Appendix E

Facility's Current NPDES Permit (effective March 1, 2018)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
1595 WYNKOOP STREET
DENVER, COLORADO 80202-1129

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. § 1251 et seq; "the Act"),

the Northern Cheyenne Utilities Commission

is authorized to discharge from the Lame Deer Lagoon wastewater treatment facility located in the NE 1/4 of Section 33 and the SE 1/4 of Section 28, Township 2S, Range 41E, latitude 45.628889° N and longitude 106.673611° W, Rosebud County,

to **Lame Deer Creek, a tributary to Rosebud Creek,**

in accordance with discharge point(s), effluent limitations, monitoring requirements and other conditions set forth herein. Authorization for discharge is limited to those outfalls specifically listed in the Permit.

This Permit shall become effective March 1, 2018.

This Permit and the authorization to discharge shall expire at midnight, December 31, 2022.

Signed this 18th day of January, 2018

Authorized Permitting Official

Darcy O'Connor
Assistant Regional Administrator
Office of Water Protection

TABLE OF CONTENTS

1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1.1. Definitions.

The *average monthly (or 30-day)* limitation, other than for microbiological organisms (e.g., bacteria, viruses, etc.), is the arithmetic mean of all samples collected during a calendar month (or consecutive 30-day period if applicable). Geometric means shall be calculated for microbiological organisms unless specified otherwise in the Permit. The calendar month shall be used for purposes of reporting self-monitoring data on discharge monitoring reports.

The *average weekly (or 7-day)* limitation, other than for microbiological organisms (e.g., bacteria, viruses, etc.), is the arithmetic mean of all samples collected during a calendar week (or consecutive 7-day period if applicable). Geometric means shall be calculated for microbiological organisms unless specified otherwise in the Permit. The calendar week, which begins on Sunday and ends on Saturday, shall be used for purposes of reporting self-monitoring data on discharge monitoring reports. If a calendar week overlaps two months (i.e., the Sunday is in one month and the Saturday in the following month), the weekly average calculated for that calendar week shall be included in the data for the month that contains the Saturday.

Approval Authority means the Director in a NPDES state with an approved state pretreatment program and the appropriate Regional Administrator in a non-NPDES state or NPDES state without an approved state pretreatment program.

CWA means the Clean Water Act (formerly referred to as either the Federal Water Pollution Control Act or the Federal Water Pollution Control Act Amendments of 1972), Pub. L. 92-500, as amended by Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483, Pub. L. 97-117, and Pub. L. 100-4. In this Permit, the CWA may be referred to as "the Act."

Daily Maximum (*Daily Max.*) is the maximum measured value for a pollutant discharged during a calendar day or any 24-hour period that reasonably represents a calendar day for purposes of sampling. For pollutants with daily maximum limitations expressed in units of mass (e.g., kilograms, pounds), the daily maximum is calculated as the total mass of pollutant discharged over the calendar day or representative 24-hour period. For pollutants with limitations expressed in other units of measurement (e.g., milligrams/liter, parts per billion), the daily maximum is calculated as the average of all measurements of the pollutant over the calendar day or representative 24-hour period. If only one measurement or sample is taken during a calendar day or representative 24-hour period, the single measured value for a pollutant will be considered the daily maximum measurement for that calendar day or representative 24-hour period.

Daily Minimum (*Daily Min*.) is the minimum value allowable in any single sample or instantaneous measurement collected during the course of a day.

Director means the Regional Administrator of the EPA Region 8 or an authorized representative.

E. coli means *Escherichia coli*.

EPA means the United States Environmental Protection Agency.

Geometric mean is defined by the Northern Cheyenne Water Quality Standards as the value obtained by taking the n^{th} root of the product of the measured values where zero values for measured values are taken to be the detection limit.

Grab sample, for monitoring requirements, is defined as a single "dip and take" sample collected at a representative point in the discharge stream.

Instantaneous measurement, for monitoring requirements, is defined as a single reading, observation, or measurement.

Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

Sewage Sludge is any solid, semi-solid or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary or advanced wastewater treatment processes; and a material derived from sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works.

Stormwater means storm water runoff, snow melt runoff, and surface runoff and drainage.

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

Whole Effluent Toxicity (WET) is the total toxic effect of an effluent measured directly with a toxicity test. Acute toxicity occurs when 50 percent or more mortality is observed for either species at any effluent concentration. Mortality in the control must simultaneously be 10 percent or less for the effluent results to be considered valid.

1.2. Description of Discharge Points: The authorization to discharge provided under this Permit is limited to the outfall specifically designated below as the discharge location. Discharges at any location not authorized under an NPDES Permit is a violation of the Clean Water Act and could subject the person(s) responsible for such discharge to penalties under Section 309 of the Act.

Outfall Serial Number	Description of Discharge Point
001	Near the west corner of cell three; discharge point is located at latitude 45.628889° N, longitude 106.673333° W.
001R	The Montana Highway 39 bridge over Lame Deer Creek about three and one-half miles north of Lame Deer, approximate latitude 45.667570° N, longitude 106.699640° W.

1.3. Specific Limitations and Self-Monitoring Requirements

1.3.1. **Effluent Limitations**

Interim Effluent Limitations - Outfall 001: Effective immediately and lasting through December 31, 2020, the quality of effluent discharged by the facility shall, at a minimum, meet the limitations as set forth below:

Effluent Characteristic	Effluent Limitation		
	Average Monthly a/	Average Weekly a/	Daily Maximum a/
BOD_5, mg/L	30	45	N/A
Total Suspended Solids, mg/L	30	45	N/A
Fecal coliform, cfu/100 mL	200 c/	N/A	400 c/
E. coli, cfu/100 mL	126 d/	N/A	406 d/
Total Residual Chlorine, mg/L e/	0.011	N/A	0.019
The pH of the effluent shall not be less than 6.5 standard units or greater than 9.0 standard units (s.u.) in any single sample or analysis.			
The Dissolved Oxygen limitation 7 Day mean cannot be less than 6.5 mg/L and the 1 Day Minimum cannot be less than 5.0 mg/L.			
There shall be no visible sheen in the receiving water or adjoining shoreline. If visible sheen is detected, a grab sample shall be taken immediately and analyzed in accordance with 40 CFR Part 136. The concentration of oil and grease shall not exceed 10 mg/L in any sample taken.			
The temperature of the effluent shall not exceed 20ºC in any single sample or analysis.			
There shall be no discharge of floating debris, scum, or other floating materials.			

Final Effluent Limitations - Outfall 001: Effective **42 months after the effective date of this permit** and lasting through the end of the permit, the quality of effluent discharged by the facility shall, at a minimum, meet the limitations as set forth below:

Effluent Characteristic	Effluent Limitation		
	Average Monthly a/	Average Weekly a/	Daily Maximum a/
BOD_5, mg/L	30	45	N/A
Total Suspended Solids, mg/L	30	45	N/A
Fecal coliform, cfu/100 mL	200 c/	N/A	400 c/
E. coli, cfu/100 mL	126 d/	N/A	406 d/
Total Residual Chlorine, mg/L e/	0.011	N/A	0.019
Ammonia as N, mg/L	See Section 1.3.1.1		N/A
The pH of the effluent shall not be less than 6.5 standard units or greater than 9.0 standard units (s.u.) in any single sample or analysis.			
The Dissolved Oxygen limitation 7 Day mean cannot be less than 6.5 mg/L and the 1 Day Minimum cannot be less than 5.0 mg/L.			

There shall be no visible sheen in the receiving water or adjoining shoreline. If visible sheen is detected, a grab sample shall be taken immediately and analyzed in accordance with 40 CFR Part 136. The concentration of oil and grease shall not exceed 10 mg/L in any sample taken.
The temperature of the effluent shall not exceed 20ºC in any single sample or analysis.
There shall be no discharge of floating debris, scum, or other floating materials.

a/ See Definitions, Part 1.1, for definition of terms.

b/ This limit for Dissolved Oxygen applies as an instantaneous minimum.

c/ Fecal coliform: From March 1 through October 31 each year, the geometric mean number of organisms in the fecal coliform group must not exceed 200 cfu/100 mL. In addition, no more than 10 percent of the total samples during any month are to exceed 400 cfu/100 mL.

d/ *E. coli*: Based on a statistically sufficient number of samples (not less than 5 samples equally spaced over a month), the geometric mean of the *E. coli* densities shall not exceed 126 per 100 mL. In addition, no single sample shall exceed 406 per 100 mL.

e/ The limits for Total Residual Chlorine are only applicable if chlorine is used in the disinfection process, once installed. The limits are below the minimum level of 0.05 mg/L for the required analytical method. Measured values greater than or equal to 0.05 mg/L are considered violations of the effluent limitations and measured values less than 0.05 mg/L are considered to be in compliance with the effluent limitations.

Ammonia Compliance Schedule Requirements

The permittee shall achieve compliance with the effluent limitations for ammonia in Part 1.3.1 of this permit in accordance with the following schedule.

The permittee shall submit the following to the permit issuing authority:

a. An outline of the measures to be taken to achieve compliance with the effluent limitations for ammonia in Part 1.3.1 of this permit; and
b. A schedule for implementing the measures described in Part a above. The schedule includes, but not limited to planning, design, bidding, construction, etc. of the necessary site improvements.

The above items shall be submitted no later than **12 months after the effective date of this permit**.

The permittee shall submit to the EPA a progress report reflecting the project status outlined in Part b above by no later than **18 months after the effective date of this permit**.

The permittee shall begin implementing the measures outlined in Part a above by no later than **24 months after the effective date of this permit**.

The permittee shall submit to the permit issuing authority a progress report reflecting the project status outlined in Part b above by no later than **30 months after the effective date of this permit**.

The permittee shall submit to the permit issuing authority a progress report reflecting the project status outlined in Part b above by no later than **36 months after the effective date of this permit**.

The permittee shall achieve compliance with the effluent limitations for ammonia in Part 1.3.1 of this permit by no later than **42 months after the effective date of this permit**.

Reports of compliance or noncompliance with, or any progress reports, on interim and final requirements contained in this Compliance Schedule shall be submitted no later than 14 days following each schedule date described above. If noncompliance is being reported, the reason for noncompliance shall be reported and the expected date when compliance will be achieved shall be given. The letter shall include the certification statement given in Part 4.7.4 of this permit and the letter shall be signed by a principal executive officer.

1.3.1.1 Ammonia Criteria Tables

Freshwater Aquatic Life Standards for *total ammonia* (mg/L NH_3-N plus NH_4-N) are expressed as a function of pH and temperature. Because these formulas are non-linear in pH and temperature, the standard is the average of separate evaluations of the formulas reflective of the fluctuations of flow, pH, and temperature within the averaging period; it is not appropriate to apply the formula to average pH, temperature and flow.

Table 1.
pH-Dependent Values of the 1-Hour Average Ammonia Limit

pH	Salmonids Present
6.5	32.6
6.6	31.3
6.7	29.8
6.8	28.1
6.9	26.2
7.0	24.1
7.1	22.0
7.2	19.7
7.3	17.5
7.4	15.4
7.5	13.3
7.6	11.4
7.7	9.65
7.8	8.11
7.9	6.77
8.0	5.62
8.1	4.64
8.2	3.83
8.3	3.15
8.4	2.59
8.5	2.14
8.6	1.77
8.7	1.47
8.8	1.23
8.9	1.04
9.0	0.885

Table 2.
Temperature- and pH-Dependent Values of the 30-Day Average Ammonia Limit

30-Day Average Limit, mg N/L										
	Temperature, C									
pH	0	14	16	18	20	22	24	26	28	30
6.5	6.67	6.67	6.06	5.33	4.68	4.12	3.62	3.18	2.80	2.46
6.6	6.57	6.57	5.97	5.25	4.61	4.05	3.56	3.13	2.75	2.42
6.7	6.44	6.44	5.86	5.15	4.52	3.98	3.50	3.07	2.70	2.37
6.8	6.29	6.29	5.72	5.03	4.42	3.89	3.42	3.00	2.64	2.32
6.9	6.12	6.12	5.56	4.89	4.30	3.78	3.32	2.92	2.57	2.25
7.0	5.91	5.91	5.37	4.72	4.15	3.65	3.21	2.82	2.48	2.18
7.1	5.67	5.67	5.15	4.53	3.98	3.50	3.08	2.70	2.38	2.09
7.2	5.39	5.39	4.90	4.31	3.78	3.33	2.92	2.57	2.26	1.99
7.3	5.08	5.08	4.61	4.06	3.57	3.13	2.76	2.42	2.13	1.87
7.4	4.73	4.73	4.30	3.78	3.32	2.92	2.57	2.26	1.98	1.74
7.5	4.36	4.36	3.97	3.49	3.06	2.69	2.37	2.08	1.83	1.61
7.6	3.98	3.98	3.61	3.18	2.79	2.45	2.16	1.90	1.67	1.47
7.7	3.58	3.58	3.25	2.86	2.51	2.21	1.94	1.71	1.50	1.32
7.8	3.18	3.18	2.89	2.54	2.23	1.96	1.73	1.52	1.33	1.17
7.9	2.80	2.80	2.54	2.24	1.96	1.73	1.52	1.33	1.17	1.03
8.0	2.43	2.43	2.21	1.94	1.71	1.50	1.32	1.16	1.02	0.897
8.1	2.10	2.10	1.91	1.68	1.47	1.29	1.14	1.00	0.879	0.773
8.2	1.79	1.79	1.63	1.43	1.26	1.11	0.973	0.855	0.752	0.661
8.3	1.52	1.52	1.39	1.22	1.07	0.941	0.827	0.727	0.639	0.562
8.4	1.29	1.29	1.17	1.03	0.906	0.796	0.700	0.615	0.541	0.475
8.5	1.09	1.09	0.990	0.870	0.765	0.672	0.591	0.520	0.457	0.401
8.6	0.920	0.920	0.836	0.735	0.646	0.568	0.499	0.439	0.386	0.339
8.7	0.778	0.778	0.707	0.622	0.547	0.480	0.422	0.371	0.326	0.287
8.8	0.661	0.661	0.601	0.528	0.464	0.408	0.359	0.315	0.277	0.244
8.9	0.565	0.565	0.513	0.451	0.397	0.349	0.306	0.269	0.237	0.208
9.0	0.486	0.486	0.442	0.389	0.342	0.300	0.264	0.232	0.204	0.179

For temperature (T) and pH conditions not expressed in Tables 1 and 2 above, ammonia toxicity limits can be calculated using the following equations:

1. Acute Criteria (CMC)
   a. The one-hour average concentration of total ammonia nitrogen (in mg N/L) cannot exceed the acute criterion as follows.

$$CMC = \frac{0.275}{1 + 10^{7.204\text{-pH}}} + \frac{39.0}{1 + 10^{\text{pH-}7.204}}$$

2. Chronic Criteria (CCC)
   a. The thirty-day average concentration of total ammonia nitrogen (in mg N/L) cannot exceed the chronic criterion calculated as follows.

$$CCC = \left(\frac{0.0577}{1 + 10^{7.688-pH}} + \frac{2.487}{1 + 10^{pH-7.688}} \right) \text{ X MIN } (2.85, 1.45 \times 10^{0.028 \times (25-T)})$$

Note: In addition, the highest four-day average within the 30-day period should not exceed 2.5 times the CCC.

1.3.2. Self-Monitoring Requirements

Outfall 001: At a minimum, upon the effective date of this Permit, the following constituents shall be monitored at the frequency and with the type of measurement indicated; samples or measurements shall be representative of the volume and nature of the monitored discharge. All effluent monitoring samples shall be taken at the discharge point near the west corner of cell three, at the earliest possible point in the discharge line after the Parshall flume located prior to the discharge into Lame Deer Creek. If no discharge occurs during the entire monitoring period, it shall be stated on the Discharge Monitoring Report (DMR) that no discharge or overflow occurred.

Effluent Characteristic a/	Frequency	Sample Type b/
Flow, MGD c/	Daily	Instantaneous
BOD_5, mg/L	Monthly	Grab
Total Suspended Solids, mg/L	Monthly	Grab
pH, standard units	Weekly d/	Instantaneous
Dissolved Oxygen, mg/L	Monthly	Grab
Fecal Coliform, no./100 ml. e/	5 per month f/	Grab
E. coli, no./100 ml.	5 per month f/	Grab
Oil and Grease (visible sheen) g/	Weekly	Visual Observation
Oil and Grease, mg/L g /	Upon observation of visible sheen	Grab
Temperature, ºC	Weekly d/	Instantaneous
Total Residual Chlorine, mg/L h/	Weekly	Grab
Ammonia, as N, mg/L	Monthly d/	Grab
Total Phosphorous, µg/L	Quarterly	Grab
Total Nitrogen, µg/L	Quarterly	Grab
Total Dissolved Solids, mg/L	Quarterly	Grab

a/ All monitored data shall be recorded in a daily log (paper or electronic). If no discharge occurs on any one day, zero (0) shall be recorded in the daily log for that day for flow and for all other parameters required to be monitored. If the required data are not entered in the daily log on a day that a discharge occurs, it will be assumed that the required monitoring was not performed. If no

discharge occurs during the reporting period, the appropriate "No Discharge" code shall be reported on the DMR.

b/ See Definitions, Section 1.1, for definition of terms.

c/ Flow monitoring shall be daily. Flow measurements of effluent volume shall be made in such a manner that the Permittee can affirmatively demonstrate that representative values are being obtained. The average flow rate (in million gallons per day) during the reporting period and the maximum flow rate observed (in mgd) shall be reported.

d/ Monitoring for pH and temperature must be conducted at the same time the sample to be analyzed for ammonia is taken.

e/ Monitoring for fecal coliform is required from March 1 to October 31 only.

f/ Samples shall be equally spaced over a calendar month.

g/ If a visible sheen is detected, a grab sample shall be taken immediately and analyzed in accordance with the requirements of 40 CFR Part 136. The concentration of oil and grease shall not exceed 10 mg/L in any sample.

h/ Monitoring for Total Residual Chlorine is required only if chlorine is used as part of the disinfection process.

1.3.3. Ambient Monitoring Requirements – Outfall 001R

Effluent Characteristic a/	Frequency	Sample Type b/
pH, standard units	Monthly	Instantaneous
Temperature, ºC	Monthly	Instantaneous
Time sample collected	Monthly	Instantaneous
Date sample collected	Monthly	Instantaneous

a/ All monitored data shall be recorded in a daily log (paper or electronic). If no discharge occurs on any one day, zero (0) shall be recorded in the daily log for that day for flow and for all other parameters required to be monitored. If the required data are not entered in the daily log on a day that a discharge occurs, it will be assumed that the required monitoring was not performed. If no discharge occurs during the reporting period, the appropriate "No Discharge" code shall be reported on the DMR.

b/ See Permit Definitions, section 1.1, for definition of terms.

1.3.4. Reporting Period

For the duration of this Permit, the discharger shall submit Discharge Monitoring Reports (DMRs) monthly as described in section 2.3.

1.3.5. Inspection Requirements

1.3.5.1. On at least a weekly basis, unless otherwise approved by the Permit issuing authority, the Permittee shall inspect its wastewater treatment facility, at a minimum, for the following:

1.3.5.1.1. Check to see if there is any leakage through the dikes;

1.3.4.1.2. Check to see if there are any animal burrows in the dike;

1.3.5.1.3. Check to see if there has been any excessive erosion of the dikes;

1.3.5.1.4. Check to see if there are any rooted plants, including weeds growing in the water;

1.3.5.1.5. Check to see if vegetation growth on the dikes needs mowing; and,

1.3.5.1.6. Determine if proper operation and maintenance procedures are being undertaken at the wastewater treatment facility.

