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# ALCOSAN'S CLEAN WATER PLAN



**3 RIVERS  
PROUD**

September, 2019

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ALCOSAN, Upper Allegheny River Planning Basin Team, *Basin Facilities Plan*, 2012

ALCOSAN, Upper Monongahela River Planning Basin Team, *Basin Facilities Plan*, 2012

## **Planning Basin Abbreviations**

CC	Chartiers Creek
LOGR	Lower Ohio - Girty's Run
MR	Main Rivers
SMR	Saw Mill Run
TC	Turtle Creek
UA	Upper Allegheny - Pine Creek
UM	Upper Monongahela

## **Abbreviations and Acronyms**

3RWW	3 Rivers Wet Weather, Inc.
3R-PM	3 Rivers Wet Weather Program Management Team
AACE	American Association of Cost Engineering
ACC	Acute Criterion Concentration
ACHD	Allegheny County Health Department
ac	Acre
ACO	Administrative Consent Order
ACOE	U.S. Army Corps of Engineers
ACS	American Community Survey
ACT	Alternative Costing Tool
ADF	Average Daily Flow
AFD	Adjustable Frequency Drives
AGIS	Allegheny County Geographic Information System Database
ALOM	Allegheny League of Municipalities
ALCOSAN	Allegheny County Sanitary Authority
AMC	Antecedent Moisture Conditions
AMD	Acid Mine Drainage
AMIP	Adaptive Management Implementation Plan
ATNK	Above Ground Tank
BARAT	Basin Alternatives Ranking and Assessment Tool
BBS	Basin Based Strategy
BC	Basin Coordinator
BG	Billions of Gallons
BLS	Bureau of Labor Statistics
BMP	Best Management Practice
BNR	Biologic Nutrient Removal
BOD	Biochemical Oxygen Demand
BOD <sub>5</sub>	5-day Biochemical Oxygen Demand
BP	Basin Planner
BPC	Basin Planning Committee
BQAR	Basin Quarterly Activity Reports
BWWF	Base Wastewater Flow



**ALCOSAN Clean Water Plan**  
**Abbreviations and Acronyms**

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C	Conveyance
CCAC	Community College of Allegheny County
CCC	Chronic Criterion Concentration
CD	Consent Decree
CEPT	Chemically Enhanced Primary Treatment
Cf	Cubic Foot
CFR	Code of Federal Regulations
cfu	colony forming unit
CICR	Current Information and Conditions Report
CIP	Capital Improvement Program
CIPP	Cured-in-Place Pipe
CMAC	Customer Municipality Advisory Committee
CMC	Criterion Maximum Concentration
COA	Consent Order and Agreement
COD	Chemical Oxygen Demand
COG	Council of Government
COP	City of Pittsburgh
CPH	Cost per Household
CPRCS	Critical Portions of the Regional Collection System
CPI	Consumer Price Index
CRGIS	Cultural Resources Geographic Information Systems
CS	Control Site
CSL	Clean Streams Law
CSO	Combined Sewer Overflow
CSS	Combined Sewer System
CTS	Conveyance and Treatment System
CWA	Clean Water Act
D <sub>t</sub>	Detention Time
DC Water	District of Columbia Water and Sewage Authority
DCIA	Directly Connected Impervious Area
DCS	Distributed Control System
DEP	Department of Environmental Protection redundant with PaDEP
DO	Dissolved Oxygen
DSI	Direct Stream Inflow
DTI	Deep Tunnel Interceptor
DWI	Drinking Water Intake
ECR	Existing Conditions Report
EDI	Equal-Discharge Increment
EICR	Existing Information and Conditions Report
EMC	Event Mean Concentration
ENR	Enhanced Nutrient Removal
ENRCCI	Engineering News Record Construction Cost Index
EPA	Environmental Protection Agency
EPM	Engineering Program Management
EQB	Environmental Quality Board
ERU	Equivalent Residential Unit
EV	Exceptional Value
EWI	Equal-Width Increment
FCA	Financial Capability Assessment

