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ABSTRACT

This policy provides necessary information and direction to management and operation agencies, utility departments, consultants, planners, or wastewater managers concerning the North Front Range Water Quality Planning Association's (NFRWQPA, Association) process concerning Regulation No. 22 The Site Location and Design Approval Regulations for Domestic Wastewater Treatment Works (Site Application). The process can be complicated and time-consuming, as outlined in Regulation No. 22, (5 CRS 1002-22). Before the State Water Quality Control Division's final review and approval, the Site Application must be submitted to various local agencies for review, recommendations, and support. Standard referral agencies include the county, municipality, health authority, and Section 208 water quality planning or management agency in which the project resides. These referral agencies must review the Site Application to ensure that it meets local requirements or needs for long-range urbanization related to water quality, public health and environmental protection, land-use management planning, and sound engineering. The Association's review includes the designated 208 management agency to have a Wastewater Utility Plan which is critical to ensuring present and future wastewater treatment and collection system needs with consideration of the interrelated service area nonpoint pollution sources for the 20-year planning horizon. The primary goal of the 208 Areawide Water Quality Management Plan (208 AWQMP) is to provide regional land-use management planning mechanisms for reasonable, feasible, and economical wastewater service to areas designated for development within the South Platte watershed. Within an agency's Utility Plan are strategies and actions for meeting all applicable and known future water quality standards and classifications. Those strategies quantify the potential impact a discharger may have on other dischargers or stream segments associated with urbanization of the service area during the 20-year planning horizon. Recommendations in the 208 AWQMP for protecting, maintaining, or restoring impaired waters within the South Platte watershed originates from information provided in agency Utility Plans. Utility Plans and the 208 AWQMP considers water quality impacts

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the treatment system and the interrelated service area may have on receiving waters. The 208 AWQMP, Utility Plans, and Site Applications collectively overlap to protect, maintain, and restore the environmental watershed quality. Figure 1 below shows the relationship of the 208 AWQMP, Utility Plans, and Site Applications all have overlapping information and must support each other to gain Site Application approval.

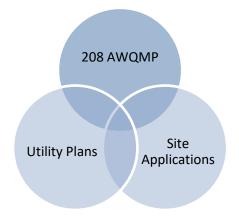


Figure 1Relationship of planning documents

Purpose:

The Site Location and Design review process applies to the proposed construction or expansion of all domestic wastewater treatment works, including treatment plants, interceptor sewers, and lift stations. Site Application forms for the different categories of projects and the regulations are available from the Colorado Department of Public Health and Environment (CDPHE), Water Quality Control Division's (Division) website at https://www.colorado.gov/pacific/cdphe/wq-facility-design-and-approval-forms. An applicant should contact each county for its procedural requirements for the submittal of the Site Application packets. In both Larimer and Weld Counties, the coordinating agency for the submittal process is the Department of Health and Environment. Please contact the individual Health Departments for assistance and directions on submitting the Site Application.

The Association is responsible for assuring that Site Applications for all proposed projects submitted for review protect, maintain, or restore the quality of waters in the Larimer-Weld county region and are consistent with the 208 AWQMP. NFRWQPA requires that all public wastewater treatment agencies submitting a Site Application for a new or expanded domestic treatment works, interceptors eligible and not eligible for certification, or lift stations, have in place a current Utility Plan (10 years or newer). NFRWQPA must approve the Utility Plan before consideration of the Site Application. The Site Application project must be within the applicant agencies' approved Utility Plan for site application consideration and approval. The Site Application, the Utility Plan, and the 208 AWQMP must all be in agreement regarding the Site Application project and supporting information. If the Utility Plan or 208 AWQMP is not in agreement with the Site Application project, the document must be

updated (Utility Plan), amended (208 AWQMP), or replaced before Site Application consideration or approval. (i.e., population projections, organic and hydraulic load projections, 5-year construction needs, etc.)

Anyone seeking the recommendation for approval of a project by NFRWQPA should be prepared to make a presentation to the NFRWQPA membership at a regular meeting if requested.