1.3.5.2. The Permittee shall maintain a daily log in either paper or electronic format recording information obtained during the inspection. At a minimum, the log shall include the following:

1.3.5.2.1. Date and time of the inspection;

1.3.4.2.2. Name of the inspector(s);

1.3.5.2.3. The facility's discharge status;

1.3.5.2.4. The flow rate of the discharge if occurring;

1.3.5.2.5. Identification of operational problems and/or maintenance problems;

1.3.5.2.6. Recommendations, as appropriate, to remedy identified problems;

1.3.4.2.7. A brief description of any actions taken with regard to problems identified; and,

1.3.5.2.8. Other information, as appropriate.

The Permittee shall maintain the daily log in accordance with proper record-keeping procedures and shall make the log available for inspection, upon request, by authorized representatives of the U.S. Environmental Protection Agency or the Northern Cheyenne Tribe.

1.3.5.3. Problems identified during the inspection shall be addressed through proper operation and maintenance. (See Part 3.1 of this Permit.)

2. MONITORING, RECORDING AND REPORTING REQUIREMENTS

2.1. Representative Sampling: Samples taken in compliance with the monitoring requirements established under Part 1 shall be collected from the effluent stream prior to discharge into the receiving waters. Samples and measurements shall be representative of the volume and nature of the monitored discharge. Sludge samples shall be collected at a location representative of the quality of sludge immediately prior to use-disposal practice.

2.2. Monitoring Procedures: Monitoring must be conducted according to paragraph 5.10.4, unless other test procedures have been specified in this Permit. Sludge monitoring procedures shall be those specified in 40 CFR 503, or as specified in the Permit.

2.3. Reporting of Monitoring Results: Upon the effective date of this Permit, the Permittee must electronically report DMRs using NetDMR. Electronic submissions by permittees must be sent to the EPA Region 8 no later than the 28th of the month following the completed reporting period. The Permittee must sign and certify all electronic submissions in accordance with the requirements of Part 4.2 of this Permit ("Signatory Requirements"). NetDMR is accessed from the internet at https://netdmr.zendesk.com/home.

In addition, the Permittee must submit a copy of the DMR to the Northern Cheyenne tribe. Currently, the Permittee may submit a copy to the Tribe by one of three ways: 1. a paper copy may be mailed. 2. The email address may be added to the electronic submittal through NetDMR, or, 3. The Permittee may provide viewing rights through NetDMR.

Legible copies of all other reports required herein, shall be signed and certified in accordance with the Signatory Requirements (see Part 4), and submitted to the EPA Region 8 Policy, Information Management & Environmental Justice Program and the Northern Cheyenne Tribe Department of Environmental Protection and Natural Resources (DEPNR) at the addresses given below:

Original to: U.S. EPA, Region 8
(8ENF-PJ)
Attention: DMR Coordinator
1595 Wynkoop Street
Denver, Colorado 80202-1129

Copy to: Northern Cheyenne Tribe
Department of Environmental Protection and Natural Resources
P.O. Box 128
Lame Deer, Montana 59043

2.4. Records Contents: In addition to those requirements specified in paragraph 5.10.3, records of monitoring information shall include:

2.4.1. References and written procedures, when available, for the analytical techniques or methods used (5.10.3.5); and,

2.4.2. The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results (5.10.3.6).

2.5. Twenty-four Hour Notice of Noncompliance Reporting. Reporting required by section 5.12.6 shall be made to the following offices:

2.5.1. The Permittee shall report any noncompliance which **may endanger health or the environment** as soon as possible, but no later than twenty-four (24) hours from the time the Permittee first became aware of the circumstances. The report shall be made to the EPA, Region 8, Site Assessment/Emergency Response Program at (303) 293-1788 and the Northern Cheyenne Tribe DEPNR at (406) 477-6506.

2.5.2. Occurrences of noncompliance noted at section 5.12.6.2 of this Permit shall be reported by telephone to the EPA, Region 8, NPDES Enforcement Unit at (800) 227-8917 (8:00 a.m. - 4:30 p.m. Mountain Time), or NPDES Program, EPA Region 8 Office of Water Protection,

Wastewater Unit at 866-457-2690) (8:00 a.m. - 4:30 p.m. Mountain Time) and the Tribe at (406) 477-6506 - (8:00 a.m. - 4:30 p.m. Mountain Time) by the first workday following the day the Permittee became aware of the circumstances.

2.5.3. A written submission of all reports shall also be provided to the U.S. EPA, Office of Enforcement, Compliance and Environmental Justice, and to the Tribe within five days of the time that the Permittee becomes aware of the circumstances. The written submission shall contain:

2.5.3.1. A description of the noncompliance and its cause;

2.5.3.2. The period of noncompliance, including exact dates and times;

2.5.3.3. The estimated time noncompliance is expected to continue if it has not been corrected; and,

2.5.3.4. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

2.5.4. The Director may waive the written report on a case-by-case basis for an occurrence of noncompliance listed under Part 5.12.6.2, if the incident has been orally reported in accordance with the requirements of Part 2.5.2.

2.5.5. Reports shall be submitted to the addresses in Part 2.3, Reporting of Monitoring Results.

3. COMPLIANCE RESPONSIBILITIES

3.1. Proper Operation and Maintenance: In addition to the operation and maintenance requirements outlined at 5.5, the Permittee shall operate, at a minimum, one complete set of each main line unit treatment process whether or not this process is needed to achieve Permit effluent compliance.

3.1.1 The Permittee shall, as soon as reasonable and practicable, but no later than six (6) months after the effective date of this Permit, do the following as part of the operation and maintenance program for the wastewater treatment facility:

3.1.1.1. Have a current O & M Manual(s) that describes the proper operational procedures and maintenance requirements of the wastewater treatment facility;

3.1.1.2. Have the O & M Manual(s) readily available to the operator of the wastewater treatment facility and require that the operator become familiar with the manual(s) and any updates;

3.1.1.3. Have a schedule(s) for routine operation and maintenance activities at the wastewater treatment facility; and,

3.1.1.4. Require the operator to perform the routine operation and maintenance requirements in accordance with the schedule(s).

3.1.2. The Permittee shall maintain a daily log, in either paper (bound notebook) or electronic format, containing a summary record of all operation and maintenance activities at the wastewater treatment facility. At a minimum, the log shall include the following information:

3.1.2.1. Date and time;

3.1.2.2 Name and title of person(s) making the log entry;

3.1.2.3. Name of the persons(s) performing the activity;

3.1.2.4. A brief description of the activity; and,

3.1.2.5. Other information, as appropriate.

The Permittee shall maintain the log in accordance with proper record-keeping procedures and shall make the log available for inspection, upon request, by authorized representatives of the U.S. Environmental Protection Agency or the Tribe.

3.2. Removed Substances: Collected screenings, grit, solids, sludge (including sewage sludge), or other pollutants removed in the course of treatment shall be buried or disposed in a manner consistent with all applicable federal and tribal regulations (e.g., 40 CFR Part 257, 40 CFR Part 258, 40 CFR Part 503). Sludge/digester supernatant and filter backwash shall not be directly blended with or enter either the final plant discharge and/or waters of the United States.

3.3. Notice of Bypass (See 5.13.3):

3.3.1. Anticipated bypass: If the Permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass to the USEPA, Technical Enforcement Program, and to the Tribe.

3.3.2. Unanticipated bypass: The Permittee shall submit notice of an unanticipated bypass as required under Part 2.8, Twenty-four Hour Noncompliance Reporting, to the U.S. EPA, Technical Enforcement Program, and to the Tribe.

3.4. Industrial Waste Management (Minor POTWs in Indian Country)

3.4.1. The Permittee has the responsibility to protect the Publicly-Owned Treatment Works (POTW) from pollutants which would inhibit, interfere, or otherwise be incompatible with operation of the treatment works including interference with the use or disposal of municipal sludge.

3.4.2. Pretreatment Standards (40 CFR Section 403.5) developed pursuant to Section 307 of the Federal Clean Water Act (the Act) require that the Permittee shall not allow, under any circumstances, the introduction of the following pollutants to the POTW from any source of nondomestic discharge:

3.4.2.1. Any other pollutant which may cause Pass Through or Interference.

3.4.2.2. Pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, waste streams with a closed cup flashpoint of less than sixty (60) degrees Centigrade (140 degrees Fahrenheit) using the test methods specified in 40 CFR Section 261.21;

3.4.2.3. Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with a pH of lower than 5.0 s.u., unless the treatment facilities are specifically designed to accommodate such discharges;

3.4.2.4. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, or other interference with the operation of the POTW;

3.4.2.5. Any pollutant, including oxygen demanding pollutants (e.g., BOD), released in a discharge at a flow rate and/or pollutant concentration which will cause Interference with any treatment process at the POTW;

3.4.2.6. Heat in amounts which will inhibit biological activity in the POTW resulting in Interference, but in no case heat in such quantities that the temperature at the POTW treatment plant exceeds forty (40) degrees Centigrade (104 degrees Fahrenheit) unless the Approval Authority, upon request of the POTW, approves alternate temperature limits;

3.4.2.7. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause Interference or Pass Through;

3.4.2.8. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems;

3.4.2.9. Any trucked or hauled pollutants, except at discharge points designated by the POTW; and

3.4.2.10. Any specific pollutant which exceeds a local limitation established by the Permittee in accordance with the requirements of 40 CFR Section 403.5(c) and (d).

3.4.3. For the POTWs covered by this Permit, the EPA presently is the Approval Authority for the Pretreatment Program and the mailing address for all reporting and notifications to the Approval Authority shall be: USEPA - Region 8, NPDES Enforcement Unit (8ENF-W-NP), 1595 Wynkoop Street, Denver, CO 80202-1129.

3.4.4. In addition to the general limitations expressed above, more specific Pretreatment Standards have been and will be promulgated for specific industrial categories under Section 307 of the Act (40 CFR Part 405 et. seq.).

3.4.5. The Permittee must notify the Approval Authority of any new introductions by new or existing industrial users or any substantial change in pollutants from any industrial user within sixty (60) days following the introduction or change. Such notice must identify:

3.4.5.1. Any new introduction of pollutants into the POTW from an industrial user which would be subject to Sections 301, 306, or 307 of the Act if it were directly discharging those pollutants; or,

3.4.5.2. Any substantial change in the volume or character of pollutants being introduced into the POTW by any industrial user;

3.4.5.3. For the purposes of this section, adequate notice shall include information on:

3.4.5.3.1. The identity of the industrial user;

3.4.5.3.2. The nature and concentration of pollutants in the discharge and the average and maximum flow of the discharge to be introduced into the POTW; and

3.4.5.3.3. Any anticipated impact of the change on the quantity or quality of effluent to be discharged from or biosolids or sludge produced at such POTW.

3.4.5.4. For the purposes of this section, an industrial user shall include:

3.4.5.4.1. Any discharger subject to Categorical Pretreatment Standards under Section 307 of the Act and 40 CFR chapter I and subchapter N;

3.4.5.4.2. Any discharger which has a process wastewater flow of 25,000 gallons or more per day;

3.4.5.4.3. Any discharger contributing five percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant;

3.4.5.4.4. Any discharger who is designated by the Approval Authority as having a reasonable potential for adversely affecting the POTW's operation or for violating any Pretreatment Standard or requirements;

3.4.6. At such time as a specific Pretreatment Standard or requirement becomes applicable to an industrial user of the Permittee, the Approval Authority may, as appropriate:

3.4.6.1. Amend the Permittee's NPDES discharge Permit to specify the additional pollutant(s) and corresponding effluent limitation(s) consistent with the applicable national Pretreatment Standards;

3.4.6.2. Require the Permittee to specify, by ordinance, order, or other enforceable means, the type of pollutant(s) and the maximum amount which may be discharged to the Permittee's POTW for treatment. Such requirement shall be imposed in a manner consistent with the program development requirements of the General Pretreatment Regulations at 40 CFR Part 403; and/or,

3.4.6.3. Require the Permittee to monitor its discharge for any pollutant which may likely be discharged from the Permittee's POTW, should the industrial user fail to properly pretreat its waste.

3.4.7. The Approval Authority retains, at all times, the right to take legal action against any source of nondomestic discharge, whether directly or indirectly controlled by the Permittee, for violations of a permit, order or similar enforceable mechanism issued by the Permittee, violations of any Pretreatment Standard or requirement, or for failure to discharge at an acceptable level under national standards issued by the EPA under 40 CFR, chapter I, subchapter N. In those cases where a NPDES permit violation has occurred because of the failure of the Permittee to properly develop and enforce Pretreatment Standards and requirements as necessary to protect the POTW, the Approval Authority shall hold the Permittee and/or industrial user responsible and may take legal action against the Permittee as well as the Industrial user(s) contributing to the Permit violation.

4. GENERAL REQUIREMENTS

4.1. Planned Changes: In addition to the requirements outlined at 5.12.1, the Permittee shall give the Director notice, at least 30 days prior to implementation, when there are any planned substantial changes to the existing sewage sludge facilities, the manner of its operation, or to current sewage sludge management practices of storage and disposal.

4.2. Signatory Requirements: All applications, reports or information submitted to the Director shall be signed and certified.

4.2.1. All permit applications shall be signed by either a principal executive officer or ranking elected official.

4.2.2. All reports required by the Permit and other information requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

4.2.2.1. The authorization is made in writing by a person described above and submitted to the Director; and,

4.2.2.2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

4.2.3. Changes to authorization: If an authorization under Part 4.2.2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part 4.2.2 must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

4.2.4. Certification: Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

4.3. Penalties for Falsification of Reports: The Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six months per violation, or by both.

4.4. Availability of Reports: Except for data determined to be confidential under 40 CFR Part 2, Subpart B, all reports prepared in accordance with the terms of this Permit shall be available for public inspection at the offices of the Director. As required by the Act, permit applications, permits and effluent data shall not be considered confidential.

4.5. Oil and Hazardous Substance Liability: Nothing in this Permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties to which the Permittee is or may be subject under Section 311 of the Act.

4.6. Property Rights: The issuance of this Permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, tribal or local laws or regulations.

4.7. Severability: The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not be affected thereby.

4.8. Transfers: This Permit may be automatically transferred to a new permittee if:

4.8.1. The current Permittee notifies the Director at least 30 days in advance of the proposed transfer date;

4.8.2. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and,

4.8.3. The Director does not notify the existing Permittee and the proposed new permittee of his or her intent to modify, or revoke and reissue the Permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part 4.8.2.

4.9. Permittees in Indian Country. The EPA is issuing this Permit pursuant to the Agency's authority to implement the Clean Water Act NPDES program in Indian Country, as defined at 18 U.S.C. § 1151.

4.10. Reopener Provision: This Permit may be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations (and compliance schedule, if necessary), or other appropriate requirements if one or more of the following events occurs:

4.10.1. Water Quality Standards: The water quality standards of the receiving water(s) to which the Permittee discharges are modified in such a manner as to require different effluent limits than contained in this Permit.

4.10.2. Wasteload Allocation: A wasteload allocation is developed and approved by the Tribe and/or the EPA for incorporation in this Permit.

4.10.3. Water Quality Management Plan: A revision to the current water quality management plan is approved and adopted which calls for different effluent limitations than contained in this Permit.

4.11. Toxicity Limitation-Reopener Provision: This Permit may be reopened and modified (following proper administrative procedures) to include whole effluent toxicity limitations if whole effluent toxicity is detected in the discharge.

5. ADDITIONAL STANDARD CONDITIONS

5.1. Duty to comply: The Permittee must comply with all conditions of this Permit. Any Permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

5.1.1. The Permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the Permit has not yet been modified to incorporate the requirement.

5.1.2. The Clean Water Act provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed $53,484 per day for each violation. The Clean Water Act provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of $2,500 to $25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than $50,000 per day of violation, or by imprisonment of not more than 2 years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than 6 years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than $1,000,000 and can be fined up to $2,000,000 for second or subsequent convictions.

5.1.3. Any person may be assessed an administrative penalty by the Administrator for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed $21,393 per violation, with the maximum amount of any Class I penalty assessed not to exceed $53,484. Penalties for Class II

violations are not to exceed $21,393 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed $267,415.

5.1.4. The Federal Civil Penalties Inflation Adjustment Act of 1990, as amended by the Debt Collection Improvement Act of 1996 and the Federal Civil Penalties Inflation Adjustment Act Improvement Act of 2015, requires the EPA to adjust the civil monetary penalties for inflation on a periodic basis. The EPA has adjusted its civil monetary penalties seven times since 1996, most recently on January 15, 2018 (83 Fed. Reg. 1190-1194). The penalties noted in Parts 5.1.2 and 5.1.3 are the civil and criminal penalties for violations of the Act (including permit conditions) as of January 15, 2018.

5.2. Duty to reapply: If the Permittee wishes to continue an activity regulated by this Permit after the expiration date of this Permit, the Permittee must apply for and obtain a new permit.

5.3. Need to halt or reduce activity not a defense: It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

5.4. Duty to mitigate: The Permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Permit which has a reasonable likelihood of adversely affecting human health or the environment.

5.5. Proper operation and maintenance: The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

5.6. Permit actions: This Permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Permit condition.

5.7. Property rights: This Permit does not convey any property rights of any sort, or any exclusive privilege.

5.8. Duty to provide information: The Permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Permit or to determine compliance with this Permit. The Permittee shall also furnish to the Director upon request, copies of records required to be kept by this Permit.

5.9. Inspection and entry: The Permittee shall allow the Director, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon presentation of credentials and other documents as may be required by law, to:

5.9.1. Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Permit;

5.9.2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;

5.9.3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and

5.9.4. Sample or monitor at reasonable times, for the purposes of assuring Permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

5.10. Monitoring and records:

5.10.1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

5.10.2. Except for records of monitoring information required by this Permit related to the Permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR part 503), the Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Permit, and records of all data used to complete the application for this Permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

5.10.3. Records of monitoring information shall include:

5.10.3.1. The date, exact place, and time of sampling or measurements;

5.10.3.2. The individual(s) who performed the sampling or measurements;

5.10.3.3. The date(s) analyses were performed;

5.10.3.4. The individual(s) who performed the analyses;

5.10.3.5. The analytical techniques or methods used; and

5.10.3.6. The results of such analyses.

5.10.4. Monitoring must be conducted according to test procedures approved under 40 C.F.R. Part 136, unless other test procedures have been specified in this Permit. Sludge monitoring procedures shall be those specified in 40 C.F.R. 503, or as specified in the Permit.

5.10.5. The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this Permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

5.11. Signatory requirement:

5.11.1. All applications, reports, or information submitted to the Director shall be signed and certified. (See 40 CFR 122.22)

5.11.2. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

5.12. Reporting requirements:

5.12.1. Planned changes. The Permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the Permitted facility. Notice is required only when:

5.12.1.1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or

5.12.1.2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the Permit, nor to notification requirements under 40 CFR 122.42(a)(1).

5.12.1.3. The alteration or addition results in a significant change in the Permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of Permit conditions that are different from or absent in the existing Permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;

5.12.2. Anticipated noncompliance. The Permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with Permit requirements.

5.12.3. Transfers. This Permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the Permit to change the name of the Permittee and incorporate such other requirements as may be necessary under the Clean Water Act. (See 40 CFR 122.61; in some cases, modification or revocation and reissuance is mandatory.)

5.12.4. Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this Permit.

5.12.4.1 Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Director for reporting results of monitoring of sludge use or disposal practices. As of December 21, 2016 all reports and forms submitted in compliance with this section must be submitted electronically by the Permittee to the Director or initial recipient, as defined in 40 CFR 127.2(b), in compliance with this section and 40 CFR part 3 (including, in all cases, subpart D to part 3), 40 CFR 122.22, and 40 CFR part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of part 127, permittees may be required to report electronically if specified by a particular permit or if required to do so by state law.

5.12.4.2. If the Permittee monitors any pollutant more frequently than required by the Permit using test procedures approved under 40 CFR Part 136, or another method required for an industry-specific waste stream under 40 CFR subchapters N or O, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Director.

