern and appreciates your commitment to improving the health of the watershed in your community. The mission of the SWQB is to preserve, protect and improve New Mexico's surface water quality for present and future generations. The SWQB works collaboratively with stakeholders, such as federal, tribal, state, and local governments, local businesses, and point source dischargers in the watershed, as well as local citizen and interest groups to help protect and improve the biological, chemical, and physical integrity of surface waters in the State of New Mexico.

To address your specific concerns, current design capacity for the WWTP is 0.095 million gallons per day (MGD). All calculations in development of the Draft TMDLs used the proposed WWTP design capacity of 0.200 MGD. Since load is a function of concentration and discharge, all load calculations in the TMDL estimate treatment capacity in the future scenario, which accommodates projected growth through 2020 (see Section 8.0).

There are two potential contributors to nutrient enrichment in a given stream: excessive phosphorus and/or nitrogen. Regarding phosphorus, the existing annual waste load allocation (WLA) for total phosphorus (TP) for this stream segment is 1.00 lbs/day. The new WLA for TP, based on nutrient export calculations and background concentrations, is 1.47 lbs/day. Even though the Draft TMDL calculated a higher TP waste load allocation than the current limit, the Village of Taos Ski Valley Wastewater Treatment Plant (WWTP) would like to maintain the current load in their new NPDES permit (1.00 lbs/day). The Village of Taos Ski Valley WWTP will not increase phosphorus loading into the Rio Hondo watershed, consistent with the State of New Mexico's antidegradation policy. The new WLA for total phosphorus will be 1.00 lbs/day, or 31% of the TMDL. The maximum allowable WWTP effluent concentration will decrease from 1.0 mg/L to 0.5 mg/L during the most stringent winter months (November through April). The remaining 0.47 lbs/day will be set aside as part of the Margin of Safety.



Regarding nitrogen, the total nitrogen loading from the Village of Taos Ski Valley WWTP will actually decrease as a result of this Draft TMDL. The current average winter WWTP nitrogen loading is 14.23 lbs/day (average winter WWTP effluent concentration is 26.91 mg/L) based on effluent concentrations from the 2004 sampling survey conducted by the SWQB and the WWTP discharge flow reports. Given the proposed expansion and subsequent increase in discharge, the Draft TMDL allocated 11.0 lbs/day total nitrogen to the WWTP. This is less than the current loading and will result in a maximum allowable effluent concentration of 6.5mg/L during the most stringent winter months. This is approximately four times lower than current effluent concentrations.

Finally, data collected by the SWQB in 2000 and 2004 (graph shown below) reveal a spike in total nitrogen associated with the WWTP, but nitrogen concentrations decrease as the river flows downstream and the nutrients are assimilated into plant materials. By the time the water reaches the Forest Service boundary, TN concentrations are similar to those found above the WWTP (highlighted by pink circles). As the water flows past Arroyo Hondo, nitrogen concentrations increase again indicating an additional source of nitrogen entering the stream along this reach.

Since water flows downstream, if water quality standards are being maintained in the upper reaches of the Rio Hondo then they should also be maintained in the lower reaches of the Rio Hondo unless there are additional nonpoint source inputs of nutrients to the stream and/or environmental factors (i.e. water diversions, temperature increases, etc.) that encourage the growth of nuisance algae.

In New Mexico, nonpoint sources are the most significant contributor to water quality exceedences; therefore, the best avenue to restore watershed health is to focus community efforts on a holistic approach to watershed protection. The Rio Hondo/Upper Rio Grande Watershed Group can choose to focus on various nonpoint sources of nutrients in the lower Rio Hondo when they develop a Watershed Restoration Action Strategy (WRAS). In addition, the SWQB will be conducting another intensive survey of the Rio Hondo watershed in 2008 to monitor and assess multiple biological, chemical, and physical water quality parameters, such as total phosphorus, total nitrogen, bacteria, temperature, pH, and dissolved oxygen. If the data from this future survey indicate impairments then new TMDLs will be written accordingly.

In contrast to voluntary nonpoint source control measures, the National Pollutant Discharge Elimination System (NPDES) permit program is responsible for regulating point source discharges of pollutants in order to protect surface water quality throughout the State. Since the program's inception, the EPA has administered the program in New Mexico with assistance and oversight by the SWQB Point Source Regulation Program. Congress provided a process and encouraged the states to develop and implement the program [CWA §101(b)]. New Mexico is now pursuing state authorization for the program.

Federal laws provide EPA with various methods of taking enforcement actions against violators of permit requirements. Equally important is how the general public can enforce permit conditions. The facility monitoring reports are public documents, and the general

public can review them. If any member of the general public finds that a facility is violating its NPDES permit, that member can independently start a legal action.

COMMENT: My second concerns has to do with the water rights that are being used to develop the new system. Attached is a print out of the agreement developed between the three main users of the Rio Hondo Acaquia systems. You will note that Taos Ski Valley is not listed. It is my understanding that they purchased part of the Acaquia water rights to run their system. I am under the impression that the total amount is less than fifty acres. The other systems are agreeing to meter their water use. Is Taos Ski Valley willing to meter theirs? Surface water rights are measured by amount taken out not by the effluent water put back in to the river.

NMED/SWQB Response: Concerns regarding water rights and the metering of Taos Ski Valley's water use need to be directed to Office of the State Engineer (OSE) and the Interstate Stream Commission (ISC). The OSE and the ISC are separate but companion agencies charged with administering the state's water resources. The agencies have jurisdiction over the supervision, measurement, appropriation and distribution of essentially all surface and ground water in New Mexico, including streams and rivers that cross state boundaries.

The Construction Programs Bureau in the New Mexico Environment Department conducted an Environmental Assessment (EA) on the Village of Taos Ski Valley's Wastewater Treatment Plant Renovation/Expansion through the National Environmental Policy Act according to Federal law. The National Environmental Policy Act (NEPA) requires federal agencies to integrate environmental values into their decision-making processes by considering the environmental impacts of their proposed actions and reasonable alternatives to those actions. The EPA reviews and comments on documents prepared by other agencies and assures that its own actions comply with NEPA. Based on consultation with the OSE, the Construction Programs Bureau concluded that both current and projected diversion and consumptive use of water are below the Village's water rights on file at the OSE.

