NORTH FRONT RANGE WATER QUALITY PLANNING ASSOCIATION
257 Johnstown Center Dr.; Unit 206
Johnstown, CO 80534
970-587-8872 – http://www.nfrwqpa.org

EXECUTIVE COMMITTEE AGENDA

March 3, 2022 8:00 AM **Remote Meeting**

Microsoft Teams meeting

Join on your computer or mobile app
Click here to join the meeting
Or call in (audio only)
+1 720-739-6745 United States, Denver
Phone Conference ID: 838 481 751#

Notice is given to the North Front Range Water Quality Planning Association (NFRWQPA) members and the general public. The Association will hold its Executive Committee meeting, which is open to the public, at the date posted above at the NFRWQPA office at 257 Johnstown Center Dr., Unit 207 Johnstown, CO 80534.

1. **CALL MEETING TO ORDER.**

2. **NOTICE TO COMMITTEE MEETING IS RECORDED.**

3. **DETERMINATION OF A QUORUM.**
   Jason Graham -Chair, Brian Zick -Vice Chair, Rob Fleck-Treasure, Jeremy Woolf, Chris Bieker, Todd Hepworth, and Tom Parko.

4. **APPROVAL OF AGENDA.**

5. **DISCLOSURE OF POTENTIAL CONFLICTS OF INTEREST.**

6. **PUBLIC COMMENTS.**

7. **APPROVAL OF PAST MINUTES.** - Attachment #1 (pages 3-5).
   For review and consideration are January 6, 2022, Executive Committee meeting minutes.

8. **ACCOUNTS RECEIVABLES AND PAYABLES REVIEW.** - Attachment #2 (pages 6-8).
   For review and consideration are the accounts receivables and payables for December 2021 and January 2022.

9. **DISCUSSION ITEM.** Town of Platteville Total Arsenic Discharge Permit Limit.
   CDPHE will add a monitoring period for Total Arsenic to Platteville's new discharge permit for the SBR (COG589164). Total Arsenic is listed in Regulation 93 for segment COSPMS01a on the 303(d) list which Platteville discharges. That means data has been collected showing higher than allowed arsenic levels in that section of the South Platte. A temporary modification for Arsenic lasts through 2025. Platteville will be given a report-only requirement for Total Arsenic during the temporary modification until 2025. If Total

Arsenic data continue to show higher than allowed levels, a permit limit of 0.02 ug/L will begin in 2028. However, 112 samples support the listing of Total Arsenic to COSPMS01a with the WQCD.

10. **DISCUSSION ITEM.** 208 Region 2 Regulation #93 M&E Listings RFP - Attachment #3 (pages 9-14).
Attachment #3 is the RFP proposed to evaluate the Regulation #93 M&E Listings within Weld and Larimer county. Within Regulation #93, there are 600 M&E listings; however, many waterbodies show attainment but lack the required minimum sample and data for delisting. M&E listings under Regulation #93 need only two (2) samples to warrant the M&E listing; however, delisting requires ten (10) samples. The Association should identify the M&E listings (12) in Region 2 and prioritize the waterbodies for the required sampling and data for watershed conservation, restoration, and preservation. Sampling and testing funding is supported through the Association's 604(b) annual grants, ≈$10,000, for 2022-2023.

11. **DISCUSSION ITEM.** 208 Region 2 OWTS Groundwater Quality RFP - Attachment #4 (pages 15-18).
Attachment #4 is the RFP proposed to create a GIS interactive mapping of On-Site Wastewater Systems (OWTS) within the Larimer and Weld County Region. Funding is supported through the Association's 604(b) annual grants, ≈$10,000, for 2021-2022.

12. **DISCUSSION ITEM.** Wastewater Utility Service Area (WUSA) Development Standards – Attachment #5 (pages 19-23).
As discussed in the December 2, 2021, Executive Committee meeting, the Association should derive ways to promote optimizing 208 Wastewater Utility Service Areas. WUSA development standards are one possible way the Association as the Regional 208 Planning agency could direct coordinated wastewater services regionally.

13. **DISCUSSION ITEM.** Utility Plan Guidance Document Consolidation Language – Attachment 6 (pages 24-28).
As discussed in the December 2, 2021, Executive Committee meeting, the Association should derive ways to promote partnerships or consolidation in the Larimer/Weld County region. The Executive Committee may discuss the following Utility Plan Guidance Document Consolidation Language.

14. **DISCUSSION ITEM.** Stream Segment Assimilative Capacity Standards – Attachment #7 (pages 30-31).
Stream Segment Assimilative Capacity Standards is another mechanism that the Association may use to protect the water quality and promote the proposed development standards and partnerships or consolidation in the 208 Region of Larimer/Weld County.

15. **DISCUSSION ITEM.** Utility Plan Professional Certification – Attachment #8 (page 32).
The current Utility Plan Guidance Document does not require professional certification affirming the information and data provided is accurate and true and approved by the local authority. The language found within Attachment #5 may be included in the Utility Plan Guidance Document as the requested professional certification.

16. **OTHER BUSINESS.**

17. **ADJOURN.**

Attachment #1

NORTH FRONT RANGE WATER QUALITY PLANNING ASSOCIATION
257 Johnstown Center Dr.; Unit 206
Johnstown, CO 80534
970-587-8872 – http://www.nfrwqpa.org

EXECUTIVE COMMITTEE MINUTES

January 6, 2022 8:00 AM **Remote Meeting Only**

1. **CALL MEETING TO ORDER.**
The meeting was called to order at 8:02 AM by Mr. Thomas.

2. **DETERMINATION OF A QUORUM.**
Attendance:
NFRWQPA – Mr. Thomas, Manager
Executive Committee Officers –
Vice-Chair – Brian Zick – Boxelder S.D.
Treasurer – Rob Fleck – St. Vrain S.D.
Officer – Chris Bieker – Upper Thompson S.D.
Officer – Todd Hepworth – City of Evans
Officer – Jeremy Woolf – City of Greeley
Executive Committee Officers Absent –
Chair – Jason Graham – City of Ft. Collins
Officer – Vacant
- a quorum was announced.
NOTE: There is one vacant Executive Committee Officer seat.

3. **APPROVAL OF AGENDA.**
Mr. Hepworth moved to approve the agenda seconded by Mr. Woolf. – motion carried unanimously.

4. **DISCLOSURE OF POTENTIAL CONFLICTS OF INTEREST.**
No conflicts of interest were disclosed during the meeting.

5. **PUBLIC COMMENTS.**
No members of the public were present, and there were no public comments.

6. **APPROVAL OF PAST MINUTES.**
Meeting minutes from December 2, 2021, were presented for review and consideration. Mr. Bieker moved to approve the minutes seconded by Mr. Hepworth. – motion carried unanimously.

7. **ACCOUNTS RECEIVABLES AND PAYABLES REVIEW.**
The accounts receivables and payables for November 2021 were presented and reviewed. Mr. Bieker moved to approve the reviewed accounts receivables and payables for November 2021, seconded by Mr. Woolf. – motion carried unanimously.

8. **DISCUSSION ITEM.** 2022 Dues Advisory Letter.
The 2022 dues advisory letter was presented and reviewed. The Executive Committee endorsed the letter's content with some minor organization edits.

9. **DISCUSSION ITEM.** 208 Areawide Water Quality Management Plan Amendment Applications.
The Executive Committee discussed the 2022 208 AWQMP Amendment Applications. The 208 AWQMP Amendment Applications standardize the information required for the Association to

process 208 Plan amendments validating the process. The Executive Committee endorsed the content of the 208 AWQMP Amendment Applications.

10. **DISCUSSION ITEM.** Resource Colorado Water and Sanitation Metro District.
    Mr. Thomas gave a brief update regarding the recent Resource Colorado Water and Sanitation Metro District Utility Plan review and developments concerning their possible USR or annexation into Keenesburg.

