| **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. | | | | | | |