I love this valley, it's people, and the Rio Hondo. Please don't rush into something that can not be reversed! Thank you for your assistance in this matter.

Sincerely,
Pam Harris

CC:
Governor Richardson
Lieutenant Governor Diane Denish
Senator Jeff Bingaman
Representative Tom Udall
Representative James Magdalena
House Standing Committee for Agriculture & Water Resource

Sent via FAX, April 12, 2005, 2:12 PM and U.S. Postal Service, April 13, 2005

Martin D. Chavez
Forest Supervisor
208 Cruz Alta Road
Taos, NM 87571

COMMENT: This letter transmits comment of the Carson National Forest to the Rio Hondo Draft TMDL, prepared by the Department in response to the potential increase in discharge at the Twining Water and Sanitation District wastewater treatment plant, located in Taos Ski Valley. In reviewing the document, we found the analysis and explanation of the load determination to be well thought out and documented. We offer the following comments:

Margin of Safety (MOS): As outlined in the Draft TMDL, the MOS is intended to address the uncertainty of load allocations used in calculating the total pollutant load that can be assimilated by a water body while still attaining water quality standards. NMED staff has adopted an approach utilizing an implicit and explicit MOS (5 percent) to the potential rate and proximity of future development along and near the Rio Hondo and its tributaries? The land ownership pattern that exists within the study area includes a large area (approximately 2000 acres) of private land along the Lake Fork of the Rio Hondo. Most, if not all of this land area would fall within the 50 m to 500 m buffer area in which the rate of delivery of natural sources of N and P would be highest, especially as that land use is converted from the forest to built up land. Given the close proximity and the uncertainty of future development, we would suggest a larger margin of safety for both the implicit and explicit cases being considered.

NMED/SWQB Response: The SWQB believes that the combination of relatively conservative numeric targets and source estimates creates an overall Margin of Safety that is adequate to account for uncertainty in this analysis. The Margin of Safety (page 32, Section 6.0) was reworded to explain, in more detail, the conservative assumptions and explicit uncertainties that were fundamental in this analysis. For further explanation, a TMDL is generally divided into a Load Allocation for nonpoint sources, a Waste Load Allocation for point sources, and a Margin of Safety for uncertainties. This analysis went one step further and also allocated the load to background and future sources. The background allocation amounted to 17% for total phosphorus and 21% for total nitrogen. This allotment was set aside for current, ambient conditions and was not lumped into the load allocation, as was done in the past when suitable reference reaches were not known and background conditions could not be established. The separation of background load from the load allocation gives added reassurance that nonpoint source loads are more appropriate for the system and that applicable water quality standards will continue to be attained.

As stated in the TMDL, individual wasteload allocations for construction activities (current or future) covered under general permits were not possible to calculate at this time using available data and analysis tools. Loads that are in compliance with the general permits are therefore currently calculated as part of the load allocation. The SWQB does not have the tools, site-specific data, and/or resources to conduct the necessary detailed studies to be able to

accurately determine waste load allocations from construction activities covered under general permits.

The SWQB has previously discussed this issue with EPA Region 6, and both parties performed research to determine if there are any examples from other states on how to approach this issue with construction activities covered under general permits. There are no good examples at this time, but several states are developing methods of including stormwater runoff from construction activities in their TMDLs, but they are still in the early stages of development. Storm water discharges from construction activities are transient because they occur mainly during the construction itself, and often only during storm events. Therefore, protection of the receiving water is best addressed through individual Storm Water Pollution Prevention Plans that are required as part of the construction process.

COMMENT: Growth Factor: This comment is related to the Margin of Safety comment above. A factor of 2 percent is assigned currently to account for unforeseen non point loading sources related to future growth and development. Does NMED feel the assigned growth factor is adequate, again given the large amount of private land as described above? While the calculations in the TMDL estimate full treatment capacity of the loading associated with the point source (ie – the wastewater treatment facility), the non point loading associated with potential future growth and development of these private lands seems inadequate given the changes that would occur as this land area is developed, again within close proximity to the Lake Fork and the Rio Hondo.

NMED/SWQB Response: The SWQB agrees that the issue of future growth and development needs to be further examined. The SWQB applied for an EPA 104(b)(3) Grant for FY 2004 to identify all dischargers and their respective contributions of nutrients within the Rio Hondo watershed, to determine the overall potential impact of these dischargers, and to revise/develop total maximum daily load (TMDL) planning documents for nutrients. The EPA did not select SWQB's proposal for funding. Unfortunately, the SWQB currently does not have the tools, site-specific data, and/or resources to conduct the necessary detailed studies to be able to develop detailed watershed models for the Rio Hondo watershed that accurately predict site-specific nutrient loading from future growth and development scenarios.

The SWQB believes that the Growth Allocation coupled with the Background Load, and implicit and explicit MOS is adequate to accommodate future growth and development through 2020 (see Section 8.0).

COMMENT: Stream Temperature: At the proposed level of discharge (200,000 gallons per day) do you anticipate any effect in stream temperature in the Rio Hondo from the point of discharge downstream? If so, what might the increase in temperature be?

NMED/SWQB Response: The SWQB does not anticipate any temperature exceedences associated with the increase in discharge from the Village of Taos Ski Valley WWTP. The WWTP is using cold water to treat its wastewater and it is discharging into a coldwater stream. During the winter critical low-flow period, the WWTP effluent will account for approximately 5% of the total discharge in the river, if the WWTP is discharging at capacity. At other times

of the year when natural flows are higher, the effluent contribution to stream flow will be much lower. Additionally, the average WWTP effluent temperature based on data collected by the SWQB in 2004 was 11.1°C (maximum = 14.5°C). The average temperature above and below the WWTP was 5.0°C and 5.2°C, respectively, and the average at the bottom of the assessment unit just above the South Fork of the Rio Hondo was 5.4°C. Both the effluent discharge and the Rio Hondo are meeting the applicable state standard for temperature, which is 20°C for the perennial reaches of the Rio Hondo (NMAC 20.6.4.123).

Thank you for the opportunity to comment on this document.