Concerning Site Applications, the areas of most significant concern to the NFRWQPA include the following:

- NFRWQPA seeks assurance that the applicant has the necessary management capability to be accountable for the long-term operation and maintenance of the facility to avoid operational problems that could potentially impair water quality. The owner and operator of the facility should be a legally constituted organization capable of meeting the financial and managerial obligations, as indicated in Regulation No. 22. Applicants should include proof that facility operators have appropriate credentials in regards to Regulation No. 100. If a homeowners association or other non-governmental organization proposes to own or operate the facility, NFRWQPA must review their articles of incorporation.
- The owner of the facility must demonstrate that they have the financial and operational resources to provide proper management, operations, and maintenance; meet capital construction requirements, and perform major repairs, including a description of financial management arrangements assuring the availability of necessary funds.
- The engineering design must provide for the protection of both surface and ground waters that may be impacted by the facility on account of either point or nonpoint source pollution. The design presented to NFRWQPA should be the final conceptual design. It should demonstrate that the facilities are appropriate for anticipated flows and, in the case of treatment plants, provide the necessary level of treatment.
- The Site Application must meet the following criteria;

1) discharge permit limitations,

2) Notice of Authorization (NOA) reclaimed water quality standards regarding Regulation No. 84,

3) provide overflow control,

4) protect groundwaters,

- 5) provide standby power, and
- 6) pumping capacity redundancy, if appropriate.
- The planned facility must be consistent with the 208 AWQMP. The 208 AWQMP discourages the proliferation of treatment facilities and evaluates the combined effects of discharges on a given stream segment and river basin. For a new treatment plant, the Site Application must demonstrate that the use of existing treatment facilities is not possible and that a new discharge will not

adversely affect existing discharges or a known TMDL of a stream segment or river basin. If the facility is not consistent with the 208 AWQMP, the project must be modified to achieve consistency, amending the 208 AWQMP. If a 208 AWQMP amendment is required, the required procedure for a plan amendment can be found on the Association's website.

The Association recognizes that executed rights-of-way, easements, and/or • temporary construction easements are essential elements for the design and construction of Site Improvements per Regulation No. 22 (WQCD, November 12, 2020). While the Association may not perform a "completeness review" of easements and rights-of-way, it is the obligation of Applicants to attest to having secured or being substantially complete with securing executed easements to proceed with construction. The Association may, at their discretion, issue an approval for a Site Application prior to, or in lieu of, full and complete executed rights-of-way and/or easements. Applicants shall submit all right-of-way and easement documentation with Site Applications including all executed agreements, letters of intent, and which properties require condemnation or are in the condemnation process. Given the Division's authority within Regulation No. 22 ensuring project easements are obtained (or executed) before site location approval or construction, the Association may approve Site Applications with unexecuted easements on a case-by-case basis in exchange for an Applicant's attestation of legal authority to construct.

Application Submittal:

Complete Site Application packets should be submitted to NFRWQPA and all other review agencies, as determined by Regulation No. 22. Completed Site Applications include the proper CDPHE application form, CDPHE Site Application checklist (filled out), required elements per the specific section of Regulation No. 22, and additional information as necessary to address the list of concerns above. Please refer to the Regulation No. 22 Guidance document, also located on the Division's website, for further explanations. NFRWQPA must approve the Utility Plan before for consideration of the Site Application. Upon receipt of the Site Applications will be returned to the applicant for corrections. An approved Utility Plan will contain much of the required Site Application information and can be used in the submittal packet and referenced in the Site Application checklist.

Policy:

The entire review and approval process may take from three to six months (including Utility Plan reviews), so Site Applications, Utility Plans, and 208 Plan Amendments, if needed, should be submitted at the earliest opportunity to help avoid delays in the final approval of the project. If there are any questions regarding this review process, contact NFRWQPA for clarification at the earliest possible point in the project development.

Relationship to Utility Plans:

Utility Plans should meet the requirements and follow the format of the most current NFRWQPA Utility Plan Guidance Document approved. Use Regulation No. 22 definitions to define terms used in any Utility Plan. NFRWQPA approved Utility Plans are used in the site approval process by NFRWQPA. As part of the state Water Quality Act, site approvals are needed to construct or expand wastewater treatment works, lift stations, and major interceptor lines. The state act lists three items for the Division to evaluate:

- 1. The comprehensive long-range plan for the area as it affects water quality and any approved regional water quality management plan for the area;
- 2. Management of the facility on the proposed site to minimize the potential adverse impact on water quality; and
- 3. Wastewater treatment facilities should consolidate whenever feasible (Water Quality Control Division guidance).

