



# State Revolving Fund Loan Program

an Indiana Finance Authority Environmental Program

100 North Senate Avenue, Room 1275  
Indianapolis, Indiana 46204  
www.srf.in.gov

## MEMORANDUM

TO: Project File, City of Huntington, Rabbit Run CSO Project- Phase I, SRF Project # WW 12 35 21 04

FROM: Jack Fisher

DATE: February 4, 2014

RE: Green Project Reserve (GPR), Business Case

### Summary:

- Huntington is constructing a new 2.25 MG CSO Storage Tank to reduce the volume and frequency of combined sewer overflows in their collection system. Currently, during wet weather events the existing Rabbit Run Storm Pumps operate to lift the combined sewage out to the Little River via CSO 004. The new CSO storage tank is sized to capture a 1-year, 1-hour storm. A new 2.25 MGD dewatering pump will be used to empty the CSO storage tank back to the influent of the WWTP after the storm event. The Rabbit Run storm pumps will only be used if the volume of the CSO Storage Tank is exceeded. The Rabbit Run storm pumps are 300 horsepower (HP), while the new dewatering pumps are 20 HP each. The new CSO storage tank will reduce the use of the existing Rabbit Run storm pumps and associated energy usage.
- The following assumptions were used to calculate energy savings: a two year period was evaluated for a storm larger than the 1-year, 1-hour storm occurring during this period; 76 wet weather events occurred in a typical year (152 events in a two year period); the existing storm pumps currently operate two hours per storm event; the dewatering pumps will operate 24 hours to dewater the CSO storage tank; during the two year period, one 10-year, 1-hour storm event will occur, which will cause the Rabbit Run storm pumps to operate one time during the two year period; and a premium will be charged by the power company for use of the 300 HP pumps.
- The estimated Total Project Cost is \$16,883,606.
- Estimated State Revolving Fund Loan Amount is \$16,883,606.
- Estimated GPR portion cost of loan associated with the Rabbit Run CSO project is **\$15,595,800** and **\$1,287,806** for planning and design costs for a total of **\$16,883,606**.

### Conclusions

- Based on the assumptions mentioned above, there is a 51 percent energy savings associated with the project. If the premium is not applied for the use of the storm water pumps, the energy savings associated with the project is calculated a 19 percent. Depending on the cost of power, energy savings associated with this project ranges from 19 to 51 percent and is therefore considered categorical.