11. **DISCUSSION ITEM.** Wastewater Utility Service Area (WUSA) Development Standards.
    Mr. Thomas introduced the proposed Wastewater Utility Service Area (WUSA) Development Standards for review by the Executive Committee. As discussed in the December 2, 2021, Executive Committee meeting, the Association should derive ways to promote optimizing 208 Wastewater Utility Service Areas. WUSA development standards are one possible way the Association as the Regional 208 Planning agency could direct coordinated wastewater services regionally. The WUSA development standards will be reviewed and revised throughout the year by the Executive Committee and the membership.

12. **ADJOURN.**

The following agenda items were not discussed due to time constraints.

13. **DISCUSSION ITEM.** Utility Plan Guidance Document Consolidation Language.
    As discussed in the December 2, 2021, Executive Committee meeting, the Association should derive ways to promote partnerships or consolidation in the Larimer/Weld County region. The Executive Committee may discuss the following Utility Plan Guidance Document Consolidation Language.

14. **DISCUSSION ITEM.** Stream Segment Assimilative Capacity Standards.
    Stream Segment Assimilative Capacity Standards is another mechanism that the Association may use to protect the water quality and promote the proposed development standards and partnerships or consolidation in the 208 Region of Larimer/Weld County.

15. **DISCUSSION ITEM.** Utility Plan Professional Certification.
    The current Utility Plan Guidance Document does not require any type of professional certification affirming the information and data provided is accurate and true and approved by the local authority. The language found within Attachment #5 may be included in the Utility Plan Guidance Document as the requested professional certification.

Attachment #2

December 2021

NUMBER	DATE	DESCRIPTION OF TRANSACTION	PAYMENT/DEBIT			DEPOSIT/CREDIT		BALANCE
		NFRWQPA - 6456	(-)			(+)		$ 7,976.93
		Electronic Deposits						
	13-Dec	Transfer from ColoTrust				$ 10,000.00		$ 17,976.93
								$ 17,976.93
		Paper Deposits						
								$ 17,976.93
								$ 17,976.93
								$ 17,976.93
								$ 17,976.93
								$ 17,976.93
								$ 17,976.93
		Electronic Transactions						
Draft	3-Dec	PERA-Mark-Citistreet 401K	$ 325.00					$ 17,651.93
		3100-Salary						
Draft	3-Dec	PERA/FICA/IRS	$ 1,865.27					$ 15,786.66
		3400-FICA/PERA Manager						
Draft	30-Dec	Tus Nau, LLC-Rent	$ 1,326.00					$ 14,460.66
		5010-Rent & Utilities						
Draft	30-Dec	Payroll-Mark Thomas	$ 5,961.93					$ 8,498.73
		3100-Salary						
Draft	30-Dec	FICA-Co Withholding	$ 1,344.09					$ 7,154.64
		3100-Salary						
AutoPay	16-Dec	Association Credit Card	$ 222.50					$ 6,932.14
		5850-Capital Expenditures	$ 100.00					
		5300-Office Supplies	$ 85.75					
		5750-Bank Charges	$ 35.00					
		5750-Bank Charges	$ 1.75					
AutoPay	15-Dec	Shaw & Associates	$ 260.00					$ 6,672.14
		5600-Accounting						
AutoPay	15-Dec	Pinnacol Assurance	$ 279.00					$ 6,393.14
		3600-Workman's Compensation						
AutoPay	3-Jan	Invision GIS	$ 442.50					$ 5,950.64
		6010-Contract Services - State/GIS						
AutoPay	8-Dec	Century Link	$ 148.41					$ 5,802.23
		5130-Internet Service & Phone						
AutoPay	31-Dec	Mark Thomas Expense Check (November)	$ 75.00					$ 5,727.23
		5100-Telephone Cellular	$ 75.00					
		5500-Mileage Reimbursement	$ -					
Check #		**PAPER Transactions**						
								$ 5,727.23
								$ 5,727.23
								$ 5,727.23
								$ 5,727.23
		TOTALS	$ 12,249.70			$ 10,000.00		$ 5,727.23
								Difference
					Bank Statement# Ending Balance:	$ 6,169.73		-442.50
		Uncashed checks Total:	$ 442.50			Balanced Amount		$ (0.00)

These Bank Charges have already been credited back.

January 2022

NUMBER	DATE	DESCRIPTION OF TRANSACTION	PAYMENT/DEBIT			DEPOSIT/CREDIT		BALANCE
		NFRWQPA - 6456	(-)			(+)		$ 6,169.73
		Electronic Deposits						
	10-Jan	ColoTrust Transfer				$ 10,000.00		$ 16,169.73
		N/A						
								$ 16,169.73
		Paper Deposits						
	14-Jan	Timnath				$ 1,000.00		$ 17,169.73
		9010-Membership Dues						
	17-Jan	Evans, Kersey, UTSD				$ 7,300.00		$ 24,469.73
		9010-Membership Dues						
	21-Jan	Fox Acres, Weld County				$ 8,500.00		$ 32,969.73
		9010-Membership Dues						
	24-Jan	Severance, Pierce, Lochbuie, Ft. Lupton				$ 8,300.00		$ 41,269.73
		9010-Membership Dues						
	28-Jan	La Salle, Milliken, Wellington, Windsor, Johnstown, Erie				$ 12,450.00		$ 53,719.73
		9010-Membership Dues						
								$ 41,269.73
								$ 41,269.73
								$ 41,269.73
					Total	$ 37,550.00		
		Electronic Transactions						
Draft	11-Jan	PERA-Mark-Citistreet 401K	$ 325.00					$ 40,944.73
		3100-Salary						
Draft	11-Jan	PERA/FICA/IRS	$ 1,865.27					$ 39,079.46
		3400-FICA/PERA Manager						
Draft	15-Jan	Tus Nau, LLC-Rent	$ 1,326.00					$ 37,753.46
		5010-Rent & Utilities						
Draft	28-Jan	Payroll-Mark Thomas	$ 6,311.08					$ 31,442.38
		3100-Salary						
Draft	28-Jan	FICA-Co Withholding	$ 1,426.13					$ 30,016.25
		3100-Salary						
								$ 30,016.25
AutoPay	10-Jan	Century Link	$ 148.41					$ 29,867.84
		5130-Internet Service & Phone						
AutoPay	10-Jan	Shaw & Associates	$ 217.50					$ 29,650.34
		5600-Accounting						
AutoPay	3-Jan	Invision GIS	$ 442.50					$ 29,207.84
		6010-Contract Services - State/GIS						
AutoPay	3-Jan	Mark Thomas Expense Check (Dec-2020)	$ 75.00					$ 29,132.84
		5100-Telephone Cellular	$ 75.00					
		5500-Mileage Reimbursement						
Check #		**PAPER Transactions**						
3752	10-Jan	Colorado Monitoring Framework	$ 5,258.02					$ 23,874.82
		5400-NFR Dues & Subscriptions						
3754	28-Jan	Colorado Rural Water Association	$ 300.00					$ 23,574.82
		5400-NFR Dues & Subscriptions						
3753		CK # 3753 VOIDED-to setup EFT for Erie						$ 23,574.82
		TOTALS	$ 17,694.91			$ 47,550.00		$ 36,024.82
								Difference
					Bank Statement# Ending Balance:	$ 36,324.82		-300.00
		Uncashed checks Total:	$ 300.00			Balanced Amount		$ (0.00)

Attachment #3

NORTH FRONT RANGE WATER QUALITY PLANNING ASSOCIATION
257 Johnstown Center Dr.; Unit 206
Johnstown, CO 80534
970-587-8872 – http://www.nfrwqpa.org

Request for Proposal

Project Name: 208 Region 2 M&E Listings DATE: March 3, 2022

Project Contact Person:

Mark Thomas, Manager
257 Johnstown Center Dr, Unit 206
Johnstown, CO 80534
970-587-8872
mthomas@nfrwqpa.org

Association Information

North Front Range Water Quality Planning Association (NFRWQPA) is the designated Section 208 planning agency under the Federal Clean Water Act for the Larimer and Weld County region. NFRWQPA represents its member entities in water quality legislative and regulation setting actions. The primary goal is to provide regional land-use management planning mechanisms for reasonable, feasible, and economical wastewater services to areas designated for development within the South Platte watershed. While considering the water quality impacts, the wastewater treatment systems, and interrelated wastewater utility service areas' nonpoint pollution sources will have on receiving waters in the river basins. Including groundwater influences by those management agencies with groundwater discharges.