The Colorado Water Quality Control Commission refined these criteria to ensure that:

- 1. Existing treatment works are not overloaded when connecting new lift stations or interceptors;
- 2. Proposed treatment works are planned and constructed on time as needed;
- 3. Proposed treatment works are developed considering the local 208 AWQMP as it affects water quality and any approved regional water quality management plan for the area;
- 4. Proposed treatment works or interceptors protect water supplies;
- 5. Necessary local, state, and federal government agencies and planning agencies have appropriately reviewed proposed treatment works or interceptors;
- 6. There are no foreseeable adverse effects on public health, welfare, and safety for the proposed Site Location(s);
- 7. Applicants provide for adequate operational management, including legal authority and financial capabilities;

- 8. Natural hazards do not unnecessarily endanger proposed treatment works; and
- 9. The objectives of other water quality regulations (TMDLs) will not be adversely affected.

Utility Plans meet the requirements of a 208 AWQMP amendment, the site application process, and to provide the planning information needed by the Division in the permitting process and the revolving loan program.

Utility Plans and the 208 AWQMP jointly are used in reviewing site location and design approvals where it is necessary to size facilities such as interceptors based on a planning horizon that extends beyond 20 years to provide cost-effective service. In general, treatment facilities and lift stations should be staged to provide for 10-year capacity increments, but maybe staged for shorter (e.g., interim lift stations) or more extended periods with appropriate economic justification. Consequently, interceptors and lift stations can be within designated Growth Management Areas (GMAs). However, wastewater infrastructure designed only to serve GMAs will **not** be used in the site approval process or to meet other appropriate regulatory requirements.

Wastewater infrastructure designed to serve areas within the Wastewater Utility Service Area (WUSA) can be physically located within GMAs, which are outside of the urban growth boundary. Since interceptors are often sized to last beyond 20 years, they may have excess capacity to accept flow at the ultimate build-out of a designated area.

Categories of Site Applications:

1. <u>Reg 22.6 - SITE APPLICATION FOR CONSTRUCTION OF NEW DOMESTIC</u> <u>TREATMENT WORKS - (Utility Plan required).</u>

The following process will be used in evaluating applications submitted for the construction of new domestic wastewater treatment works as per section 22.6 of Regulation No. 22. The Manager will evaluate the Site Application packet for completeness and for consistency with the 208 AWQMP and with the accepted Utility Plan. New domestic wastewater treatment works require a 208 AWQMP amendment since the new facility affects the loading capacity of river basins and stream segments in the 208 AWQMP. Noting amendments to the 208 AWQMP for new treatment works include a 60-day public notice period. The Site Application must demonstrate that the use of existing treatment facilities is not possible and that a new discharge will not adversely affect existing dischargers or a known TMDL. If the Site Application is not consistent with one or both of the plans mentioned above, the Manager will contact the applicant and attempt to resolve the outstanding issues before consideration by NFRWQPA membership. All outstanding issues must be resolved before the Manager will place the Site Application on the agenda for consideration at the next NFRWQPA meeting. The Site Application will then be summarized and placed on the agenda for consideration at the upcoming Association meeting.

Once NFRWQPA membership has decided on the Site Application, the Manager will sign the Site Application, including the membership decision, and return the original Site Application to the applicant. A copy of the completed Site Application along with the information packet will be kept on the Association's website.

2. <u>Reg 22.7 - SITE APPLICATIONS FOR INCREASING OR DECREASING THE DESIGN</u> <u>CAPACITY OF EXISTING DOMESTIC WASTEWATER TREATMENT WORKS WHERE</u> <u>CONSTRUCTION HAS TAKEN PLACE OR WILL TAKE PLACE - (Utility Plan</u> <u>required).</u>

The following process will be used in evaluating applications submitted for increasing or decreasing the design capacity of existing domestic wastewater treatment works where construction has taken place or will take place as per section 22.7 of Regulation No. 22. The Manager will evaluate the Site Application packet for completeness and consistency with the 208 AWQMP and with the accepted Utility Plan. A Site Application project for increasing or decreasing the design capacity of an existing domestic wastewater treatment works must be stated as a planned project in the agencies' accepted Utility Plan and detailed within the 208 AWQMP before application approval. Site Application population projections related to either increasing or decreasing the design capacity of an existing domestic wastewater treatment works must be in agreement in the agencies' accepted Utility Plan and detailed accurately within the 208 AWQMP prior to application approval. Flexibility will be given between the accepted Utility Plan and Site Application regarding documented increases in a design capacity and projected timelines. Increasing or decreasing the design capacity of an existing domestic wastewater treatment works modifies the regional river basin and segment loading capacity in the 208 AWQMP. Noting amendments to the 208 AWQMP for increasing or decreasing the design capacity of a treatment works or modifying service area population projections include a 60-day public notice period. The Site Application must demonstrate that the project will not adversely affect existing dischargers or a known TMDL. If the Site Application is not consistent with one or both of the plans mentioned above, the Manager will contact the applicant and attempt to resolve the outstanding issues before consideration by NFRWQPA membership. All outstanding issues must be resolved before the Manager will place the Site Application on the agenda for consideration at the next NFRWQPA meeting. The Site Application will be summarized and placed on the agenda for consideration at the upcoming Association meeting.

