WATER CONSERVATION PROGRAMMING



COLUMBIA'S WATER CONSERVATION GOALS

- > Ensure safe and reliable water supply
- Conserve water to meet future needs
- Increase longevity of our system



DEMAND PROJECTIONS

		2020	2025	2030	2035	2040
Average Daily	Baseline (MDG)	16.47	18.9	21.69	24.9	28.59
Demand	Conservation (MGD)	16.11	17.98	20.54	23.61	27.14
Maximum Daily	Baseline (MDG)	28.20	32.22	36.82	42.09	48.13
Demand	Conservation (MGD)	27.19	29.19	32.98	37.75	43.21

PROGRAMMING

Columbia Water & Light's three pronged approach:

- I. Water conservation education and outreach
- 2. Market transformation
- 3. Water conservation rebates

EDUCATION AND OUTREACH

- Columbia Youth Teaching Efficiency
- > Updated website to reflect water conservation as a primary focus
- > Water efficiency kits for qualifying participants of window A/C exchange
- > Including water conservation in marketing efforts

CONTRACTOR EDUCATION AND TRAINING

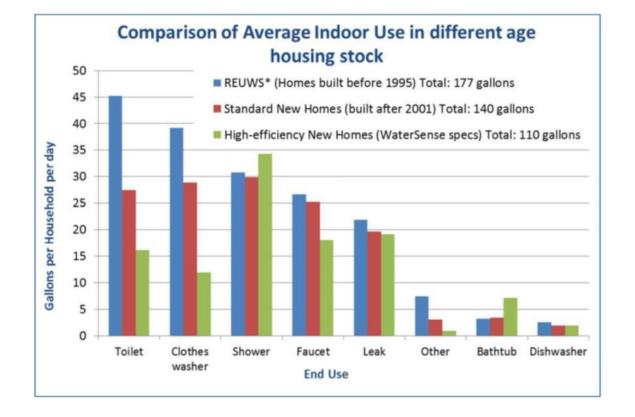
- > Educate and train irrigation and landscape contractors
- > Transform the local market to install water efficient products
- > Coordinate efforts of City departments

ON-SITE ASSESSMENTS

Staff will work with customers to identify water conservation opportunities

- Utility bill analyses
- Water usage education
- Assess water systems and practices
- > Develop conservation plans for customers
- Rebate options

INDOOR WATER CONSERVATION



- > Toilets are largest user of indoor water
- > WaterSense toilets use 38% less water per day
- Customers likely to replace older leaky toilets

STAFF RECOMMENDATION

Indoor water conservation recommendation:

I. Installing replacement WaterSense qualifying toilets

Conservation Method	Suggested Rebate	Maximum Allowable
Residential Toilet	\$75	2 rebates per address
Commercial Toilet	\$100	4 rebates per address – Pre installation inspection required to do more

LOW TO MODERATE INCOME (LMI) PROGRAM

Participants will receive a water efficiency kit that will offer additional opportunities for water savings. Kits may consist of:

- Low flow shower head
- Faucet aerators
- > Garden/lawn water timer
- Foilet leak detection dye

STAFF RECOMMENDATION

LMI water conservation program recommendation:

- I. Installing WaterSense qualifying toilets
- 2. Water Efficiency Kits

Conservation Method	Suggested Rebate	Maximum Allowable
Residential Toilet	\$200	2 rebates per address
Residential Water Kits	\$65/kit	I kit per qualifying address

OUTDOOR WATER CONSERVATION

- Customer education
- Fargeted outreach
- Contractor education and training
- Site evaluations
- > Rebates

IRRIGATION SYSTEM CHALLENGES

Current System Issues:

- > Water lawn regardless of weather
- > Typically open control loop
- Utilize standard sprinkler heads



STAFF RECOMMENDATION

Staff recommends outdoor water conservation program to include the following:

- I. Rain sensors
- 2. Weather-Based irrigation controls
- 3. High efficiency sprinkler nozzles

Conservation Method		Projected Savings for Customer
Rain Sensor	\$50	Up to 21%
Weather-Based	\$150 or \$25	14%-21%
Irrigation Controls	per zone	
Rotary/High	\$5/nozzle	Up to 5,600 gal per
Efficiency Nozzles		year

WATER & LIGHT WATER EFFICIENCY PROGRAM BREAKDOWN

Indoor Water Programming		Outdoor Water Programming (all meter types)			
		stimated Water Savings 2026 MGD)		Suggested Rebate	Estimated Water Savings Percentage For Customer
	`	,	Rain Sensor	\$50	Up to 21%
Residential Toilet Commercial Toilet	• • •	176 019	Weather-Based	¢IEO on ¢2E/zono	149/ 219/
			Irrigation Controls	\$150 or \$25/zone	14/0-21/0
Low to Mode	erate Incom	e Water Programming	High Efficiency Nozzles	s \$5/nozzle	5,600 gallons per year
	Suggested Rebate	Estimated Water Savings 2026 (MGD)	Commercial	and Industrial Wa	ater Assessments
Residential Toilet	\$200	See Residential Toilet Savings		Suggested Ret	Estimated Water Savings 2026 (MGD)
Residential Water Kits	\$65/kit	10%-15%	Facility Water Assessm	ents Managed by St	taff .095

QUESTIONS?

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BUDGET AMENDMENT				
Conservation	Suggested	Estimated I st		
Method	Rebate	year Expense		
Residential Toilet	\$75	000 000		
Commercial Toilet	\$100	\$30,000		
LMI Residential Toilet	\$200	\$20,000		
Water Kits	\$65/kit	\$20,000		
Rain Sensor	\$50			
Weather-Based	\$150 or \$25			
Irrigation Controls	per zone	\$25,000		
High Efficiency Nozzles	\$5/nozzle			