

A7.0 NON-TYPICAL USER Conversions to Peak Day Demand and Standard ERC Units:

NOTE: an ERC means Equivilant Residential Connection		GIVEN			Input	RESULTS			
		Peak gal/day Demand per Unit	Peak gpm Demand per Unit	Number of ERC's per Unit	Project UNIT Inventory	TOTAL Project Peak Day Demand (PDD)	TOTAL Project Ave. Day Demand (ADD)	Estimated Project Peak Hour Demand	TOTAL Project ERC's
Category	INDOOR (NON-TYPICAL) USES:								
	ERC Typical Base Supply Definition Unit (from line 6.5 of the Water Mechanics Worksheet A4.1):	1,236	0.86	1.000	1.00	0.86	0.43	1.72	1.00
1	Airports								
	a. per passenger	3	0.002	0.002		0.00	0.00	0.00	0.00
	b. per employee	15	0.010	0.012	33.00	0.34	0.17	0.69	0.40
2	Apartments (does not include any outside watering)								
	a. 3 Bedroom	800	0.556	0.647		0.00	0.00	0.00	0.00
	b. 2 Bedroom	600	0.417	0.485		0.00	0.00	0.00	0.00
	c. 1 Bedroom	400	0.278	0.324		0.00	0.00	0.00	0.00
3	Bars, Taverns, Cocktail Lounges, per seat								
	a. Each Employee	10	0.007	0.008	12.00	0.08	0.04	0.17	0.10
	b. Each Seat (no restaurant)	20	0.014	0.016	100.00	1.39	0.69	2.78	1.62
4	Boarding Houses								
	a. for each resident boarder and employee	50	0.035	0.040		0.00	0.00	0.00	0.00
	b. for each nonresident boarders	10	0.007	0.008		0.00	0.00	0.00	0.00
5	Bowling Alleys, per alley								
	a. with snack bar	100	0.069	0.081		0.00	0.00	0.00	0.00
	b. with no snack bar	85	0.059	0.069		0.00	0.00	0.00	0.00
6	Camps / Resorts / Recreational								
	a. Resort per person	100	0.069	0.081		0.00	0.00	0.00	0.00
	b. Summer (modern) per person	70	0.049	0.057		0.00	0.00	0.00	0.00
	c. Semi-Developed per person (with pit privies)	7	0.005	0.006		0.00	0.00	0.00	0.00
	d. Semi-Developed per person (with flush toilets)	30	0.021	0.024		0.00	0.00	0.00	0.00
	e. Day (with central bathhouse)	45	0.031	0.036		0.00	0.00	0.00	0.00
	f. Labor Camp, per person	50	0.035	0.040		0.00	0.00	0.00	0.00
	g. Per RV or Travel Trailer Site	100	0.069	0.081		0.00	0.00	0.00	0.00
7	Churches, per person	5	0.003	0.004		0.00	0.00	0.00	0.00

8	Clinics								
	a. Per Staff	20	0.014	0.016		0.00	0.00	0.00	0.00
	b. Per Patient	7	0.005	0.006		0.00	0.00	0.00	0.00
9	Country Clubs								
	a. per resident member	100	0.069	0.081		0.00	0.00	0.00	0.00
	b. per nonresident member present	25	0.017	0.020		0.00	0.00	0.00	0.00
	c. per employee	15	0.010	0.012		0.00	0.00	0.00	0.00
10	Dentist's Office								
	a. per chair	200	0.139	0.162		0.00	0.00	0.00	0.00
	b. per staff member	35	0.024	0.028		0.00	0.00	0.00	0.00
11	Doctor's Office								
	a. per patient	10	0.007	0.008		0.00	0.00	0.00	0.00
	b. per staff member	35	0.024	0.028		0.00	0.00	0.00	0.00
12	Factories								
	a. Each Employee (no showers)	35	0.024	0.028		0.00	0.00	0.00	0.00
	b. Each Employee (with shower)	50	0.035	0.040		0.00	0.00	0.00	0.00
	c. Each Employee (with kitchen)	60	0.042	0.049		0.00	0.00	0.00	0.00
13	Fairgrounds, per person	1	0.001	0.001		0.00	0.00	0.00	0.00
14	Fire Stations, per person								
	a. with full-time employees and food prep.	70	0.049	0.057		0.00	0.00	0.00	0.00
	b. with no full-time employees and no food prep.	5	0.003	0.004		0.00	0.00	0.00	0.00
15	Gyms								
	a. per participant	25	0.017	0.020		0.00	0.00	0.00	0.00
	b. per spectator	4	0.003	0.003		0.00	0.00	0.00	0.00
16	Hairdresser								
	a. per chair	50	0.035	0.040		0.00	0.00	0.00	0.00
	b. per operator	35	0.024	0.028		0.00	0.00	0.00	0.00
17	Hospitals								
	a. Per Bed Space	250	0.174	0.202		0.00	0.00	0.00	0.00
	b. Per Resident Staff	150	0.104	0.121		0.00	0.00	0.00	0.00
18	Hotels, per bedroom (no restaurant)	150	0.104	0.121		0.00	0.00	0.00	0.00
19	Institutions, per resident	150	0.104	0.121		0.00	0.00	0.00	0.00
20	Industrial Buildings, per 8 hour shift, per employee (exclusive of industrial waste)								
	a. with showers	35	0.024	0.028		0.00	0.00	0.00	0.00
	b. with no showers	15	0.010	0.012		0.00	0.00	0.00	0.00
21	Launderette, per washer (self service)	580	0.403	0.469		0.00	0.00	0.00	0.00
22	Mobile Homes (3 person)	600	0.417	0.485		0.00	0.00	0.00	0.00
23	Motels, per unit (no restaurant)	150	0.104	0.121		0.00	0.00	0.00	0.00

