| **Worksheet 10: Nomograph Method for Determining Capture Efficiency of Harvest and Use BMPs**  |
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| Part 1: Calculate the EIATA and the effect of upstream HSCs |
| 1a | Landscape area irrigated with harvested water | LA= |  | acres |
| 1b | Area-weighted landscape coefficient (typically 0.7 for active turf, 0.35 for conservation landscape design) | KL= |  |  |
| 1c | Irrigation efficiency (typically 0.90) | IE |  |  |
| 1d | Enter DMA area tributary to BMP (s), *A* (acres) (not including any self-retaining areas) | A= |  | acres |
| 1e | Enter DMA Imperviousness, *imp* (unitless)  | imp= |  |  |
| 1f | Effective Irrigated Area to Tributary Area ratio, EIATA = LA \* KL / (IE \* imp \* A) | EIATA |  | ac/ac |
| 2 | Enter capture efficiency corresponding to upstream HSCs (Worksheet 4) and locate on Figure E-8 or the figure within the worksheet below | Y1= |  | % |
| 3 | Using Figure E-8 or the figure within the worksheet below, determine the cistern volume as a fraction of the DCV corresponding to the capture efficiency of the HSCs | X1= |  |  |
| Part 2: Calculate the DCV |
| 4 | 85th percentile, 24-hour design storm | d = |  | inches |
| 5a | Calculate runoff coefficient, *C= (0.75 x imp) + 0.15* | C= |  |  |
| 5b | Calculate the DCV*= (C x d x A x 43560 sf/ac x (1 ft/12 in))* | DCV= |  | cu-ft |
| Part 3: Calculate capture efficiency |
| 6 | Storage Volume of BMP (cistern, vault, etc.) | V |  | cu ft |
| 7 | Storage Volume as a fraction of DCV, Vfrac = V/CDV  | Vfrac |  |  |
| 8 | Final equivalent volume as a fraction of DCV from combination of HSCs and harvest and use BMPs,X2 = X1 + Vfrac | X2 |  |  |
| 9 | Using Figure E-8 or the figure within the worksheet below, determine the capture efficiency of the harvest and use BMPs and any upstream HSCs | Y2 |  | % |
| Supporting Calculations |
| Describe system: |
| Graphical Operations |
| Provide supporting graphical operations. |