Sincerely,
MARTIN D. CHAVEZ
Forest Supervisor

Received via U.S. Postal Service, April 15, 2005

Robert Fies
P.O. Box 581
Arroyo Hondo, NM 87513

COMMENT: I attended the above meeting. While it seems the approved wastewater treatment plan for Taos Ski Valley would improve existing sewage treatment effluent, the proposed doubling of capacity and desire for growth in a confined steep-slope valley raises huge possibilities for contaminated runoff from asphalt, home and commercial chemicals, etc. I want to see a first-class and real (capable of being executed and with funds and intent to perform) mitigation plan to minimize nonpoint source pollution.

NMED/SWQB Response: Current design capacity for the WWTP is 0.95 million gallons per day (MGD). All calculations in development of these TMDLs used the proposed WWTP design capacity of 0.200 MGD. Since load is a function of concentration and discharge, all load calculations in the TMDL estimate treatment capacity in the future scenario, which accommodates projected growth through 2020 (see Section 8.0).

As stated in the TMDL, individual wasteload allocations for construction activities covered under general permits were not possible to calculate at this time using available data and analysis tools. Loads that are in compliance with the general permits are therefore currently calculated as part of the load allocation. The SWQB does not have the tools, site-specific data, and/or resources to conduct the necessary detailed studies to be able to accurately determine waste load allocations from construction activities covered under general permits.

The SWQB has previously discussed this issue with EPA Region 6, and both parties performed research to determine if there are any examples from other states on how to approach this issue with construction activities covered under general permits. There are no good examples

at this time, but several states are developing methods of including stormwater runoff from construction activities in their TMDLs, but they are still in the early stages of development. Storm water discharges from construction activities are transient because they occur mainly during the construction itself, and often only during storm events. Therefore, protection of the receiving water is best addressed through individual Storm Water Pollution Prevention Plans that are required as part of the construction process.

Received via U.S. Postal Service, April 19, 2005

Robert Gomez
Director of Taos Pueblo Environment Department
P.O. Box 1846
Taos, NM 87571

COMMENT: The following comments are provided by the Sovereign Nation of Taos Pueblo regarding the draft Total Maximum Daily Load (TMDL) documents for the Rio Hondo Watershed, defined as the South Fork of the Rio Hondo to the Lake Fork of the Rio Hondo.

Taos Pueblo's ancestral lands included the Rio Hondo Watershed. Moreover, Taos Pueblo has always used the Rio Hondo Watershed for such traditional and cultural activities as: fishing; hunting; plant gathering; other traditional and cultural activities involving water immersion and ingestion; and water supply. These cultural uses continue into the present day as they have for thousands of years, and therefore should be protected by the TMDL for the Rio Hondo Watershed. It is the Pueblo's position that any cultural uses for the Rio Hondo are protected under the National Historic Preservation Act, and the Rio Hondo TMDL should take into account the Pueblo's Water Quality Standards that are designed to protect the traditional and cultural uses of Taos Pueblo.

Pursuant to its sovereign authority, the Tribal Council of the Pueblo of Taos, a federally recognized Indian tribe, enacted Water Quality Standards (Standards) for the Pueblo. In so doing, the Tribal Council recognized that the Pueblo's clean waters are an extraordinary resource which must be protected so that traditional and cultural uses of those waters may continue for generations to come. The Tribal Council enacted its Standards in order to prevent, reduce, and eliminate pollution of Pueblo waters and to plan the development and use, *including restoration and enhancement*, of land and water resources within the Pueblo's jurisdiction.

I. Taos Pueblo's Interest in Commenting on the TMDL for the Rio Hondo Watershed

Taos Pueblo has adopted Water Quality Standards designed to keep water quality at levels protective of human health and compatible with traditional uses. In the interest of preserving Taos Pueblo's traditional uses of Rio Hondo waters and protecting the health of those engaged in these practices, Taos Pueblo strongly suggests that the proposed TMDL consider Taos Pueblo Water Quality Standards as a guideline for water quality goals in the Rio Hondo. Since the

Pueblo's Water Quality Standards are designed to protect traditional uses, using the Taos Water Quality Standards as guidelines for the Rio Hondo TMDL would help to preserve the Pueblo's cultural and religious heritage.

II. The Proposed TMDL does not Meet the Pueblo of Taos' Tribal Water Quality Standards

The Pueblo of Taos' Water Quality Standards Antidegradation Policy states;

Existing water uses and the level of water quality necessary to protect existing uses shall be maintained.

The Pueblo shall require the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable management practices for nonpoint source control.

A. The Proposed TMDL Fails to Recognize that Water Quality Standards are Comprised of Numeric and Narrative Criteria, Beneficial Use Support, and an Antidegradation Policy.

The development of a TMDL is the appropriate time for a definitive assessment of a waterbody's impairment to be conducted, to ensure that all parameters for which the waterbody is impaired are identified -- or at least those that have similar impacts, or additive or synergistic effects so that they may be analyzed concurrently -- and that all components of water quality standards have been applied. The draft Rio Hondo TMDL fails to adequately recognize that the legal definition of a water quality standard includes numeric and narrative criteria, beneficial use support, and an antidegradation policy.

The analytical work of a TMDL should begin with a thorough evaluation of water quality standards and data reflective of current reality. The proposed TMDL relies primarily on more than twenty-year-old numeric data modeled on *non Rio Grande Watershed* rivers and streams, thereby imposing surrogate measures on the Rio Hondo. Not only is this approach flawed because of the age of the data used, it fails to adequately take into account narrative criteria, beneficial support and antidegradation policies as required by law and the Pueblo's Water Quality Standards.

While the TMDL states that "target values for nutrient loads are determined based on 1) the presence of numeric and narrative criteria..." (2.2), the document fails to address the kind of narrative criteria included in the Pueblo's Water Quality Standards. Nor does it mention the requirement to support beneficial uses or apply narrative criteria, in addition to the application of numeric criteria, *as 'gap fillers.'* Such gap fillers do not exist as a legal fiction; they exist in order to be applied and there is no better time for applying them than the development of a quantitative plan to attain the water quality standards, namely a TMDL. This omitted step is critical in order for this draft TMDL to evaluate what it means to meet water quality standards in the Rio Hondo Watershed.

