



April 19, 2016

Honorable Corey Harris
City of Archer
PO Box 39
Archer, FL 32618-0039

RE: Wastewater System
Preliminary Engineering Report

Dear Mayor Harris:

We have reviewed the Preliminary Engineering Report for the City of Archer – Wastewater Improvements Project as prepared by Preble-Rish, Inc. dated March 2016. Based on material submitted, the following items need to be addressed:

1. There is no indication that the Preliminary Engineering Report (PER) was prepared by a Professional Engineer licensed in the State of Florida.
2. The water use data for the City and for those who are expected to be connected with this project needs to be provided. Example tables are attached.
3. Documentation should be provided that shows Alachua County requires advanced wastewater treatment.
4. Other treatment systems should be considered in the alternatives analysis.
5. The technical and economic basis for how the small and medium sized collection system alternatives are laid out should be provided.
6. The life cycle cost analysis doesn't clearly show which of the three size alternatives (small, medium and large) is most advantageous to the City. These three alternatives should be compared using some equitable method of measurement, such as anticipated user fees. For comparison purposes, this analysis may assume the project is funded with 100% loan.
7. Why are there 24 to 25 grinder stations and septic tank abandonments included in the alternatives for wastewater treatment?

Rural Development • Ocala Area Office
2441 NE 3rd Street, Suite 204-1 • Ocala, FL 34470
Voice (352) 732-7534 • Fax (352) 732-9728

USDA is an equal opportunity provider and employer.

8. It appears the estimated unit price for the 12-Inch force main provide in Appendix F and H may be high. We ask that the Engineer check and verify that the estimated cost is accurate.
9. It appears the estimated unit price for the 8-inch gravity sewer provided in Appendix J may be high. We ask that the Engineer check and verify that the estimated cost is accurate.
10. It appears the estimated unit price for the grinder stations provided in Appendix N may be low. We ask that the Engineer check and verify that the estimated cost is accurate.
11. Does the force main in the GRU connection alternative need to traverse the entire 49 thousand foot distance to the Kanapaha Water Reclamation Facility? Is there a location closer to Archer where the tie-in can be made?
12. The basis of the O&M and treatment costs presented in Table 6.1 should be provided.
13. The basis of the O&M costs presented in Table 6.2 should be provided.
14. Section 7 generally needs to provide more detail on the collection and treatment process, in accordance with section 6 of the RUS Bulletin 1780-2 PER guide.
15. The initial anticipated treatment demand, just after project completion should be provided in section 7.
16. A more precise description needs to be provided for the Miscellaneous Costs line item in Table 7.2c.
17. The estimated interest on interim financing appears to be very high. It should be noted that according to RUS 1780 regulations, obligated loan or grant funds not needed to complete the proposed project will be de-obligated, with any reduction being applied to grant funds first.
18. It is unclear how the Specialized Hydrogeological Study mentioned in the footnotes of Table 7.2c affect the Engineer's Opinion of Probable Cost.
19. It appears the costs associated with legal fees and interest on interim financing were omitted from the Loan Payback Analysis shown in Tables 7.3.a and Table 7.3.b.
20. The anticipated operations and maintenance costs for the first year after project completion needs to be provided in section 7. A sample table is attached.

21. The short-lived asset table (Table 7.3e) needs to be revised. The items listed appear to be capital improvement projects and/or are not specific assets. Please reference Page 17 of RUS Bulletin 1780-2 for guidance, along with the sample table that is attached. It also appears replacement of grinder pumps should be considered for the short-lived asset schedule. Significant short lived asset costs, such as grinder pump replacement, should be reflected in the life cycle cost analysis.

Since this project will, initially, provide service only to a portion of the service area, the Engineer and City (applicant) need to be aware that according to RUS Instruction 1780.11(a), wastewater facilities must be installed "so as to serve any potential user within the service area who desires service and can be feasible and legally served", unless it is not "economically feasible to serve the entire area". So according to 1780.11(a)(2):

- A. The applicant must publicly announce a plan for extending service to areas not initially receiving service from the system.
- B. Potential users located in the areas not to be initially served must receive written notice from the applicant that service will not be provided until such time as it is economically feasible to do so.

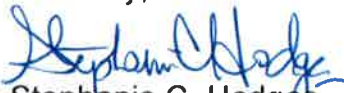
The plan for meeting the requirements of bullet items A. and B. above must be submitted to Rural Development for review and concurrence, however this is not required prior to obligating funds.