5.12.4.3. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the Permit.

5.12.5. Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Permit shall be submitted no later than 14 days following each schedule date.

5.12.6. Twenty-four hour reporting.

5.12.6.1. The Permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Permittee becomes aware of the circumstances. A report shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times), and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described above (with the exception of time of discovery) as well as the type of event (combined sewer overflows, sanitary sewer overflows, or bypass events), type of sewer overflow structure (e.g., manhole, combine sewer overflow outfall), discharge volumes untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the sewer overflow event, and whether the noncompliance was related to wet weather. As of December 21, 2020 all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events submitted in compliance with this section must be submitted electronically by the Permittee to the Director or initial recipient, as defined in 40 CFR 127.2(b), in compliance with this section and 40 CFR part 3 (including, in all cases, subpart D to part 3), 40 CFR 122.22, and 40 CFR part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of part 127, permittees may be required to electronically submit reports related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section by a particular permit or if required to do so by state law. The Director may also require permittees to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section.

5.12.6.2. The following shall be included as information which must be reported within 24 hours under this paragraph.

5.12.6.2.1. Any unanticipated bypass which exceeds any effluent limitation in the Permit. (See 40 CFR 122.41(g).

5.12.6.2.2. Any upset which exceeds any effluent limitation in the Permit.

5.12.6.2.3. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the Permit to be reported within 24 hours. (See 40 CFR122.44(g).)

5.12.6.3. The Director may waive the written report on a case-by-case basis for reports under paragraph 5.12.2.6 if the oral report has been received within 24 hours.

5.12.7. Other noncompliance. The Permittee shall report all instances of noncompliance not reported under paragraphs 5.12.4, .5, and .6, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph 5.12.6. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports shall contain the information described in paragraph 5.12.6 and the applicable required data in appendix A to 40 CFR part 127. As of December 21, 2020 all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events submitted in compliance with this section must be submitted electronically by the Permittee to the Director or initial recipient, as defined in 40 CFR 127.2(b), in compliance with this section and 40 CFR part 3 (including, in all cases, subpart D to part 3), 40 CFR 122.22, and 40 CFR part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of part 127, permittees may be required to electronically submit reports related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section by a particular permit or if required to do so by state law. The Director may also require permittees to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section.

5.12.8. Other information. Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

5.12.9. Identification of the initial recipient for NPDES electronic reporting data. The owner, operator, or the duly authorized representative of an NPDES-regulated entity is required to electronically submit the required NPDES information (as specified in appendix A to 40 CFR part 127) to the appropriate initial recipient, as determined by the EPA, and as defined in 40 CFR 127.2(b). The EPA will identify and publish the list of initial recipients on its Web site and in the Federal Register, by state and by NPDES data group [see 40 CFR 127.2(c)]. The EPA will update and maintain this listing.

5.13. Bypass:

5.13.1. Definitions.

5.13.1.1. Bypass means the intentional diversion of waste streams from any portion of a treatment facility.

5.13.1.2. Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

5.13.2. Bypass not exceeding limitations. The Permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 5.13.3 and 5.13.4.

5.13.3. Notice

5.13.3.1. Anticipated bypass. If the Permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass. As of December 21, 2020 all notices submitted in compliance with this section must be submitted electronically by the Permittee to the Director or initial recipient, as defined in 40 CFR 127.2(b), in compliance with this section and 40 CFR part 3 (including, in all cases, subpart D to part 3), 40 CFR 122.22, and 40 CFR part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of part 127, permittees may be required to report electronically if specified by a particular permit or if required to do so by state law.

5.13.3.2. Unanticipated bypass. The Permittee shall submit notice of an unanticipated bypass as required in paragraph 5.12.6 (24-hour notice). As of December 21, 2020 all notices submitted in compliance with this section must be submitted electronically by the Permittee to the Director or initial recipient, as defined in 40 CFR 127.2(b), in compliance with this section and 40 CFR part 3 (including, in all cases, subpart D to part 3), 40 CFR 122.22, and 40 CFR part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of part 127, permittees may be required to report electronically if specified by a particular permit or if required to do so by state law.

5.13.4. Prohibition of bypass.

5.13.4.1. Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:

5.13.4.1.1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

5.13.4.1.2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

5.13.4.1.3. The Permittee submitted notices as required under paragraph 5.13.3.

5.13.4.2. The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph 5.13.4.1.

5.14. Upset:

5.14.1. Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

5.14.2. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph 5.14.3 are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

5.14.3. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

5.14.3.1. An upset occurred and that the Permittee can identify the cause(s) of the upset;

5.14.3.2. The permitted facility was at the time being properly operated; and

5.14.3.3. The Permittee submitted notice of the upset as required in paragraph 5.12.6.2 (24-hour notice).

5.14.3.4. The Permittee complied with any remedial measures required under paragraph 5.4.

5.14.4. Burden of proof. In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset has the burden of proof.

Appendix F

October 28, 2020 NCUC Initial Rates Study Report

Northern Cheyenne Utility Commission Rate Study Report

October 28, 2020

Prepared by
Glenn Barnes, Director
Water Finance Assistance

This document was prepared under contract with the Inter-Tribal Council of Arizona, Inc. as part of the work under the FY2019-2020 Technical Assistance and Training Grant Agreement between the Inter-Tribal Council of Arizona, Inc. and the US Department of Agriculture—Rural Facilities Services.

Contents

Executive Summary

This report contains the summary rates analysis for the Northern Cheyenne Utility Commission (NCUC) conducted in 2020. The current water and wastewater rates are insufficient to capture the full cost of providing those services, even with grants covering many capital expenditures. In addition, NCUC must also increase its reserve funds to meet a goal of keeping $100,000 in the bank. This reserve fund goal is approximately the minimum reasonable amount to have in reserves for a utility of NCUC's size. Over the next five years, the total annual revenue shortfall will range from approximately $60,000 to $112,000.

To recover this revenue shortfall, NCUC must raise rates. NCUC currently divides residential customers into two groups: residential customers who pay the full rate, and elder customers, whose rates are set by Resolution No. DOI-144 (2011) as half of the regular established residential full rates. This may allow for elder rates to be retained at half of the 2012 rates, or to be increased to half of new rates. In addition, each individual non-residential customer is assigned a different monthly rate based on the number of fixtures. Please note that because each non-residential customer pays a unique rate for water and wastewater service, the change in their rates is expressed throughout the report as a percentage increase.

This report examines four rate change scenarios: raising rates on non-residential customers only, raising rates on residential and elder customers only, raising rates on all customers, and raising rates on residential full and non-residential customers but maintaining the current elder rates. The table below shows what the monthly rates would be under these four rate scenarios:[1]

Rate Change Scenarios	Residential Full Rate	Elder Rate	Percent Increase in Non-Residential Rates
1. Raise Non-Residential Rates Only	$51.00	$25.50	51%
2. Raise Residential Full & Elder Rates Only	$68.09	$34.04	0%
3. Raise All Rates by the Same Percentage	$61.34	$30.67	20.28%
4. Raise Residential Full & Non-Residential Rates Only by Same Percentage	$62.28	$25.50	22.115%

NCUC can also consider building up to the revenue target over the next 5 years. That would allow small incremental rate increases that would be easier for customers to budget.

The utility serves a relatively low-income population, so affordability of service should be a concern. Household incomes are lower than countrywide averages, especially for customers in rental properties. Unemployment and participation in social safety net programs is higher than countrywide averages. Customers at the 20th percentile of household income in particular may have difficulty affording water and wastewater service.

[1] Appendix 4 shows what each individual non-residential customer would pay under each of the three rate scenarios.

Here are the recommended next steps:

- Determine an appropriate increase to the residential and non-residential rates
- Create a robust outreach plan to educate customers on the new rates
- Consider implementing a customer assistance program
- Discover ways to lower operating and capital costs
- Work to ensure a consistent and professional utility workforce
- Utilizing meter data in the future
- Establish and enforce a delinquency policy for non-payment
- Budget separately for water and wastewater

Introduction

Northern Cheyenne Utility Commission (NCUC) operates four community water systems in EPA Region 8. NCUC also provides wastewater service to these communities. Across the four service areas, there are a total of 881 accounts[2]:

- 526 pay the full residential rate
- 167 pay the elder residential rate
- 92 are non-residential properties
- 96 accounts are for properties that are vacant and not currently receiving bills

Currently, customers pay a flat monthly charge for the services they receive, and that fee does not change month to month based on the amount of the service used. Residential full customers pay the following rates:

- Water: $31.00 per month
- Wastewater: $20.00 per month

Elders currently pay a rate that is one-half of the current residential rate. By statute, the elder rate cannot exceed 50 percent of the residential full rate:

- Water: $15.50 per month
- Wastewater: $10.00 per month

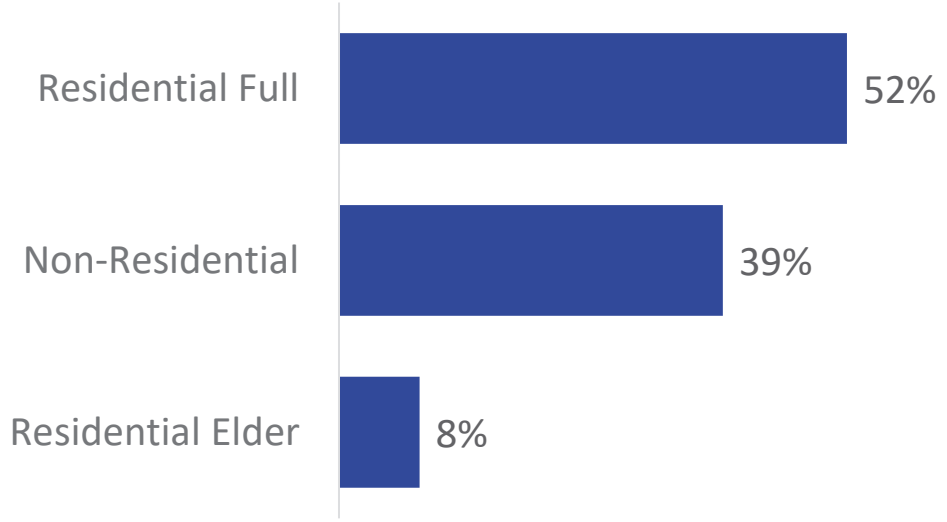
The utility has determined unique, individual fees for each of the non-residential customers based on the number of fixtures. Like residential customers, non-residential customers are not metered and pay a flat rate for unlimited service. These rates have three elements: a water rate, a wastewater rate, and a monthly standard charge for maintenance and fuel supply (which range from $10 to $90 a month). Some non-residential customers receive only water service, and others receive only wastewater service. But all pay the standard charge. Total non-residential rates range from $60 to $80 per month on the low end to nearly $2,000 a month on the high end for the Indian Health Service clinic in Lame Deer.

[2] Source: communication with Ethelyn Shoulder Blade on 6/29/2020. Ethelyn warns that these numbers change month-to-month

Based on the current rate structure, and assuming a 90 percent collection rate, customers paying the full residential rate generate about $290,000 a year in revenue. Non-residential customers generate about $219,000 a year. The chart below shows the percentage of revenue each group brings in per year.

Percent of Total Revenue Generated Each Year by Group

Assumes a 90 percent collection rate



All of the revenue from the water and wastewater utilities accrues to the utility general fund.

By resolution of the tribal council, NCUC is not allowed to "sell" water. The fees they charge are for the service provided and for the cost of infrastructure. Rates had not been raised in 11 years due to a moratorium on increases. That moratorium was recently lifted, the Tribal Council recognized NCUC's authority to set rates, and non-residential rates were increased. The non-residential water and wastewater rates each increased by 20 percent, and the non-residential standard rate was raised $10 per month. Residential rates remain unchanged.

This report will examine how rates could change so that NCUC becomes self-sufficient and is able to cover the full cost of providing water and wastewater service. One important note, all of the data on water and wastewater revenues and expenses, customer payment rates, and demographics are from past years and are not reflective of the changes that have occurred due to the ongoing COVID-19 pandemic. Should current conditions continue, analyses and conclusions within this report may be significantly impacted. Based on the age of the data and the complexity of the changes occurring in most communities, while NCUC should set higher rates in the short-term to get on a more sustainable financial path, it is recommended that the rate analysis be revisited in one year to assess conditions and to compare data, with particular attention paid to the bill collection rate and the expenses of providing water and wastewater service. In addition, the ongoing pandemic is expected to alter customer usage behavior, so it is also recommended that the utility gather data from its existing meters and pursue grants to install meters for all customers without one so that these usage changes can be measured.

The Cost of Day-to-Day Operations

The daily operating costs for water and wastewater utilities (operations and maintenance costs) include salaries, treatment supplies, maintenance costs, utilities, insurance, billing, and other expenses. Based on the NCUC FY19 budget, these expenses total $595,864.33. O&M costs generally increase by a small amount per year due to inflation, and any change in infrastructure, treatment process, or regulation can cause O&M costs to increase.

Capital Improvements

NCUC has been successful in obtaining grants to cover the cost of many capital improvements. This has saved the utility and its customers a significant amount of money over time, and the utility should do everything it can to continue to receive these grants. For example, the utility has two lagoon projects underway—one at Lame Deer, and the other at Ashland. These two projects are funded by Indian Health Service and administered by NCUC along with an administrative fee. The Lame Deer project alone is for $1.5 million. If instead the utility had to borrow money for that project through the United States Department of Agriculture (USDA) Rural Development's Water and Waste Disposal Loan Program, the interest rate would be at least 1.125% over 40 years. The monthly payment for that loan would be approximately $3,882, which if spread evenly across all 785 active customers comes out to $4.95 per customer per month. That one project alone would increase residential wastewater bills by 25 percent, and that extra charge will be with customers for the next four decades. Additional projects would add more monthly cost to customers.

This would be a good point in time for NCUC to take stock of the utilities' critical assets, replacement costs and estimate the useful life of assets. A more thorough assessment of the condition and expected useful life of assets across the two utility services is needed to understand better what other capital improvements will be necessary in the next 5 to 10 years.

Consideration: Full Cost Recovery

The gold standard for drinking water and wastewater utilities is to be operated as an independent enterprise. That is, they would each be self-sustaining, business-like units that cover their own costs through the rates and fees that they charge to their customers. Achieving true self-sufficiency is not easy for small water systems across the country, especially if they serve a lower income population. Often, these small water systems focus only on operations and emergency repairs and do not invest in capital improvements such as repairing treatment facilities, pipes, storage tanks, or rolling stock.

NCUC would likely have deferred many of its capital improvements, including the upcoming lagoon renovations in Lame Deer and Ashland, if not for the availability of federal grants. It is recommended the utility continue to pursue as many grant opportunities as are available for capital improvements, and this initial assessment assumes that grants will continue to cover a substantial portion of the cost of capital improvements into the future. Please note, if these grants are discontinued in the future, or if NCUC is not successful in obtaining grants, rates across both utility services will likely need to increase

substantially in order to pay for needed capital improvements. Currently, NCUC reports that it is running short-staffed. It is also possible that future additional hiring will increase costs. These potential increased costs should be taken into account when setting rates.

For the purposes of this initial analysis, full cost recovery will look at covering the cost of operations and maintenance, along with some money for reserves. NCUC has a goal to maintain a total of $100,000 in its various reserve accounts, and it is generally a best practice for utility services to maintain some money in the bank for emergencies, revenue shortfalls, and future capital improvements.

Projecting Revenues and Expenses into the Future

Both revenues and expenses change over time. This analysis will project revenues and expenses over the next five years. The base year for the projections is the NCUC FY2019 budget, which was based off of a three-year average in operational costs. NCUC has not kept detailed budgets in the past.

The two biggest factors impacting revenue are:

- The number of customers served, and
- The number of customers that pay their bills on time and in full.

The formula for calculating annual revenue from customers is:

$$Number\ of\ Customers\ \times Rate\ \times Billing\ Periods\ \times Collection\ Rate$$

It is necessary to estimate both the number of customers NCUC will have over the next five years and what the collection rate will be. This analysis assumes that the number of residential, non-residential, and elder customers will remain the same over the next five years. While there are small variations from month-to-month, NCUC reports that, in general, the customer base is relatively stable. The report also assumes a 90 percent collection rate across all five years.

In general, the costs of goods and services that water and wastewater utilities purchase go up every year. This concept is known as inflation. Likewise, for most water and wastewater utilities, salaries also increase every year. That does not necessarily mean that all costs rise every year. For example, there may be a year with weather-related emergencies that cause the utility to spend extra money on repairs and overtime. The next year, if there isn't another emergency, those line items may decrease. Also, each individual cost does not necessarily rise by the same percentage.

The formula for calculating changes in operating expenses is:

$$Expense\ Base\ Number\ \times (1 + Rate\ of\ Change)$$

For this analysis, the FY2019 budget serves as the expense base number, and because there isn't good historical budget data, the analysis assumes an across-the-board 2 percent annual increase in expenses. The 2 percent increase is roughly the rate of inflation and is in line with what similar water and wastewater utilities report.

Sufficiency of Current Rates

With the expectations of changes to revenues and to expenses, the next step is a financial forecast. A financial forecast looks at the expected revenues and expenses over the next five years, including operations, capital outlays, and contributions to reserve funds. The financial forecast will determine whether the *current* rates will be sufficient to cover the full and true costs of the water and wastewater utilities.

In the base year, the FY2019 budget, revenues were already not sufficient to cover costs. Over the next five years, the analysis is expecting revenues to remain the same but costs to increase by 2 percent per year, so the current rates will certainly not be sufficient to cover costs over the next five years. The table below shows the expected revenue shortfall by year.

Revenues

	FY+1	FY+2	FY+3	FY+4	FY+5
Residential	$289,720.80	$289,720.80	$289,720.80	$289,720.80	$289,720.80
Elder	$45,991.80	$45,991.80	$45,991.80	$45,991.80	$45,991.80
Commercial	$218,918.98	$218,918.98	$218,918.98	$218,918.98	$218,918.98
Total	**$554,631.58**	**$554,631.58**	**$554,631.58**	**$554,631.58**	**$554,631.58**

Expenses

Total	**$607,781.62**	**$619,937.25**	**$632,335.99**	**$644,982.71**	**$657,882.37**
Revenues - Expenses	**($53,150.04)**	**($65,305.67)**	**($77,704.41)**	**($90,351.13)**	**($103,250.79)**

The revenue shortfall grows from around $53,000 in the first projected year to more than $103,000 in the fifth projected year. This is just to cover the day-to-day operations of the utilities. In addition, NCUC has a goal of maintaining $100,000 across its various reserve funds. It is a best practice to set a reserve target and build it into the rate structure. Healthy reserves are an important part of financially sustainable water and wastewater utilities.

Currently, the reserve fund balance is $40,663. That means NCUC will need to generate an additional $59,337 in the first year to hit the reserve goal. The table below shows the additional revenue that would need to be generated from customers to cover all projected costs and reserve fund goals:

	FY+1	FY+2	FY+3	FY+4	FY+5
Total Expenses	$607,782	$619,937	$632,336	$644,983	$657,882
Reserve Target	$100,000	$100,000	$100,000	$100,000	$100,000
Current Reserve Funds	$40,663	$100,000	$100,000	$100,000	$100,000
Additional Reserve Funds Needed	$59,337	$0	$0	$0	$0
Revenue Needed from Water/Wastewater	667,119	619,937	632,336	644,983	657,882
Projected Water/Wastewater Under Current Rates	554,632	554,632	554,632	554,632	554,632
Additional Revenue Needed from Water Rates	**$112,487**	**$65,306**	**$77,704**	**$90,351**	**$103,251**

Another alternative is to build up to the $100,000 reserve target over multiple years to smooth out rate increases. For example, NCUC could build up to $100,000 over 5 years. The table below shows the additional revenue that would need to be generated from customers to cover all projected costs and reserve fund goals:

	FY+1	FY+2	FY+3	FY+4	FY+5
Total Expenses	$607,782	$619,937	$632,336	$644,983	$657,882
Reserve Target	$50,000	$62,500	$75,000	$87,500	$100,000
Current Reserve Funds	$40,663	$50,000	$62,500	$75,000	$87,500
Additional Reserve Funds Needed	$9,337	$12,500	$12,500	$12,500	$12,500
Revenue Needed from Water/Wastewater	617,119	632,437	644,836	657,483	670,382
Projected Water/Wastewater Under Current Rates	554,632	554,632	554,632	554,632	554,632
Additional Revenue Needed from Water Rates	**$62,487**	**$77,806**	**$90,204**	**$102,851**	**$115,751**

The full tables showing projected revenues and expenses are included in Appendix 1 of this report. The full tables showing the financial targets are included in Appendix 2 of this report.