Once NFRWQPA membership has decided on the Site Application, the Manager will sign the Site Application, including the membership decision, and return the original Site Application to the applicant. A copy of the completed application, along with the information packet will be kept on the

Association's website.

3. Reg 22.8 - <u>SITE LOCATION FOR INTERCEPTORS AND CERTIFICATION</u> <u>PROCEDURES FOR ELIGIBLE INTERCEPTOR SEWERS (New or Expanding)- (Utility</u> <u>Plan required).</u>

The Site Application certification process for eligible interceptors is allowed when applicable. Ninety (90) days before the commencement of construction of an interceptor sewer, the person responsible for that sewer shall notify NFRWOPA and the Division of such construction. This notification shall include a certification from the treatment entity receiving the wastewater for treatment that it has, or will have, the approved capacity to treat the projected wastewater from that interceptor sewer per the treatment entity's site location approval and discharge permit. Within thirty (30) days of receipt of notification, NFRWQPA shall certify that the proposed interceptor sewer has the capacity to carry the projected flow and is consistent with the 208 AWQMP. A Site Application project for an interceptor sewer must be stated as a planned project in the agencies' accepted Utility Plan before application approval. Flexibility will be given between the accepted Utility Plan and Site Application regarding documented interceptor project timelines. The Site Application must demonstrate that the project will not adversely affect existing discharges or a known TMDL. The proposed project must be capable of carrying the projected flows from the applicable wastewater utility service area (WUSA) and be consistent with the 208 AWQMP and the local referral agencies' recommendations.

If the proposed interceptor meets the certification requirements, the Manager will evaluate the packet for completeness and consistency with the 208 AWQMP and the accepted Utility Plan. If it is consistent with both plans, the Manager will certify the proposed interceptor to the Division by means of approval signature. The NFRWQPA membership will be advised of such a certification by the Manager at the next regular meeting.

If the proposed interceptor is certifiable, but not consistent with the 208 AWQMP or an approved Utility Plan, the proposal will be referred to NFRWQPA membership for consideration. The Manager will contact the applicant to resolve outstanding issues before review by the NFRWQPA membership. The Manager will forward to the Division any decision or recommendation made by NFRWQPA membership. A copy of the Site Application decision will be sent to the applicant. A copy of the completed application, along with the information packet will be kept on the Association's website.

INTERCEPTORS NOT ELIGIBLE FOR CERTIFICATION (New or Expanding)

The following process will be used in evaluating applications submitted for new or expanding interceptors not eligible for certification. A site location application shall be made to the Division and NFRWQPA on the proper form.

The proposed project must be capable of carrying the projected flows from the applicable wastewater utility service area and be consistent with the agency's Utility Plan and 208 AWQMP as well as the local referral agencies' recommendations. Flexibility will be given between the accepted Utility Plan and Site Application regarding documented interceptor project timelines. The Site Application must demonstrate that the project will not adversely affect existing discharges or a known TMDL. The Manager will evaluate the Site Application packet submitted for completeness and for consistency with the 208 AWQMP and with the accepted Utility Plan.

If the Site Application is not consistent with one or both of the plans mentioned above, the Manager will contact the applicant and attempt to resolve the outstanding issues before consideration by NFRWQPA membership. All outstanding issues must be resolved before the Manager will place the Site Application on the agenda for consideration at the next NFRWQPA meeting. The Site Application will then be summarized and placed on the agenda for consideration at the upcoming Association meeting.

Once NFRWQPA membership has decided on the Site Application, the Manager will sign the Site Application, including the membership decision, and return the original Site Application to the applicant. A copy of the completed application, along with the information packet will be kept on the Association's website.