Based on the information provided, it appears this project is not necessary to alleviate a health or a sanitary problem (in accordance with RUS Instruction 1780.10(c)(1) and 1780.13(b)(1).) We note that with the exception of the November 30, 2011 warning letter, the consent orders and other documentation noted in section 3.1 are old (circa 2001) and appear to no longer be applicable.

Please be advised that fees listed for engineering services are for planning purposes only. RD's review of the reasonableness of the engineering compensation will be provided with the review for the Engineering Services Agreement.

Should you have questions or concerns, please contact this office.

Sincerely,


Stephanie C. Hodges
Area Director

cc: Preble-Rish, Inc.

FL RUS BULLETIN 1780-43
Attachment

(Issued 10/2014)

(For Wastewater Projects)

Table EX.1b - City Water Use Data (all connections)			
User Category	# of Wastewater Connections	Total Average Monthly Water Use (Gal/Mo)	Avg Monthly Water Use per connection (Gal/mo)
Residential	1,278	8,623,944	6,748
Commercial	84	1,802,220	21,455
Schools	3	29,961	9,987
Hospitals	1	12,375	12,375
ACME Industries	1	214,400	214,400
Total	1,367	10,682,900	

* Water use data obtained from District records for the 12 month time period between <date> and <date>

Table EX.2b - Water Use Data for Wastewater Users Connected from Project			
User Category	# of Wastewater Connections	Projected Avg Monthly Water Use per connection (Gal/mo)	Total Projected Average Monthly Water Use (Gal/Mo)
Residential	104	6,750	702,000
Commercial	13	21,500	279,500
Schools	1	10,000	10,000
ACME Industries	1	214,400	214,400
Total	119		1,205,900

* Projections based on water use shown in table EX.1b

FL RUS BULLETIN 1780-43
Attachment

(Issued 2/2010)

Table EX.3 - Existing Yearly Operation and Maintenance (O&M) Expenditures	
Category	Expense
Personnel Costs	\$38,000
Utilities	\$12,000
Insurance	\$1,500
Supplies	\$5,000
Repairs and Maintenance	\$2,000
Fuel	\$500
Accounting & Auditing	\$2,000
Total	\$61,000

* O&M data for FY 2009 (Oct 2014 to Sep 2015)

Table EX.4 - Projected Yearly Operation and Maintenance (O&M) Expenditures	
Category	Projected Expense
Personnel Costs	\$45,000
Utilities	\$16,000
Insurance	\$2,000
Supplies	\$6,000
Repairs and Maintenance	\$3,500
Fuel	\$500
Accounting & Auditing	\$2,000
Total	\$75,000

** For FY 2018 - (First full year after project implementation)

FL RUS BULLETIN 1780-43
Attachment

(Revised 3/2011)

Table EX.5 - Short Lived Asset Schedule			
<u>Asset</u>	<u>Cost (ea)</u>	<u>qty</u>	<u>Typical Life Span</u>
ABC Pumps	\$10,000	50	15 yrs
XYZ Pumps	\$1,500	300	10 yrs
QRS Valves	\$1,000	20	20 yrs

{Note: Short Lived Assets should be provided for the whole system}

**Florida Department of Environmental Protection
Clean Water State Revolving Fund Program**

Comments on the *Preliminary Engineering Report for City of Archer Wastewater Improvements Project* prepared by Preble-Rish, Inc., and dated March 2016

1. The preliminary engineering report (PER) should be signed and sealed by the professional engineer in responsible charge of preparing the PER.
2. Subsection 1.2 (Environmental Resources Present): Please explain the statement, “For instance, Alachua County does not allow effluent discharge in the form of spray fields or point source discharge.” This statement does not seem consistent with Section 406.70 of the Alachua County Code of Ordinances.
3. Subsection 1.2 (Environmental Resources Present); Subsection 2.5.2 (Floodplains and Wetlands), including Figure 3 (FEMA Flood Zones Map); and Sections 4 (Wastewater Treatment Alternatives Considered) and 5 (Wastewater Collection System Alternatives Considered): It is anticipated that Executive Order (EO) 13690 will apply to Fiscal Year 2017 capitalization grant projects. This EO amends EO 11988 and establishes a Federal Flood Risk Management Standard that expands floodplain management for federally-funded projects from the 100-year flood elevation and floodplain to a higher vertical elevation and corresponding horizontal floodplain determined using one of the following three approaches:
 - Climate-Informed Science Approach – use the best-available, actionable hydrologic and hydraulic data and methods that integrate current and future changes in flooding based on climate science.
 - Freeboard Approach – use the 100-year flood elevation and an additional two feet for non-critical actions or an additional three feet for critical actions.
 - 500-Year Flood Approach – use the 500-year flood elevation.