The Pueblo's Water Quality Standards specifically state that Pueblo Waters shall be free from pollution so as "*not to injure or otherwise adversely affect the habitation, growth, or propagation of indigenous aquatic plant life and animal communities or any member of those communities....*" (Section III. A.) The TMDL does not address the populations of fishes in the Rio Hondo traditionally relied upon by the Pueblo, or adequately address the issues of *temperature* and *minerals* as required by the Pueblo's Standards.

- 1. Fishes.** The Pueblo has always relied upon the Rio Hondo Watershed to support populations of fishes for Pueblo uses. This includes the endangered Rio Grande Cutthroat Trout. In order to apply the narrative criteria and beneficial use support components of water quality standards, the Department must identify all species of fish that may have water quality requirements that are more protective than the existing numeric criterion. The TMDL fails to do this. Moreover, the TMDL must also take into consideration the status of those species. The development of each numeric criterion is built upon assumptions of acceptable risk regarding the magnitude of concentrations, duration of the exceedances, and the frequency with which exceedances occur to allow for recovery to the aquatic communities. In determining the applicable site-specific criteria to protect these uses, the Department must take into account the depleted state of species. The criteria must be designed to restore their populations. In other words, the risks to the species must be decreased to a greater extent in order to meet the goals of the standards and the Clean Water Act. Therefore, in writing the TMDL, the Department must interpret and apply its narrative criteria and requirement to support beneficial uses to fill these gaps, not ignore them. To do any less than this is to reject the legal fact that beneficial use support is a stand-alone component of water quality standards the attainment of which is the required goal of the TMDL. 40 CFR 130.7(c) (1).
- 2. Temperature and Indigenous Aquatic plant life.** In addressing impacts to indigenous aquatic plant life the TMDL relies mostly on seasonal dilutions. It makes no mention of temperature, as required by both the Pueblo's Water Quality Standards and the laws governing the use of narrative and antidegradation criteria.

The Pueblo's Water Quality Standards require that: "Normal seasonal variations of temperature in surface waters shall be maintained..." (II.B). The Section goes on to specify that; "*the introduction of heat by other than natural causes shall not increase the temperature, as measured upstream from the point of introduction, by more than 5 degrees F (2.7 degrees C) in a stream...*" (*Id.*) While the TMDL addresses plant nutrients (2.3), it does not address the impact of artificially induced temperature rises from the point and non-point source discharges identified in the draft document. Thus, for temperature, the TMDL must establish whether the Pueblo's established criterion of plus 5 degrees C will be violated by point and nonpoint discharges impacting the watershed. The draft TMDL makes no reference to this issue.

- 3. Minerals.** Pueblo Standards state: "*Existing mineral content of the Pueblo's waters shall not be altered by municipal, industrial, or in-stream activities or other waste discharges so as to interfere with the designated uses. In all cases, increases*

exceeding 1/3 over naturally occurring levels will not be allowed. Numeric values for chlorides at 230 mg/L, for sulfates at 250 mg/L, and for total dissolved solids at 500 mg/L shall not be exceeded” (II.C). In concentrating on the total loads of nitrogen and phosphorus discharged into the Rio Hondo, the draft TMDL does not use or refer to the Pueblo’s 1/3 over naturally occurring levels standard; nor does it address Pueblo requirements for chlorides, sulfates, or total dissolved solids.

- 4. Sampling and Biological Criteria.** The Pueblo’s Standards require that: *“Biological integrity, the protection of aquatic communities in their most natural condition, shall be protected and maintained [through the enforcement of narrative criteria].” (II. D.)* In establishing this standard, the Pueblo specifically requires that: *“The conditions at reference and other locations will be assessed by **consistent sampling** and reliable measure of selected measures indicative of aquatic communities...” (Id.)*

The draft TMDL’s proposed monitoring plan does not conform to Pueblo or federal standards. Section 9.0 states: *“Long-term monitoring for assessments will be accomplished through the establishment of sampling sites...which can be revisited approximately every seven years...”* It is the Pueblo’s position that a time span of approximately every seven years violates both the Pueblo’s standard of consistent sampling and the requirements of Sections 303 (d) and 305 (b) of the Clean Water Act, which require *“a systematic, detailed review of water quality data...”*

NMED/SWQB Response: While the SWQB respects the Pueblo’s traditional and cultural activities in the Rio Hondo watershed, the applicable surface water quality standards for the Rio Hondo are found in 20.6.4.123 New Mexico Administrative Code (NMAC). The USEPA and the New Mexico Water Quality Control Commission (WQCC) have approved these standards. Protected designated uses as stated in 20.6.4.123 NMAC include domestic water supply, fish culture, high quality coldwater fishery, irrigation, livestock watering, wildlife habitat, and secondary contact. General standards found under 20.6.4.12 NMAC also apply.

Pursuant to Section 106(e)(1) of the Federal CWA, the SWQB has established appropriate monitoring methods, systems and procedures in order to compile and analyze data on the quality of the surface waters of NM. The SWQB monitoring strategies are developed with assistance from USEPA Region 6. Similar to most states, New Mexico has developed and utilizes a rotational watershed-based monitoring plan because we do not have staff or financial resources to intensively monitoring all surface waters in the state every year.

The SWQB recently developed a draft 10-year monitoring strategy submitted to USEPA on September 30, 2004, according to federal guidelines. Once the 10-year monitoring plan is approved by the USEPA, it will be available at the SWQB website: <http://www.nmenv.state.nm.us/swqb/swqb.html>. The strategy will detail both the extent of monitoring that can be accomplished with existing resources plus expanded monitoring strategies that could be implemented given additional resources.

5. Mixing Zones. The proposed TMDL identifies the Twining Water and Sanitation District (TWSD) as the only point source discharge impacting the Rio Hondo. It also identifies: “*Numerous anthropogenic nonpoint sources of phosphorus [which] also exist in the upper Rio Hondo watershed. The most important are thought to be runoff from parking lots and recreational areas.*” (5.1.1.) In addressing these sources of pollution, the TMDL draft relies heavily on seasonal dilutions. In so doing the draft points out that during the winter months that dilution will be comprised exclusively of runoff: “*The ability of the Rio Hondo to dilute wastewater is least during the winter months. Winter is also the period during which the District’s wastewater discharges are the greatest*” (2.4). The TMDL’s reliance on dilution to achieve water quality standards is flawed.