4. <u>Reg 22.9 SITE APPLICATION PROCEDURES FOR LIFT STATIONS (Utility Plan</u> required).

The Site Application for lift stations shall be made to the Division and NFRWQPA on the proper form for: new, change in site boundaries, or a change in design capacity (increase or decrease) of a lift station. A Site Application project for a lift station must be documented as a planned project in the agencies' accepted Utility Plan and detailed within the 208 AWQMP before application approval. Flexibility will be given between the approved Utility Plan and Site Application regarding documented lift station project timelines. The Site Application shall be an adequate engineering report describing the proposed lift station. A full engineering design report is not necessary for the application or to obtain site location approval with NFRWQPA. The Site Application shall address at a minimum the requirements listed in section 22.9 of Regulation No. 22. The Site Application shall include a certification from the treatment entity receiving the wastewater for treatment from the lift station that it has, or will have, the approved capacity to treat the projected wastewater from that interceptor sewer per the treatment entity's site location approval and discharge permit. The proposed project must be capable of carrying the projected flows from the applicable wastewater utility service area and be consistent with the 208 AWQMP and the local referral agencies' recommendations. If the proposed lift station meets the requirements of section 22.9, the Manager will evaluate the

packet for completeness.

Lift Stations with a capacity greater than 50,000 gpd or serving more than 667 people must be documented within a Utility Plan and the 208 AWQMP. Flexibility will be given between the accepted Utility Plan, the 208 AWQMP, and Site Application regarding historical lift stations as the ultimate goal is to document the lift station's location and hydraulic load. The Manager will contact the applicant to resolve outstanding issues before consideration by the NFRWQPA membership. All outstanding issues must be resolved before consideration by NFRWQPA membership. Once NFRWQPA membership has decided on the Site Application, the Manager will sign the Site Application to the applicant. The Manager will forward to the Division any decision or recommendation made by NFRWQPA membership. A copy of the completed application, along with the information packet will be kept on the Association's website.

5. <u>Reg 22.10 - SITE APPLICATION PROCEDURES FOR AMENDMENT OF AN EXISTING</u> <u>SITE LOCATION APPROVAL - (Utility Plan not required).</u>

This process will be used in evaluating Site Applications submitted for an amendment to existing site location approvals per section 22.10 of Regulation No. 22. An application to amend an existing site location approval will be required when entities are proposing the specific types of minor changes listed in section 22.10 of Regulation No. 22. The Manager will evaluate the Site Application packet for completeness and consistency with the agency's Utility Plan and the 208 AWQMP.

If the Manager determines that there is consistency with the 208 AWQMP and there are no other concerns or questions with the Site Application amendment, the Site Application will be reviewed for consistency with an approved Utility Plan. If the Site Application is consistent with an approved Utility Plan the association manager will endorse the application. Membership will be advised of the endorsement by the Manager at the next regular meeting.

If the Site Application meets the requirements of Regulation No. 22 but is not consistent with the 208 AWQMP or the approved Utility Plan; the Site Application will be referred to the NFRWQPA membership for consideration. Noting the Association will have to request an extension with the Division to resolve said issues. The Manager will contact the applicant and attempt to resolve the outstanding issues before consideration by the NFRWQPA. All outstanding issues must be resolved before the Manager will place the Site Application on the agenda for consideration at the next NFRWQPA meeting. The Manager will submit any recommendations from the NFRWQPA, following the meeting, directly to the Division. A copy of the recommendation will be sent to the applicant. A copy of the application along with the information packet and endorsement will be kept on the Association's website.

Note: The Association will have 15 working days to provide comments to the Division on this type of Site Application. Should additional time be needed, the Association will request an extension.

6. <u>Reg 22.11 - APPLICATION PROCEDURES FOR DEMONSTRATION PROJECTS -</u> (Utility Plan not required).

An application for demonstration projects will be required by the Division when entities meet the requirements of section 22.11 of Regulation No. 22. Applicants are not required to submit applications to referral agencies per 22.11 (6). Any notification of a demonstration project by an applicant is for informational purposes only.

7. Reg 22.12 - IN-KIND REPLACEMENT - (Utility Plan not required).

Applications for In-kind replacement per section 22.12 of Regulation No. 22 are submitted directly to the Division and do not need Association approval. Any notification of in-kind replacement by an applicant is for informational purposes only.