Project Goals and Scope of Services

The Association will hire a firm to explore data gaps and conduct sampling and analysis on the M&E listings within the Association's 208 Planning Region (2). The project will be completed by September 1, 2023, for consideration by the Water Quality Control Division (WQCD) for the 2026 listing cycle of Regulation No. 93. All sampling and analysis shall be conducted according to CDPHE acceptable practices referenced in Regulation No. 93. Considerations shall be made for proposed changes concerning assessments for E. coli anticipated in March 2022. The project's primary goal is to acquire enough data to either delist the M&E parameter(s) or confirm the M&E listing as a TMDL under Regulation No. 93.

Within Regulation #93, there are 600+ M&E listings; however, many waterbodies show attainment but lack the required minimum sample and data for delisting. M&E listings under Regulation No. 93 need only two (2) samples to warrant the M&E listing; however, delisting requires ten (10) samples. The Association has identified the M&E listings (12) in Region 2. The Association wants to determine the necessary sampling and testing to obtain the required minimum data to delist the M&E listings in Region 2, with a margin of error, and improve the region's overall measured water quality. Delisting M&E waterbody segments would improve the regions' water quality, upgrading many waterbodies into attainment or through the TMDL requirements over time.

1. The hiring firm shall explore data gaps between publicly available data sources and the existing data of the M&E listing to determine the remaining data needed for delisting or confirming as a TMDL.

2. The hiring firm shall conduct all remaining sampling and analysis required of each segment within Attachment #1.
3. The hiring firm shall perform sampling in accordance with WQCD acceptable practices regarding frequency, time periods, number of samples required, and acceptable methodologies.
   For example,
   a. E. Coli requires new samples to be sampled during the same period of time as existing data.
      i. E. Coli assessments are proposed to change in March 2022.
   b. Temperature requires continuous data loggers.
   c. pH and Dissolved Oxygen require in field measurements, or data probes.
   d. Macroinvertebrates require samples at least one month apart.
   e. Metals require samples at least one month apart.

The Request for Proposal timeline is as follows:

Request for RFP: 4/2/2022

Deadline for Bidders to Submit Questions: 4/30/2022

NFRWQPA Responds to Bidders Questions: 5/15/2022

Deadline for Bidders RFP Response: 5/31/2022

Review Proposals: June 2022

Contract Award / Notifications to Unsuccessful Bidders: 6/30/2022

Time and Place of Submission of Proposals:

The RFP will be sent to select firms.

Respondents to the RFP must submit their proposal clearly marked "RFP – 208 Region 2 M&E Listings" no later than 5/31/2022. Please submit 1 original copy and one electronic copy to mthomas@nfrwqpa.org.

Deadline:

The Association would like to have the project completed by October 31, 2023.

Elements of Proposal:

The hiring firm should provide a description of the firm that includes a general overview, names, and credentials of the team that will be involved in the project.

A one-page narrative outlining the firm's strengths and distinguishing skills or capabilities as they might relate to the project.

The hiring firm should describe previous proposals written for similar clients with references.

Evaluation Criteria

The Association will evaluate firms based on the education, experience, knowledge, skills, and qualifications and the individuals necessary to provide these services.

The Association will evaluate the expertise of the firms working with similar customers on similar projects.

Competitive cost of services.

Documents available for use in proposal preparation (available electronically):

Regulation No. 93 Reference:
https://www.sos.state.co.us/CCR/GenerateRulePdf.do?ruleVersionId=9662&fileName=5%20CCR%201002-93

Section 303(d) Listing Methodology 2022 Listing Cycle:
https://drive.google.com/file/d/1jlgq37fgFV5MpUC3HPA5misOmvhKeMrZ/view

E. Coli Proposed Changes for March 2022:
https://drive.google.com/drive/folders/10cj2sHrpWnQDJEFmV-yu6YN1AmiMZs5-

Macroinvertebrate collection requirements are described in Policy 10-1:
https://www.colorado.gov/pacific/sites/default/files/Policy%2010-1_Appendices.pdf

Attachments

Attachment 1 – M&E listings for Region 2
Attachment 2 – Acceptable Methodologies

Attachment #1

All M&E Listings in Weld and Larimer Counties.					
AUID	*Use*	*Analyte*	*Cycle First Listed*	*Data Suggest Attainment?*	*Explanation*
COSPBO07b_B	Aquatic Life Use	Macroinvertebrates	2012	No	-Original listing based on old version of MMI tool, so data from that assessment cycle not shown -For 2020 cycle, all of segment COSPBO07b (Coal Creek from Hwy 36 to confluence with Boulder Creek) was assessed together, but only a portion of COSPBO07b_B (Coal Creek from Rock Creek to Boulder Creek) falls within southwestern Weld County -Whole segment placed on M&E list because of two samples collected from two different locations on this segment on the same day, one attained the MMIthreshold, and one did not
COSPBT05_A	Recreational Use	E. coli	2016	No	-Data from 2013-2014 indicate impairment based on a less stringent standard (Rec Class: P; 630 #/100mL); -More stringent standard (Rec Class: E; 126 #/100mL) promulgated in 2020, making attainment less likely
COSPBT08_B	Aquatic Life Use	Temperature	2016	Unknown	-Based on 122 exceedances of daily maximum and 45 exceedances of maximum weekly average temperature standards, but in the absence of flow data, could not assess excursions -Did not reassess in 2020, so no recent data available
COSPBT10_A	Aquatic Life Use	Dissolved Oxygen	2016	No	-Only data assessed to date have been from 2012-2013, and 5 samples (after bias removal) indicate impairment
COSPCP02a_B	Aquatic Life Use	Zinc (Dissolved)	2020	No	-Listed during the most recent assessment cycle focused on the South Platte -Data were sufficient for 303(d) listing based on acute standard, but chose M&E List instead because of uncertainty about the effects of the 2012 High Park fire -Hardness is very low and, as a result, zinc standards are very low
COSPCP07_D	Recreational Use	E. coli	2010	Unknown	-Samples from Stonewall Creek (currently, COSPCP08_B) represented most tributaries to the N. Fork downstream of Halligan Reservoir at the time of the listing, so all of those tributaries were listed. Today, many of those tributaries now fall within COSPCP07_D. -No E. coli data available from other tribs that fall within this portion -Note, the tributaries that are *not* in COSPCP07_D or COSPCP08_B are: Lone Pine Creek and its tributaries below the confluence of North Fork and South ForkLone Piine Creek, and the Mainstem (*only*) of Rabbit Creek
COSPLA02a_A	Water Supply Use	Arsenic (Total)	2016	No	-Recent data (2017-2018) indicate impairment, but many of the values were estimated (i.e., J-qualified, where a result is above the detection limit but below the reporting limit), which precluded 303(d) listing
COSPLA02a_A	Water Supply Use	Manganese (Dissolved)	2016	Yes	-Most recent data (2017-2018) clearly indicate attainment, but 9 samples (after bias removal) was not sufficient to remove this from the M&E List
COSPLA02a_A	Water Supply Use	pH	2010	Yes	-Most recent data (2017-2018) clearly indicate attainment, but 9 samples (after bias removal) was not sufficient to remove this from the M&E List -Data from 2012 used for the 2016 listing cycle also indicated attainment
COSPLA02a_A	Aquatic Life Use	Macroinvertebrates	2020	No	-Listed during the most recent listing cycle, so no recent data shows attainment -Three samples collected within the same segment, with two showing attainmentand one showing impairment based on auxiliary metrics - constitutes sufficient evidence for an M&E listing
COSPLA02b_A	Water Supply Use	Arsenic (Total)	2016	No	-Recent data (2017-2018) indicate impairment, but we did not list it because there were fewer than 10 samples
COSPMS01b_A	Water Supply Use	Nitrate	2020	No	-Listed during the most recent listing cycle, so no recent data shows attainment -Note that the nitrate water supply standard is acute
COSPMS05c_A	Aquatic Life Use	Dissolved Oxygen	2020	No	-Listed during the most recent listing cycle, so no recent data shows attainment -However, percentile value was very close to the standard
COSPSV02a_A	Water Supply Use	Arsenic (Total)	2020	No	-Listed during the most recent listing cycle, so no recent data shows attainment -However, results were qualified in most cases, so M&E listing decision waspartially in response to uncertainty in actual value
COSPUS15_D	Aquatic Life Use	Temperature	2016	Unknown	-Based on 20 exceedances of daily maximum temperature standard, but in the absence of flow data, could not assess excursions -Did not reassess in 2020, so no recent data available