You may view detailed guidelines for implementing EO 11988 and EO 13690 at <http://www.fema.gov/media-library/assets/documents/110377>.

- a. Please determine if any proposed project facilities will be in a floodplain when using one of the aforementioned approaches to determine the floodplain. The PER should identify the approach used; whether any proposed facilities will be in a floodplain when using the identified approach; and if any proposed facilities will be in a floodplain, the resulting impacts, measures to minimize the impacts, and measures to preserve floodplain values.
 - b. On Figure 3, please show the site for the proposed wastewater treatment plant and constructed infiltrating wetland.
4. Subsection 1.2 (Environmental Resources Present); and Section 3.1 (Health, Sanitation, and Security), including Appendix A: Subsections 1.2 and 3.1 state that the primary need for the proposed project is to eliminate failing septic tanks, and Subsection 3.1 states that Appendix A includes a consent order that documents issues with the current septic tanks. However, Appendix A includes only documentation for a 2003 closed enforcement case, and a 2011 warning letter, pertaining to the Archer Homes WWTF (FLA011298), which is currently in compliance with the Department’s wastewater rules, and a 2002 closed consent order

pertaining to Alachua Community School WWTF (FLA011281), which is currently in compliance with the Department's wastewater rules. Please provide up-to-date documentation of failing septic tanks and/or describe other reasons for the project.

5. Subsection 2.5.1 (Cultural Resources), including Figure 7 (FNAI Biodiversity Matrix); and Subsection 2.5.7 (Biological Resources):
 - a. We suggest that you discuss the FNAI biodiversity information in Subsection 2.5.7 (Biological Resources) instead of in Subsection 2.5.1 (Cultural Resources). Also, the U.S. Fish and Wildlife Service and the Florida Fish and Wildlife Conservation Commission should be notified if threatened or endangered species are encountered during construction.
 - b. The FNAI biodiversity matrix included in Figure 7 is for an area in Jackson County. Please include an FNAI biodiversity matrix for the project area.
 - c. What site-specific surveys have been performed to determine the environmental effects of the proposed project at the site for the proposed wastewater treatment plant and constructed infiltrating wetland? A professional familiar with Florida's flora and fauna should conduct a survey at the site, and findings should be included in the PER.

6. Subsection 4.1 (Construct WWTP in Archer), including Appendixes B, C, and D:
 - a. Subsection 4.1 should document the Alachua County requirement for advanced wastewater treatment by referencing the appropriate portion of the Alachua County Code of Ordinances (Section 406.70). Also, Subsection 4.1 should clearly describe Alachua County's advanced wastewater treatment standards (i.e., high-level disinfection and not more, on an annual average basis, than 5 mg/l biochemical oxygen demand, 5 mg/l suspended solids, 3 mg/l total nitrogen expressed as N, and 1 mg/l total phosphorus expressed as P per Chapter 410 in the Alachua County Code of Ordinances).
 - b. Subsection 4.1 should explain in more detail why a WWTP with a capacity of 100,000 gpd is required.
 - c. The flow diagram in Appendix C shows the aeration tank as an aerobic MBBR (moving bed bioreactor). However, the aeration tank should be shown as an aerobic IFAS (integrated fixed-film activated sludge) tank. An MBBR does not involve any return activated sludge (RAS) flow and relies only on attached-growth media; while an IFAS tank includes RAS flow and relies on both suspended growth and attached-growth media.
 - d. On the flow diagram in Appendix C, fine screening and grit removal should be added upstream of flow equalization; and on the cost estimate in Appendix D, the cost for the wastewater treatment plant should be adjusted to include the cost for fine screening and grit removal. Fine screening is recommended to remove materials that could entangle media or plug media retention screens in the IFAS tank. Grit removal is recommended for all wastewater treatment plants to prevent damage to pumps and to prevent grit accumulation, and reduced capacity, in treatment units.
 - e. On the flow diagram in Appendix C, what type of sludge dewatering is being proposed?
 - f. We suggest that you consider alternative treatment processes for the Archer WWTP. The IFAS process shown on the flow diagram in Appendix C is usually most

advantageous where there are site constraints, where there is a need to upgrade an existing activated sludge process, or where there is a need for resiliency to peak wet weather flows. The proposed constructed denitrification wetland shown on the flow diagram in Appendix C is described as a subsurface flow wetland, and the USEPA's September 2000 "Wastewater Technology Fact Sheet, Wetlands: Subsurface Flow" indicates that it usually will be cheaper to construct a free water surface wetland instead of a subsurface flow wetland to treat flows greater than 60,000 gpd.