8. Appendix A: Site Location and Design Application Checklist.

208 AWQMP WUSA Development Policy (2022)

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 selffulfilling 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 potentially affecting where and when urban development occurs. Therefore, WUSA Development Standards establish BMPs 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.
- 3) Establish accepted practices across the region to ensure that the North Front Range Water Quality Planning Association supports projects as they proceed through regulatory processes overseen by the Water Quality Control Division and Water Quality Control Commission.

4) Ensure compliance with water quality rules and regulations overseen by the Water Quality Control Division and Water Quality Control Commission.

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, as well as requirements in other WQCC and WQCD regulations, policies and guidance. 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. Nonproliferation of Wastewater Treatment Facilities. Prior to siting new facilities, existing wastewater treatment facilities should be expanded or consolidated instead of developing new facilities unless not legally or technically feasible.
- a. New WWTFs are not supported within a 5-mile radius of existing WWTFs.
- b. New Regional WWTFs may be built following decommissioning of one or more WWTFs within a 5-mile radius.
- c. New Regional WWTFs may not be built when adjacent collection system service sewer lines are available within two miles of each other.
- d. A maximum of two lift stations are preferred over building new WWTFs.
- e. Existing WWTFs within a 5-mile radius of each other are required jointly to explore consolidation in the Utility Plan process, considering current treatment facilitie' 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). Including providing a chosen mechanism for how the regional DMOAs will keep exploring consolidation over the 20-year planning period and provide periodic reports to the Association documenting activities.
- f. 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.
- g. Partnerships and Consolidation of WUSAs are encouraged to optimize regional collection systems by topography and significant landmarks.

- h. 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.
- i. Before siting new facilities, existing wastewater treatment facilities should be expanded or consolidated instead of developing new facilities unless not legally or technically feasible.
- j. 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 examining if an adjacent DMOA WUSA may serve a sewered area by gravity 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. Lift Stations shall be designed for the build-out capacity for the regional service area intended to be served in the long-term.
- d. 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 cannot 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 tax 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.
- f. Changes in costs of water and wastewater treatment.
- g. Estimated local economy impacts over the 20-year planning period of the Project.
- h. Changes in assessed valuation.
- i. Changes in Tax revenues and fees to local governments that will be generated by the Project.
- j. Changes in tax revenues caused by agricultural lands being removed from production.
- k. 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 densities, 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.

Pertinent factors relating to the appropriate land use pattern and support the WUSA Development Policy for the Region include:

1) Dispersed land uses necessitate a more extensive utility service network than concentrated patterns, incurring costs considerably higher than would be attributable to a concentrated pattern of development. The greater the dispersion, the greater the linear length of roadways required to connect residences with destination points (employment, shopping, entertainment, etc.). In addition, the effectiveness of public transportation systems depends on concentration of potential users. Lower concentrations and densities result in higher operating costs and generally lead to a greater reliance on the automobile to serve the needs of residents. 2) On a per capita basis, at first glance it would appear that the costs of providing public services (police and fire protection, health, and educational facilities, etc.) would be constant for dispersed and concentrated land use patterns. However, the costs of providing services to a dispersed population can be considerably higher than the costs of providing equal services to a concentrated population. To maintain adequate levels of police and fire protection additional facilities must be built and maintained in the local areas thus increasing the capital operating and maintenance cost of providing such services over the costs that would be incurred in providing a similar level of service to a concentrated population from centralized facilities. For those services where the provision of additional facilities is not necessary to protect the health and welfare of the residents, the costs are still higher for providing services to a dispersed population versus a concentrated one. In these cases, the residents must incur transportation costs of getting to and from the service location, and the farther from the facility they live, the higher the transportation cost.

In addition, dispersed development may incur inequities in the financial support of public service systems. Those residing in outlying areas may use libraries, museums, parks, and other services in urban areas without appropriate compensation to the municipality providing the service. Hence, the resident of the municipality assumes the burden of costs for others' benefits.

- 3) As a general rule, the greater the dispersion of land uses, the greater the capital costs of providing utility service systems (water, sewer, energy, and communication). Collection and distribution systems would have to cover more distance to service a dispersed versus a concentrated population; therefore, the capital costs of providing such services would be higher. In addition, concentrated land use patterns provide for the construction of centralized water and sewage treatment plants which can realize the economics of scale and treat water or sewage at a lower pergallon cost than smaller plants providing treatment for a dispersed population.
- 4) The economic viability of a recycling and maintenance program for older community areas is directly related to the intensification of use in the area. The outward shift of uses often accounts for the deterioration of the older areas. Recent shifts in residential and commercial activity along the Front Range have occurred at the expense of the downtown areas in these cities.
- 5) A decreasing supply of land available for development accompanied by a commensurate increase in the value of developable land. In general, the

greater the scarcity of developable land, the higher the price such land will bring. If land uses are concentrated, land values for developable land on a per-acre basis would be higher than they would be for a dispersed pattern.