Division Recommendations:

1. The M&E listing in Larimer County for COSPCP07_D predates the current segmentation in this area. It's actually based on samples collected from Stonewall Creek, which is currently in COSPCP08_B, and we do not have any data from any other tributaries in COSPCP07_D (in the spreadsheet, the data for this listing are labeled COSPCP08_B). One recent sample from Stonewall Creek indicates attainment. I would keep this in mind if you're interested in investigating this listing.

2. More recent data that may be available via public sources, like the Water Quality Portal. You may want to check for other data on these segments before you plan your sampling efforts.

3. Only two of these portions have recent data clearly indicating attainment; however, others have recent data that indicate impairment. We would encourage you to consider collecting data on those portions, too, as identifying impairments based on a sufficient dataset (10 or more samples in most cases) will also resolve M&E listings.

4. Macroinvertebrate and temperature M&E listings are different from conventional M&E listings for chemistry. In particular, temperature assessments generally require continuous data measured at sub-hourly frequencies. Keep this in mind as you review these results. If you have questions about macroinvertebrates or temperature, let me know, and I will put you in touch with the appropriate division staff.

Attachment #2
Parameters, Methods, Holding Times and Units

ANALYSIS	METHODOLOGY	HOLDING TIME	TURNAROUND TIME	UNITS
METALS PANELS:				
ALUMINUM, TOTAL RECOVERABLE	EPA 200.7	6 MONTHS	30 DAY	ug/L
ARSENIC, DIS	EPA 200.8	6 MONTHS	30 DAY	ug/L
CADMIUM	EPA 200.8	6 MONTHS	30 DAY	ug/L
CALCIUM, DIS	EPA 200.7	6 MONTHS	30 DAY	mg/L
CHROMIUM, TOTAL RECOVERABLE	EPA 200.7	6 MONTHS	30 DAY	ug/L
COPPER, DIS	EPA 200.7	6 MONTHS	30 DAY	ug/L
HARDNESS, TOTAL	CALCULATION	6 MONTHS	30 DAY	mg/L
IRON	EPA 200.7	6 MONTHS	30 DAY	ug/L
LEAD	EPA 200.8	6 MONTHS	30 DAY	ug/L
MAGNESIUM, DIS	EPA 200.7	6 MONTHS	30 DAY	mg/L
MANGANESE	EPA 200.8	6 MONTHS	30 DAY	ug/L
MOLYBDENUM, TOTAL RECOVERABLE	EPA 200.8	6 MONTHS	30 DAY	ug/L
MERCURY, TOTAL	EPA 245.1	28 DAYS	30 DAY	ug/L
NICKEL	EPA 200.7	6 MONTHS	30 DAY	ug/L
POTASSIUM, DIS	EPA 200.7	6 MONTHS	30 DAY	mg/L
SELENIUM, DIS	EPA 200.8	6 MONTHS	30 DAY	ug/L
SILVER, DIS	EPA 200.8	6 MONTHS	30 DAY	ug/L
SODIUM, DIS	EPA 200.7	6 MONTHS	30 DAY	mg/L
THALLIUM, DIS	EPA 200.7	6 MONTHS	30 DAY	mg/L
URANIUM	EPA 200.8	6 MONTHS	30 DAY	ug/L
ZINC, DIS	EPA 200.7	6 MONTHS	30 DAY	ug/L
NUTRIENTS:				
N-AMMONIA	EPA 350.1	28 DAYS	30 DAY	mg/L
N-NITRATE/NITRITE	EPA 353.2	28 DAYS	30 DAY	mg/L
ORTHOPHOSPHATE	4500 P G 1999	FILTER & 28 DAYS	30 DAY	mg/L
PHOSPHORUS, TOTAL	EPA 365.1	28 DAYS	30 DAY	mg /L
TOTAL NITROGEN	ASTM D5176-08	28 DAYS	30 DAY	mg/L
FISH TISSUE:				
MERCURY IN FISH (includes prep cost)	EPA 7473	NOT DETERMINED	30 DAY	mg/kg
SELENIUM IN FISH	EPA 200.11	NOT DETERMINED	30 DAY	mg/kg
OTHER:				
ALKALINITY, TOTAL	EPA 310.1	14 DAYS	30 DAY	mg/L
CHLORIDE	EPA 300.0	28 DAYS	30 DAY	mg/L
DISSOLVED ORGANIC CARBON (DOC)	EPA 415.3	FILTER & 28 DAYS	30 DAY	mg/L
E. COLI	9223B	8 HRS	30 DAY	MPN
FLUORIDE	EPA 410.1	28 DAYS	30 DAY	mg/L
NITROGEN, NITRATE	EPA 300.0	48 HRS	30 DAY	mg/L
NITROGEN, NITRITE	EPA 300.0	48 HRS	30 DAY	mg/L
SELENIUM SPECIATION IN WATER	USGS 2008	14 DAYS	60 DAY	ug/L
SELENIUM IN SEDIMENT	EPA 200.8	6 MONTHS	60 DAY	mg/kg
SELENIUM IN BUG TISSUE	EPA 200.8	NOT DETERMINED	60 DAY	mg/kg
SOLIDS, SUSPENDED	EPA 160.2	7 DAYS	30 DAY	mg/L
SULFATE	EPA 300.0	28 DAYS	30 DAY	mg/L
TOTAL ORGANIC CARBON (TOC)	EPA 415.3	28 DAYS	30 DAY	mg/L

Attachment #4

NORTH FRONT RANGE WATER QUALITY PLANNING ASSOCIATION
257 Johnstown Center Dr.; Unit 206
Johnstown, CO 80534
970-587-8872 – http://www.nfrwqpa.org

Request for Proposal

Project Name: 208 Region 2-Onsite Wastewater Septic Systems & Groundwater Quality GIS Database

DATE: March 3, 2022

Project Contact Person:

Mark Thomas, Manager
257 Johnstown Center Dr, Unit 206
Johnstown, CO 80534
970-587-8872
mthomas@nfrwqpa.org

Association Information

North Front Range Water Quality Planning Association (NFRWQPA) is the designated Section 208 planning agency under the Federal Clean Water Act for the Larimer and Weld County region. NFRWQPA represents its member entities in water quality legislative and regulation setting actions. The primary goal is to provide regional land-use management planning mechanisms for reasonable, feasible, and economical wastewater services to areas designated for development within the South Platte watershed. While considering the water quality impacts, the wastewater treatment systems and interrelated wastewater utility service areas' nonpoint pollution sources will have on receiving waters in the river basins. Including groundwater influences by those management agencies with groundwater discharges.

