

ACRONYMS AND ABBREVIATIONS

7Q10	7-day low flow with a 10-year recurrence interval
A ² O	Anaerobic/anoxic/oxic process
AAL	average annual load
ACH	air changes per hour
alum	aluminum sulfate
AKART	All Known Available and Reasonable methods of prevention, control, and Treatment
American	American Engineering Corporation
BA	biological assessment
BAT	best available technology
BNR	biological nutrient removal
BOD	biochemical oxygen demand
BOD ₅	5-day biochemical oxygen demand
Bridge	Carnation Farm Road Bridge
C	Celsius
CAC	Citizen's Advisory Committee
CaCO ₃	calcium carbonate
Carollo	Carollo Engineers
CIP	capital improvement program
CFR	Code of Federal Regulations
cfs	cubic feet per second
CFU	colony forming unit
City Council	Carnation City Council
City	City of Carnation
Cl ₂	chlorine
cm/day	centimeters per day
CMU	concrete masonry unit
COD	chemical oxygen demand
Comprehensive Plan	King County general land use and development comprehensive plan
Cosmopolitan	Cosmopolitan Engineering
County	King County
County Council	Metropolitan King County Council
CWA	Clean Water Act
CWWTF	Carnation Wastewater Treatment Facility
CY	cubic yard
D	dependent on likelihood of exposure to humans and habitats

DBO	design/build/operate
DI	ductile iron
DO	dissolved oxygen
DOH	Washington Department of Health
DWS	Drinking Water Standards
EA	environmental assessment
EBMUD	East Bay Municipal Utility District
Ecology	Washington Department of Ecology
EDC	endocrine disrupting compound
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
Executive	King County Executive
FEMA	Federal Management Agency
FIRM	Flood Insurance Rate Map
FIS	Flood Insurance Study
FONSI	Findings of No Significant Impact
fps	feet per second
ft	feet
ft ³ /day	cubic feet per day
FTE	full-time equivalent
gal	gallons
gfd	gallons of permeate produced per square foot of membrane per day
GIS	Geographic Information System
GLO	Government Land Office
GMA	Growth Management Act
gpcd	gallons per capita per day
gpd	gallons per day
gpm	gallons per minute
GW	groundwater
HPA	Hydraulic Project Approval
HDPE	high-density polyethylene
HDR	HDR Engineering
hp	horsepower
HRT	hydraulic retention time
HVAC	heating, ventilation, and air conditioning
Hz	hertz
I/I	inflow and infiltration
JARPA	Joint Aquatic Resources Permit Application
kg/ha/d	kilograms per hectare per day

kVA	kilovolt-amperes
kW	kilowatt
lb/day	pounds per day
LEED	Leadership in Energy & Environmental Design
LF	linear feet
LS	lump sum
MBR	membrane bioreactor
MCC	motor control center
MDF	maximum daily flow
MDL	method detection limit
MG	million gallons
mg/L	milligrams per liter
mgd	million gallons per day
MJ/sq CM	millijoules per square centimeter
MLSS	mixed liquor suspended solids
mL	milliliter
mm	millimeter
MMF	maximum monthly flow
MML	maximum monthly load
mph	miles per hour
MPN	most probable number
µg/L	microgram per liter
N	nitrogen
NA	not applicable
NAVD	North American Vertical Datum
NEPA	National Environmental Policy Act
NH ₃ -N	ammonia-nitrogen
NO ₃ -N	nitrate-nitrogen
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NR	not regulated
NRHP	National Register of Historic Places
ntu	nephelometric turbidity unit
NWRI	National Water Research Institute
O&M	operations and maintenance
Orange Book	Criteria for Sewage Works Design Manual
P	phosphorus
PAA	potential annexation area
Park	Tolt MacDonald Park
PHF	peak hourly flow
PSE	Puget Sound Energy

Public Health	Public Health – Seattle & King County
Qal	recent alluvium geological unit
R	reserved by Ecology (depends on fate of water)
RAS	return activated sludge
R.W. Beck	R.W. Beck and Associates
RCW	Revised Code of Washington
RDL	reporting detection limit
RM	river mile
Roth Hill	Roth Hill Engineering Partners, LCC
SBR	sequencing batch reactor
SCADA	supervisory control and data acquisition
scfm	standard cubic feet per minute
SEPA	State Environmental Policy Act
sf	square feet
SFHA	special floor hazard area
SIP	State Implementation Plan
SKCDPH	Seattle – King County Department of Public Health
SOTE	standard oxygen transfer efficiency
SRP	soluble reactive phosphorus
SWA	Stillwater Wildlife Area
SWQ	Surface Water Quality Standards
TDR	Tolt Delta Reach
TKN	total Kjeldahl nitrogen
TM	technical memorandum
TMDL	total maximum daily load
TOC	total organic carbon
trail	Snoqualmie Valley Trail
TSS	total suspended solids
UCT	University of Cape Town process
UGA	urban growth area
USACE	U.S. Army Corps of Engineers
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UV	ultraviolet
VIP	Virginia Initiative Plant process
VOC	volatile organic compound
VFD	variable-frequency drive
WAC	Washington Administrative Code
WAS	waste activated sludge
WDFW	Washington Department of Fish and Wildlife

WDOT
WRIA
WQGW
WTD

Washington Department of Transportation
Water Resource Inventory Area
Water Quality for Groundwater Standards
Wastewater Treatment Division