- 6) Air quality is directly correlated to the distance and number of daily automobile trips. Dispersed land use patterns encourage longer trips; hence, heightening air pollution, while concentrated patterns minimize total vehicle miles traveled thus lessening pollution.
- 7) Water consumption is directly related to the density of land uses. Per capita consumption ratios are lower in concentrated urban areas than in dispersed suburban communities. Suburban developments use more water than urban developments to irrigate extensive lawn and garden areas. The per capita consumption rate of apartment house dwellers is roughly half that of suburban dwellers [Milne 1976].
- 8) Noise levels are impacted by the pattern and density of land uses. In a dispersed pattern, the lengths of highways and local streets would be greater than in a concentrated pattern. Consequently, noise impacts would be spread over a larger area. A concentrated pattern would result in increased noise levels at centralized activity points and reduced levels in outlying areas. Therefore, exposure to noise varies significantly with the land use patterns. It should be noted, however, that actual noise exposure is a function of the specific siting of land uses (i.e., a concentration of residents in a high-noise area would expose a greater number of residents than a dispersed pattern). It is the greater opportunity for avoidance of high noise that can be attributed to a concentrated pattern.
- 9) A dispersed land use pattern will disrupt native vegetation and wildlife to a greater extent than a concentrated pattern. The degree of disruption will depend on the extent of fragmentation of the dispersed uses. The greater the dispersion, the greater the amounts of land that are utilized; consequently, the greater the potential for disruption.

Development in a concentrated urban pattern would be focused primarily in and around existing urban and suburban areas where vegetation and wildlife have already been disturbed. Species that are less sensitive have adapted to the presence of man. Those of greater sensitivity have migrated to locations away from existing communities or become locally extinct. Continued concentrations of urban uses would have a minimum impact on existing species, while a dispersed pattern would affect outlying areas where sensitive species have migrated, causing substantial disruption. 10) Consumption of natural gas and electricity is a function of housing type, distribution and orientation, and industrial demand. Apartment units consume less energy than single-family units. Consequently, the increasing densities of a concentrated pattern require less energy per unit than a dispersed pattern. Additionally, there is a correlation between the length of a transmission system and the loss of electrical energy. Because a dispersed pattern requires longer transmission systems than a concentrated pattern, it results in higher losses in energy during transmission.

Gasoline usage is a function of total vehicle miles traveled. In a dispersed land use pattern, vehicle miles traveled are higher than in a concentrated pattern. Therefore, dispersed land-use patterns create higher gasoline consumption on a per capita basis than do concentrated patterns.

11) A dispersed land use pattern would tend to perpetuate fragmentation of public services. As population and land-uses grow and disperse, attempts to consolidate individual special districts and governmental units would be hindered.

Fragmentation of services often results in a low level of effectiveness and efficiency, and overlapping jurisdictions hinder a coordinated effort to provide for and guide growth. Agencies often compete for available funding, and tax dollars can be spent on capital improvements that contradict improvements made by other agencies. In some cases, improvements bear no relationship to either existing or potential concentrations of population.

A concentrated pattern of urban and suburban uses would tend to increase the consolidation of the public service districts and their boundaries. Consolidated districts reflecting concentrations of development, whether urban or rural, contribute to the efficiency and effectiveness of guiding growth.

All of the factors discussed above indicate advantages that could be gained by directing future development in the Region in a concentrated pattern and the disadvantages of allowing development to occur in a dispersed manner. Based on these factors, it is obvious that the Region would benefit through the development and adoption of a land-use strategy that resulted in a concentrated land use pattern promoting consolidation of wastewater collection and treatment based on concentrated urban patterns.