24	Movie Theaters								
	a. auditorium, per seat	5	0.003	0.004		0.00	0.00	0.00	0.00
	b. drive-in, per car space	10	0.007	0.008		0.00	0.00	0.00	0.00
25	Nursing Homes, per bed space								
	a. Per bed space, no laundry	200	0.139	0.162		0.00	0.00	0.00	0.00
	b. Per bed space with laundry	280	0.194	0.227		0.00	0.00	0.00	0.00
26	Office Buildings & Business Establishments, per shift, per employee (sanitary wastes only)								
	a. with cafeteria	25	0.017	0.020		0.00	0.00	0.00	0.00
	b. with no cafeteria	15	0.010	0.012		0.00	0.00	0.00	0.00
27	Picnic Parks, per person (toilet wastes only)	5	0.003	0.004		0.00	0.00	0.00	0.00
28	Recreational Home Development, per connection	400	0.278	0.324		0.00	0.00	0.00	0.00
28	Restaurants (includes toilet and kitchen wastes)								
	a. ordinary restaurants (not 24 hour service), per seat	35	0.024	0.028		0.00	0.00	0.00	0.00
	b. 24 hour service, per seat	50	0.035	0.040		0.00	0.00	0.00	0.00
	c. single service customer utensils only, per customer	2	0.001	0.002		0.00	0.00	0.00	0.00
	d. or, per customer served (includes toilet and kitchen wastes)	10	0.007	0.008		0.00	0.00	0.00	0.00
29	Roadway Rest Stop, per connection	400	0.278	0.324		0.00	0.00	0.00	0.00
30	Rooming House, per person	40	0.028	0.032		0.00	0.00	0.00	0.00
31	Schools, per person								
	a. Boarding	75	0.052	0.061		0.00	0.00	0.00	0.00
	b. day, without cafeteria, gym or showers	15	0.010	0.012		0.00	0.00	0.00	0.00
	c. day, with cafeteria, but no gym or showers	20	0.014	0.016		0.00	0.00	0.00	0.00
	d. day, with cafeteria, gym and showers	25	0.017	0.020		0.00	0.00	0.00	0.00
32	Service Stations, per pump								
	a. Per Gas Pump (only gas, no service)	250	0.174	0.202		0.00	0.00	0.00	0.00
	b. Each Car Served	10	0.007	0.008		0.00	0.00	0.00	0.00
	c. Each Car Washed	90	0.063	0.073		0.00	0.00	0.00	0.00
	d. First Bay	1,000	0.694	0.809		0.00	0.00	0.00	0.00
	e. Each Additional Bay	500	0.347	0.404		0.00	0.00	0.00	0.00
33	Shopping Centers, per 1000 sq. ft. space	250	0.174	0.202		0.00	0.00	0.00	0.00
34	Skating Rink, Dance Halls, etc., per person								
	a. no kitchen wastes	10	0.007	0.008		0.00	0.00	0.00	0.00
	b. additional for kitchen wastes	3	0.002	0.002		0.00	0.00	0.00	0.00

35	Stores								
	a. per public toilet room	500	0.347	0.404		0.00	0.00	0.00	0.00
	b. per employee	11	0.008	0.009		0.00	0.00	0.00	0.00
36	Ski Areas, per person (no kitchen wastes)	10	0.007	0.008		0.00	0.00	0.00	0.00
37	Stadiums, per seat (no restaurant)	3	0.002	0.002		0.00	0.00	0.00	0.00
38	Swimming Pools and Bathhouses, per person, or	10	0.007	0.008		0.00	0.00	0.00	0.00
	20 x { Water Area (sq.ft.) / 30 } + Deck Area (sq.ft.) - whichever is higher								
39	Visitor Centers, per visitor	5	0.003	0.004		0.00	0.00	0.00	0.00
Category	OUTDOOR USES per Acre (Non-Typical):								
40	Undeveloped, undisturbed, and unirrigated Acres	0	0.000	0.000		0.00	0.00	0.00	0.00
41	Developed Irrigated Acres	4,032	2.800	3.262	22.00	61.60	30.80	123.20	71.76
42	Developed Non-Irrigated Acres (Includes Buildings & Parking)	0	0.000	0.000		0.00	0.00	0.00	0.00
SUMMARY:	TOTALS:					64.27	32.14	128.55	74.87
	Estimated Peak Instantaneous Demand (rough estimate only):					643			

Peaking Factors:	2.00	= Assumed Peaking Factor for Use in Estimating ADD (typically 1.5 to 2.2)
	4.00	= Assumed Average Day to Peak Hour Demand Factor (typically 3 to 5)
	20	= Assumed Average Day to Peak Instantaneous Demand Factor (typically 15 to 30) This factor reduces when quantities of ERC's Increase.