- g. We suggest that you consider alternative effluent disposal or reclaimed water reuse methods, such as spray irrigation, for the Archer WWTP.
7. Subsection 4.1 (Construct WWTP in Archer), including Appendix D; Subsection 4.2 (Connect to GRU Treatment System), including Appendix F; and Subsection 4.3 (Connect to Williston Treatment System), including Appendix H: On the cost estimates in Appendixes D, F, and H, why are there 24 or 25 grinder stations included in the cost for transmission to treatment? Are these grinder stations that would be connected directly to the transmission force main regardless of the type of collection system selected for the remainder of the service area? Please clarify.
8. Subsections 4.1 (Construct WWTP in Archer), 4.2 (Connect to GRU Treatment System), and 4.3 (Connect to Williston Treatment System); Subsections 5.1 (Medium-Area Gravity Collection System), 5.2 (Large-Area Pressure Sewer Collection System), 5.3 (Medium-Area Pressure Sewer Collection System), 5.4 (Small-Area Pressure Collection System), and 5.5 (Medium-Area Vacuum Collection System); and Subsections 6.1.1 (Discussion of Wastewater Treatment Alternatives) and 6.2.1 (Discussion of Wastewater Collection System Alternatives): Under Section 602(b)(13) of the Federal Water Pollution Control Act as amended by the Water Resources Reform and Development Act of 2014, each CWSRF loan applicant now must certify that it...
 - "has studied and evaluated the cost and effectiveness of the processes, materials, techniques, and technologies for carrying out the proposed project or activity for which assistance is sought..."; and
 - "has selected, to the maximum extent practicable, a project or activity that maximizes the potential for efficient water use, reuse, recapture, and conservation, and energy conservation, taking into account (i) the cost of constructing the project or activity; (ii) the cost of operating and maintaining the project or activity over the life of the project or activity; and (iii) the cost of replacing the project or activity."
 - a. Subsections 4.1 through 4.3, 5.1 through 5.5, 6.1.1, and 6.2.1 should discuss the potential for water reuse and energy conservation for each alternative as compared to other alternatives.
 - b. Please complete and submit the attached "Project Sponsor's Cost and Effectiveness Certification and Water/Energy Conservation Certification."
9. Subsection 4.2 (Connect to GRU Treatment System), including Appendix F; and Subsection 4.3 (Connect to Williston Treatment System), including Appendix H:
 - a. Subsections 4.2 and 4.3 should explain why a 12-inch force main would be needed to convey wastewater to the GRU wastewater system or the Williston wastewater

system. A cleansing velocity of at least 2 fps should be maintained in force mains at design pumping rates.

- b. On the cost estimates in Appendixes F and H, the cost for the master lift station and the unit cost for the 12-inch force main seem somewhat high. Please verify the accuracy of these costs.

10. Subsection 5.1 (Medium-Area Gravity Collection System), including Appendix J:

- a. On the cost estimate in Appendix J, why is the number of septic tank abandonments (338) not consistent with the number of service laterals (288)?
- b. On the cost estimate in Appendix J, the unit cost for the 8-inch PVC gravity sewer seems somewhat high. Please verify the accuracy of this cost.
- c. It appears that a cost for Master Lift Station 1 is being included in the cost estimates in Appendixes D, F, and H for the wastewater treatment alternatives and again in the cost estimate in Appendix J for the medium-area gravity collection system alternative. Thus, it appears that the cost for Lift Station 1 is being considered twice for the medium-area gravity collection system alternative. Please clarify.

11. Subsection 5.2 (Large-Area Pressure Sewer Collection System), including Appendixes K and L; Subsection 5.3 (Medium-Area Pressure Sewer Collection System), including Appendixes M and N; and Subsection 5.4 (Small-Area Pressure Collection System) including Appendixes O and P:

- a. Subsections 5.2, 5.3, and 5.4 describe, and the cost estimates in Appendixes L, N, and P include costs for, 2-, 4-, and 6-inch pressure sewer mains; whereas, the maps in Appendixes K, M, and O show 2- and 3-inch pressure sewer mains. Please clarify.
- b. On the cost estimates in Appendixes L, N, and P, the unit cost for a grinder station seems somewhat low. Please verify the accuracy of this cost.
- c. Subsection 5.4.1 states that the small-area pressure sewer collection system would serve 100 customers. However, it appears the this system would serve 124 to 125 customers when including the 24 or 25 customers that apparently would be connected directly to the transmission force main to treatment (see Comment 7).