Project Goals and Scope of Services

The Association will hire a firm to create a GIS database that illustrates the region's OWTSs with the ability to assess groundwater quality, including depth to groundwater and parameter-specific queries. The project will be completed by January 1, 2023.

1. The hiring firm shall create a GIS database illustrating all the current and future OWTSs in Weld and Larimer County.
2. The GIS database created shall be accessed on the Association website or available via a link on the Association website here: https://data-nfrwqpa.hub.arcgis.com/.
    a. The Weld County GIS Hub may be used to access the OWTSs shapefiles, or by contacting Samuel Gould at sgould@weldgov.com.
    b. The Larimer County GIS Digital Data webpage may be used to access the OWTS shapefiles, or by contacting Chris Manley at cmanley@larimer.org.
3. The GIS database should consist of multiple and selectable ESRI GIS Layers:
        1. OWTSs
        2. 208 Agencies Boundaries layer; https://data-nfrwqpa.hub.arcgis.com/
4. The hiring firm shall incorporate a query into the database that includes depth to groundwater and parameter-specific queries over a predetermined timeframe.
5. The hiring firm shall create groundwater water quality reports for the watershed basins in the region.
    a. South Platte River Basin

b. Cache la Poudre River Basin
c. St. Vrain Creek River Basin
d. Big & Little Thompson River Basin
e. Big Thompson River Basin
f. Little Thompson River Basin
g. Big Dry Creek River Basin

6. The groundwater water quality reports shall include the following information:
    a. Number OWTSs in the watershed, or quired location
    b. Report all known groundwater quality parameters, number, mean, average, etc., from the eRAMS Groundwater Protection database with the Colorado Department of Agriculture in the watershed or quired location.
    c. Human Health (Drinking) Suitability results, i.e., CSU Water Quality Interpretation tool
        i. Including a Risk Assessment Map illustrating the drinking groundwater suitability from 1-5.
    d. Livestock Suitability results, i.e., CSU Water Quality Interpretation tool
        i. Including a Risk Assessment Map illustrating the livestock groundwater suitability from 1-5.
    e. Agricultural Crop Suitability results, i.e., CSU Water Quality Interpretation tool
        i. Including a Risk Assessment Map illustrating the agricultural groundwater suitability from 1-5.
    f. Soil Health results, i.e., CSU Water Quality Interpretation tool
        i. Including a Risk Assessment Map illustrating the soil groundwater suitability from 1-5.
7. The groundwater water quality reports shall be able to trend groundwater quality over time.
    a. Trend periods shall be user selectable.
8. A functional working ESRI GIS model shall be provided to the Assocation as part of the final delivery.

The Request for Proposal timeline is as follows:

Request for RFP: 4/2/2022

Deadline for Bidders to Submit Questions: 4/30/2022

NFRWQPA Responds to Bidders Questions: 5/15/2022

Deadline for Bidders RFP Response: 5/31/2022

Review Proposals: June 2022

Contract Award / Notifications to Unsuccessful Bidders: 6/30/2022

Time and Place of Submission of Proposals:

The RFP will be sent to select firms.

Respondents to the RFP must submit their proposal clearly marked “RFP – 208 Region 2-Onsite Wastewater Septic Systems & Groundwater Quality GIS Database” no later than 5/31/2022. Please submit 1 original copy and one electronic copy to mthomas@nfrwqpa.org.

Deadline:

The Association would like to have the project completed by January 1, 2023.

Elements of Proposal:

The hiring firm should provide a description of the firm that includes a general overview, names, and credentials of the team that will be involved in the project.

A one-page narrative outlining the firm's strengths and distinguishing skills or capabilities as they might relate to the project.

The hiring firm should describe previous proposals written for similar clients with references.

Evaluation Criteria

The Association will evaluate firms based on the education, experience, knowledge, skills, and qualifications and the individuals necessary to provide these services.

The Association will evaluate the expertise of the firms working with similar customers on similar projects.

Competitive cost of services.

Attachment #5

Wastewater Utility Service Area (WUSA) Development Standards

Development standards encourage regional collaboration between Designated Management and Operating Agencies (DMOAs) to build easy-to-maintain treatment and collection systems that are economically feasible rather than costly short-term solutions driven by urban development demands. Local governments recognize that water pollution is caused by and has adverse effects on regional development. Even as wastewater and other treatment facilities have improved, water quality goals have become more difficult to meet. Significant regional issues include stormwater management, construction and nonpoint source pollution, biosolids management, wasteload allocations as part of the TMDL setting processes, watershed implementation and screening, water quality monitoring, and use of OWTSs require innovative, cooperative and affordable long-term regional solutions. Since established local government municipal boundaries or special district boundaries frequently do not follow hydrologic boundaries, there can be an increased cost of service associated with this type of urban growth. The wastewater treatment facility for a given municipality or special district can treat wastewater flows from multiple watersheds using force mains and lift stations at a higher cost than gravity flow systems. Due to multiple service area designations, the duplication of infrastructure can occur within a watershed. Duplication of infrastructure can also result in the underutilization of many transmission, collection, and treatment systems. Local plans have been the driving force behind changes to water supply and/or wastewater service areas. In-fill development could be limited in some areas because of insufficient capacity in existing infrastructure and limited opportunities to upgrade these systems. Two critical components for urban development are wastewater service and supply. Along with transportation facilities, these utilities form the skeleton built by a region. Typical wastewater treatment or water supply systems are designed to accommodate projected development through at least a 20-year time period, with some long-range system designs established for 50 years or more. Individual facilities are often sized to meet growth projections for the next 10 or 20 years. Some facilities, such as major interceptors, may be sized for the ultimate development anticipated in a sanitary sewer service area. Excess capacity in transmission, collection or treatment facilities has sometimes been used by some communities to subsidize development. As a result, population and employment projections developed for some facility plans became self-fulfilling and resulted in population and flow increases occurring faster than anticipated. Since the tax base from commercial development and the desire for new growth have been two driving factors in urban development, competition has been fierce among local governments and special districts for service area designations. The advent of the *WUSA Development Standards* changed the approach so that infrastructure decisions could be made beyond the 20-year planning horizon and, in some instances, consider the region's projected ultimate development. Water and wastewater planning must develop long-range, staged utility plans for the most feasible future service area incorporating these WUSA Development Standards. Although future development patterns can affect water management decisions, these standards allow the focus to be on ensuring protection and maintenance of clean lakes and streams, not using water quality regulation to force some predetermined land-use configuration. Instead, WUSA Development Standards support local decisions at a regional level, rather than water quality regulations dictating where and when urban development occurs. Therefore, WUSA Development Standards establishes guidance for DMOAs, in cooperation with the general-purpose governments they serve and surrounding or adjacent DMOAs to:

1. Identify the areas they intend to serve in the long-term (30-50years); and
2. Provide a means to resolve territorial issues related to wastewater service areas before facilities are designed and constructed.

