

A	Channel cross-section area	L^2
a, c, k	Common coefficient for linear or power functions	<i>variable</i>
b, d, m	Common exponent for linear or power functions	none
B	Channel top width	L
c	Mass concentration	ML^{-3}
c, \bar{c}	Volume concentration	
c_b, c_a	Near-bed volumetric sediment concentration	
C_f	Friction coefficient	
C_z	Chezy friction coefficient $\sqrt{g}(U/u_*)$	
D	grain size	L
D_s, D_{gr}	Mean grain size of the sand and gravel fractions in a two-fraction approach	L
D_i	Grain size of fraction i	L
D_{xx}	Grain size for which xx percent of the bed is finer (e.g. 50, 90)	L
D_{mol}	Molecular diffusion coefficient	L^2T^{-1}
D_d	Turbulent diffusion coefficient	L^2T^{-1}
D_r	Volumetric rate of suspended sediment deposition, per unit area ($v_s c_b$)	LT^{-1}
E_r	Volumetric suspended sediment entrainment rate, per unit area	LT^{-1}
E_s	Dimensionless volumetric suspended sediment entrainment rate (E_r / v_s)	
F_i	Proportion of size fraction i on the bed surface	none
f_i	Proportion of size fraction i in the bed subsurface	none
f	Darcy-Weisbach friction coefficient $8(u_* / U)^2$	
g	Acceleration of gravity	LT^{-2}
h	Flow depth (sometimes y , alas)	L
\bar{h}	Mean flow depth (A/B)	L
k_s	Nikuradse roughness length	L
n	Manning's roughness	$TL^{-1/3}$
n_D	Manning's roughness due to bed material only (Manning-Strickler)	$TL^{-1/3}$
p	Pressure	$ML^{-1}T^{-2}$
p_i	Proportion of size fraction i in transport	none
Q	Water discharge	L^3T^{-1}
Q_c	Critical water discharge for incipient sediment transport	L^3T^{-1}
Q_r	Water discharge at reference transport conditions	L^3T^{-1}
Q_s	Sediment transport rate	<i>various</i>
q	Water discharge per unit width	L^2T^{-1}
q_s, q_{si}	Sediment transport rate per unit width. Subscript i refers to an individual size fraction i	L^2T^{-1}
R, r_h	Hydraulic radius	L
R	Submerged specific weight ($s = \rho_s / \rho$) {Parker, Garcia only}	
s	Submerged specific weight (ρ_s / ρ)	
S	Channel slope	none
S_f	Friction slope (slope of the energy grade line)	none
t	Time	T
U	Mean velocity	LT^{-1}
u, v, w	Velocity in the 3 coordinate directions	LT^{-1}
u', v', w'	Fluctuating velocity in the 3 coordinate directions (e.g. $u = \bar{u} + u'$)	LT^{-1}
$\bar{u}, \bar{v}, \bar{w}$	Mean velocity in the 3 coordinate directions, averaged over turbulence	LT^{-1}
u^*	Shear velocity ($\sqrt{\tau_o / \rho}$)	LT^{-1}
v_s, w	Sediment fall velocity	LT^{-1}

x	Distance in streamwise direction	L
x, y, z	3 coordinate directions in Cartesian system	L
z_b, η	Streambed elevation	L
z_o	Elevation (distance from wall) where velocity u is zero	L
γ	Specific weight (ρg)	
δ	Thickness of viscous sublayer	L
ε	Eddy viscosity	L^2T^{-1}
κ	Von Karman's constant (0.41)	
λ	Bed-form spacing ('wavelength')	L
λ_p	Bed porosity ($\nabla_{\text{void}} / \nabla_{\text{total}}$)	
μ	Dynamic viscosity	$ML^{-1}T^{-1}$
ν	Kinematic viscosity (μ/ρ)	L^2T^{-1}
ρ	Water density	ML^{-3}
ρ_s	Sediment density	ML^{-3}
σ	Normal stress	$ML^{-1}T^{-2}$
σ_g	Geometric standard deviation of grain-size distribution	
σ_ψ	Arithmetic standard deviation of grain-size distribution on the ψ scale	
τ	Shear stress	$ML^{-1}T^{-2}$
τ', τ_s	Grain stress	$ML^{-1}T^{-2}$
τ_o	Boundary shear stress	$ML^{-1}T^{-2}$
τ_c, τ_{ci}	Critical shear stress for incipient grain motion	$ML^{-1}T^{-2}$
τ_l	Local shear stress	$ML^{-1}T^{-2}$
τ_r, τ_{ri}	Reference shear stress, a surrogate for τ_c	$ML^{-1}T^{-2}$
ϕ	Grain size scale. For D in mm: $\phi = -\log_2(D)$ and $D = 2^{-\phi}$	
ψ	Grain size scale. For D in mm: $\psi = -\log_2(D)$ and $D = 2^{-\psi}$	
ω	Straining function in Parker (1990) transport function	
∇	Volume	L^3