These calculations show how much revenue NCUC needs to generate to cover the full cost of operations and full contributions to reserves. But there are multiple ways to set rates to generate that amount. This report will examine four rate scenarios:

- Raise non-residential rates only
- Raise residential and elder rates only
- Raise rates on all customers
- Raise residential (not elders) and non-residential rates only

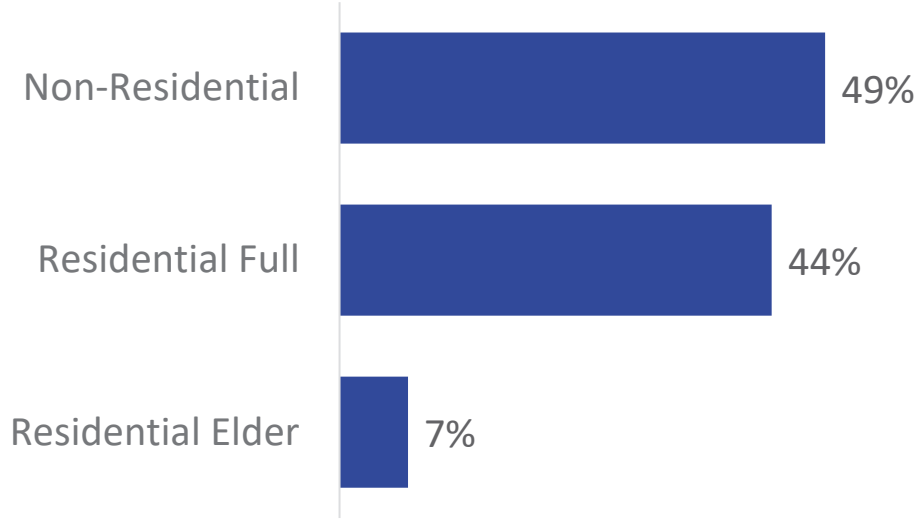
The report will also show what the rate per month would be if NCUC were to hit its $100,000 reserve goal in the first year and what the rate per month would be if NCUC were to build up to $100,000 in reserves over five years.

Rate Alternatives to Achieve Full Cost Recovery: Raise Non-Residential Rates Only

One method to generating additional revenue is to raise rates for the non-residential customers only. This would involve raising the water rate, the wastewater rate, and the standard rate. If all three were raised equally, all non-residential rates would need to increase 51.4 percent to cover the revenue shortfall and fully fund reserves in the first year. The rates could either stay at that level going forward to generate additional reserve funds or drop down after the first year.

Under this scenario, revenue from non-residential customers would account for nearly half of all revenue, as seen in the chart below.

Percent of Total Revenue Generated Each Year by Group if Only Non-Residential Rates are Raised
Assumes a 90 percent collection rate



If the reserve balance is built up to $100,000 over five years, the non-residential rates would increase at the following levels each year:

- Year 1: 28.5%
- Year 2: 5.4%
- Year 3: 4.2%
- Year 4: 4.1%
- Year 5: 4.0%

Rate Alternatives to Achieve Full Cost Recovery: Raise Residential and Elder Rates Only

Another method to generating additional revenue is to raise rates for residential full and elder customers only. This would involve raising the water rate and the wastewater rate. If both were raised

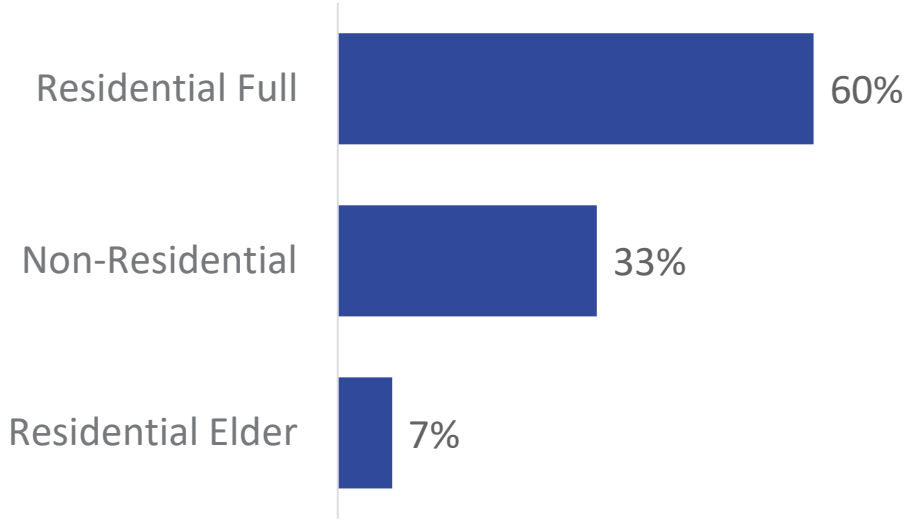
by equal percentages to cover the revenue shortfall and fully fund reserves in the first year, the new rates would be

- Residential Full: $68.09 per month
- Elder: $34.04 per month

The rates could either stay at that level going forward to generate additional reserve funds or be lowered after the first year.

Under this scenario, revenue from residential full customers would account for more than 60 percent of all revenue, as seen in the chart below.

Percent of Total Revenue Generated Each Year by Group if Only Residential and Elder Rates are Raised
Assumes a 90 percent collection rate



If the reserve balance is built up to $100,000 over five years, the residential and elder rates would increase to the following levels each year:

	Year 1	Year 2	Year 3	Year 4	Year 5
New Residential Full Rate	$60.49	$62.82	$64.70	$66.62	$68.58
New Elder Rate	$30.25	$31.41	$32.35	$33.31	$34.29

Rate Alternatives to Achieve Full Cost Recovery: Raise Rates for All Customers

The third method to generate additional revenue is to raise rates for all customers. For example, if residential full and elder rates went up 10 percent, then non-residential rates would increase 36 percent to cover all costs and reserve goals. Likewise, if non-residential rates went up 10 percent, then

residential full and elder rates would increase 27 percent to cover all costs and reserve goals. The first table in Appendix 3 shows the various combinations of rate increases.

An increase of approximately 20.28 percent to all customer groups would generate enough money to cover the revenue shortfall and fully fund reserves in the first year. Under that scenario, the current water rate, wastewater rate, and standard fee for non-residential customers would each increase by 20.28 percent. The new combined water and wastewater rate for residential full customers and elder customers would be

- Residential Full: $61.34 per month
- Elder: $30.67 per month

Because all rates are being raised by an equal percentage, the share that each group pays of all revenue would be the same as it is currently: 52 percent by residential full customers, 39 percent by non-residential customers, and 8 percent by elders.

If the reserve balance is built up to $100,000 over five years, the residential full, elder, and non-residential rates would change in the following ways each year:

	FY+1	FY+2	FY+3	FY+4	FY+5
Residential Full Rate	$56.75	$58.15	$59.29	$60.46	$61.64
Elder Rate	$28.37	$29.08	$29.65	$30.23	$30.82
Non-Residential Annual Increase	11.3%	2.5%	2.0%	2.0%	2.0%

Rate Alternatives to Achieve Full Cost Recovery: Raise Rates for Residential Full and Non-Residential Customers and Maintain Current Elder Rates

The fourth method to generate additional revenue is to raise rates for residential full and non-residential customers and maintain the current rates for elder customers. For example, if residential full rates went up 10 percent, then non-residential rates would increase 38 percent to cover all costs and reserve goals. Likewise, if non-residential rates went up 10 percent, then residential full rates would increase 31 percent to cover all costs and reserve goals. The second table in Appendix 3 shows the various combinations of rate increases.

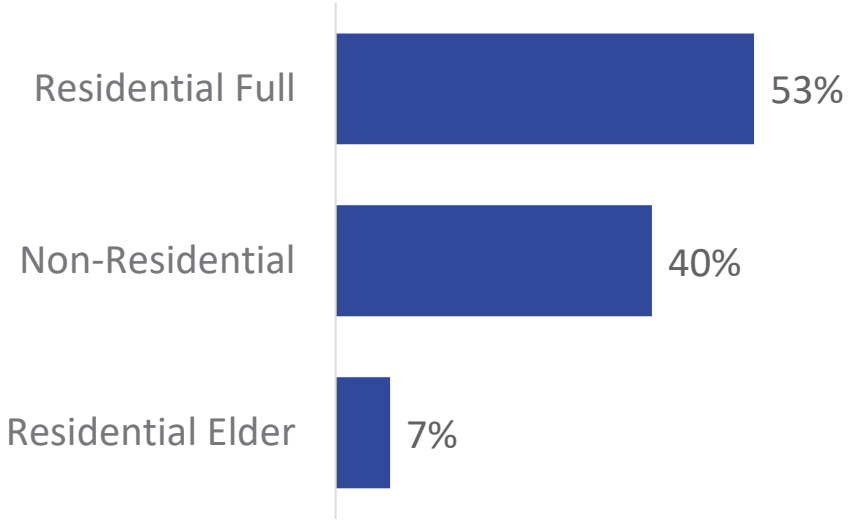
An increase of approximately 22.115 percent to both residential full and non-residential customers would generate enough money to cover the revenue shortfall and fully fund reserves in the first year. Under that scenario, the current water rate, wastewater rate, and standard fee for non-residential customers would each increase by 22.115 percent. The new combined water and wastewater rate for residential full customers and elder customers would be

- Residential Full: $62.28 per month
- Elder: $25.50 per month (unchanged)

Under this scenario, revenue from residential full customers would account for 53 percent of all revenue, and revenue from non-residential customers would account for 40 percent of all revenue, as seen in the chart below. These numbers are very similar to the current percentage allocation.

Percent of Total Revenue Generated Each Year by Group if Only Residential and Non-Residential Rates are Raised by an Equal Percentage and Elder Rates Stay the Same

Assumes a 90 percent collection rate



If the reserve balance is built up to $100,000 over five years, the residential full, elder, and non-residential rates would change in the following ways each year:

	FY+1	FY+2	FY+3	FY+4	FY+5
Residential Full Rate	$57.27	$58.80	$60.04	$61.31	$62.61
Elder Rate	$25.50	$25.50	$25.50	$25.50	$25.50
Non-Residential Annual Increase	12.3%	2.7%	2.1%	2.1%	2.1%

Consideration: Affordability

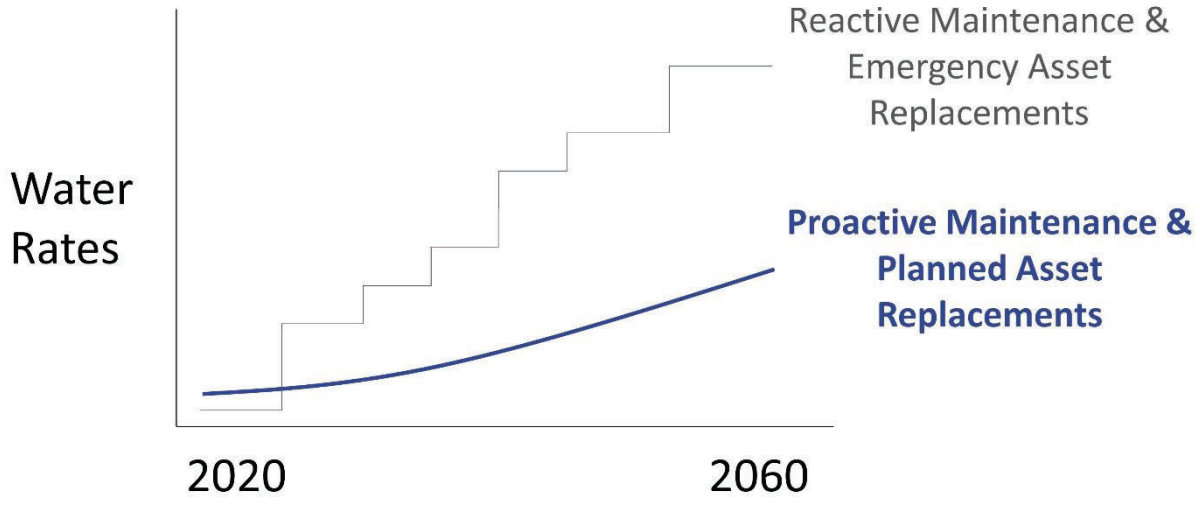
Water and wastewater are essential services for maintaining public health in a community. But those services rely on the fees and rates paid by customers to cover many of their costs. As a result, when setting rates, the ability of customers to pay should be considered.

This analysis on the affordability of water and wastewater service looks at key demographics within the utility service territory. There is no generally accepted definition of drinking water and wastewater affordability, nor is there one single, generally accepted metric to represent the affordability of drinking water and wastewater at the household level. Over the past several decades, water and wastewater rates have been artificially low. After the passage of the Clean Water Act in 1972 and the Safe Drinking

Water Act in 1974, the federal government provided generous construction grants to communities to help build water and wastewater infrastructure that was compliant with the new regulations. Today, tribal nations are still eligible for some federal grants through Indian Health Service and USDA, but the grants are limited. The customers of tribal water and wastewater utilities may end up being responsible for paying the full cost of infrastructure replacement into the future. As a result, it is not unusual to see water and wastewater rates rising faster than most other utility bills, faster than inflation, and faster than salaries. This trend has increased attention around the issue of affordability.

For many utilities, the old approach to affordability involved keeping rates as low as possible. Utilities would focus on covering only their day-to-day operational costs, or charging only what the lowest income customers could afford, or at least charging less than neighboring utilities. Routine, preventative maintenance was often not prioritized. This approach proved to be short-sighted. Utilities found themselves constantly reacting to infrastructure failure with reactive maintenance and emergency asset replacement, which are far more expensive in the long term than preventative maintenance and planned infrastructure replacement. Rates would need to be increased sharply at irregular intervals to cover revenue shortfalls created by the emergencies, and utilities failed to build up cash reserves. Charging artificially low rates may put the entire water and wastewater systems—and public health—at risk in the future.

Today, the focus of the water and wastewater sector is shifting to planned infrastructure replacement through asset management and charging what is necessary to sustain the utility now and for decades to come, with revenue to cover operations, to pay debt service and capital replacement costs, and to build up reserves for capital needs, unexpected revenue shortfalls, and emergencies. Rates that are designed with this 40-year view in mind may be higher today, but the proactive approach is the cheapest way to sustain operations over the long term.



The best practices in the water and wastewater sectors around affordability today involve charging what is necessary to run the utility properly for decades to come, identifying customers that may have affordability issues, and designing assistance programs to allow those customers to pay the charges

necessary to sustain the utility. Ultimately, it is up to each individual utility and community to decide what its customers are able to afford. But there are metrics built around demographic data that can help utilities make an informed decision about affordability and what assistance programs, if any, are appropriate. The metrics presented in this report represent the latest research into drinking water affordability. This report analyzes Northern Cheyenne Utility Commission's water and wastewater service under both its current rate structure and under two proposed rate structures: increasing the rates for all customers by an equal percentage, and increasing only residential full and elder rates.

There are three important notes. First, this report uses census data from the Northern Cheyenne Indian Reservation and Off-Reservation Trust Land census tract. No census data perfectly captures all the utility's customers, but this tract was most representative of the utility's customer base. Second, there is a larger margin of error in census data from both smaller communities and from Indian Country than there is in larger or non-tribal communities. Again, while there may be some inaccuracies as a result, the census data are the best data available on the utility's customer base. Third, all the data for this section are drawn from the 2018 American Community Survey. As mentioned earlier in the report, information on household income, unemployment, and other statistics are not reflective of the changes that have occurred due to the ongoing COVID-19 pandemic. Should current conditions continue, analyses and conclusions within this report may be significantly impacted. As recommended earlier, NCUC should revisit this rates analysis in one year to determine if there are any significant changes to the bill collection rate and to expenses.

Household Income

The U.S. Census collects information on "Income in the Past 12 Months" through the American Community Survey. This income is the sum of the amounts reported separately for wage or salary income; net self-employment income; interest, dividends, or net rental or royalty income or income from estates and trusts; Social Security or Railroad Retirement income; Supplemental Security Income (SSI); public assistance or welfare payments (including food stamps and cash public assistance); retirement, survivor, or disability pensions; and all other income. "Household Income" includes the income of all individuals 15 years old and over in the household, whether they are related or not[3].

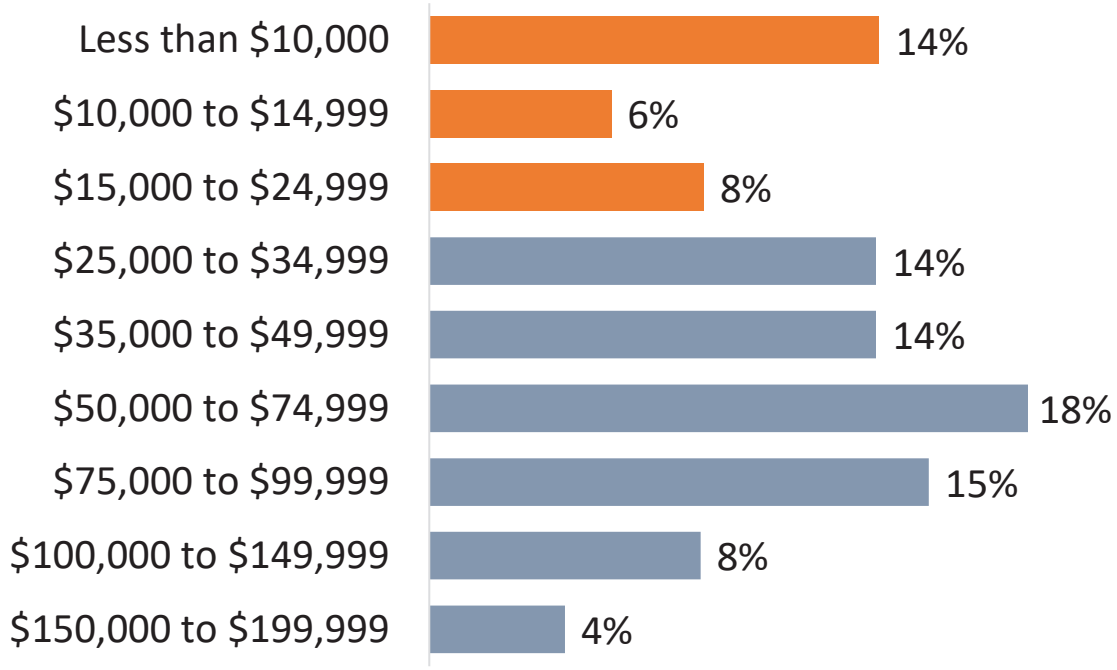
The Median Household Income for the Northern Cheyenne Tribe census area is $46,300.[4] For comparison, the statewide Median Household Income for Montana is $55,328, and the Median Household Income for the United States as a whole is $61,937. The median household income, though, is just that—if you were to line up all the household incomes in the Northern Cheyenne Tribe census area from lowest to highest, it would be the one in the middle. The median household income does not tell us anything about the *distribution* of income within a community. Are household incomes clustered around the median? Or does the community have a large number of low-income households and a large number of high-income households?