12. Subsection 5.5 (Medium-Area Vacuum Collection System), including Appendixes Q and R:

- a. Preliminary vacuum main sizes should be shown on the map in Appendix Q.
- b. On the cost estimate in Appendix R, why is the number of valve pits and air terminals included in equipment costs (200) different from the number of valve pits included in construction costs (266)?
- c. A cost for Master Lift Station 1 is being included in the cost estimates in Appendixes D, F, and H for the wastewater treatment alternatives, and a cost for Vacuum/Lift Station 1, which presumably would pump directly to treatment, is being included in the cost estimate in Appendix R for the medium-area vacuum collection system alternative. Thus, it appears that the cost for pumping to treatment is being considered twice for the medium-area vacuum collection system alternative. Please clarify.
- d. In the preliminary design of the medium-area vacuum collection system, we suggest that you connect multiple (two to four) customers to a single vacuum valve where

possible, which would reduce the cost for the medium-area vacuum collection system alternative.

- e. We suggest that you consider a large-area vacuum collection system alternative because a large-area system still might require only a single vacuum station and, thus, might have a lower cost per customer than other collection system alternatives.

13. Subsections 6.1 (Discussion of Wastewater Treatment Alternatives) and 6.2 (Discussion of Wastewater Collection System Alternatives):

- a. The PER should include a breakdown, or describe the basis, of the annual O&M costs used to determine the present worth values in Tables 6.1 and 6.2. Replacement of short-lived assets, such as pumps, blowers, etc., should be included in these costs.
- b. In Table 6.1, why are the O&M costs for the connect-to-GRU alternative (which includes 50-hp pumps and 9.4 miles of force main) and the O&M costs for the connect-to-Williston alternative (which includes 60-hp pumps and 10.7 miles of force main) the same?
- c. The PER should describe the basis of the annual GRU and Williston treatment costs used to determine the present worth values in Table 6.1.
- d. To account for life expectancy differences between alternatives, salvage values should be incorporated into the lifecycle cost analyses in Subsections 6.1 and 6.2.
- e. We suggest that you conduct separate lifecycle cost analyses using each of the following two discount rates: the real discount rate from the latest revision (November 2015) of OMB Circular A-94 Appendix C, which is 1.5%; and the U.S. Bureau of Reclamation's latest (December 17, 2015) discount rate for water resources planning, which is 3.125%.
- f. Since the large-, medium-, and small-area collection systems will serve different numbers of customers, they should be compared on a cost per customer basis. Also, the large- and small-area wastewater collection systems would require different treatment capacities than the medium-area collection system, and this should be factored into the comparison of alternatives.

14. Subsection 7.2 (Total Project Cost Opinion):

- a. In Table 7.2c (Engineer's Opinion of Probable Cost, Total Project), the rate and amount for interim financing appears high.
- b. A footnote to Table 7.2c states that a specialized hydrogeological study has been funded through a State grant. It is unclear if/how this affects the total project cost in Table 7.2c. Please clarify.

15. Subsection 7.3 (Annual Operating Budget):

- a. Subsection 7.3.1 (Operations and Maintenance Costs) should include a breakdown, or describe the basis, of the annual O&M costs for the proposed project.
- b. In the loan payback analyses in Tables 7.3a and 7.3b, interim financing interest, legal fees, and miscellaneous costs have been omitted from the analyses.
- c. The proposed annual revenues tables in Subsection 7.3.2 (Debt Repayment) show a total of $309 + 9 + 9 = 327$ customers; but, Subsection 7.1.1 states that the proposed wastewater collection system will serve 292 customers, and the cost estimate for the Archer WWTP alternative (Appendix D) and the cost estimate for the medium-area

pressure collection system alternative (Appendix N) show a total of $25 + 266 = 291$ customers. Please clarify.