Throughout the Region are numerous communities located along the principal north-south and east-west highways and railroads. Most are located along U.S. Highway 287 (Laporte, Fort Collins, South Fort Collins

Sanitation District, Loveland, and Berthoud), U.S. Highway 85 (Nunn, Pierce, Ault, Eaton, Greeley, Evans, LaSalle, Gilcrest, Platteville, Fort Lupton, and Metro Water Recovery), Colorado Highway 60 (Johnstown and Milliken), and U.S. Interstate 76 (Lochbuie, Hudson, Resource Colorado Metro District, and Keenesburg). Others along I-25 include Wellington, Boxelder Sanitation District, Timnath, South Fort Collins Sanitation District, Loveland, Johnstown, Berthoud, Mead, St. Vrain Sanitation District, Erie, and Broomfield. U.S. Highway 34 starting in Rocky Mountain National Park includes Estes Park Sanitation District, Upper Thompson Sanitation District, Loveland, Johnstown, and Greeley.

It is a recommendation of the Association that these agencies along major highways explore opportunities for collection and/or treatment consolidation as well as other opportunities to improve treatment processes with partnerships. Fort Lupton and Metro Water Recovery are trending towards consolidating treatment. Johnstown and Milliken along Colorado Highway 60 are located in close proximity to one another and are trending towards convergence. Others most recently to explore consolidations are Mead and St. Vrain Sanitation District, and Resource Colorado Metro District, Hudson, and Keenesburg.

208 AWQMP Consolidation Policy (2022)

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. Do not go about consolidation alternatives alone, agencies must involve others and collaborate on alternative solutions and examine them thoroughly. At the request of a Designated Management and Operation Agency (DMOA) the Association will facilitate consolidation meetings. In agreement with Regulation No. 22 Implementation Policy, Consolidation analysis; if it is demonstrated to the satisfaction and the parties involved that any one of the following factors would make consolidation infeasible, no further investigation of consolidation is required.

The Association requires the following subjects be thoroughly examined and followed within the Utility Plan report considering regional (DMOA) partnerships or consolidation with the final decision and recommendations being approved by a public process:

1. <u>WUSA Consolidation or subdivision</u>

WUSA consolidation and partnership options must be thoroughly assessed considering long-range WUSAs and GMAs to optimize 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 should 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. <u>Assimilative Stream Segment Capacity Comparison of DMOAs within a 5-</u> <u>mile radius</u>

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. <u>Surface Water Quality</u>

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. <u>Ground Water Quality</u>

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. <u>Water Quantity</u>

- 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

- a. 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.
- b. Description of the source of water interacting with the surface systems to create each wetland (i.e., side slope runoff, over-bank flooding, groundwater seepage, etc.).
- c. 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. <u>Regional DMOA Credit Trading.</u>

Partnerships and consolidation options may 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. <u>CIP Economic Feasibility Studies of DMOAs within a 5-mile radius.</u>

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 long-term maintenance and operation costs of the project as well as the financial burden on ratepayers and residents. The Financial burden includes the existing tax 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 effects of the project on the local economy and opportunities for economic diversification can be illustrated by examining regional opportunities for consolidation.

11. User Rate Studies of DMOAs within a 5-mile radius.

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's vision cannot happen without public participation.

a. In the event that multiple attempts have been made to engage DMOAs, provide documentation and timelines in which those DMOAs have declined to participate in consolidation discussions.

Appendix A:

Site Location and Design Application Checklist

| Site Location and Design Process |
|----------------------------------|
| Entity: |
| Project: |
| Review Start Date: |
| Approval Date: |

Location in Report: 1. Is the project Comments: documented in the approved Utility Plan? 2. Is the project within the agency's 208 boundary? 3. Is the project identified by the agency or recommended by NFRWQPA within the 208 AWQMP (i.e. Estimated 5-year construction needs)? 4. Does the project adversely affect other discharges or TMDLs of the segment or river basin? 5. Does the project include the 1-mile radius map identifying domestic water sources and wells? 6. Does the project include the 5-mile radius map identifying other wastewater agencies? 7. Is the land use zoning correct for the project? 8. Is the Land Ownership documented for the project, must have appropriate and valid Deed/Title? 9. Does the project financials show the project can be constructed and maintained for the life of the project? 10. Are the FEMA maps included for the project? 11. Has the project Public Notice been posted on

| site for the correct time period according to Reg | |
|--|--|
| 22? | |
| 12. Has the project Public | |
| Notice been posted by | |
| NFRWQPA according to | |
| the requirements within? | |
| 13. Does the receiving entity | |
| have the capacity to | |
| receive the anticipated | |
| flows from the project? | |
| 14. Have all Entity owner | |
| and referral signatures | |
| been obtained? | |