[3] https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html
[4] Census table DP03

For the Northern Cheyenne Tribe census area, household incomes are relatively evenly distributed. About 28 percent of households have annual incomes under $25,000 (the orange bars on the graph below). About 27 percent of households have annual incomes above $75,000. And everyone else is in the middle[5].

Household Income Distribution in Northern Cheyenne Indian Reservation and Off-Reservation Trust Land Census Tract

Based on American Community Survey 2018 5-Year Estimates



Under the current rate structure, households in the lowest income bracket (under $10,000) pay at least 6.1 percent of their annual income for water and wastewater service at the residential full rate. Households in the $15,000 to $24,999 bracket pay at least 4.1 percent of their annual income for water and wastewater service at the residential full rate.

Under the proposed rate structure where rates increase by an equal percentage for residential, elder, and non-residential customers, households in the lowest income bracket (under $10,000) would pay at least 7.4 percent of their annual income for water and wastewater service at the residential full rate. Likewise, households in the $15,000 to $24,999 bracket would pay at least 2.9 percent of their annual income for water and wastewater service at the residential full rate.

Under the proposed rate structure where rates increase by an equal percentage for residential full and non-residential customers but elder rates stay the same, households in the lowest income bracket (under $10,000) would pay at least 7.5 percent of their annual income for water and wastewater service

[5] Census table DP03

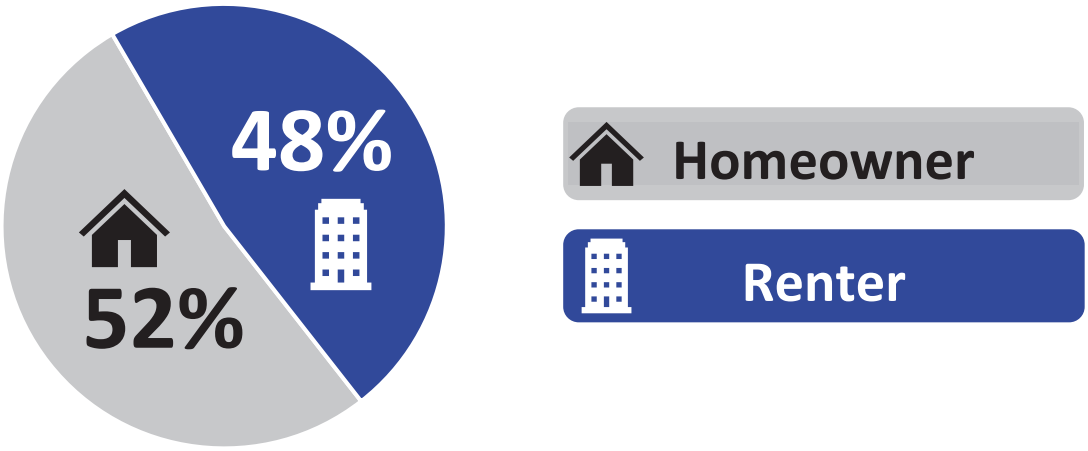
at the residential full rate. Likewise, households in the $15,000 to $24,999 bracket would pay at least 3.0 percent of their annual income for water and wastewater service at the residential full rate.

And under the proposed rate structure where rates increase only for residential and elder customers, households in the lowest income bracket (under $10,000) would pay at least 8.2 percent of their annual income for water and wastewater service at the residential full rate. Likewise, households in the $15,000 to $24,999 bracket would pay at least 3.3 percent of their annual income for water and wastewater service at the residential full rate.

Homeowners and Renters

In the Northern Cheyenne Tribe census area, 52 percent of occupied housing units are owner-occupied, and the other 48 percent are renter-occupied.

Occupied Housing Units, Homeowner vs. Renter

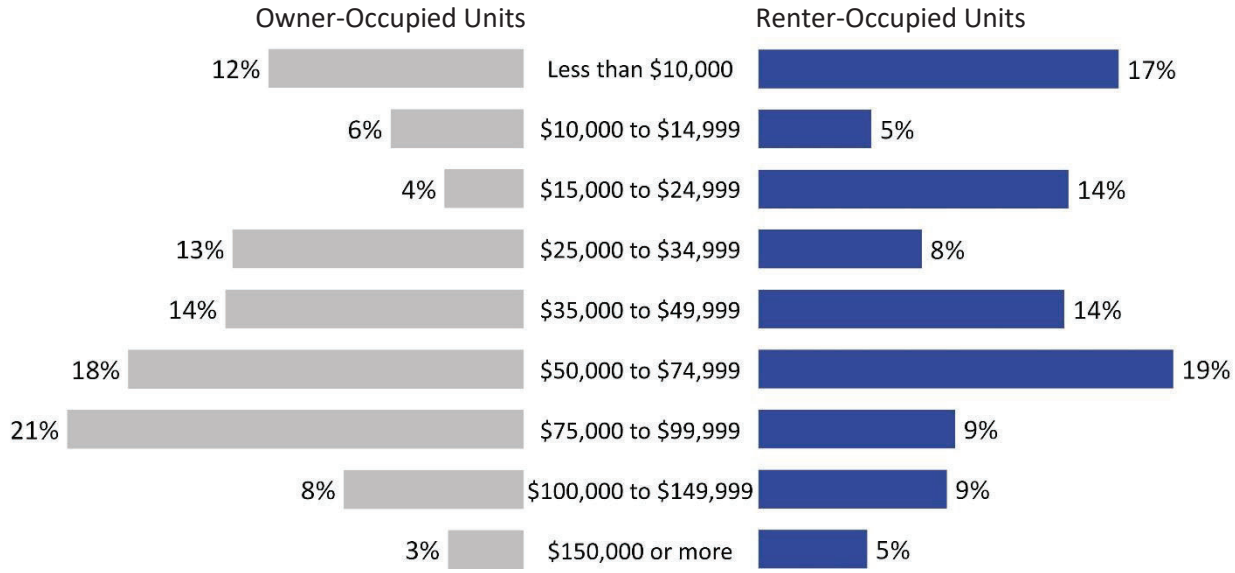


The household incomes for owner-occupied units (gray bars) are greater than the household incomes for renter-occupied units (blue bars)—see the graph below[6]. Just 22 percent of owner-occupied units have an annual household income under $25,000, compared to 36 percent of renter-occupied units.

[6] Census table B25118

Household Income Distribution in Northern Cheyenne Indian Reservation and Off-Reservation Trust Land Census Tract, Owner vs. Renter

Based on American Community Survey 2018 5-Year Estimates



Key Demographic Data

People in certain demographic groups may be generally less able to pay their water and wastewater bills—for example, people who are out of work, or who are on a fixed income, or who work only part-time. Additionally, some demographics are more broadly associated with people living in poverty. What are these numbers for the Northern Cheyenne Tribe census area?

Employment

The previous section looked at household income. But what about the number of people in the Northern Cheyenne Tribe who are working in general? The Census divides the workforce, which is defined as anyone aged 16 and higher, into a few categories:

- Employed: people who have civilian jobs, either full-time or part-time.
- Unemployed: people who do not have civilian jobs but are actively seeking employment.
- Armed Forces: people serving our country as active duty military.
- Not in the labor force: people who do not have civilian jobs and are not actively seeking employment. This can include retirees, people still in school, people who are not able to work due to health issues or disabilities, and people who have voluntarily removed themselves from the workforce, perhaps to care for a relative.

For the Northern Cheyenne Tribe census area, the unemployment rate in the 2018 American Community Survey was 13.0 percent, which is about four times the statistic for the United States as a whole (3.1%). As a reminder, these numbers reflect pre-COVID data. Additionally, 41.6 percent of the

Northern Cheyenne Tribe census area residents age 16 and higher are not in the labor force, and this is slight above the United States statistic (37%)[7].

Of the people who are employed in the civilian workforce, 10.1 percent are part-time employees, while the rest work full-time. This number is below the United States statistic of 17.0 percent. In the United States, adults who work part-time are three times more likely to live in poverty than adults who work full-time.

Social Security

In the Northern Cheyenne Tribe census area, 22.4 percent of households receive social security; this is below the United States statistic of 31.6 percent[8]. People who receive social security are often referred to as being on a "fixed income." While this is not literally true—social security recipients get a cost of living adjustment based on changes in the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) (it was 1.6 percent in 2020[9])—the fact is that social security income likely rises at a slower rate than the salaries of people who are employed. When water and wastewater rates rise faster than the cost of living adjustment, it becomes more difficult for people on social security to afford water service year after year.

Participation in Social Safety Net Programs

Another indication that people may have affordability issues is whether they qualify for and participate in federal social safety net programs. These programs have income requirements and are an indication that households have difficulty paying for other essential goods and services including food and housing. Some programs include:

- Supplemental Nutrition Assistance Program (SNAP)[10]: commonly known as food stamps, SNAP provides nutrition benefits to supplement the food budget of needy families.
- Supplemental Security Income (SSI)[11]: pays benefits to disabled adults and children who have limited income and resources and pays benefits to people aged 65 and older without disabilities who meet certain financial limits.
- Cash public assistance[12]: a catch-all term for multiple social welfare programs including the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), Temporary Assistance for Needy Families (TANF), and General Assistance (GA).

For the Northern Cheyenne Tribe census area, participation in SNAP (27.5% of households), Supplemental Security Income (8.6% of households), and cash public assistance (12.0% of households) are all higher than the statistics for the United States as a whole (11.3% SNAP, 5.4% SSI, 2.3% CPA)[13].

[7] Census table DP03
[8] Census table DP03
[9] https://www.ssa.gov/OACT/COLA/latestCOLA.html
[10] https://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program
[11] https://www.ssa.gov/benefits/ssi/
[12] https://www.census.gov/topics/income-poverty/public-assistance/about.html
[13] Census table DP03

Education

There is a strong correlation between education and income. In the United States, 29 percent of adults without a high school diploma live in poverty. That compares to just 7 percent of college graduates, with everyone else in between. For the Northern Cheyenne Tribe census area, 14.6 percent of heads of households do not have a high school diploma, which is higher than the United States statistic of 9.9 percent[14].

13.0%	41.6%	22.4%	27.5%
Unemployed	Not in Labor Force	On Social Security	Receiving SNAP



Hours of Minimum Wage Work

This metric, developed by Manny Teodoro, a professor at University of Wisconsin and a thought leader on water affordability, measures the number of hours of minimum wage labor required per month to pay for water and wastewater service. This is a measure of the labor burden on the lowest earners in a community. The minimum wage for the Northern Cheyenne Tribe is $8.65 per hour[15]. This metric looks at gross wage, so no income taxes or payroll taxes have been removed. The hours of minimum wage labor required to pay for water and wastewater service under the current residential full rate is 5.9 hours per month. Under the proposed rate structure where rates increase by an equal percentage for residential, elder, and non-residential customers, the required hours increase to 7.1 hours per month. Under the proposed rate structure where rates increase only for residential and non-residential customers, the required hours increase to 7.2 hours per month. And under the proposed rate structure where rates increase only for residential and elder customers, the required hours increase to 7.9 hours per month.

Burden on the Working Poor (20th Percentile Household Income)

The ideal way to measure if customers can afford water and wastewater service would be to gather data on the actual income of each household in the community and their actual expenditures on housing and food. Then, we could look at the percent of income remaining to pay for water and wastewater service after these other essentials have been covered. Unfortunately, this type of analysis is not possible. We don't know the income of each individual household, nor do we know their actual expenditures on necessities. Since the focus on affordability concerns is often low-income households, Dr. Teodoro and others have developed metrics that try to approximate the ideal method of calculation but focus on households making the 20th percentile of income in a community (in other words, 80 percent of households make more money each year). This level is considered a good approximation of the "working poor."

[14] Census table S2502

[15] https://www.dol.gov/agencies/whd/minimum-wage/state

For the Northern Cheyenne census area, the 20th percentile household income is $15,766 per year[16]. The average cost of housing, food, and other essential services for all households (these numbers are not available just for the 20th percentile household) are:

Description	Annual Amount	Source
Median Annual Housing Costs (mortgage, home insurance, other utilities)	$9,372	Census table S2506
Annual Median Gross Rent	$6,756	Census table B25064
Annual Food Costs	$5,069	BLS Consumer Expenditure Survey[17]
Annual Water/Wastewater Bill—Current	$612	
Annual Water/Wastewater Bill—Increase Residential Full, Elder, and Non-Residential	$736.08	
Annual Water/Wastewater Bill—Increase Residential Full and Elder only	$817.08	

We know that about half of the housing units in the Northern Cheyenne Tribe census area are rental properties. And we know that the occupants of the rental units in general have lower annual incomes than do homeowners. So, it is more likely that someone at the 20th percentile income in the Northern Cheyenne Tribe census area is renting, and some of those rental units may be subsidized by Tribal housing. We also know that more than 20 percent of households in the Northern Cheyenne Tribe census area receive SNAP, so they may not be paying for all of their food costs directly. In addition, if the occupants of the 20th percentile income household are elders, they receive a reduced water and wastewater bill. Again, because we do not know the characteristics of individual customers, we cannot be sure what subsidies they may be receiving. Therefore, the calculations below assume that the household is paying 100 percent of its housing and food costs without subsidies. In other words, the calculations here represent the worst-case scenario for affordability.

Under the current rate structure, a renter at the 20th percentile of income who pays the full water and wastewater rate pays 6.8 percent of remaining income on water and wastewater after paying rent and 15.5 percent of its remaining income on water and wastewater after paying for rent and food. If the 20th percentile income is a homeowner, that household would spend 10.7 percent of its remaining income on water and wastewater after paying for housing and other utilities. That same household pays 90.7 percent of its remaining income on water and wastewater after paying for housing, other utilities, and food. Because elder water and wastewater rates are 1/2 of full water and wastewater rates, the percentages for elders are also 1/2 of those for other households (3.4% and 7.8% for renters, 5.3% and 45.3% for homeowners).

Under the proposed rate structure where rates increase by an equal percentage for residential, elder, and non-residential customers, a renter at the 20th percentile of income who pays the full water and wastewater rate pays 8.2 percent of remaining income on water and wastewater after paying rent and

[16] Census table B19080

[17] The annual food cost data available from the Bureau of Labor Statistics' Customer Expenditure Survey are from the cross-tabulated table Region of residence by income before taxes. The numbers are taken from the West Region for the income band that includes the 20th percentile for the Northern Cheyenne census area. https://www.bls.gov/cex/tables.htm#crosstab

18.7 percent of its remaining income on water and wastewater after paying for rent and food. If the 20th percentile income is a homeowner, that household would spend 12.8 percent of its remaining income on water and wastewater after paying for housing and other utilities. That same household would not have enough money to cover its water and wastewater fees after paying for housing, other utilities, and food. Because elder water and wastewater rates are 1/2 of full water and wastewater rates, the percentages for elders are also 1/2 of those for other households (4.1% and 9.3% for renters, 6.4% and 54.5% for homeowners).

Under the proposed rate structure where rates increase by an equal percentage for residential full and non-residential customers but elder rates stay the same, a renter at the 20th percentile of income who pays the full water and wastewater rate pays 8.3 percent of remaining income on water and wastewater after paying rent and 19.0 percent of its remaining income on water and wastewater after paying for rent and food. If the 20th percentile income is a homeowner, that household would spend 13.0 percent of its remaining income on water and wastewater after paying for housing and other utilities. That same household would not have enough money to cover its water and wastewater fees after paying for housing, other utilities, and food.

Under the proposed rate structure where rates increase only for residential and elder customers, a renter who pays the full water and wastewater rate at the 20th percentile of income pays 9.1 percent of remaining income on water and wastewater after paying rent and 20.7 percent of its remaining income on water and wastewater after paying for rent and food. If the 20th percentile income is a homeowner, that household would spend 14.2 percent of its remaining income on water and wastewater after paying for housing and other utilities. That same household would not have enough money to cover its water and wastewater bill after paying for housing, other utilities, and food. Because elder water and wastewater rates are 1/2 of full water and wastewater rates, the percentages for elders are also 1/2 of those for other households (4.5% and 10.4% for renters, 7.1% and 60.5% for homeowners).

Next Steps

This report represents an initial analysis of how NCUC can set its water and wastewater rates. Here are a series of recommended next steps:

- Determine an **appropriate increase to the residential and non-residential rates**. There are multiple alternative pricing levels that will generate a sufficient level of revenue for the two utility services, balanced between increases to the residential and non-residential customers. NCUC will also need to determine the most appropriate time to institute the rate increase. Currently, in October 2020, many residents and small businesses are struggling due to the economic conditions surrounding the COVID-19 pandemic. Also, because many of the non-residential customers receive federal funds to cover their utility expenses, their budgets may be set for the coming year, so the timing of any rate change should ideally coincide with their grant and budget cycle.

- Create a **robust outreach plan** to educate customers on the new rates. Prior to implementing the rate changes, the utility should plan a comprehensive education and outreach campaign to explain what customers will be paying and why. This will be especially important for residential customers

who have not seen a rate increase for more than a decade. NCUC should consider public meetings as well as sending information to homes. NCUC can also include information about the rate changes in mailings to customers such as the monthly bill and be prepared to answer questions by phone.

- Consider implementing a **customer assistance program**. NCUC served a customer base that was economically challenged before the COVID-19 outbreak, and the pandemic is bound to make the economic situation more difficult, at least in the short term. Right now, NCUC offers one customer assistance program to a vulnerable group of customers—elders—by discounting their rates. The utility could consider programs for other vulnerable customers as well, such as discounts or assistance to low income customers or temporary assistance to customers who have been impacted negatively by the pandemic. NCUC can also consider any of the cost control programs listed below as a way to keep future rate increases smaller for customers.

- Discover **ways to lower operating and capital costs**. The bills that customers pay each month should be based on rates that reflect the true cost of running the water and wastewater utilities today and in the future. There are a number of actions that NCUC can take or continue to take that will ensure that water and wastewater are provided as cost-effectively as possible while maintaining regulatory compliance and level of service. These actions include:
  - Preventative maintenance and replacing assets on a fixed schedule, which will reduce the number of emergencies due to infrastructure failure
  - Planning for the replacement of infrastructure through an asset management and capital improvement program
  - Conduct a leak investigation and identify water leaks and taking appropriate steps to limit non-revenue water
  - Efficiencies in operational costs through technology and energy management

  Each of these practices has the effect of lowering the cost of operations, maintenance, and capital replacement immediately or over time, including by limiting the number of emergency repairs and emergency infrastructure replacements. This is a benefit to the utility. And if those cost reductions are reflected in future rate adjustments, all customers benefit, including those with affordability challenges. It also allows the utility to show its customers that it is being responsible with its revenue.

- Ensure that the utility has is **properly staffed and maintains a consistent utility workforce**. Utilities are most efficiently run by professional, certified employees. Because each individual water and wastewater system is unique, employees become more efficient at operating the system the longer they have been employed. As a result, it is recommended that NCUC ensure that the salaries and benefits provided to employees are appropriate for water and wastewater professionals and that NCUC focus on employee retention as a long-term cost control strategy. Utilities often find that the cost of replacing employees who leave, or the cost of using contract labor for operations, is higher than the cost of providing higher salaries and better benefits to retain good employees. In addition, it is recommended that NCUC ensure it is staffed with an appropriate number of employees to carry out its mission. NCUC reports that they are currently understaffed and have difficulty paying competitive wages, and that they would ideally add one or more FTEs to the current team of

employees and raise wages to increase employee retention. Future rate studies should build in these potential positions into calculating revenue requirements.