The following Wastewater Utility Service Area (WUSA) development standards for the Association optimize regional collection systems using the best available technology at the lowest cost options while providing the general public with economically feasible solutions. The WUSA Development standards shall also adhere to those construction standards within the WQCD Policy DPR-1. In Region-2, water supply is and will remain a limited resource. A local DMOA coordinated water supply planning involving the water providers will be needed to maximize water supply capacities. It cannot be assumed that all water providers will find sufficient quantities of water to meet all development expectations. Those water providers with surplus water resources could outgrow those providers with limited capacities dictating projected urban development, which will require sanitary services. The foundation of water quality planning is forecasting expected wastewater collection and treatment needs, which is tied to future population projections and urban development. Forecasts define wastewater flow rates and the capacity needed to collect and treat the projected volume of wastewater. Datasets and forecasts for WUSAs are included in the 208 AWQMP.

1. No new WWTFs are allowed within a 5-mile radius of existing WWTFs.
    a. New Regional WWTFs may be built following decommissioning of one or more WWTFs within a 5-mile radius.
    b. New Regional WWTFs may not be built when adjacent collection system service sewer lines are available within two miles of each other.
    c. A maximum of two lift stations are preferred over building new WWTFs.
    d. Existing WWTFs within a 5-mile radius of each other are required jointly to explore consolidation bi-annually, considering current treatment facilities' life cycle costs and the ability for consolidation regarding their sewer collections systems, i.e., line sizing or capacity. Submitting a thorough examination/assessment report with a record of public consideration and decision for inclusion into the 208 Areawide Water Quality Management Plan (208 AWQMP) bi-annual updates.
    e. WUSAs with collection sewer systems within 2.5-miles of each other are encouraged to examine partnerships and consolidation over WWTF capacity increases or lift stations to provide the general public with economically feasible solutions.
    f. Partnerships and Consolidation of WUSAs are encouraged to optimize regional collection systems by topography and significant landmarks.
    g. Consolidation can result in economies of scale for wastewater treatment and better planning to meet increasingly stringent water quality regulations. Additionally, consolidation generally results in lower user rates over time.
    h. Before siting new facilities, existing wastewater treatment facilities should be expanded or consolidated instead of developing new facilities unless not legally or technically feasible.
    i. The Project will not result in excess capacity in existing water or wastewater treatment services or create duplicate services.

2. The following additional criteria apply to any development of major new domestic water and wastewater treatment systems or major extensions of existing domestic water and wastewater treatment systems:

a. The Project shall be reasonably necessary to meet projected community development and population demands in the areas to be served by the Project or comply with regulatory or technological requirements.
b. To the extent feasible, water and wastewater treatment facilities shall be consolidated with existing facilities within the area.
c. New domestic water and sewage treatment systems shall be constructed in areas which will result in the proper utilization and optimization of existing treatment plants and the orderly development of domestic water and sewage treatment systems of adjacent communities.
d. The Project shall be permitted in those areas in which the anticipated growth and development that may occur as a result of such extension can be accommodated within the financial and environmental capacity of the area to sustain such growth and development.
e. New domestic water and sewage treatment systems shall be permitted in those areas in which the anticipated growth and development that may occur as a result of such extension outside of current urban development can be accommodated within the financial and environmental capacity of the area to sustain such growth and development.

3. Gravity sewers are preferred over lift stations.
    a. If it can be served by gravity, it shall be served by gravity.
    b. Including examing if an adjacent DMOA WUSA may serve a sewered area by gravity can more efficiently, it shall be preferred.

4. Interceptors shall be sized for consolidation sited within 2-miles of an adjacent service area. Interceptors may be staged for ultimate build-out with appropriate economic or right-of-way justification.

5. Lift Stations are allowed when economically infeasible to a gravity sewer within a 5-mile radius.
    a. Proposed lift stations shall include topographical maps illustrating the proposed force main elevations in an elevation profile; additionally, proposed lift stations shall include a gravity line elevation profile displaying sewer line sizes and cost comparisons.
    b. No Lift Stations are allowed when gravity sewer service is available within a 2.5-mile radius.
    c. Proposed Lift Stations within 2.5 miles of an adjacent sewer service agency that is down gradient must provide a letter of agreement for construction documenting that the area in question can not be served by the adjacent agency that is down gradient. Agreements must confirm public meeting minutes and the decision.

6. OWTSs are not allowed when a sewer service line is available, according to the local county health department code and Regulation #43.

7. DMOAs must serve new urban developments that flow by gravity within their approved WUSA. Economic hardship is not considered regarding the DMOA or the Developer.

8. Private Wastewater Operations are Discouraged. The ownership and management of wastewater treatment facilities by homeowner associations or private wastewater operators should not be allowed unless there is no other option. The preferred choice is for the local DMOA to assume ownership and operation of lift stations.

9. Economic Feasibility. The Term Economic Feasibility goes beyond the upfront capital cost of the Project being considered. Economic Feasibility should include the long-term maintenance and operation costs of the Project and the financial burden on ratepayers and residents. The Financial burden consists of the existing tas burden and fee structure for government services, including but not limited to assessed valuation, mill levy, rates for water and wastewater collection and treatment, and costs of water supply. Thus, the Project's net effect is the residents' financial burdens and is considered part of the Economic Feasibility of projects. Beyond the financial burden of the ratepayers and residents, the Project should consider the impacts on the local economy. Description of the local economy including but not limited to revenues generated by the different economic sectors and the value of productivity of different lands. Local economic impacts and net effects of the Project on the local economy and opportunities for economic diversification can be illustrated by examining regional opportunities for consolidation. The determination of technical and financial feasibility of the Project may include but is not limited to the following considerations:

    a. Amount of debt associated with the Project.
    b. Debt retirement schedule and sources of funding to retire the debt.
    c. Estimated construction costs and construction schedule with the Project.
    d. Estimated annual operation, maintenance, and monitoring costs with the Project.
    e. Estimated user rates over the 20-year planning period of the Project.
        a. Changes in costs of water and wastewater treatment.
    f. Estimated local economy impacts over the 20-year planning period of the Project.
    g. Changes in assessed valuation.
    h. Changes in Tax revenues and fees to local governments that will be generated by the Project.
    i. Changes in tax revenues caused by agricultural lands being removed from production.
    j. Changes in opportunities for economic growth and diversification.

10. The Project will not create an undue financial burden on existing or future residents of the Association 208 Planning-Region 2.

11. The Project will not significantly degrade any current or foreseeable future sector of the local economy of the Association 208 Planning-Region 2.

12. The Project will not have a significant adverse effect on the quality or quantity of recreational opportunities and experience of the Association 208 Planning-Region 2.

13. The project's planning, design, and operation shall reflect principles of resource conservation, energy efficiency, and recycling or reuse.

14. The Project shall emphasize the most efficient use of water, including the recycling, reuse, and conservation of water.

15. The Project will not result in excess capacity in existing water or wastewater collection and treatment services or create duplicate services.

16. The Project shall be necessary to meet community development and population demands in the areas to be served by the Project.

17. The Project will not significantly degrade air quality.

18. The Project will not significantly degrade existing visual quality.

19. The Project will not significantly degrade surface water quality.

20. The Project will not significantly degrade groundwater quality.

21. The Project will not significantly degrade wetlands, and riparian areas.

22. The Project will not significantly degrade terrestrial or aquatic animal life or its habitats.

23. The Project will not significantly deteriorate terrestrial plant life or plant habitat.

24. The Project will not significantly deteriorate soils and geologic conditions.

25. The Project will not cause a nuisance.

26. The Project will not significantly degrade areas of paleontological historic, or archaeological importance.

27. The Project will not result in unreasonable risk of releases of hazardous materials.

28. The Project will/will not cause or contribute to urban sprawl or “leapfrog or flagpole” development.

29. Promotes contiguity of development associated with the Project to existing growth centers.

30. The benefits accruing to the County and its citizens from the Project outweigh the losses of any natural, agricultural, recreational, grazing, commercial or industrial resources within the County, or the losses of opportunities to develop such resources.