**ALCOSAN Clean Water Plan**  
**Abbreviations and Acronyms**

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FCI	Financial Capability Indicator
FEMA	Federal Emergency Management Agency
FMIT	Flow Monitoring Implementation Team
FMP	Final Measures Wet Weather Plan
FMSP	Field Monitoring and Sampling Plan
FMWG	Flow Monitoring Working Group
FRPWA	Feasibility Report and Present Worth Analysis
FST	Final Settling Tank
FSWG	Feasibility Study Working Group
ft	Foot/Feet
Gal	Gallons
GHG	Greenhouse Gas
GI	Green Infrastructure
GIF	Green Improvement Fund
GIN	Green Infrastructure Network
GIS	Geographic Information System
gpcd	Gallons per Capita per Day
GPD	Gallons per Day
gpd/sf	Gallons per Day per Square Foot
GPIMD	Gallons per Inch-Mile per Day
GPM	Gallons per Minute
GPS	Global Positioning System
GRJSA	Girty's Run Joint Sewer Authority
GROW	Green Revitalization of Our Waterways
GSI	Green Stormwater Infrastructure
GWI	Groundwater Infiltration
H&H	Hydrologic and Hydraulic
HCPID	Hydraulic Condition Purpose ID
HDPE	High Density Polyethylene
HGL	Hydraulic Grade Line
HHMP	Hydrologic and Hydraulic Modeling Plan
HHMVCR	Hydrologic and Hydraulic Modeling Validation and Characterization Report
HP	Higher Performing Assumption (for simulation)
HQ	High Quality
HRC	High Rate Clarification
HRD	High Rate Disinfection
HRT	Hydraulic Retention Time
HUD	Housing and Urban Development (Federal)
I/I	Inflow and Infiltration
in	Inch
INL	In-Line-Storage
IPCMP	Interim and Post-Construction Monitoring Plan
IPP	Industrial Pretreatment Program
IRO	Interceptor Relief Overflow
IWM	Integrated Watershed Management
IWWP	Interim Measures Wet Weather Plan
KOC	Knee-of-the-Curve

**ALCOSAN Clean Water Plan**  
**Abbreviations and Acronyms**

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L&D	Lock and Dam
LEED	Leadership in Energy and Environmental Design
LF	Linear Foot/Feet
LID	Low Impact Development
LNA	Lower Northern Allegheny
LO	Lower Ohio
LOC	Level of Control
LOI	Letters of Interest
LON	Lower Ohio North
LOS	Lower Ohio South
LRJOC	Lowries Run Joint Operating Committee
LTCP	Long-Term Control Plan
LWE	Left Water's Edge
MAA	Municipal Authorities Act
MACT	Maximum Achievable Control Threshold
MCES	Twin Cities Metropolitan Sewage District
MFS	Municipal Feasibility Study
MDS	Municipal Data Support
MG	Million Gallons
MGD	Million Gallons per Day
MHI	Median Household Income
MLSS	Mixed Liquor Suspended Solids
MMSD	Metropolitan Sewer District
MSDGC	Metropolitan Sewer District of Greater Cincinnati
MSRS	Municipal Source Reduction Study(ies)
MTSA	McCandless Township Sanitary Authority
MWRA	Massachusetts Water Resources Authority
NA	Not Applicable
NEORS	Northeast Ohio Regional Sewer District
NH <sub>3</sub> N	Ammonia Nitrogen
NMC	Nine Minimum Controls
NPDES	National Pollutant Discharge Elimination System
NPS	Non-Point Source
NURP	Nationwide Urban Runoff Program
NSQD	National Stormwater Quality Dataset
OLS	Off-Line Storage
O&M	Operations and Maintenance
ORSANCO	Ohio River Valley Water Sanitation Commission
OTSA	Ohio Township Sanitary Authority
PaDEP	Pennsylvania Department of Environmental Protection
PAT	Port Authority Transit
PCB	Polychlorinated Biphenyl
PCMR	Post-Construction Monitoring Plan
PDF	Portable Document File
PE	Primary Effluent
PEDF	Pennsylvania Environmental Defense Fund
PennDOT	Pennsylvania Department of Transportation