In addition, NCUC should prepare for the possibility that employees will be unable to work, in particular due to the ongoing COVID-19 pandemic. A utility best practice is to have a Continuity of Operations plan, which is a written plan for how to maintain operations during emergencies such as the pandemic. This is especially important for utilities with limited staff. This plan should

- Catalog essential operations
- List critical positions and minimum staffing to maintain essential operations
- Specify staff with cross-training and other back-up resources
- Define employee health and safety procedures
- Discuss how to prevent or handle any chain of supply disruption
- Establish a communications plan for staff, leadership, and the community

- Consider **collecting data from existing meters and installing meters for any customer without one** in the future. Metering for water generates benefits for both the utility and for the customer. The utility can track water consumption better, and customers can understand their consumption better. Leaks on the customer side of the meter can be identified and eliminated quickly. The utility can also compare the volume of water recorded by the meters to the volume of water generated at the treatment plant to identify non-revenue water due to leaks on transmission lines or theft. These benefits would save the utility money even without changing the rate structure. Some parts of the four systems are currently metered, but most of the meters are not read regularly, and some may be inoperable. It is recommended that the NCUC conduct a meter survey to identify the number, type and size for the meters required. There is tremendous savings buying in bulk. Because the utility is often understaffed and because of the geographic distribution of the four systems, NCUC should consider installing radio-read AMI meters. These meters can also give the utility real-time updates on water usage and alert the utility about possible leaks.

  Currently, by statute, NCUC is not allowed to sell water. If that were ever to change in the future, the utility could use the meter data to develop and charge volumetric rates. The current flat rate structure for unlimited water use has some advantages. It is easy to administer and simple for customers to understand. It doesn't require a complicated billing system. But under flat rates, customers are all paying the wrong amount for their water and wastewater service. Some pay too much, and others pay too little. There is no incentive for conservation or to even fix leaking toilets or fixtures. And customers with affordability challenges have no way to control their bills. No matter how much or how little water they use, their bill never changes.

- Establish and enforce a **delinquency policy** for non-payment. NCUC reports that some residential customers have delinquencies stretching back more than a year, and even some federal accounts have been delinquent for months at a time. The utility can consider establishing a delinquency policy where a late fee is levied if payment is not received within a certain time frame of billing (for example, 2-3 weeks), and water is shut off if payment is not received within a certain time frame after that (for example, an additional 1-2 weeks). The customer would then have to pay a reconnection fee to reestablish service. If the utility begins shutoffs, it is recommended that the

policy be enforced uniformly for all customers. For example, one tribal utility with a shutoff policy presents a list of shutoffs to the Tribal Council each month. The Tribal Council must accept all of the shutoffs or reject them all—there is no ability to shut some off but not others. And if the Tribal Council accepts all of the shutoffs, they sign each shutoff notice that is shown to the customer. One alternative to shutoffs is the use of flow restrictors when customers don't pay their bills.[18] These devices allow a trickle of water to come out of the tap but not more. That would be enough for a customer to get a glass of water to drink, to fill a pot (slowly) for cooking, to wash hands, and to fill a bucket (again, slowly) for bathing. Water is not completely shut off, but it is greatly reduced. Another option for customers that may be habitually delinquent on bills is to require prepayment[19]. Water and wastewater are often charged after the month of use, but the utility could switch to requiring delinquent customers to pay ahead of time for access to the system. Enforcing a delinquency policy always must be balanced with affordability concerns. The goal of a delinquency policy is to ensure that customers with the ability to pay their bills do in fact pay. The goal is not to punish customers with legitimate affordability concerns. It is recommended that any delinquency policy be paired with a customer assistance program.

- **Budget separately** for water and wastewater. Ideally, each utility service should be self-sufficient on its own, and the rates charged for each service should reflect the cost of that serve only. This is a best practice for water and wastewater finance and management. In addition, funders such as USDA require that water and wastewater budgets be separated as condition for accessing their grant and loan funding. Having separate budgets would allow future rate studies to adjust water and wastewater rates separately.

[18] https://www.ibenvironmental.com/blog/2020/04/13/waterflowrestrictionsblog discusses flow restrictors in detail

[19] This episode of the Water Values podcast discusses pre-paid water: https://www.bluefieldresearch.com/podcast/pre-paid-water/

Appendix 1: Projected Revenues and Expenses Over 5 Years

Revenues

	Collection Rate	Expected Annual Revenue	Change in # Users	FY+1	FY+2	FY+3	FY+4	FY+5
Residential	90%	289,721	0%	$289,721	$289,721	$289,721	$289,721	$289,721
Elder	90%	45,992	0%	$45,992	$45,992	$45,992	$45,992	$45,992
Commercial	90%	218,919	0%	$218,919	$218,919	$218,919	$218,919	$218,919
Total		**554,632**		**$554,632**	**$554,632**	**$554,632**	**$554,632**	**$554,632**

Expenses	FY2019 Projected	Change in Expenses	FY+1	FY+2	FY+3	FY+4	FY+5
SALARIES	$296,120	2%	$302,043	$308,084	$314,245	$320,530	$326,941
TEMPORARY SALARIES	$9,246	2%	$9,431	$9,620	$9,812	$10,008	$10,208
EMPLOYEE TAXES	$33,047	2%	$33,707	$34,382	$35,069	$35,771	$36,486
EMPLOYEE BONUS	$5,193	2%	$5,297	$5,402	$5,511	$5,621	$5,733
POSATAGE	$1,965	2%	$2,004	$2,044	$2,085	$2,127	$2,170
TRAVEL	$20,450	2%	$20,859	$21,276	$21,702	$22,136	$22,578
TRAINING	$4,389	2%	$4,477	$4,566	$4,658	$4,751	$4,846
DONATIONS	$3,500	2%	$3,570	$3,641	$3,714	$3,789	$3,864
LICENSES & FEES	$112	2%	$114	$116	$119	$121	$123
PUBLICATIONS	$150	2%	$153	$156	$159	$162	$166
OFFICE SUPPLIES	$6,381	2%	$6,509	$6,639	$6,772	$6,907	$7,045
FIELD SUPPLIES	$51,344	2%	$52,371	$53,419	$54,487	$55,577	$56,688
UTILITIES	$76,187	2%	$77,710	$79,265	$80,850	$82,467	$84,116
TELEPHONE	$8,416	2%	$8,584	$8,756	$8,931	$9,110	$9,292
LAB COSTS	$9,450	2%	$9,639	$9,832	$10,028	$10,229	$10,433
PROFESSIONAL SERVICES	$58,477	2%	$59,647	$60,839	$62,056	$63,297	$64,563
MEETING COSTS	$2,199	2%	$2,243	$2,288	$2,334	$2,380	$2,428
BUILDING MAINTENANCE/REPAIR	$1,029	2%	$1,050	$1,071	$1,092	$1,114	$1,136
VEHICLE MAINTENANCE/REPAIR	$800	2%	$816	$832	$849	$866	$883
EQUIP MAINTENCE/REPAIR	$2,200	2%	$2,244	$2,289	$2,335	$2,381	$2,429
EQUIP RENTAL	$5,000	2%	$5,100	$5,202	$5,306	$5,412	$5,520
INTEREST EXPENSES	$50	2%	$51	$52	$53	$54	$55
BANK SERVICE CHARGE	$160	2%	$163	$166	$170	$173	$177
Total	**$595,864**		**$607,782**	**$619,937**	**$632,336**	**$644,983**	**$657,882**
Revenues - Expenses	**($41,233)**		**($53,150)**	**($65,306)**	**($77,704)**	**($90,351)**	**($103,251)**

Appendix 2: Financial Targets Over 5 Years

Reserve Target Met in Year 1:

	Base Year +1	Base Year +2	Base Year +3	Base Year +4	Base Year +5
Total Projected Operating Expenses	$607,782	$619,937	$632,336	$644,983	$657,882
Principal and Interest Payments on Long Term Debt	0	0	0	0	0
Capital Outlay	0	0	0	0	0
Total Expenses	**$607,782**	**$619,937**	**$632,336**	**$644,983**	**$657,882**
Reserve Target	$100,000	$100,000	$100,000	$100,000	$100,000
Current Reserve Funds	$40,663	$100,000	$100,000	$100,000	$100,000
Additional Reserve Funds Needed	**$59,337**	**$0**	**$0**	**$0**	**$0**
Financial Target	**$667,119**	**$619,937**	**$632,336**	**$644,983**	**$657,882**
Total Revenue Other Than Water/Wastewater Rates	**$0**	**$0**	**$0**	**$0**	**$0**
Revenue Needed from Water/Wastewater	667,119	619,937	632,336	644,983	657,882
Projected Water/Wastewater Under Current Rates	554,632	554,632	554,632	554,632	554,632
Additional Revenue Needed from Water Rates	**$112,487**	**$65,306**	**$77,704**	**$90,351**	**$103,251**

Reserve Target Met Gradually Over 5 Years:

	Base Year +1	Base Year +2	Base Year +3	Base Year +4	Base Year +5
Total Projected Operating Expenses	$607,782	$619,937	$632,336	$644,983	$657,882
Principal and Interest Payments on Long Term Debt	0	0	0	0	0
Capital Outlay	0	0	0	0	0
Total Expenses	**$607,782**	**$619,937**	**$632,336**	**$644,983**	**$657,882**
Reserve Target	$50,000	$62,500	$75,000	$87,500	$100,000
Current Reserve Funds	$40,663	$50,000	$62,500	$75,000	$87,500
Additional Reserve Funds Needed	**$9,337**	**$12,500**	**$12,500**	**$12,500**	**$12,500**
Financial Target	**$617,119**	**$632,437**	**$644,836**	**$657,483**	**$670,382**
Total Revenue Other Than Water/Wastewater Rates	**$0**	**$0**	**$0**	**$0**	**$0**
Revenue Needed from Water/Wastewater	617,119	632,437	644,836	657,483	670,382
Projected Water/Wastewater Under Current Rates	554,632	554,632	554,632	554,632	554,632
Additional Revenue Needed from Water Rates	**$62,487**	**$77,806**	**$90,204**	**$102,851**	**$115,751**

Appendix 3: Residential Full, Elder Rate and Non-Residential Rate Increase Combinations for Full Cost Pricing

Scenario 3: All Three Rates are Raised

If Residential Full and Elder Rates Increase by...	Then Non-Residential Rates Would Increase by...	
0%	51%	
1%	50%	
2%	48%	
3%	47%	
4%	45%	
5%	44%	
6%	42%	
7%	41%	
8%	39%	
9%	38%	
10%	36%	
11%	35%	
12%	33%	
13%	31%	
14%	30%	
15%	28%	
16%	27%	
17%	25%	
18%	24%	
19%	22%	
20%	21%	
20.28%	**20.28%**	← All rates raised by the same percentage
21%	19%	
22%	18%	
23%	16%	
24%	15%	
25%	13%	
26%	12%	
27%	10%	
28%	8%	
29%	7%	
30%	5%	
31%	4%	
32%	2%	
33%	1%	
34%	0%	

Scenario 4: The Residential Full and Non-Residential Rates are Raised, but the Elder Rate Stays the Same

If Residential Full Rates Increase by...	Then Non-Residential Rates Would Increase by...	
0%	51%	
1%	50%	
2%	49%	
3%	47%	
4%	46%	
5%	45%	
6%	43%	
7%	42%	
8%	41%	
9%	39%	
10%	38%	
11%	37%	
12%	36%	
13%	34%	
14%	33%	
15%	32%	
16%	30%	
17%	29%	
18%	28%	
19%	26%	
20%	25%	
21%	24%	
22%	22%	
22.115%	**22.115%**	← Rates raised by the same percentage
23%	21%	
24%	20%	
25%	18%	
26%	17%	
27%	16%	
28%	14%	
29%	13%	
30%	12%	
31%	10%	
32%	9%	
33%	8%	
34%	7%	
35%	5%	
36%	4%	
37%	3%	
38%	1%	
39%	0%	

Appendix 4: Monthly Rates for Non-Residential Customers Under Each Rate Change Scenario

Scenario 1: Raise Non-Residential Rates Only

Non-Residential	Location	Water	Sewer	Standard	Monthly
Indian Health Service - Clinic	Lame Deer	$1,819.68	$963.78	$135.90	$2,919.37
NCTH SB Complex	Lame Deer	$1,544.73	$996.60	$15.10	$2,556.43
NC Tribal School--Gym	Busby	$697.69	$495.13	$135.90	$1,328.72
Lame Deer Pub Sch - Main	Lame Deer	$485.16	$509.63	$135.90	$1,130.69
Lame Deer Pub Sch - Gym	Lame Deer	$447.20	$258.34	$135.90	$841.44
BIA Youth Detention Center	Busby	$0.00	$687.53	$135.90	$823.43
BIA - Law Enforcement	Lame Deer	$306.12	$209.01	$135.90	$651.03
NCT Tribal Office	Lame Deer	$274.99	$189.28	$135.90	$600.17
NCT Charging Horse Casino	Lame Deer	$259.33	$204.07	$135.90	$599.30
CDKC - Main A	Lame Deer	$285.43	$154.74	$135.90	$576.07
NCTH Elderly Program	Lame Deer	$297.24	$139.94	$135.90	$573.08
Boys & Girls Club of NC Nation	Lame Deer	$259.33	$150.14	$135.90	$545.38
NCT Headstart - Adm.	Lame Deer	$228.02	$130.08	$135.90	$494.01
CDKC - Main B	Lame Deer	$222.80	$135.01	$135.90	$493.72
NCT BOH - Main	Lame Deer	$196.71	$125.14	$135.90	$457.75
BIA - Adm.	Lame Deer	$191.49	$127.06	$135.90	$454.45
NCT Rosebud Lodge	Busby	$181.06	$95.55	$135.90	$412.50
CDKC - Daycare	Lame Deer	$170.62	$80.74	$135.90	$387.26
Blessed Sacrament Catholic Church	Lame Deer	$212.37	$125.14	$45.30	$382.80
NCT Cheyenne Depot	Lame Deer	$154.96	$70.89	$135.90	$361.75
NCT Lil Eagle Headstart	Busby	$134.09	$75.81	$135.90	$345.80
NCT Headstart - Rainbow	Lame Deer	$134.09	$75.81	$135.90	$345.80
NCT BOH - Fitness Center	Lame Deer	$113.21	$95.55	$135.90	$344.66
NCT Cheyenne Ave. Laundromat	Lame Deer	$113.25	$109.63	$105.70	$328.58
NC Tribal School--Adm.	Busby	$118.43	$70.89	$135.90	$325.22
NCT Headstart - Lil Cheyenne	Lame Deer	$123.65	$61.01	$135.90	$320.56
Lame Deer Trading Post	Lame Deer	$134.09	$31.42	$135.90	$301.41
NCT Prosecution	Lame Deer	$102.78	$61.01	$135.90	$299.69
NC Tribal School--School	Busby	$113.21	$46.21	$135.90	$295.32
People's Partnership	Lame Deer	$122.31	$36.69	$135.90	$294.90
NCT BOH- Ambulance Serv. Office	Lame Deer	$118.23	$28.54	$135.90	$282.67
NCT Tribal Historic Pres	Lame Deer	$97.85	$48.92	$135.90	$282.67
NCT BOH - Prevention Center	Lame Deer	$97.56	$46.21	$135.90	$279.66
NCT BOH - Wellness Center	Lame Deer	$92.34	$51.15	$135.90	$279.39
Robinson, Tom	Lame Deer	$112.80	$24.46	$135.90	$273.16

Non-Residential	Location	Water	Sewer	Standard	Monthly
NCT Land Authority	Lame Deer	$48.92	$81.54	$135.90	$266.36
Lame Deer Pub Sch - Altern Ed	Lame Deer	$81.90	$51.15	$105.70	$238.76
NCT E.P.D.	Lame Deer	$40.15	$56.08	$135.90	$232.14
US Postal Service Lame Deer	Lame Deer	$71.47	$51.15	$105.70	$228.32
NCT Headstart - ABC	Lame Deer	$81.90	$36.35	$105.70	$223.95
NCT Headstart - Can Do	Lame Deer	$81.90	$36.35	$105.70	$223.95
BIA - Forestry 2	Lame Deer	$66.25	$51.15	$105.70	$223.10
NCT Food Distribution	Lame Deer	$66.25	$41.80	$105.70	$213.75
NCT LIHEAP/HIP	Lame Deer	$71.47	$31.42	$105.70	$208.59
NCT Dept. of Transportation	Lame Deer	$66.25	$31.42	$105.70	$203.37
NCT MSU Extension Service	Lame Deer	$61.03	$36.35	$105.70	$203.08
CDKC - Library	Lame Deer	$55.81	$41.28	$105.70	$202.79
NCT Lube Center	Lame Deer	$68.40	$58.44	$75.50	$202.34
BIA - Forestry 1	Lame Deer	$61.03	$31.42	$105.70	$198.15
CDKC - Cultural Bldg	Lame Deer	$50.59	$36.35	$105.70	$192.64
Mike's Tool Box	Lame Deer	$80.63	$26.27	$75.50	$182.41
Morning Star Baptist Church	Lame Deer	$81.90	$51.15	$45.30	$178.36
NCTH Hse N Offie	Lame Deer	$69.31	$0.00	$105.70	$175.01
NCT Dev. Corp	Lame Deer	$48.92	$44.85	$75.50	$169.27
Lame Deer Pentecostal Church	Lame Deer	$76.68	$41.28	$45.30	$163.26
NCT Forestry Development	Lame Deer	$55.81	$26.47	$75.50	$157.78
NCT Motor Pool	Lame Deer	$55.81	$26.47	$75.50	$157.78
NCTH Main Office	Lame Deer	$81.90	$0.00	$75.50	$157.40
NCTH Maint. Dept.	Lame Deer	$81.90	$0.00	$75.50	$157.40
NCTH Maint. Shop	Lame Deer	$81.90	$0.00	$75.50	$157.40
CDKC - Café	Lame Deer	$45.37	$36.35	$75.50	$157.22
Lame Deer Menn. Church	Lame Deer	$50.59	$56.63	$45.30	$152.52
NCT Tribal Education	Lame Deer	$45.37	$26.47	$75.50	$147.35
CDKC - VoTech	Lame Deer	$71.47	$0.00	$75.50	$146.97
NCT Tribal Court	Lame Deer	$45.37	$21.54	$75.50	$142.42
Ind. Bir. Baptist Church *I	Birney	$92.34	$0.00	$45.30	$137.64
NC Tribal School--Transportation	Busby	$40.15	$21.54	$75.50	$137.20
First Interstate Bank	Lame Deer	$40.15	$21.54	$75.50	$137.20
Lame Deer Pub Sch - Bus Shop	Lame Deer	$32.62	$28.54	$75.50	$136.66
NCT BOH - D.E.S.	Lame Deer	$44.85	$16.31	$75.50	$136.66
NIWRC	Lame Deer	$40.15	$16.62	$75.50	$132.27
NCT Birney Comm Hall *I	Birney	$54.18	$0.00	$75.50	$129.68
Pentecostal Church of Busby	Busby	$55.81	$26.47	$45.30	$127.58
NCTH OPA	Lame Deer	$40.15	$11.69	$75.50	$127.34
NC Ministerial Assoc.	Lame Deer	$50.59	$31.42	$45.30	$127.31