31. Urban development, population desities, and site layout and design of stormwater and sanitation systems shall be accomplished in a manner that will prevent pollution of surface water and the pollution of aquifer recharge areas.

Attachment #6

Wastewater Consolidation Standards

In evaluating the suitability of a proposed site for a domestic wastewater treatment facility the WQCD must consider any approved regional wastewater management plan for the designated area. State law encourages the consolidation of wastewater treatment facilities as part of the approval process. The Association requires the following subjects be thoroughly examined and provided within the Utility Plan report considering regional Designated Management and Operation Agency (DMOA) partnerships or consolidation with the final decision approved by a public process:

1. **WUSA Consolidation or subdivision.**
   WUSA consolidation and partnership options must be thoroughly assessed considering long-range WUSAs and GMAs to optimized service areas. As adjacent WUSAs or GMAs boundaries encroach or meet, the economic feasibility of service area consolidation improves over more costly treatment facility capacity increases to serve the same local area population. Overloaded collection systems or treatment facilities may consider subdividing their WUSA with local DMOAs with suitable treatment capacity. DMOAs that can provide the same area sewered service by gravity should also be considered to eliminate current or future planned lift stations. Non-urban areas where collection systems are to be constructed should be constructed and sized considering long-term consolidation options. The Association prefers and encourages WUSA partnerships or consolidation for DMOAs within a 5-mile radius over creating additional WWTFs, and gravity sewers over lift stations. DMOAs have a duty and responsibility to evaluate the best regional solutions for collections systems under the CWA Section 208.

   The Project shall be reasonably necessary to meet projected community development and population demands in the areas to be served by the Project, or to comply with regulatory or technological requirements. The determination of whether the Project is reasonably necessary may include but is not limited to the following considerations:

   a. Relationship to reasonable growth projections and local land use plans.
   b. Relationship to other water and wastewater provider's service area.
   c. Whether the Project is not in compliance with regulatory or technological requirements or will not be in compliance in the near future.

2. **Treatment Consolidation or Partnership within a 5-mile radius of WWTFs.**
   Larger wastewater treatment facilities can often provide service more effectively while providing a higher degree of treatment than can be achieved through smaller treatment facilities. Consolidation potentially offers significant capital and operational cost savings through economies of scale, reduced points of failure that can lead to SSOs, improve effluent water quality, and improved management and administration through shared resource availability. Based on rates, economics, cost-effectiveness, operations, water quality impacts, physical constraints

(topography), and water rights. The Association prefers and encourages WUSA partnerships or consolidation for DMOAs within a 5-mile radius over creating additional WWTFs, and gravity sewers over lift stations. DMOAs have a duty and responsibility to evaluate the best regional solutions for treatment systems under the CWA Section 208.

The Project will not result in excess capacity in existing water or wastewater treatment services or create duplicate services. The determination of whether the Project will result in excess capacity or create duplicate services may include but is not limited to the following considerations:

a. Whether the Project creates overlapping or competing service areas.
b. Whether the Project differs significantly from the provider's facility plan.
c. Whether the Project impacts other water and wastewater permits.

To the extent feasible, wastewater and water treatment facilities shall be consolidated with existing facilities within the area. The determination of whether consolidation is **feasible** shall include but is not limited to the following considerations:

a. Whether there is an opportunity for consolidation.
b. The environmental, financial and social feasibility of consolidation.

New domestic water and sewage treatment systems shall be constructed in areas which will result in the proper utilization of existing treatment plants and the orderly development of domestic water and sewage treatment systems of adjacent communities. The determination shall include but is not limited to the following considerations:

a. Relationship to reasonable growth projections and local land use plans.
b. Proximity to other water and wastewater provider's service area.

3. **<u>Population Projections of DMOAs within a 5-mile radius.</u>**

Discuss consolidation opportunities within and beyond the 20-year horizon period as regional planning alternatives for WWTFs and modifications of WUSAs to be documented within the 208 AWQMP. As population projections demonstrate pinch points, overloaded collection systems or treatment facilities should consider subdividing their WUSA with local DMOAs with suitable treatment capacity. WUSA consolidation opportunities should examine the portion of the UPA boundary beyond the GMA or WUSA currently anticipating consolidation opportunities beyond the 20-year planning horizon. Map and description of other municipal and industrial water projects in the vicinity of the Project, including their capacity and existing service levels, location of intake and discharge points, service fees and rates, debt structure and service plan boundaries and reasons for and against hooking on to those facilities.

a. Description of existing domestic water and wastewater treatment facilities in the vicinity of the Project, including their capacity and existing service

levels, location of intake and discharge points, service fees and rates, debt structure and service plan boundaries, and reasons for and against hooking on to those facilities.

b. Description of how the Project will affect urban development, urban densities, and site layout and design of stormwater and sanitation systems.
c. Description of other water and wastewater management agencies in the Project area and reasons for and against consolidation with those agencies.
d. Description of how the Project may affect adjacent communities and users on wells.

4. **Assimilative Stream Segment Capacity Comparison of DMOAs within a 5-mile radius.**

Within the 20-year planning period and beyond, partnerships and consolidation options should consider population projections and resulting stream segment assimilative capacity projections at 5, 10, 15, & 20-year intervals. Overloaded stream segments and WWTPs (85-95%) should consider partnerships and consolidation options above increasing treatment plant capacities. The Association prefers and encourages consolidation or partnerships above increasing treatment plant capacities within a 5-mile radius. DMOAs have a duty and responsibility to evaluate the best regional solutions to protect, maintain, or restore water quality under the CWA Section 208.

5. **Surface Water Quality.**

Map and/or description of all surface waters to be affected by the Project, including:

a. Description of provisions of the applicable regional water quality management plan that applies to the Project and assessment of whether the Project would comply with those provisions.
b. Existing data monitoring sources.
c. Descriptions of the immediate and long-term impact and net effects that the Project would have on the quantity and quality of surface water under both average and worst-case conditions.

The Project will not significantly degrade surface water quality. The determination of effects of the Project on surface water quality may include but is not limited to the following considerations:

a. Changes to existing water quality, including patterns of water circulation, temperature, conditions of the substrate, extent and persistence of suspended particulates and clarity, odor, color or taste of water.
b. Applicable narrative and numeric water quality standards.
c. Changes in point and nonpoint source pollution loads.
d. Increase in erosion.
e. Changes in sediment loading to waterbodies.
f. Changes in stream channel or shoreline stability.
g. Changes in stormwater runoff flows.

h. Changes in trophic status or in eutrophication rates in lakes and reservoirs.
i. Changes in the capacity or functioning of streams, lakes or reservoirs.
j. Changes in flushing flows.
k. Changes in dilution rates of mine waste, agricultural runoff and other unregulated sources of pollutants.

6. Ground Water Quality.

Map and/or description of all groundwater, including any aquifers. At a minimum, the description should include:

a. Seasonal water levels in each subdivision of the aquifer affected by the Project.
b. Artesian pressure in aquifers.
c. Groundwater flow directions and levels.
d. Existing aquifer recharge rates and methodology used to calculate recharge to the aquifer from any recharge sources.
e. For aquifers to be used as part of a water storage system, methodology and results of tests used to determine the ability of aquifer to impound groundwater and aquifer storage capacity.
f. Seepage losses expected at any subsurface dam and at stream-aquifer interfaces and methodology used to calculate seepage losses in the affected streams, including description and location of measuring devices.
g. Existing groundwater quality and classification.
h. Location of all water wells and their uses.
i. Description of the impacts and net effect of the Project on groundwater.

The Project will not significantly degrade groundwater quality. The determination of effects of the Project on groundwater quality may include but is not limited to the following considerations:

a. Changes in aquifer recharge rates, groundwater levels and aquifer capacity including seepage losses through aquifer boundaries and at aquifer-stream interfaces.
b. Changes in capacity and function of wells within the impact area.
c. Changes in quality of well water within the impact area.