First, the TMDL’s reliance on dilution to achieve water quality goals is flawed as it relates to native fisheries. The discharge from the wastewater treatment plant should stand alone as meeting or exceeding water quality standards. By relying on dilution to assimilate nutrients into the river during the winter low flow, the TMDL is creating a mixing zone that is potentially dangerous to fish that must migrate past this zone. It also encourages localized algae growths that in turn have their own negative effects on water quality. According to Pueblo Standards, “*In any perennial waters receiving waste discharge, a continuous zone must be maintained where the water is of adequate quality to allow the migration of wildlife and which meets all water quality standards.*”

In addition, in referring to the wastewater treatment plant operated by TWSD, the TMDL states: “*this TMDL does not include a specific WLA for storm water discharges for this assessment unit...*” (5.2.3). By avoiding development of a Waste Load Allocation (WLA), the TMDL is negligent in truly assessing the cumulative effects of land use immediately surrounding the Wastewater Treatment Plant. Specific consideration for toxicants and sedimentation from parking lots is deliberately avoided. Due to the proximity of parking lots and the wastewater discharge, a much more localized assessment that considers these factors should be provided. Heavy metals from parking lots and industrial building associated with the ski area need to be honestly addressed by a specific WLA, if not a full-blown EIS.

The TMDL is also deficient regarding nonpoint pollution sources identified in the draft. In so doing, the draft assumes that dilution will also be used to mitigate these nonpoint discharges. The draft document identifies the Ski Valley’s parking lots and recreational areas as well as seepage from overload or malfunctioning on-site sewage disposal systems located near the stream as contributing sources of nonpoint pollution yet fails to offer a solution to the pollution, other than dilution.

NMED/SWQB Response: The SWQB disagrees with this comment. Data from the 2000 intensive survey and the 2004 special survey of the Rio Hondo indicate that the Rio Hondo (South Fork to Lake Fork Creek) is currently meeting and maintaining the applicable New

Mexico state standards for this stream segment. Based on this assessment, the Rio Hondo (South Fork to Lake Fork Creek) was not listed as an impaired reach in the 2004-2006 STATE OF NEW MEXICO INTEGRATED CLEAN WATER ACT §303(D)/ §305(B) REPORT.

To address the Pueblo's specific concerns, the Village of Taos Ski Valley WWTP will not increase phosphorus loading into the Rio Hondo watershed, which is consistent with the State of New Mexico's antidegradation policy. The maximum allowable WWTP effluent concentration will decrease from 1.0 mg/L to 0.5 mg/L during the most stringent winter months (November through April). Clarification was added to the TMDL document (see page 27, Section 5.1.3). In addition, nitrogen loading from the Village of Taos Ski Valley WWTP will actually decrease by approximately 30% as a result of this Draft TMDL, which will result in a maximum allowable effluent concentration of 6.5mg/L during the most stringent winter months. This is approximately four times lower than current effluent concentrations.

As stated in the TMDL, individual waste load allocations for construction activities covered under general permits were not possible to calculate at this time using available data and analysis tools. Loads that are in compliance with the general permits are therefore currently calculated as part of the load allocation. The SWQB does not have the tools, site-specific data, and/or resources to conduct the necessary detailed studies to be able to accurately determine waste load allocations from construction activities covered under general permits.

The SWQB has previously discussed this issue with USEPA Region 6, and both parties performed research to determine if there are any examples from other states on how to approach this issue with construction activities covered under general permits. There are no good examples at this time, but several states are developing methods of including stormwater runoff from construction activities in their TMDLs, but they are still in the early stages of development. Storm water discharges from construction activities are transient because they occur mainly during the construction itself, and often only during storm events. Therefore, protection of the receiving water is best addressed through individual Storm Water Pollution Prevention Plans that are required as part of the construction process.

B. The TMDL is Flawed because it Fails to Consider Pollution in lieu of Pollutants

Pueblo of Taos water quality standards include various narrative criteria related to pollution, rather than being limited to control of pollutants. Beneficial uses requiring support in the standards likewise require physical and biological quality, not just chemical parameters in the ambient water column. This trio of needs corresponds to the goal of the Clean Water Act: "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." CWA 101(a). While the Pueblo is aware that the portion of the statute that requires the development of TMDLs makes reference to "pollutants," not "pollution," the intent of a TMDL using surrogate measures is presumably to avoid a narrow approach utilizing pollutant loadings in lieu of a more holistic and useful analysis that will address all the interrelated parameters for which the waterbody is impaired. CWA 303(d) (1). Under Pueblo of Taos Standards such a holistic approach is required. Moreover, it is the Pueblo's position that to create a viable TMDL,

toxicants as well as nutrients must be considered in developing the standard. The proposed TMDL makes no explicit mention of toxicants (from parking lot runoff and other sources) impacting the watershed.

NMED/SWQB Response: The applicable surface water quality standards for the Rio Hondo are found in 20.6.4.123 New Mexico Administrative Code (NMAC). The USEPA and the New Mexico Water Quality Control Commission (WQCC) have approved these standards. Protected designated uses as stated in 20.6.4.123 NMAC include domestic water supply, fish culture, high quality coldwater fishery, irrigation, livestock watering, wildlife habitat, and secondary contact. General standards found under 20.6.4.12 NMAC also apply.

As stated in the TMDL and at the public meeting, SWQB performed an extensive water quality survey for the Rio Hondo in 2000, with follow up monitoring in 2004. This survey included measurements of various chemical (including toxicants), biological, and physical parameters. The only documented impairment for the Rio Hondo was excessive temperature in the lower reaches. This nutrient TMDL was developed as a preventative measure to ensure continued protection of the Rio Hondo in the event of a plant expansion at the Village of Taos Ski Valley.