- d. It appears that, for residential customers in Archer, the average monthly wastewater bill would slightly exceed 2% of the median household income, and thus, the average monthly water and wastewater bill would significantly exceed 2% of the median household income. Consequently, we are concerned about the affordability of the proposed project.
 - e. Subsection 7.3.3 (Reserves) should include a more detailed breakdown of specific short-lived assets, such as pumps, blowers, etc., that will need to be replaced.
16. The PER should include completed capital financing plan worksheets, which are available for download at <http://www.dep.state.fl.us/water/wff/wwmanual.htm>.
 17. We understand that you will be preparing an environmental report/assessment for USDA Rural Development and consulting with the U.S. Fish & Wildlife Service and the State Clearinghouse during preparation of the report/assessment. Please provide a copy of the following documentation when it becomes available: documentation that the U.S. Fish & Wildlife Service has accepted the proposed project; State Clearinghouse approval of the proposed project; and the USDA Rural Development's final environmental determination and accepted environmental assessment for the proposed project.
 18. We require that a public meeting be held to allow for public participation in the evaluation of project alternatives and to inform the public of the capital cost of the proposed project and the long-term financial impacts on customers. Please provide the following meeting documentation when it becomes available: a copy of the meeting notice, which must be issued at least 14 days before the meeting; and a copy of the meeting minutes.
 19. We require a City resolution adopting the PER and establishing a commitment to implement the planning recommendations. Please provide a copy of the resolution when it becomes available after the aforementioned public meeting.



April 28, 2016

Honorable Corey Harris
City of Archer
PO Box 39
Archer, FL 32618-0039

RE: Wastewater System
Preliminary Engineering Report – Supplemental Comments

Dear Mayor Harris:

This letter is being provided as a supplement to my letter of April 19th wherein a review of the Preliminary Engineering Report (PER) for the City of Archer – Wastewater Improvements Project by Preble-Rish, Inc. dated March 2016 was discussed.

Our Agency has recently been informed that the City of Newberry has sufficient capacity to provide wastewater treatment for the City of Archer. The PER should include a discussion or alternative analysis, as appropriate, of this potential interconnection. Also, a similar analysis should be provided for the Town of Bronson, if such treatment capacity is available.

Additionally, we have been made aware that sinkhole activity may be prevalent in the City of Archer service/site area. The PER should discuss these sinkhole risks as they relate to the treatment plant.

And finally, it should be noted that the 2.625% interest rate used in the alternatives analysis is not the real discount rate from Appendix C of OMB circular A-94, which is currently 1.5% for a 30 or 40 year term. This comment was not provided in the original review since this rate did not affect the conclusion of the report.

By copy of this letter, we are sharing this information with your Engineer, Preble-Rish, Inc. Should you have questions or concerns, please contact this office.

Sincerely,


Stephanie C. Hodges
Area Director

cc: Preble-Rish, Inc.

Rural Development • Ocala Area Office
2441 NE 3rd Street, Suite 204-1 • Ocala, FL 34470
Voice (352) 732-7534 • Fax (352) 732-9728

USDA is an equal opportunity provider and employer.

**STATE OF FLORIDA STATE REVOLVING FUND (SRF)
PROJECT SPONSOR'S COST AND EFFECTIVENESS CERTIFICATION
AND WATER/ENERGY CONSERVATION CERTIFICATION**

Project Sponsor: _____
Project Name: _____
Project Number: _____

On June 10, 2014, the Water Resources Reform and Development Act of 2014 (WRRDA) was signed into law. Among its provisions are amendments to Titles I, II, V, and VI of the Federal Water Pollution Control Act (FWPCA). Sections 602(b)(13)(A) and (B) of the FWPCA requires that the loan recipient:

(A) has studied and evaluated the cost and effectiveness of the processes, materials, techniques, and technologies for carrying out the proposed project or activity for which assistance is sought under this title; and

(B) has selected, to the maximum extent practicable, a project or activity that maximizes the potential for efficient water use, reuse, recapture, and conservation, and energy conservation, taking into account –

- (i) the cost of constructing the project or activity;*
- (ii) the cost of operating and maintaining the project or activity over the life of the project or activity; and*
- (iii) the cost of replacing the project or activity;*

We certify that the above referenced project meets the requirements set forth in Sections 602(b)(13)(A) and (B) of the FWPCA. We also certify that the documentation justifying this certification will be made available upon request.

We understand that falsifying information on this certification may be grounds for termination of the SRF loan agreement.

Project Authorized Representative

Professional Engineer

Print Name: _____

Print Name: _____

Signature: _____

Signature: _____

Date: _____

Date: _____