

California Urban Water Conservation Council


Determine the feasibility of converting mixed-use CII meters to landscape meters

A tool provided by CUWCC to help its member water agencies create successful water conservation programs

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May 30, 2013


The BMP 1 – Utility Operations



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- Section 1.3 – Metering with commodity rates...
 - One of BMP 1.3 Requirements:
That water agencies conduct a feasibility study to assess the merits of a program to provide incentives to switch mixed use CII accounts to dedicated landscape meters
 - The feasibility study only has to be completed one time
 - If your agency has already completed the study, another is not required
 - CUWCC created this spreadsheet to help water agencies complete their feasibility study
 - You are required to do the study, but are NOT required to use this spreadsheet

Reporting to CUWCC




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- You are encouraged to upload your feasibility study along with your other BMP reporting, but it is not a requirement that you do so
- The new BMP reporting database has a check box to indicate you have completed the feasibility study
- Uploading your feasibility study will
 - Make it more accessible to others that are interested in this issue and might learn from your experience
 - Make finding it easy if, in the future, your agency is asked to make the study available

To download the spreadsheet 

- CUWCC's website: <http://www.cuwcc.org>
- Then click "Resource Center"
- Then click "BMP tools to download"
- Then click
 - BMP 1.3 Mixed Use to Dedicated Irrigation Meter Feasibility Study Spreadsheet**
(<http://www.cuwcc.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=20390>)


What's the purpose of the feasibility study? 

- It is assumed that CII customers will conserve water on landscape irrigation if they switch to a dedicated landscape meter
- The feasibility study helps you identify scenarios where
 - The benefits to your agency that come from conserving the water (the avoided cost of water)
 - Are greater than the costs (including the incentives) to your agency of the program

How the "merits" of the program are calculated 

- You enter the required information
- Then the spreadsheet calculates the
 - Annual COSTS and BENEFITS to your water agency
 - Over the life of the program
 - Then converts those costs and benefits to today's dollars (the present value)
 - Then sums them, giving you the NPV (Net Present Value) of the program
- If the NPV is > \$0, then the **BENEFITS** are greater than the Costs
 - And the program probably has merit
- If the NPV is < \$0, then the **COSTS** are greater than the Benefits
 - And the program probably does not have merit


The spreadsheet has three (3) worksheets



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- “How to use this spreadsheet”
- “#1. General Inputs”
- “#2. Key Inputs and NPV Graph”


The “How to use this spreadsheet” tab



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- As you scroll down you will see three sections
 - Purpose
 - Background
 - Using this spreadsheet for BMP compliance
- These sections are self-explanatory

The “#1. General Inputs” tab




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- This worksheet is also broken into sections, which you will see as you scroll down
- There are three kinds of cells:
 - | |
|--|
| GOLD cells with RED text: you enter values in cells like these |
|--|
 - | |
|---|
| BLUE cells with GREEN text: these values you will enter on worksheet #2 |
|---|
 - | |
|---|
| WHITE cells with BLACK text: these cells contain formulas |
|---|
- Because some of the calculations done on Worksheet #1 rely on values you enter on Worksheet #2 (the BLUE cells),
 - The NPV calculation will not be accurate until you have finished entering all the data on **both** Worksheet #1 **and then** Worksheet #2

Overview of "#1. General Inputs" 


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- Section I: enter discount rate and life of project
- Section II: enter your water and sewer rates
- Section III & IV: estimate how much water your customer is likely to save by switching to a landscape meter
- Section V: estimate the benefits to your agency from reduced runoff
- Section VI & VII: estimate your agency's incentives in the form of a subsidy of the CII customer's water bill and/or their capital costs
- Section VIII:
 - estimate your cost of running the program and
 - whether the program has merit (is the NPV > \$0)

The "#2. Key Inputs and NPV Calculation" tab 

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- This worksheet is also broken into sections, which you will see as you scroll down
 - The purpose of this worksheet (self-explanatory)
 - How to use this worksheet (self-explanatory)
 - Table 1: Key Inputs & NPV Chart
- Table 1 is where you enter the 7 very important values which help determine the NPV

After you have completed the spreadsheet 

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- **Write the feasibility study**
 - Describe under what conditions, if any, such a program offering the needed incentives is feasible
 - When writing up your feasibility assessment, you might find it helpful to re-read the bottom section of the worksheet "How to use this spreadsheet"

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**End of
Power Point Presentation**
