



California  
Urban Water  
Conservation  
Council

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# **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**

**Matt Lyons  
Long Beach Water Department**

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# 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

- 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

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- 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?



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- 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

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- 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

- **“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

- **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”

# End of Power Point Presentation