**MEMO**

To: Project File, Town of Bargersville, Water treatment Plant Improvements, Phase I, SRF Project # DW1104401

From: Richard Ziemba

Date: September 20, 2011

Re: Green Project Reserve, Business Case

**Summary**

1. The Bargersville Water Treatment Plant (WTP) Improvements Phase I Projects is the construction of a new WTP with several water efficiency, energy efficiency and environmentally innovative categories being met with associated business cases. The project also includes the installation of ductile iron pipe that consists of 95% recycled material for water transmission main. A business case for each of the components in their respective category was submitted by Strand Associates in Appendix J of the preliminary engineering report (PER).
2. The water efficiency components are: air scouring process and backwash water recycling process. The actual construction costs based on actual bid documents is a total of $1,580,000.
3. The energy efficiency components are: premium efficiency motors on the vertical turbine pumps, re-carbonation process, and energy efficient lighting. The actual construction costs based on actual bid documents is a total of $312,000.
4. The environmentally innovative components are: fluidized bed reactors water softening and recyc led material use of ductile iron pipe. The actual construction costs based on actual bid documents is a total of $3,348,000.
5. The total engineering costs for these GPR items is a total of $333,000.
6. **The total SRF loan amount is $11,000,000. The GPR engineering amount is $333,000 and the total GPR component amount is $5,240,000, for a total GPR amount of $5,573,000.**

**Conclusions**

1. The business cases were reviewed and found to be in conformance with meeting the GPR requirements for water efficiency, energy efficiency and environmentally innovative categories.