

DWR Method 4 Proposal II

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Proposed Method divides urban
water use into 3 sectors:

Residential

CII

landscape/water loss

Indoor Residential Savings

- Residential Savings used the method two indoor residential performance standard of 55 GPCD.
- Assumed a statewide average indoor residential use of 75 GPCD
- $75 \text{ GPCD} - 55 \text{ GPCD} = 20 \text{ GPCD}$
statewide savings from indoor Residential

CII Savings

- Uses the Method II CII savings goal of a 10% reduction
- 20x2020 Report estimated statewide CII use at 37 GPCD
- Statewide savings of 3.7 or 4 GPCD

Landscape and Water loss Savings

- Since statewide landscape area and landscape water use is unknown, it's hard to estimate savings for landscape
- Savings estimate based on subtracting indoor residential savings and CII from the total statewide savings goal (38 GPCD).
- $38 - 20 \text{ (IR)} - 4 \text{ (CII)} = 14 \text{ GPCD}$ from landscape

Landscape Savings %

- 14 GPCD across the board savings requirement not fair to suppliers with low GPCD
- A percentage reduction is calculated by dividing 14 GPCD by state landscape and water loss GPCD
- Landscape/water loss GPCD equals

$$192-75-37= 80 \text{ GPCD}$$

$$14 \text{ GPCD}/80 \text{ GPCD} = 17.5\%$$

Statewide Savings Estimate

- If state average indoor residential is 75 GPCD
- And every supplier:
 - Reduces indoor residential use to 55 GPCD
 - Reduces CII by 10%
 - Reduces landscape and water loss by 18 %
- The state will meet the 20% reduction goal in GPCD

Retail Water Supplier Target

- Suppliers set water use target using individual numbers and the 3 state standards
- Example: A Supplier with baseline per capita water use of 160, indoor residential of 65 and CII water use of 50 GPCD
 - $65 - 55 = 10$ GPCD
 - $(50)10\% = 5$ GPCD
 - $160 - 65 - 50 = 45$ GPCD, $(45) 18\% = 8$ GPCD
 - $10 + 5 + 8 = 23$ GPCD savings target or a 14% reduction

Estimation of Indoor Residential Water use

- Key to this method is to have a good estimate of statewide indoor residential water use and a way for individual supplier's to accurately estimate their baseline indoor residential water use.
- DWR attempted to estimate indoor residential from PWSS data.

1995-2005 PWSS Indoor Residential based on Minimum Month Use

Supplier	Average Population	Minimum Res	Winter Irr	Indoor Res
SOUTH SACRAMENTO	87929	32	7	25
LAKEWOOD	123357	41	3	38
HOLLISTER	29059	48	10	38
CORONA, EL CERRITO	130991	56	13	43
MONTEREY	103532	56	4	52
VACAVILLE	89669	59	11	48
HEMET ET AL	439909	62	21	41
SANTA CRUZ AND ADJACENT	94764	62	11	51
CONTRA COSTA WD	220000	63	9	54
NAPA	77625	63	20	43
SANTA ROSA	147592	64	9	56
MARINA	18217	66	27	39
REDDING	81636	66		
SANTA CLARITA	69827	68	16	52
FREMONT	305895	68	15	53
PARAMOUNT	54784	68		
PLEASANTON	65294	68	19	49
IRVINE	236235	73	6	67
LONG BEACH	460688	74	14	61
OCEANSIDE	161459	78	34	44
ANTIOCH	88604	78	10	68
ROWLAND WD	56909	79		
LOS ANGELES, CITY OF	3883167	80	15	65
HUNTINGTON BEACH	197000	81	25	55
NOVATO	56571	83	7	76
POMONA/SOME CHINO/CLAREMONT	153416	84		53
SANTA MONICA	85769	84	16	68
ESCONDIDO	126338	84	20	64
HESPERIA	68651	85	51	34
CHULA VISTA, SPRING VALLEY, EL CAJO	121000	85	20	65
STOCKTON	113938	86	13	72
LA MESA ET AL	240285	86	25	60
BREA	36910	87	27	59
WESTMINSTER/MID-WAY CITY	87455	89	30	60
CHINO	55812	91	30	61
COACHELLA, CITY OF	24870	91	28	63
LAGUNA HILLS/LAKE FOREST/MISSION	50565	94	21	73
BUENA PARK, ANAHEIM, LA MIRADA	70606	95		
SANTA MARGARITA WATER DIST.	113073	97	25	71
FULLERTON	128268	98	23	75
CORONA	125079	99	44	54
BAKERSFIELD	96488	101	21	80
PEDLEY/GLEN/AVON/MIRA LOMA	44731	113	63	50
MONROVIA	38841	115	79	37
GARDEN GROVE	167100	116		
RANCHO CUCAMONGA	148430	119		
TEMECULA, MURRIETA	86195	134	36	98
LANCASTER/PALMDALE	113267	143	139	4

Lompoc Ground Truthing

- 4 CA suppliers participated in the Residential End Use Study. We only had readily available data to test Lompoc
- Modified PWSS calculator to only account for Single Family residences and obtained single family and multi family breakdown from Department of Finance.
- PWSS estimated Lompoc indoor residential at 51 GPCD. End Use Study estimated 65 GPCD.