Non-Residential	Location	Water	Sewer	Standard	Monthly
BIA - Fire Management	Lame Deer	$24.50	$26.47	$75.50	$126.47
Circle of Life Lutheran Church	Muddy Cluster	$76.97	$0.00	$45.30	$122.27
Lame Deer Pub Sch - Maint. Shop	Lame Deer	$29.72	$16.62	$75.50	$121.83
NC Tribal School--Maint. Shop	Busby	$24.50	$21.54	$75.50	$121.54
BIA - Fac. Management	Lame Deer	$24.50	$21.54	$75.50	$121.54
Busby Assembly Church of God	Busby	$50.59	$21.54	$45.30	$117.44
Christ the King Church of Busby	Busby	$50.59	$21.54	$45.30	$117.44
Range Telephone Coop	Lame Deer	$29.72	$11.69	$75.50	$116.90
White River Chey Menn Church	Busby	$71.47	$0.00	$45.30	$116.77
NCT Fire Dept.	Lame Deer	$24.50	$16.62	$75.50	$116.61
BIA - Roads Dept.	Lame Deer	$19.28	$21.54	$75.50	$116.32
Lame Deer Pub Sch - Daycare *1	Lame Deer	$24.46	$12.23	$75.50	$112.19
CDKC - Prev. Vo-Rehab.*I	Lame Deer	$24.50	$11.69	$75.50	$111.69
Flower Grinder	Lame Deer	$24.50	$11.69	$75.50	$111.69
NC Tribal School--Bldg. 1713	Busby	$14.06	$21.54	$75.50	$111.11
NC Tribal School --Bldg. 1714	Busby	$14.06	$21.54	$75.50	$111.11
US Postal Service Busby	Busby	$34.94	$0.00	$75.50	$110.44
NCTH Ross Grant	Lame Deer	$34.94	$0.00	$75.50	$110.44
NCT Ashland Comm Hall *I	Ashland	$19.28	$11.33	$75.50	$106.10
NCT BOH - Ambulance Serv. Garage	Lame Deer	$20.39	$8.15	$75.50	$104.04
NCT Solid Waste	Lame Deer	$16.31	$0.00	$75.50	$91.81
NCT (New Apostolic Ch) *I	Birney	$0.00	$0.00	$15.10	$15.10
NCT (Catholic Church)*I	Birney	$0.00	$0.00	$15.10	$15.10

Scenario 2: Raise Residential Full & Elder Rates Only

Non-Residential	Location	Water	Sewer	Standard	Monthly
Indian Health Service - Clinic	Lame Deer	$1,205.09	$638.27	$90.00	$1,933.36
NCTH SB Complex	Lame Deer	$1,023.00	$660.00	$10.00	$1,693.00
NC Tribal School--Gym	Busby	$462.05	$327.90	$90.00	$879.95
Lame Deer Pub Sch - Main	Lame Deer	$321.30	$337.50	$90.00	$748.80
Lame Deer Pub Sch - Gym	Lame Deer	$296.16	$171.08	$90.00	$557.24
BIA Youth Detention Center	Busby	$0.00	$455.32	$90.00	$545.32
BIA - Law Enforcement	Lame Deer	$202.73	$138.42	$90.00	$431.15
NCT Tribal Office	Lame Deer	$182.11	$125.35	$90.00	$397.46
NCT Charging Horse Casino	Lame Deer	$171.74	$135.14	$90.00	$396.89
CDKC - Main A	Lame Deer	$189.02	$102.48	$90.00	$381.50
NCTH Elderly Program	Lame Deer	$196.85	$92.68	$90.00	$379.52
Boys & Girls Club of NC Nation	Lame Deer	$171.74	$99.43	$90.00	$361.18
NCT Headstart - Adm.	Lame Deer	$151.01	$86.15	$90.00	$327.16
CDKC - Main B	Lame Deer	$147.55	$89.41	$90.00	$326.96
NCT BOH - Main	Lame Deer	$130.27	$82.87	$90.00	$303.14
BIA - Adm.	Lame Deer	$126.82	$84.14	$90.00	$300.96
NCT Rosebud Lodge	Busby	$119.90	$63.28	$90.00	$273.18
CDKC - Daycare	Lame Deer	$112.99	$53.47	$90.00	$256.46
Blessed Sacrament Catholic Church	Lame Deer	$140.64	$82.87	$30.00	$253.51
NCT Cheyenne Depot	Lame Deer	$102.62	$46.94	$90.00	$239.57
NCT Lil Eagle Headstart	Busby	$88.80	$50.21	$90.00	$229.01
NCT Headstart - Rainbow	Lame Deer	$88.80	$50.21	$90.00	$229.01
NCT BOH - Fitness Center	Lame Deer	$74.98	$63.28	$90.00	$228.25
NCT Cheyenne Ave. Laundromat	Lame Deer	$75.00	$72.60	$70.00	$217.60
NC Tribal School--Adm.	Busby	$78.43	$46.94	$90.00	$215.38
NCT Headstart - Lil Cheyenne	Lame Deer	$81.89	$40.40	$90.00	$212.29
Lame Deer Trading Post	Lame Deer	$88.80	$20.81	$90.00	$199.61
NCT Prosecution	Lame Deer	$68.06	$40.40	$90.00	$198.47
NC Tribal School--School	Busby	$74.98	$30.60	$90.00	$195.58
People's Partnership	Lame Deer	$81.00	$24.30	$90.00	$195.30
NCT BOH- Ambulance Serv. Office	Lame Deer	$78.30	$18.90	$90.00	$187.20
NCT Tribal Historic Pres	Lame Deer	$64.80	$32.40	$90.00	$187.20
NCT BOH - Prevention Center	Lame Deer	$64.61	$30.60	$90.00	$185.21
NCT BOH - Wellness Center	Lame Deer	$61.15	$33.88	$90.00	$185.03
Robinson, Tom	Lame Deer	$74.70	$16.20	$90.00	$180.90
NCT Land Authority	Lame Deer	$32.40	$54.00	$90.00	$176.40
Lame Deer Pub Sch - Altern Ed	Lame Deer	$54.24	$33.88	$70.00	$158.12
NCT E.P.D.	Lame Deer	$26.59	$37.14	$90.00	$153.73

Non-Residential	Location	Water	Sewer	Standard	Monthly
US Postal Service Lame Deer	Lame Deer	$47.33	$33.88	$70.00	$151.20
NCT Headstart - ABC	Lame Deer	$54.24	$24.07	$70.00	$148.31
NCT Headstart - Can Do	Lame Deer	$54.24	$24.07	$70.00	$148.31
BIA - Forestry 2	Lame Deer	$43.87	$33.88	$70.00	$147.75
NCT Food Distribution	Lame Deer	$43.87	$27.68	$70.00	$141.56
NCT LIHEAP/HIP	Lame Deer	$47.33	$20.81	$70.00	$138.14
NCT Dept. of Transportation	Lame Deer	$43.87	$20.81	$70.00	$134.68
NCT MSU Extension Service	Lame Deer	$40.42	$24.07	$70.00	$134.49
CDKC - Library	Lame Deer	$36.96	$27.34	$70.00	$134.30
NCT Lube Center	Lame Deer	$45.30	$38.70	$50.00	$134.00
BIA - Forestry 1	Lame Deer	$40.42	$20.81	$70.00	$131.22
CDKC - Cultural Bldg	Lame Deer	$33.50	$24.07	$70.00	$127.58
Mike's Tool Box	Lame Deer	$53.40	$17.40	$50.00	$120.80
Morning Star Baptist Church	Lame Deer	$54.24	$33.88	$30.00	$118.12
NCTH Hse N Offie	Lame Deer	$45.90	$0.00	$70.00	$115.90
NCT Dev. Corp	Lame Deer	$32.40	$29.70	$50.00	$112.10
Lame Deer Pentecostal Church	Lame Deer	$50.78	$27.34	$30.00	$108.12
NCT Forestry Development	Lame Deer	$36.96	$17.53	$50.00	$104.49
NCT Motor Pool	Lame Deer	$36.96	$17.53	$50.00	$104.49
NCTH Main Office	Lame Deer	$54.24	$0.00	$50.00	$104.24
NCTH Maint. Dept.	Lame Deer	$54.24	$0.00	$50.00	$104.24
NCTH Maint. Shop	Lame Deer	$54.24	$0.00	$50.00	$104.24
CDKC - Café	Lame Deer	$30.05	$24.07	$50.00	$104.12
Lame Deer Menn. Church	Lame Deer	$33.50	$37.50	$30.00	$101.00
NCT Tribal Education	Lame Deer	$30.05	$17.53	$50.00	$97.58
CDKC - VoTech	Lame Deer	$47.33	$0.00	$50.00	$97.33
NCT Tribal Court	Lame Deer	$30.05	$14.27	$50.00	$94.32
Ind. Bir. Baptist Church *I	Birney	$61.15	$0.00	$30.00	$91.15
NC Tribal School--Transportation	Busby	$26.59	$14.27	$50.00	$90.86
First Interstate Bank	Lame Deer	$26.59	$14.27	$50.00	$90.86
Lame Deer Pub Sch - Bus Shop	Lame Deer	$21.60	$18.90	$50.00	$90.50
NCT BOH - D.E.S.	Lame Deer	$29.70	$10.80	$50.00	$90.50
NIWRC	Lame Deer	$26.59	$11.00	$50.00	$87.60
NCT Birney Comm Hall *I	Birney	$35.88	$0.00	$50.00	$85.88
Pentecostal Church of Busby	Busby	$36.96	$17.53	$30.00	$84.49
NCTH OPA	Lame Deer	$26.59	$7.74	$50.00	$84.33
NC Ministerial Assoc.	Lame Deer	$33.50	$20.81	$30.00	$84.31
BIA - Fire Management	Lame Deer	$16.22	$17.53	$50.00	$83.76
Circle of Life Lutheran Church	Muddy Cluster	$50.98	$0.00	$30.00	$80.98
Lame Deer Pub Sch - Maint. Shop	Lame Deer	$19.68	$11.00	$50.00	$80.68

Non-Residential	Location	Water	Sewer	Standard	Monthly
NC Tribal School--Maint. Shop	Busby	$16.22	$14.27	$50.00	$80.49
BIA - Fac. Management	Lame Deer	$16.22	$14.27	$50.00	$80.49
Busby Assembly Church of God	Busby	$33.50	$14.27	$30.00	$77.77
Christ the King Church of Busby	Busby	$33.50	$14.27	$30.00	$77.77
Range Telephone Coop	Lame Deer	$19.68	$7.74	$50.00	$77.42
White River Chey Menn Church	Busby	$47.33	$0.00	$30.00	$77.33
NCT Fire Dept.	Lame Deer	$16.22	$11.00	$50.00	$77.23
BIA - Roads Dept.	Lame Deer	$12.77	$14.27	$50.00	$77.04
Lame Deer Pub Sch - Daycare *1	Lame Deer	$16.20	$8.10	$50.00	$74.30
CDKC - Prev. Vo-Rehab.*I	Lame Deer	$16.22	$7.74	$50.00	$73.96
Flower Grinder	Lame Deer	$16.22	$7.74	$50.00	$73.96
NC Tribal School--Bldg. 1713	Busby	$9.31	$14.27	$50.00	$73.58
NC Tribal School --Bldg. 1714	Busby	$9.31	$14.27	$50.00	$73.58
US Postal Service Busby	Busby	$23.14	$0.00	$50.00	$73.14
NCTH Ross Grant	Lame Deer	$23.14	$0.00	$50.00	$73.14
NCT Ashland Comm Hall *I	Ashland	$12.77	$7.50	$50.00	$70.27
NCT BOH - Ambulance Serv. Garage	Lame Deer	$13.50	$5.40	$50.00	$68.90
NCT Solid Waste	Lame Deer	$10.80	$0.00	$50.00	$60.80
NCT (New Apostolic Ch) *I	Birney	$0.00	$0.00	$10.00	$10.00
NCT (Catholic Church)*I	Birney	$0.00	$0.00	$10.00	$10.00

Scenario 3: Raise All Rates by the Same Percentage

Non-Residential	Location	Water	Sewer	Standard	Monthly
Indian Health Service - Clinic	Lame Deer	$1,449.48	$767.71	$108.25	$2,325.44
NCTH SB Complex	Lame Deer	$1,230.46	$793.85	$12.03	$2,036.34
NC Tribal School--Gym	Busby	$555.75	$394.40	$108.25	$1,058.40
Lame Deer Pub Sch - Main	Lame Deer	$386.46	$405.95	$108.25	$900.66
Lame Deer Pub Sch - Gym	Lame Deer	$356.22	$205.78	$108.25	$670.25
BIA Youth Detention Center	Busby	$0.00	$547.65	$108.25	$655.91
BIA - Law Enforcement	Lame Deer	$243.84	$166.49	$108.25	$518.58
NCT Tribal Office	Lame Deer	$219.04	$150.77	$108.25	$478.07
NCT Charging Horse Casino	Lame Deer	$206.57	$162.55	$108.25	$477.38
CDKC - Main A	Lame Deer	$227.36	$123.26	$108.25	$458.87
NCTH Elderly Program	Lame Deer	$236.77	$111.47	$108.25	$456.49
Boys & Girls Club of NC Nation	Lame Deer	$206.57	$119.60	$108.25	$434.42
NCT Headstart - Adm.	Lame Deer	$181.63	$103.62	$108.25	$393.50
CDKC - Main B	Lame Deer	$177.48	$107.54	$108.25	$393.27
NCT BOH - Main	Lame Deer	$156.69	$99.68	$108.25	$364.62
BIA - Adm.	Lame Deer	$152.53	$101.21	$108.25	$361.99
NCT Rosebud Lodge	Busby	$144.22	$76.11	$108.25	$328.58
CDKC - Daycare	Lame Deer	$135.91	$64.32	$108.25	$308.47
Blessed Sacrament Catholic Church	Lame Deer	$169.16	$99.68	$36.08	$304.92
NCT Cheyenne Depot	Lame Deer	$123.44	$56.46	$108.25	$288.15
NCT Lil Eagle Headstart	Busby	$106.81	$60.39	$108.25	$275.45
NCT Headstart - Rainbow	Lame Deer	$106.81	$60.39	$108.25	$275.45
NCT BOH - Fitness Center	Lame Deer	$90.18	$76.11	$108.25	$274.54
NCT Cheyenne Ave. Laundromat	Lame Deer	$90.21	$87.32	$84.20	$261.73
NC Tribal School--Adm.	Busby	$94.34	$56.46	$108.25	$259.05
NCT Headstart - Lil Cheyenne	Lame Deer	$98.49	$48.60	$108.25	$255.34
Lame Deer Trading Post	Lame Deer	$106.81	$25.03	$108.25	$240.09
NCT Prosecution	Lame Deer	$81.87	$48.60	$108.25	$238.72
NC Tribal School--School	Busby	$90.18	$36.81	$108.25	$235.24
People's Partnership	Lame Deer	$97.43	$29.23	$108.25	$234.91
NCT BOH- Ambulance Serv. Office	Lame Deer	$94.18	$22.73	$108.25	$225.16
NCT Tribal Historic Pres	Lame Deer	$77.94	$38.97	$108.25	$225.16
NCT BOH - Prevention Center	Lame Deer	$77.71	$36.81	$108.25	$222.77
NCT BOH - Wellness Center	Lame Deer	$73.55	$40.75	$108.25	$222.55
Robinson, Tom	Lame Deer	$89.85	$19.49	$108.25	$217.59
NCT Land Authority	Lame Deer	$38.97	$64.95	$108.25	$212.17
Lame Deer Pub Sch - Altern Ed	Lame Deer	$65.24	$40.75	$84.20	$190.18
NCT E.P.D.	Lame Deer	$31.98	$44.67	$108.25	$184.91

Non-Residential	Location	Water	Sewer	Standard	Monthly
US Postal Service Lame Deer	Lame Deer	$56.93	$40.75	$84.20	$181.87
NCT Headstart - ABC	Lame Deer	$65.24	$28.95	$84.20	$178.39
NCT Headstart - Can Do	Lame Deer	$65.24	$28.95	$84.20	$178.39
BIA - Forestry 2	Lame Deer	$52.77	$40.75	$84.20	$177.71
NCT Food Distribution	Lame Deer	$52.77	$33.30	$84.20	$170.26
NCT LIHEAP/HIP	Lame Deer	$56.93	$25.03	$84.20	$166.15
NCT Dept. of Transportation	Lame Deer	$52.77	$25.03	$84.20	$161.99
NCT MSU Extension Service	Lame Deer	$48.61	$28.95	$84.20	$161.76
CDKC - Library	Lame Deer	$44.46	$32.88	$84.20	$161.53
NCT Lube Center	Lame Deer	$54.49	$46.55	$60.14	$161.18
BIA - Forestry 1	Lame Deer	$48.61	$25.03	$84.20	$157.84
CDKC - Cultural Bldg	Lame Deer	$40.30	$28.95	$84.20	$153.45
Mike's Tool Box	Lame Deer	$64.23	$20.93	$60.14	$145.30
Morning Star Baptist Church	Lame Deer	$65.24	$40.75	$36.08	$142.07
NCTH Hse N Offie	Lame Deer	$55.21	$0.00	$84.20	$139.40
NCT Dev. Corp	Lame Deer	$38.97	$35.72	$60.14	$134.83
Lame Deer Pentecostal Church	Lame Deer	$61.08	$32.88	$36.08	$130.05
NCT Forestry Development	Lame Deer	$44.46	$21.09	$60.14	$125.68
NCT Motor Pool	Lame Deer	$44.46	$21.09	$60.14	$125.68
NCTH Main Office	Lame Deer	$65.24	$0.00	$60.14	$125.38
NCTH Maint. Dept.	Lame Deer	$65.24	$0.00	$60.14	$125.38
NCTH Maint. Shop	Lame Deer	$65.24	$0.00	$60.14	$125.38
CDKC - Café	Lame Deer	$36.14	$28.95	$60.14	$125.24
Lame Deer Menn. Church	Lame Deer	$40.30	$45.11	$36.08	$121.49
NCT Tribal Education	Lame Deer	$36.14	$21.09	$60.14	$117.37
CDKC - VoTech	Lame Deer	$56.93	$0.00	$60.14	$117.07
NCT Tribal Court	Lame Deer	$36.14	$17.16	$60.14	$113.44
Ind. Bir. Baptist Church *I	Birney	$73.55	$0.00	$36.08	$109.64
NC Tribal School--Transportation	Busby	$31.98	$17.16	$60.14	$109.29
First Interstate Bank	Lame Deer	$31.98	$17.16	$60.14	$109.29
Lame Deer Pub Sch - Bus Shop	Lame Deer	$25.98	$22.73	$60.14	$108.85
NCT BOH - D.E.S.	Lame Deer	$35.72	$12.99	$60.14	$108.85
NIWRC	Lame Deer	$31.98	$13.24	$60.14	$105.36
NCT Birney Comm Hall *I	Birney	$43.16	$0.00	$60.14	$103.30
Pentecostal Church of Busby	Busby	$44.46	$21.09	$36.08	$101.63
NCTH OPA	Lame Deer	$31.98	$9.31	$60.14	$101.43
NC Ministerial Assoc.	Lame Deer	$40.30	$25.03	$36.08	$101.41
BIA - Fire Management	Lame Deer	$19.51	$21.09	$60.14	$100.74
Circle of Life Lutheran Church	Muddy Cluster	$61.31	$0.00	$36.08	$97.40
Lame Deer Pub Sch - Maint. Shop	Lame Deer	$23.67	$13.24	$60.14	$97.05