III. Projected Growth Rates are not Consistent with a 2% Set Aside

Section 8.0 of the draft states that: “Growth estimates for Taos County project a 40% growth rate through 2030. Since future projections indicate that nonpoint sources of nutrients will more than likely increase as Taos Ski Valley continues to grow and develop, two percent of the TMDL will be set aside as a placeholder for unknown or future nutrient source.” The Pueblo of Taos takes exception to a 2% set aside. Conservatively, growth rate for the county is projected at 40%. The Taos Ski Valley is a large part of that projected growth. The TMDL offers no rational basis for imposing a 2% set aside. Rather, the number is arbitrarily inserted. The Pueblo asserts that a rational set aside formula be developed in a government-to-government consultation with the Pueblo which more realistically accounts for the projected growth.

Furthermore, the 2% set aside does not account for anticipated infrastructure development that will likely follow build-out of the higher portions of Taos Ski Valley (a.k.a. “the Backside”). Road construction, parking lots, nutrient loads from landscapes and additional vehicle traffic are virtually ignored. This set aside also does nothing to address potential private development outside the village boundaries (i.e. Pattison Land Trust).

Taos Pueblo believes that the set aside for unknown and future nutrient source should be at least 7%-10%, with a place holder as high as 20% not being unreasonable.

NMED/SWQB Response: The SWQB agrees that the issue of future growth and development needs to be further examined. The SWQB applied for an EPA 104(b)(3) Grant for FY 2004 to identify all dischargers and their respective contributions of nutrients within the Rio Hondo watershed, to determine the overall potential impact of these dischargers, and to revise/develop total maximum daily load (TMDL) planning documents for nutrients. The EPA did not select

SWQB's proposal for funding. Unfortunately, the SWQB currently does not have the tools, site-specific data, and/or resources to conduct the necessary detailed studies to be able to develop detailed watershed models for the Rio Hondo watershed that accurately predict site-specific nutrient loading from future growth and development scenarios.

However, The Construction Programs Bureau of the NMED did conduct an Environmental Assessment (EA) on the Village of Taos Ski Valley's Wastewater Treatment Plant Renovation/Expansion through the National Environmental Policy Act according to Federal law. The National Environmental Policy Act (NEPA) requires federal agencies to integrate environmental values into their decision-making processes by considering the environmental impacts of their proposed actions and reasonable alternatives to those actions. The EPA reviews and comments on documents prepared by other agencies and assures that its own actions comply with NEPA. The final determination of the EA was that there would be no significant environmental impact to the Rio Hondo watershed as a result of the WWTP renovation and expansion.

Finally, all calculations in development of this TMDL used the projected plant design capacity of 0.200 MGD, instead of the current design capacity of 0.095 MGD. Consequently, all flow calculations in this TMDL estimate treatment capacity in the future scenario, which accommodates projected growth through 2020 (see Section 8.0). In addition to the projected growth that was integrated into the TMDL calculations, two percent of the TMDL was set aside for a growth allocation (GA), as a placeholder for unknown or future sources of nutrients. The SWQB believes that the Growth Allocation coupled with the Background Load, and implicit and explicit MOS is adequate to accommodate future growth and development through 2020.

IV. The Margin of Safety is Inadequate

Section 6.0 of the TMDL allocates an explicit 5% margin of safety to accommodate uncertainties in accuracy. It also claims to be providing an implicit margin of safety by providing conservative estimates in the TMDL analysis. The Pueblo of Taos asserts that the proposed margin of safety is inadequate, for the reasons explained below.

A. The Explicit Margin of Safety is Too Small to Account for Uncertainties

In calculating nitrogen and phosphorus exports into the Rio Hondo, the TMDL relies heavily on nutrient export coefficients to come up with waste load allocations of both nutrients. In the words of the TMDL, these coefficients provide a "rough approximation" since "no site-specific values exist for the Rio Hondo". Since no source data from the Rio Hondo exists, a hierarchical "best professional estimates" approach is employed utilizing surrogate data that is over 20 years old. Not only does this surrogate data not adequately represent the Rio Hondo, it makes no mention of present day realities associated with long-term drought that is well-known to be of historic significance.

The obvious problem with this approach is that it has no real connection to the Rio Hondo, and instead relies on values available for “western states.” It also fails to recognize on-the-ground truths that a meaningful environmental evaluation would not ignore. Nowhere does the TMDL account for relative density or health of native vegetation, frequency and intensity of storm events, compaction of soils on the banks of the Rio Hondo, or any number of environmental factors that would be quite obvious if NMED actually did fieldwork to verify their assumptions, *i.e.*, “best professional estimates”. The reality of the Upper Rio Hondo watershed is that summer monsoons bring very intense rains for short periods of time, and transport of sediments over parking lots and other disturbed areas are quite common. The cumulative effects of driveways, rooftops, sidewalks, and roads magnify these events in the form of non-point source pollution. This TMDL makes no attempt to look at this local phenomenon of summer monsoons, but rather inserts surrogate data assigned to an “eco-region” of the “western states.”

Perhaps the greatest oversight on the part of NMED would be effects of slope on nutrient transport. Since the immediate area is indeed a *ski area*, and recognized worldwide by skiers for *steepness*, Taos Pueblo finds it hard to believe that *slope* is never once accounted for in the nutrient export coefficients nor the margin of safety. This glaring omission is a serious dereliction of duty by the State of New Mexico in protection of the waters of the United States.

B. The Implicit Margin of Safety Unjustified

Due to oversights in nutrient transport calculations, inadequate allocations for future growth projections, and many other factors discussed throughout this document, Taos Pueblo has no choice but to challenge the assertion that the methods employed in this TMDL are in any way “conservative.” The cumulative effect of oversights and assumptions on behalf of the NMED leads Taos Pueblo to conclude that any reference to implicit margin of safety is unsubstantiated and thereby void. If the TMDL document wishes to rely on these stated “conservative assumptions,” clear and thorough explanations of these assumptions should be included throughout the TMDL. While we respect the stated effort to err on the side of caution, many aspects of this draft TMDL lend themselves to skepticism, and justify a more thorough inquiry and explanation.

The margin of safety allocated for the Rio Hondo TMDL should be increased to accommodate the many weaknesses in analysis contained therein. The combined effects of steep slope, soil compaction near the river, forest health that has been adversely affected by drought, and under-represented growth allocations all contribute to a margin of error that needs to be accounted for in the margin of safety. The TMDL’s reliance on surrogate data, derived from regional “best professional estimates,” is an inherent weakness. Taos Pueblo believes that the 5% margin of safety should be increased to at least 20% to account for these shortfalls. The 5% margin of safety would hardly cover the oversight of slope in the equation of nutrient transport, much less the other factors mentioned above. Standing alone as the single-most obvious and grievous oversight within this TMDL is the complete disregard for slope related to nutrient transport.

