

Assessing the Financial Impact of Utilizing a Below Market Rate SRF Loan for a Green Project

December 4, 2012

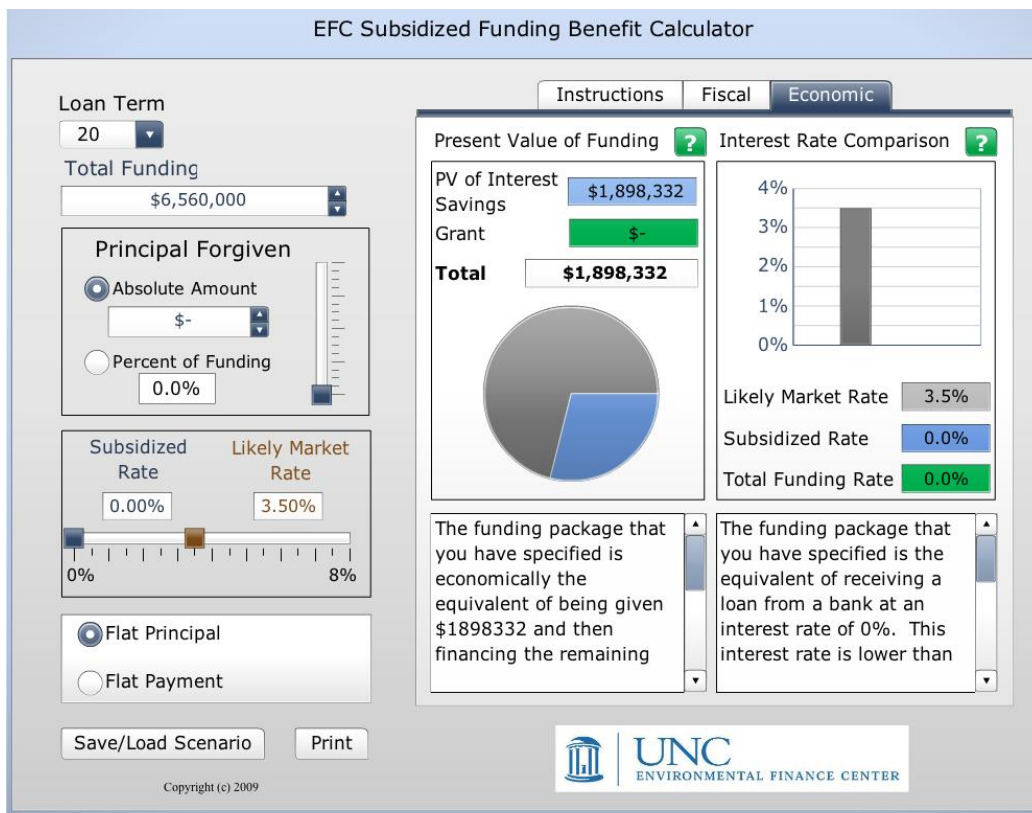
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The Environmental Finance Center at UNC Chapel Hill developed a simple tool ([http://efc.unc.edu/tools/Subsidized Funding Benefit Calculator.swf](http://efc.unc.edu/tools/Subsidized_Funding_Benefit_Calculator.swf)) to quickly and visually demonstrate the financial impact of using a low or no interest loan to fund a project. The on-line tool allows users to enter in basic information about the project cost and prevailing interest rates and calculates the nominal value of annual savings and the present value of that stream of savings.

The tool does not take into consideration closing costs associated with a particular loan program. While subsidized programs occasionally have higher closing costs than commercial market lenders, in general the transaction costs for subsidized programs tend to be similar or even less than the costs associated with commercial debt (e.g. acquiring a rating, developing official statements etc.).

The tool was used to analyze the impacts of using the North Carolina Clean Water State Revolving Fund (CWSRF) to fund an energy efficient aeration and mixing system at the Mason Farm Wastewater Treatment Plant. The results of the analysis are shown in the figures below. Assuming debt structured with level principal payments and not considering closing/administrative costs, we estimate that using a no interest loan instead of a market rate loan would result in a stream of savings over the life of the valued at **\$1,898,332** in today's dollars. In the short term, the loan would save over **\$200,000** per year in debt service payments for the first three years compared to using market rate debt.



EFC Subsidized Funding Benefit Calculator

Loan Term

20

Total Funding

\$6,560,000

Principal Forgiven

Absolute Amount

\$-

Percent of Funding

0.0%

Subsidized Rate

0.00%

Likely Market Rate

3.50%

0%

8%

Flat Principal

Flat Payment

Save/Load Scenario

Print

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Instructions

Fiscal

Economic

Grant Amount

\$-

Amount of Loan

\$6,560,000

Annual Debt Service Schedule

Year	Market Rate	Subsidized Rate	Savings Due to
1	\$(557,600)	\$(328,000)	\$229,600
2	\$(546,120)	\$(328,000)	\$218,120
3	\$(534,640)	\$(328,000)	\$206,640
4	\$(523,160)	\$(328,000)	\$195,160
5	\$(511,680)	\$(328,000)	\$183,680
6	\$(500,200)	\$(328,000)	\$172,200
7	\$(488,720)	\$(328,000)	\$160,720
8	\$(477,240)	\$(328,000)	\$149,240
9	\$(465,760)	\$(328,000)	\$137,760
10	\$(454,280)	\$(328,000)	\$126,280
11	\$(442,800)	\$(328,000)	\$114,800
12	\$(431,320)	\$(328,000)	\$103,320



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Annual Debt Service

Year	Market Rate Debt Payment	Subsidized Rate Debt Payment	Savings Due to Subsidy
13	\$(419,840)	\$(328,000)	\$91,840
14	\$(408,360)	\$(328,000)	\$80,360
15	\$(396,880)	\$(328,000)	\$68,880
16	\$(385,400)	\$(328,000)	\$57,400
17	\$(373,920)	\$(328,000)	\$45,920
18	\$(362,440)	\$(328,000)	\$34,440
19	\$(350,960)	\$(328,000)	\$22,960
20	\$(339,480)	\$(328,000)	\$11,480
21	\$-	\$-	\$-
22	\$-	\$-	\$-
23	\$-	\$-	\$-
24	\$-	\$-	\$-



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