Non-Residential	Location	Water	Sewer	Standard	Monthly
NC Tribal School--Maint. Shop	Busby	$19.51	$17.16	$60.14	$96.82
BIA - Fac. Management	Lame Deer	$19.51	$17.16	$60.14	$96.82
Busby Assembly Church of God	Busby	$40.30	$17.16	$36.08	$93.54
Christ the King Church of Busby	Busby	$40.30	$17.16	$36.08	$93.54
Range Telephone Coop	Lame Deer	$23.67	$9.31	$60.14	$93.12
White River Chey Menn Church	Busby	$56.93	$0.00	$36.08	$93.01
NCT Fire Dept.	Lame Deer	$19.51	$13.24	$60.14	$92.89
BIA - Roads Dept.	Lame Deer	$15.36	$17.16	$60.14	$92.66
Lame Deer Pub Sch - Daycare *1	Lame Deer	$19.49	$9.74	$60.14	$89.37
CDKC - Prev. Vo-Rehab.*I	Lame Deer	$19.51	$9.31	$60.14	$88.96
Flower Grinder	Lame Deer	$19.51	$9.31	$60.14	$88.96
NC Tribal School--Bldg. 1713	Busby	$11.20	$17.16	$60.14	$88.50
NC Tribal School --Bldg. 1714	Busby	$11.20	$17.16	$60.14	$88.50
US Postal Service Busby	Busby	$27.83	$0.00	$60.14	$87.97
NCTH Ross Grant	Lame Deer	$27.83	$0.00	$60.14	$87.97
NCT Ashland Comm Hall *I	Ashland	$15.36	$9.02	$60.14	$84.52
NCT BOH - Ambulance Serv. Garage	Lame Deer	$16.24	$6.50	$60.14	$82.87
NCT Solid Waste	Lame Deer	$12.99	$0.00	$60.14	$73.13
NCT (New Apostolic Ch) *I	Birney	$0.00	$0.00	$12.03	$12.03
NCT (Catholic Church)*I	Birney	$0.00	$0.00	$12.03	$12.03

Scenario 4: Raise Residential Full and Non-Residential Rates by the Same Percentage and Maintain Current Elder Rates

Non-Residential	Location	Water	Sewer	Standard	Monthly
Indian Health Service - Clinic	Lame Deer	$1,471.59	$779.42	$109.90	$2,360.92
NCTH SB Complex	Lame Deer	$1,249.24	$805.96	$12.21	$2,067.41
NC Tribal School--Gym	Busby	$564.23	$400.42	$109.90	$1,074.55
Lame Deer Pub Sch - Main	Lame Deer	$392.36	$412.14	$109.90	$914.40
Lame Deer Pub Sch - Gym	Lame Deer	$361.66	$208.92	$109.90	$680.48
BIA Youth Detension Center	Busby	$0.00	$556.01	$109.90	$665.91
BIA - Law Enforcement	Lame Deer	$247.56	$169.03	$109.90	$526.50
NCT Tribal Office	Lame Deer	$222.39	$153.07	$109.90	$485.36
NCT Charging Horse Casino	Lame Deer	$209.73	$165.03	$109.90	$484.66
CDKC - Main A	Lame Deer	$230.83	$125.14	$109.90	$465.87
NCTH Elderly Program	Lame Deer	$240.38	$113.17	$109.90	$463.46
Boys & Girls Club of NC Nation	Lame Deer	$209.73	$121.42	$109.90	$441.05
NCT Headstart - Adm.	Lame Deer	$184.40	$105.20	$109.90	$399.51
CDKC - Main B	Lame Deer	$180.18	$109.19	$109.90	$399.27
NCT BOH - Main	Lame Deer	$159.08	$101.20	$109.90	$370.18
BIA - Adm.	Lame Deer	$154.86	$102.75	$109.90	$367.52
NCT Rosebud Lodge	Busby	$146.42	$77.27	$109.90	$333.59
CDKC - Daycare	Lame Deer	$137.98	$65.30	$109.90	$313.18
Blessed Sacrament Catholic Church	Lame Deer	$171.74	$101.20	$36.63	$309.58
NCT Cheyenne Depot	Lame Deer	$125.32	$57.33	$109.90	$292.55
NCT Lil Eagle Headstart	Busby	$108.44	$61.31	$109.90	$279.65
NCT Headstart - Rainbow	Lame Deer	$108.44	$61.31	$109.90	$279.65
NCT BOH - Fitness Center	Lame Deer	$91.56	$77.27	$109.90	$278.73
NCT Cheyenne Ave. Laundromat	Lame Deer	$91.59	$88.66	$85.48	$265.72
NC Tribal School--Adm.	Busby	$95.78	$57.33	$109.90	$263.01
NCT Headstart - Lil Cheyenne	Lame Deer	$100.00	$49.34	$109.90	$259.24
Lame Deer Trading Post	Lame Deer	$108.44	$25.41	$109.90	$243.75
NCT Prosecution	Lame Deer	$83.12	$49.34	$109.90	$242.36
NC Tribal School--School	Busby	$91.56	$37.37	$109.90	$238.83
People's Partnership	Lame Deer	$98.91	$29.67	$109.90	$238.49
NCT BOH- Ambulance Serv. Office	Lame Deer	$95.62	$23.08	$109.90	$228.60
NCT Tribal Historic Pres	Lame Deer	$79.13	$39.57	$109.90	$228.60
NCT BOH - Prevention Center	Lame Deer	$78.90	$37.37	$109.90	$226.17
NCT BOH - Wellness Center	Lame Deer	$74.68	$41.37	$109.90	$225.95
Robinson, Tom	Lame Deer	$91.22	$19.78	$109.90	$220.91
NCT Land Authority	Lame Deer	$39.57	$65.94	$109.90	$215.41
Lame Deer Pub Sch - Altern Ed	Lame Deer	$66.24	$41.37	$85.48	$193.08

Non-Residential	Location	Water	Sewer	Standard	Monthly
NCT E.P.D.	Lame Deer	$32.47	$45.35	$109.90	$187.73
US Postal Service Lame Deer	Lame Deer	$57.79	$41.37	$85.48	$184.64
NCT Headstart - ABC	Lame Deer	$66.24	$29.40	$85.48	$181.11
NCT Headstart - Can Do	Lame Deer	$66.24	$29.40	$85.48	$181.11
BIA - Forestry 2	Lame Deer	$53.57	$41.37	$85.48	$180.42
NCT Food Distribution	Lame Deer	$53.57	$33.81	$85.48	$172.86
NCT LIHEAP/HIP	Lame Deer	$57.79	$25.41	$85.48	$168.68
NCT Dept. of Transporation	Lame Deer	$53.57	$25.41	$85.48	$164.46
NCT MSU Extension Service	Lame Deer	$49.35	$29.40	$85.48	$164.23
CDKC - Library	Lame Deer	$45.13	$33.38	$85.48	$164.00
NCT Lube Center	Lame Deer	$55.32	$47.26	$61.06	$163.63
BIA - Forestry 1	Lame Deer	$49.35	$25.41	$85.48	$160.24
CDKC - Cultural Bldge	Lame Deer	$40.91	$29.40	$85.48	$155.79
Mike's Tool Box	Lame Deer	$65.21	$21.25	$61.06	$147.51
Morning Star Baptist Church	Lame Deer	$66.24	$41.37	$36.63	$144.24
NCTH Hse N Offie	Lame Deer	$56.05	$0.00	$85.48	$141.53
NCT Dev. Corp	Lame Deer	$39.57	$36.27	$61.06	$136.89
Lame Deer Pentecostal Church	Lame Deer	$62.01	$33.38	$36.63	$132.03
NCT Forestry Development	Lame Deer	$45.13	$21.41	$61.06	$127.60
NCT Motor Pool	Lame Deer	$45.13	$21.41	$61.06	$127.60
NCTH Main Office	Lame Deer	$66.24	$0.00	$61.06	$127.29
NCTH Maint. Dept.	Lame Deer	$66.24	$0.00	$61.06	$127.29
NCTH Maint. Shop	Lame Deer	$66.24	$0.00	$61.06	$127.29
CDKC - Café	Lame Deer	$36.69	$29.40	$61.06	$127.15
Lame Deer Menn. Church	Lame Deer	$40.91	$45.79	$36.63	$123.34
NCT Tribal Education	Lame Deer	$36.69	$21.41	$61.06	$119.16
CDKC - VoTech	Lame Deer	$57.79	$0.00	$61.06	$118.85
NCT Tribal Court	Lame Deer	$36.69	$17.42	$61.06	$115.17
Ind. Bir. Baptist Church *I	Birney	$74.68	$0.00	$36.63	$111.31
NC Tribal School--Transportation	Busby	$32.47	$17.42	$61.06	$110.95
First Interstate Bank	Lame Deer	$32.47	$17.42	$61.06	$110.95
Lame Deer Pub Sch - Bus Shop	Lame Deer	$26.38	$23.08	$61.06	$110.51
NCT BOH - D.E.S.	Lame Deer	$36.27	$13.19	$61.06	$110.51
NIWRC	Lame Deer	$32.47	$13.44	$61.06	$106.97
NCT Birney Comm Hall *I	Birney	$43.81	$0.00	$61.06	$104.87
Pentecostal Church of Busby	Busby	$45.13	$21.41	$36.63	$103.18
NCTH OPA	Lame Deer	$32.47	$9.45	$61.06	$102.98
NC Ministerial Assoc.	Lame Deer	$40.91	$25.41	$36.63	$102.96
BIA - Fire Management	Lame Deer	$19.81	$21.41	$61.06	$102.28
Circle of Life Lutheran Church	Muddy Cluster	$62.25	$0.00	$36.63	$98.88

Non-Residential	Location	Water	Sewer	Standard	Monthly
Lame Deer Pub Sch - Maint. Shop	Lame Deer	$24.03	$13.44	$61.06	$98.53
NC Tribal School--Maint. Shop	Busby	$19.81	$17.42	$61.06	$98.29
BIA - Fac. Management	Lame Deer	$19.81	$17.42	$61.06	$98.29
Busby Assembly Church of God	Busby	$40.91	$17.42	$36.63	$94.97
Christ the King Church of Busby	Busby	$40.91	$17.42	$36.63	$94.97
Range Telephone Coop	Lame Deer	$24.03	$9.45	$61.06	$94.54
White River Chey Menn Church	Busby	$57.79	$0.00	$36.63	$94.43
NCT Fire Dept.	Lame Deer	$19.81	$13.44	$61.06	$94.31
BIA - Roads Dept.	Lame Deer	$15.59	$17.42	$61.06	$94.07
Lame Deer Pub Sch - Daycare *1	Lame Deer	$19.78	$9.89	$61.06	$90.73
CDKC - Prev. Vo-Rehab.*I	Lame Deer	$19.81	$9.45	$61.06	$90.32
Flower Grinder	Lame Deer	$19.81	$9.45	$61.06	$90.32
NC Tribal School--Bldg. 1713	Busby	$11.37	$17.42	$61.06	$89.85
NC Tribal School --Bldg. 1714	Busby	$11.37	$17.42	$61.06	$89.85
US Postal Service Busby	Busby	$28.25	$0.00	$61.06	$89.31
NCTH Ross Grant	Lame Deer	$28.25	$0.00	$61.06	$89.31
NCT Ashland Comm Hall *I	Ashland	$15.59	$9.16	$61.06	$85.81
NCT BOH - Ambulance Serv. Garage	Lame Deer	$16.49	$6.59	$61.06	$84.14
NCT Solid Waste	Lame Deer	$13.19	$0.00	$61.06	$74.25
NCT (New Apostolic Ch) *I	Birney	$0.00	$0.00	$12.21	$12.21
NCT (Catholic Church)*I	Birney	$0.00	$0.00	$12.21	$12.21

Contact

Glenn Barnes
Director
Water Finance Assistance
200 North Main Street
Graham, North Carolina 27253
617-388-4404
glenn@waterfinanceassistance.com

Appendix G

Quarterly Report Template

Northern Cheyenne Utilities Commission

Quarterly Report in Compliance with Consent Decree

Report for INSERT DATES

Status of compliance for **Lagoon Renovations** (Paragraph 26) including whether scheduled milestones have been met and the anticipated project completion date.
INSERT COMPLIANCE UPDATE OR DATE THE PROJECT WAS FULLY COMPLETED.
Status of compliance and milestones regarding **Collection System Improvements** (Paragraph 27) including whether scheduled milestones have been met and the completion date (actual or anticipated) for the project. If a project has been completed, the date of completion need only be provided.
INSERT COMPLIANCE UPDATE OR DATE THE PROJECT WAS FULLY COMPLETED.
Status of compliance and milestones regarding **Facility Security** (Paragraph 28) including whether scheduled milestones have been met and the completion date (actual or anticipated) for the project . If a project has been completed, the date of completion need only be provided..
INSERT COMPLIANCE UPDATE OR DATE THE PROJECT WAS FULLY COMPLETED.
Status of compliance for Plan of Operations, **Preliminary Engineering Report** (Paragraph 29.a), including the completion date (actual or anticipated). NCUC shall also report the completion date of the most recent annual review of the Plan of Operations. If any subparts of the Plan of Operations were revised within the reporting quarter, NCUC shall also provide a copy of the relevant updated subparts with the quarterly report.
INSERT COMPLIANCE UPDATE OR DATE THE PROJECT WAS FULLY COMPLETED.
Status of compliance and milestones regarding Plan of Operations, **Operations and Maintenance Manual** (Paragraph 29.b), including the completion date (actual or anticipated). NCUC shall also report the completion date of the most recent annual review of the Plan of Operations. If any subparts of the Plan of Operations were revised within the reporting quarter, NCUC shall also provide a copy of the relevant updated subparts with the quarterly report.
INSERT COMPLIANCE UPDATE OR DATE THE PROJECT WAS FULLY COMPLETED.
Status of compliance and milestones regarding Plan of Operations, **Emergency Response Plan** (Paragraph 29.c), including the completion date (actual or anticipated). NCUC shall also report the completion date of the most recent annual review of the Plan of Operations. If any subparts of the Plan of Operations were revised within the reporting quarter, NCUC shall also provide a copy of the relevant updated subparts with the quarterly report.
INSERT COMPLIANCE UPDATE OR DATE THE PROJECT WAS FULLY COMPLETED.

Status of compliance and milestones regarding Plan of Operations, **Staffing Management Plan** (Paragraph 29.d), including the completion date (actual or anticipated). NCUC shall also report the completion date of the most recent annual review of the Plan of Operations. If any subparts of the Plan of Operations were revised within the reporting quarter, NCUC shall also provide a copy of the relevant updated subparts with the quarterly report.
INSERT COMPLIANCE UPDATE OR DATE THE PROJECT WAS FULLY COMPLETED.
The status of compliance with **Facility certified operator requirements**, including whether a certified operator has been employed by NCUC for the Facility for the duration of the reporting quarter, and if not, the termination date of the certification or employment of the previous certified operator and the actual or anticipated date that a new operator will be trained or retained and certified in accordance with Paragraph 30 of the Consent Decree.
INSERT COMPLIANCE UPDATE
The status of compliance with each subpart of the **Financial Management Plan** (Paragraph 31), including, the completion date (actual or anticipated) for each subpart and the most recent annual review of the Financial Management Plan; whether the target sewer rates or different rates for wastewater services are being implemented and collected; and a summary of fees billed and collected. If any subparts of the Financial Management Plan were revised within the reporting quarter, Defendants shall also provide a copy of the relevant updated subparts with the quarterly report.
INSERT COMPLIANCE UPDATE
The status of compliance with the **Organizational Improvements Section** (Paragraph 32), including the completion date (actual or anticipated) of the Communication and Notification Plan.
INSERT COMPLIANCE UPDATE
Summary of any other **planned or ongoing physical repairs and improvements to the Facility** and their status of completion until such projects or actions are complete.
INSERT NARRATIVE
Any problems encountered or anticipated which could prevent Defendants from meeting their obligations under the Consent Decree, together with implemented or proposed solutions.
INSERT NARRATIVE
The status of compliance with **any other submittals** as specifically required by the Consent Decree.
INSERT NARRATIVE

A description of any noncompliance with the requirements of the Consent Decree and the Facility's NPDES Permit and an explanation of the likely cause of the noncompliance and the remedial steps taken, or to be taken, to prevent or minimize such noncompliance in the future. If the cause of a violation cannot be fully explained at the time the quarterly report is due, NCUC shall so state in the report, investigate further the cause of the violation, and provide an update on the results of the investigation and follow-up in the next quarterly report
INSERT NARRATIVE

Additional attachments:

- An itemized list of costs expended on Facility operation and maintenance and Consent Decree compliance.
- Any updated portions of Plan of Operations.

Appendix H

Deliverables and Deadlines Schedule

Northern Cheyenne Utilities Commission

Consent Decree Deliverables and Deadline Schedule

Note: This is an outline of time frames and deliverables. Please review the Consent Decree for all the requirements for each deliverable.

¶	TIME FRAME	REQUIREMENT	PROGRESS
12	Within 30 days of entry of the Consent Decree	Payment of $1,500 plus interest to United States	
14	At time of payment of penalty	Send notice of payment to the EPA via email at ciwd_acctsreceivable@epa.gov	
26.f.	Within 90 days of Effective Date	Equipment Replacement Parts. NCUC shall acquire and maintain a replacement pump for each make, model or type of pump currently in use at the Lagoon's lift station. Further NCUC, in consultation with IHS, will determine any other essential equipment spare parts for the Lagoon lift station that are necessary for NCUC to maintain in its possession for the purpose of timely repairing equipment malfunctions and ensuring continued operation in the event of future equipment failures.	

29	Within 1 year of Effective Date	Plan of Operations. NCUC shall submit to the EPA a revised "Plan of Operations" (last updated January 7, 2013) describing the procedures, personnel and resources to be used by NCUC to operate and maintain the Facility in a sustainable manner consistent with applicable NPDES permits and the CWA.	
30	Within 90 days of Effective Date	Certified Operator. NCUC shall hire and maintain at least one wastewater operator certified by a state-approved or EPA-recognized wastewater certification program, with minimum certification level authorizing operation of aerated, discharging lagoons, such as a Montana Level 3C certification or equivalent, to perform or supervise Facility operations and maintenance.	
30	Within 90 days of Effective Date	NCUC shall submit documentation of wastewater operator certification to the EPA	
30	Within 90 days of termination of wastewater operator's employment with NCUC or certification terminates	Train or hire a NCUC staff member meeting the outlined certification criteria	
30	Within 14 days of training or hiring of new wastewater operator	NCUC shall submit documentation of certification for any subsequently trained or hired certified operators to the EPA	

31	Within 365 days of Effective Date	NCUC shall develop and submit to the EPA a Financial Management Plan for NCUC.	
31.a.	Within 90 days of the Effective Date, and annually thereafter at least 30 days before the start of NCUC's new fiscal year	Budget. NCUC shall develop an annual budget for NCUC that includes projected revenue, salaries, overhead, capital expenditures, regular operating and repair costs, emergency response costs, reserve funds, and planned repair costs for the Facility for the next three years.	
31.c.	Within 2 years of the Effective Date	Interim Rates Study. NCUC shall commence an interim rates study and develop a report that evaluates NCUC's current service rates, annual budget, billing and collection policies and the ability of NCUC to ensure financial solvency, provide wastewater services, and properly operate and maintain the Facility	
31.d.	Within 60 days of the Effective Date	Service Rates. NCUC shall develop and implement revised service rates that reflect the recommendations provided in the 2020 Initial Rates Study (Paragraph 31.b), including establishment of reserve funds.	
31.e.	Within 90 days of the Effective Date	Customer Database. NCUC shall update and maintain its customer database to ensure that all wastewater users are accounted for and customer information, including name and address, are current.	
31.f.	Within 120 days of the Effective Date	Billing and Collection Policy. NCUC shall review and update its September 25, 2016 "Billing and Collection Policy" and present any updates to the Tribal Council that may require its approval.	

31.g.	Upon the Effective Date	Grant Applications and Awards. NCUC shall maintain records of any grant applications and awards received that are related to the Facility for the purpose of managing NCUC's budget associated with the operation and maintenance of the Facility and/or capital improvements.	
32	Within 90 days of the Effective Date	Communication and Notification Plan. NCUC shall develop, implement, and submit to the EPA a Communication and Notification Plan intended to improve coordination and communication between NCUC and other Tribal programs and departments, such as the Tribal Department of Environmental Protection and Natural Resources, Tribal Health, Tribal Housing, Tribal Land Authority, and Tribal Roads and Transportation, with overlapping interests and impacts related to the wastewater collection and treatment services provided by NCUC.	
35	15 days following the end of each calendar year quarter	Quarterly Progress Reports. NCUC shall submit by email a quarterly report covering the previous calendar quarter.	