Oversight of monsoon storm events is surely worth 5% on its own as well. Likewise, weak representation within the TMDL of growing sources of non-point source pollution is

worthy of 5% margin of safety. Forest health, cumulative effects of growth, increased traffic associated with growth, and a general disregard for traditional native uses of the Rio Hondo all contribute to the remaining 5% margin of safety. Overall, this draft TMDL for the Rio Hondo has too many shortcomings to grant it the confidence implied by a 5% margin of safety. Taos Pueblo recommends the margin of safety be increased to at least 20% to offset weaknesses described above.

NMED/SWQB Response: The SWQB disagrees with this comment and believes that the combination of relatively conservative numeric targets and source estimates creates an overall Margin of Safety (MOS) that is adequate to account for uncertainty in this analysis. The MOS (page 32, Section 6.0) was reworded to explain, in more detail, the conservative assumptions and explicit uncertainties that were fundamental in this analysis. For further explanation, a TMDL is generally divided into a Load Allocation (LA) for nonpoint sources, a Waste Load Allocation (WLA) for point sources, and a Margin of Safety for uncertainties. This analysis went one step further and also allocated the load to background and future sources. The background, or ambient, allocation amounted to 17% for total phosphorus and 21% for total nitrogen. This allotment was set aside for current, ambient conditions and was not lumped into the LA, as was done in the past when suitable reference reaches were not known and background conditions could not be established. The separation of background load from the LA gives added reassurance that nonpoint source loads are more appropriate for the system and that applicable water quality standards will continue to be attained.

Also, it is not clear what is meant by the statement "...utilizing surrogate data that is over 20 years old..." The calculations in this TMDL were developed with monitoring data from 2000 and 2004, as well as recent peer-reviewed literature. The SWQB recognized and took the initiative to revise the 20-year old WLA (developed in 1981) even though the Rio Hondo is not currently impaired for nutrients to ensure that the plant expansion would not result in nutrient impairment to the Rio Hondo.

V. Waste Load Allocations From Taos Ski Valley Development are not Adequately Addressed in the TMDL.

At the heart of the proposed TMDL is the future growth and development of Taos Ski Valley. In numerous places the document states: "*Future projections indicate that nonpoint sources of nitrogen will more than likely increase as the Village of Taos Ski Valley continues to grow and develop*" (5.2.2). However, the document concludes: "*this TMDL does not include a specific WLA for stormwater discharges...*" (5.2.3). In reading the document, it appears that the TMDL justifies its lack of WLA on the possibility that the Village of Taos Ski Valley will develop a community wide sewer line extension project (5.2.3).

As the document points out, the TMDL is a planning document. To wait to see if the Ski Valley develops a community wide sewer line is bad planning. The development of such a sewer line extension is conservatively years away. In the meantime, nonpoint pollution continues to negatively impact the Rio Hondo Watershed, requiring the development of a WLA based upon specifically analyzed BMPs in the current document.

NMED/SWQB Response: The intent of this comment is unclear. According to the title of this comment section, the WLA is not adequately addressed. The WLA refers to point source discharges, not nonpoint sources.

As stated in the TMDL, individual waste load allocations for construction activities covered under general permits were not possible to calculate at this time using available data and analysis tools. Loads that are in compliance with the general permits are therefore currently calculated as part of the load allocation. The SWQB does not have the tools, site-specific data, and/or resources to conduct the necessary detailed studies to be able to accurately determine waste load allocations from construction activities covered under general permits.

The SWQB has previously discussed this issue with USEPA Region 6, and both parties performed research to determine if there are any examples from other states on how to approach this issue with construction activities covered under general permits. There are no good examples at this time, but several states are developing methods of including stormwater runoff from construction activities in their TMDLs, but they are still in the early stages of development. Storm water discharges from construction activities are transient because they occur mainly during the construction itself, and often only during storm events. Therefore, protection of the receiving water is best addressed through individual Storm Water Pollution Prevention Plans that are required as part of the construction process.

The SWQB agrees that in New Mexico, nonpoint sources are a significant contributor to water quality exceedences; therefore, the best avenue to maintain and/or improve watershed health is to focus community efforts on a holistic approach to watershed protection. A general implementation plan for activities to be established related to nonpoint sources is included in this document. The Surface Water Quality Bureau's Watershed Protection Section (SWQB/WPS) will further develop the details of this plan, known as a Watershed Restoration Action Strategy (WRAS), in full cooperation with stakeholders, such as the Rio Hondo/Upper Rio Grande Watershed Group, local and tribal governments, including Taos Pueblo, local businesses, and point source dischargers in the watershed. It is up to these participants to come to an agreement on their objectives, define the goals of the WRAS, and provide implementation strategies that will work for the various stakeholders in the community.

VI. The TMDL Fails to Consider Deficiencies in Other Parameters that Have an Additive or Synergistic Effect Combined with the Identified Impairment and Therefore Fails to Be Conservative and Adequately Protect Beneficial Uses

As the draft document points out, the watershed addressed by this TMDL suffers from excessive nitrogen and phosphorous loads. In addressing these loads the document fails, however, to account for the additive and/or synergistic effects of these pollutants and other identified stressors or "pollution" (e.g., "instream habitat availability, streambank erosion, low summer flows"), making the analysis in the TMDL significantly less conservative than the document acknowledges. For example, the draft specifically notes that while "phosphorus and nitrogen are essential for proper functioning of ecosystems...excess nutrients cause conditions

unfavorable for the proper functioning of aquatic ecosystems.” (1.4.) Nowhere in the document is there analysis which includes the synergistic effects of projected nitrogen and phosphorous releases combined with other known bacteria, minerals, toxicants and/or chemicals found in the Rio Hondo. Not only does this kind of fragmented approach lack conservatism, it weighs against a finding that this TMDL will lead to attainment of viable standards. It also undercuts the proposed margin of safety in the draft TMDL which proposes to take credit for various conservative assumptions. Those assumptions are simply of less value when they fail to include analysis of related parameters that have similar negative impacts on the beneficial uses. The development of the TMDL is the time to have a thorough and definitive assessment of *all* standards that are currently or in imminent likelihood of violation. For a TMDL, such as this, which purports to address the issues of the watershed as a whole, to overlook other related parameters is a serious error.