Other Subscripts

s, n : downstream and cross-stream directions

q^*	$\frac{q_s}{\sqrt{(s-1)gD^3}}$	Einstein Number
s	ρ_s/ρ	Specific density
S^*, R_{cp}	$S^* = \frac{\sqrt{(s-1)gD^3}}{\mu/\rho}$	Dimensionless viscosity
τ^*	$\frac{\tau}{(s-1)\rho gD}$	Shields Number
w^*	$\frac{v_s}{\sqrt{(s-1)gD}}$	Dimensionless fall velocity
W^*	$\frac{(s-1)gq_s}{(\tau/\rho)^{3/2}}$	Yalin Transport Parameter
Z_r, R_o	$\frac{v_s}{Ku^*}$	Rouse Number
R	How many can you define?	Reynolds Numbers
R*	$\frac{u_*D}{\nu}$	Grain Reynolds Number
F	$\frac{U}{\sqrt{gh}}$	Froude Number

Subscripts on τ^* , q^* , and W^* :

- c*: critical conditions for incipient sediment motion
- i*: applies to individual grain size fraction
- r*: conditions reference sediment transport ($W^* = 0.002$)
- g, s*: applies to gravel or sand fraction in two-fraction approach
- 50*: median grain size

Alpha	Beta	Gamma	Delta	Epsilon	Zeta	Eta	Theta	Iota	Kappa	Lambda	Mu
a	b	g	d	e	z	h	q	i	k	l	m
α	β	γ	δ	ϵ	ζ	η	θ	ι	κ	λ	μ
		Unit weight	Thickness vsL, BL	Eddy viscosity		Bed elevation			Von Karman		Dyn.. Viscosity
A	B	G	D	E	Z	H	Q	I	K	L	M
A	B	Γ	Δ	E	Z	H	Θ	I	K	Λ	M
Nu	Xi	Omicron	Pi	Rho	Sigma	Tau	Upsilon	Phi	Chi	Psi	Omega
n	x	o	p	r	s	t	u	f	c	y	w
ν	ξ	\omicron	π	ρ	σ	τ	υ	ϕ	χ	ψ	ω
Kin. viscosity				Density	Std deviation	Shear stress		Grain size		Stream function	
N	X	O	P	R	S	T	U	F	C	Y	W
N	Ξ	Ο	Π	Ρ	Σ	Τ	Υ	Φ	Χ	Ψ	Ω
KEY:		Common		Flow &	transport		Special	Rare	Reserved		English

Α α Β β Γ γ Δ δ Ε ε Ζ ζ
Alpha Beta Gamma Delta Epsilon Zeta

Η η Θ θ Ι ι Κ κ Λ λ Μ μ
Eta Theta Iota Kappa Lambda Mu

Ν ν Ξ ξ Ο ο Π π Ρ ρ Σ σ ς
Nu Xi Omicron Pi Rho Sigma

Τ τ Υ υ Φ φ Χ χ Ψ ψ Ω ω
Tau Upsilon Phi Chi Psi Omega

PHONETIC ALPHABET	
A ALPHA	N NOVEMBER
B BRAVO	O OSCAR
C CHARLIE	P PAPA
D DELTA	Q QUEBEC
E ECHO	R ROMEO
F FOXTROT	S SIERRA
G GOLF	T TANGO
H HOTEL	U UNIFORM
I INDIA	V VICTOR
J JULIET	W WHISKEY
K KILO	X X-RAY
L LIMA	Y YANKEE
M MIKE	Z ZULU