7. Water Quantity.

a. Map and/or description of existing stream flows and reservoir levels.
b. Map and/or description of existing Colorado Water Conservation Board held minimum stream flows.
c. Descriptions of the impacts and net effect that the Project would have on water quantity.
d. Statement of methods for efficient utilization of water.

8. Floodplains, Wetlands, and Riparian Areas.

Map and/or description of all floodplains, wetlands, and riparian areas to be affected by the Project, including a description of the types of wetlands, species composition, and biomass.

a. Description of the source of water interacting with the surface systems to create each wetland (i.e., sideslope runoff, over-bank flooding, groundwater seepage, etc.).
b. Description of the impacts and net effect that the Project would have on the floodplains, wetlands and riparian areas.

The Project will not significantly degrade wetlands and riparian areas.
The determination of effects of the Project on wetlands and riparian areas may include but is not limited to the following considerations:

a. Changes in the structure and function of wetlands and riparian areas.
b. Changes to the filtering and pollutant uptake capacities of wetlands and riparian areas.
c. Changes to aerial extent of wetlands and riparian areas.
d. Changes in species' characteristics and diversity.
e. Transition from wetland to upland species.
f. Changes in function and aerial extent of floodplains.

9. **Regional DMOA Credit Trading.**
Partnerships and consolidation options should include water quality trading credits for water quality-based permitted limits, parameters of concern, and assimilative capacity. As population and loading projections demonstrate water quality-based limit pinch points, overloaded stream segments should consider credit trading with local DMOAs with suitable treatment or assimilative capacity.

10. **CIP Economic Feasibility Studies of DMOAs within a 5-mile radius.**
Within the 20-year planning period and beyond, DMOA CIP projects must provide economic feasibility studies compared to consolidation and partnership options for DMOAs within a 5-mile radius. DMOAs have a duty and responsibility to evaluate the best regional solutions to ensure that present and future wastewater needs are financially feasible for the general public as ratepayers under the CWA Section 208. Economic Feasibility. The Term Economic Feasibility goes beyond the upfront capital cost of the project being considered. Economic Feasibility should include the longterm maintenance and operation costs of the project as well as the financial burden on ratepayers and residents. The Financial burden includes the existing tas burden and fee structure for government services including but not limited to assessed valuation, mill levy, rates for water and wastewater collection and treatment, and costs of water supply. Thus, the project's net effect is the residents' financial burdens and is to be considered part of the Economic Feasibility of projects. Beyond the financial burden of the ratepayers and residents the project should consider the impacts on the local economy. Description of the local economy including but not limited to revenues generated by the different economic sectors,

and the value of productivity of different lands. Local economic impacts and net affects of the project on the local economy and opportunities for economic diversification can be illustrated by examining regional opportunities for consolidation.

11. <u>User Rate Studies of DMOAs within a 5-mile radius.</u>

Within the 20-year planning period and beyond, including the known ratepayer DMOA increases provided here within, provide ratepayer economic feasibility studies compared to consolidation and partnership options for DMOAs within a 5-mile radius. DMOAs have a duty and responsibility to evaluate the best regional solutions to ensure that present and future wastewater needs are financially feasible for the general public as ratepayers under the CWA Section 208.

12. <u>Consolidation Record of Public Participation.</u>

Provide a discussion of public meetings, dates, and public hearings, including a general review, comment, and approval component. If a public hearing was held to consider partnerships or consolidation, provide minutes of that meeting in the appropriate appendix as outlined within the checklist, including the economic feasibility options presented for consideration during the public hearing. Confirm regional consolidation decisions, including the reasons for or against, with meeting minutes by the involved agencies' decision-making authorities. Meeting minutes should identify legally responsible personnel with decision-making authority (i.e., mayor, president/chair of the council/board, town or city council/board, public works director, owner, corporate officer, other authorized officials, etc.) with the business, organization, or municipality. The Association and its member DMOAs aspire to be a highly respected regional leader resolving wastewater regional water quality planning issues. DMOAs are a source of reliable information and data utilizing the administrative public comment and decision process. This Association vision can not happen without public participation.

Attachment #7

1. Stream Segment Assimilative Capacity

The Utility Plan must compare the stream segment assimilative capacity related to the permittee's water quality-based limits, or standards, of the permit to the DMOA's current and future population and loading projections at 5, 10, 15, and 20-year intervals. Stream segment assimilative capacity projections equal to or greater than 85% must start planning to protect the stream's water quality, and forecasts equal to or greater than 95% must be in the design and construction phase to protect the stream's water quality. These assimilative capacity projections then can be compared to adjacent DMOAs to determine partnerships or consolidation options to protect regional water quality. Understanding that the stream segments designations may dictate whether a water body may utilize assimilative capacity. For example, as illustrated in Figure XX, outstanding waters do not degrade the stream's water quality. Reviewable waters allow the use of assimilative capacity only after review and use protected waters to use the water body's assimilative ability fully. Once the 85% or 95% thresholds have been met, options must be presented for relocation of the wastewater treatment plant, partnerships, or consolidation to lessen the stream segment capacity overload to protect, maintain, or restore water quality. Upstream or downstream DMOAs that utilize the same stream segment can propose fees or trading credits to use portions of the segment's assimilative ability between dischargers on the same stream segment using intergovernmental agreements. DMOAs seeking to utilize even more of the segment's assimilative capacity may have to pay the other dischargers on the segment to use a more significant portion of the stream segment's ability to absorb the pollutants. Treatment facilities on the same segment shall be model together or collectively to determine assimilative capacity. In stream flows shall also be considered for assimilative determinations.

What do we do about dischargers outside of the Association's Region 2 boundary? i.e., those dischargers on the South Platte, like South Platte Renew, affecting those dischargers assimilative capacity inside the Association's Region 2. Or, those dischargers on the St. Vrain like Boulder affecting SVSD?

1) Biochemical oxygen demand (BOD),
2) Total suspended solids (TSS),
3) Ammonia as Nitrogen (NH3),
4) Total Inorganic Nitrogen (TIN),
5) Total Phosphorus (TP),
6) e. Coli,
7) Temperature,

8) Table Value Standards of the segment, &
9) TMDLs.

Outstanding Waters: Allows no degradation

"Reviewable" Waters: Allows use of assimilative capacity only after review

Use Protected Waters: Protect uses (nothing extra)

Figure 1 Assimilative Capacity Illustration

Attachment #8

Association Utility Plans are not required to be prepared and certified by a professional engineer. Agencies must submit certification, including signature block; the Utility Plan was written under the direct supervision of the DMOA or a registered professional engineer under the laws in the State of Colorado. It is the responsibility of either the submitting engineering firm or the DMOA to certify the Utility Plan was prepared according to the submitting requirements of this Utility Plan Guidance Document are accurate and true for submission. Certification affirms no known conflicts exist with the current or proposed WUSA, treatment facility, sanitary sewer (lift stations or interceptor sewers), storm water drainage facilities, and utilities described in the Utility Plan. Project plans have been made available to submitting DMOA and local DMOAs impacted by this Utility Plan, and all known potential conflicts and comments by councils, commissioners, or administrators have been addressed during the preparation of this Utility Plan. Professional engineers licensed in Colorado may submit their professional engineering stamp and signature in place of a signature block. A professional's stamp is evidence that the information provided within the Utility Plan has the highest regard for health and safety, protects the environment, and serves the interests of the general public. Certification ensures that the best interests of regional 208 Planning are preserved as professional engineers are required by licensure to recommend regional wastewater treatment options that are economically feasible for the general public and protect, maintain, or restore the region's water quality. Understanding submitting erroneous information or an incomplete submittal may delay the Utility Plan approval process.