NMED/SWQB Response: Nowhere in the Draft document does it say that the watershed addressed by this TMDL suffers from excessive nutrients. According data collected during the 2000 and 2004 water quality surveys, the Rio Hondo (South Fork to Lake Fork Creek) fully supports its designated uses defined by the state of New Mexico and was not listed on the 2004-2006 STATE OF NEW MEXICO INTEGRATED CLEAN WATER ACT §303(D)/ §305(B) REPORT.

Section 1.4, entitled “Nutrient Cycling”, was written to give general background information for readers who are not familiar with the interactions and complexities of nutrient cycling in aquatic ecosystems.

VII. The Use of Site Specific Data in a Quantitative Analysis is a Necessary Prerequisite to Making a Determination that this TMDL will Lead to Attainment of Standards

As explained below, one of the Pueblo’s primary objections to the TMDL is the lack of any site-specific data and the prescriptions that are necessary to achieve the allocations. The result of this approach is a TMDL that could be applied to a variety of geographic areas in Northern New Mexico where there is impairment caused by excessive nutrient releases. As such, the TMDL is not a TMDL but rather an analytical restatement of water quality standards in surrogate form. While this is a very important first step, it is nonetheless just a first step and is not sufficient to constitute a TMDL.

A. Site-Specific Information is a Requirement of any TMDL, Regardless of the Use of Surrogate Measures

The quantitative analysis in the TMDL is an explanation of how some -- but not all, as discussed above -- of the applicable criteria contained in New Mexico water quality standards can be translated into surrogate measures that provide greater utility than loads to devising appropriate pollution control measures for non-point sources. The TMDL states: “*Currently, there are no numeric standards applicable to the Rio Hondo for total phosphorus (TP) and total Nitrogen (TN)...This TMDL document is adopting the philosophy and target concentrations suggested in the 1981 Waste Load Allocation for Twining Water Sanitation District...because the numeric targets in the 1981 document have proven effective.*” (2.3.) *Nutrient export coefficients*

for this study were obtained from literature values since no site-specific values existed for the Rio Hondo...From these, values from western states were selected.” (3.0.) This approach is seriously flawed.

Instead of developing holistic site-specific standards, the TMDL, as pointed out above, relies on outdated surrogate measures – namely 24-year-old water quality standards not developed for the Rio Hondo. Nowhere in controlling statutes or regulations is a TMDL defined as merely being a restatement of historic water quality standards. Instead, a TMDL is a quantitative analysis of the standards as applied to a particular water body. In contrast, the Rio Hondo TMDL does not go beyond reiterating the rationale behind the surrogate measures and noting various goals and objectives. Neither constitutes a complete TMDL, nor do they constitute one together.

NMED/SWQB Response: According data collected during the 2000 and 2004 water quality surveys, the Rio Hondo (South Fork to Lake Fork Creek) fully supports its designated uses defined by the state of New Mexico and was not listed on the 2004-2006 STATE OF NEW MEXICO INTEGRATED CLEAN WATER ACT §303(D)/ §305(B) REPORT. Since historical records show that this assessment unit was impaired for plant nutrients and current analysis indicates it is not impaired, it can be concluded that the in-stream target concentrations that were suggested in the 1981 WLA were effective at reducing nutrient pollution and improving stream water quality.

The use of export coefficients to estimate nonpoint source loading was the best available method given the available dataset and given that detailed watershed models have not been developed for the Rio Hondo watershed. The results provided an approximation of the loading to the Rio Hondo watershed. The SWQB applied for an EPA 104(b)(3) Grant for FY 2004 to identify all dischargers (point and nonpoint sources) and their respective contributions of nutrients within the Rio Hondo watershed, to determine the overall potential impact of these dischargers, and to revise/develop total maximum daily load (TMDL) planning documents for nutrients. The EPA did not select SWQB’s proposal for funding. Unfortunately, the SWQB currently does not have the tools, site-specific data, and/or resources to conduct the necessary detailed studies to be able to develop detailed watershed models for the Rio Hondo watershed that accurately predict site-specific nutrient loading.

VIII. Taos Pueblo would be interested in a Cooperative Agreement with New Mexico to Protect the Rio Hondo Watershed

Because of the predicted growth in Taos County adjacent to the Pueblo of Taos, the Pueblo would be interested in entering into a cooperative Agreement with New Mexico to develop appropriate standards for the Rio Hondo Watershed.

In Section 10.1 the document refers to “*opportunities for private landowners and public agencies in reducing and preventing water quality,*” without specifically naming the Pueblo of Taos. As a sovereign Nation, the Pueblo of Taos would consider working with the State of New Mexico to secure Clean Water Act Section 319 funding for the watershed. Indeed, it is the

Tribe's position that such a joint venture, involving the Pueblo, would prioritize the funding coming to New Mexico. In this regard, the Pueblo would be interested in watershed planning; consistent timely monitoring; and developing a holistic approach to protecting the water quality standards of the Rio Hondo Watershed.

NMED/SWQB Response: The SWQB understands Taos Pueblo's concern and appreciates the Pueblo's commitment to improving the health of the Rio Hondo watershed. The SWQB agrees that the monitoring, assessment, TMDL development, and watershed protection activities should be in the best interest of the target watershed. SWQB intends to continue working collaboratively with interested stakeholders, such as Taos Pueblo, local governments, local businesses, Taos Ski Valley WWTP, and the Rio Hondo/Upper Rio Grande Watershed Group to help protect and improve the biological, chemical, and physical integrity of Rio Hondo watershed. The SWQB Watershed Protection Section will be working with interested stakeholders, including Taos Pueblo, on the development of Watershed Restoration Action Strategies (WRAS), which will lead to CWA 319 proposals for subsequent restoration projects for the entire Upper Rio Grande watershed.

Sincerely,
Robert Gomez, Director
Taos Pueblo Environment Department