## ***ALCOSAN Clean Water Plan Abbreviations and Acronyms***

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PennVEST	Pennsylvania Infrastructure Investment Authority
PFE	Preliminary Flow Estimate
PHF	Peak Hourly Flow
PHMC	Pennsylvania Historical and Museum Commission
PI	Primary Influent
PIA	Pittsburgh International Airport
PNDI	Pennsylvania Natural Diversity Inventory
PM	Program Manager
PMP	Project Monitoring Plan
POC	Point of Connection
POTW	Publicly Owned Treatment Works
PPP	Public Participation Plan
PS	Pump Station
PVC	Polyvinyl Chloride
PW	Present Worth
PWD	Philadelphia Water Department
PWEA	Pennsylvania Water Environment Association
PWSA	Pittsburgh Water and Sewer Authority
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QC	Quality Control
RAS	Return Activated Sludge
RBM	Regional Balance Model
RBS	Regional Based Strategy
RCF	Relative Contribution Factor
RCS	Regional Collection System
RCS-FMP	Regional Collection System Flow Monitoring Plan
RDII	Rainfall Dependent Infiltration and Inflow
RFI	Request for Information
RFMP	Regional Flow Monitoring Plan
RI	Residential Indicator
RIDC	Regional Industrial Development Corporation of Southwestern Pennsylvania
RLTWWCCP	Regional Long-Term Wet Weather Control Concept Plan
ROW	Right of Way
R&R	Renew & Replace
RSCS	Regional Source Control Study
RSG	Regional Stakeholder Group
RTB	Retention Treatment Basin
RTK	Runoff/Time to Peak/Ratio of Recession Time to Time to Peak (modeling parameters)
RUS	Rural Utility Service
RWE	Right Water's Edge
RWQMP	Receiving Waster Quality Monitoring Program
SAS	Statistical Analysis Software
SAT	Satellite Advanced Treatment
SBR	Sequencing Batch Reactor
scfm	Standard Cubic Feet Per Minute
SCI	Shallow Cut Interceptor

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**ALCOSAN Clean Water Plan**  
**Abbreviations and Acronyms**

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SCS	Soil Conservation Service
SCS	Source Control Study
SCSR	Screening of Controls and Sites Report
SD	Screening and Disinfection
SEP	Supplemental Environmental Projects
SF	Square Foot
S&F	Solids and Floatables
SFPUC	San Francisco Public Utility Commission
SHAPE	Sewer Hydrograph Analysis Package
SIAC	System Inventory and Characterization
SOAK	Sewer Overflow Advisory Key
SOP	Standard Operating Procedure
SOR	Surface Overflow Rate
SPB	Storage and Pump-Back
SPC	Southwest Pennsylvania Commission
sq. mi.	Square Mile
SRIC	Sewer Regionalization Implementation Conference
SRT	Solids Retention Time
SS	Solids Separation
SSES	Sanitary Sewer Evaluation Survey
SSI	Sewage Sludge Incineration
SSO	Sanitary Sewer Overflow
SSS	Separate Sewer System
SST	Satellite Sewage Treatment
STP	Sewage Treatment Plant
SUO	Sewer Use Ordinance
SUSTAIN	System for Urban Stormwater Treatment and Analysis Integration
SV	Single Vertical
SVI	Sludge Volume Index
SWD	Side Water Depth
SWMM 5	Stormwater Management Model, Version 5
TBD	To Be Determined
TBM	Tunnel Boring Machine
TDH	Total Dynamic Head
TKN	Total Kjeldahl Nitrogen
TMDL	Total Maximum Daily Load
TP	Total Phosphorous
TPW	Total Present Worth
TRC	Total Residual Chlorine
TSS	Total Suspended Solids
Twp.	Township
UNMR	Upper Nine Mile Run
UPMC	University of Pittsburgh Medical Center
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UV	Ultraviolet
V	Vortex Separation
VSS	Volatile Suspended Solids

***ALCOSAN Clean Water Plan  
Abbreviations and Acronyms***

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WaPUG	Wastewater Planning Users Group
WAS	Waste Activated Sludge
WEP	New York Department of Water Environment Protection
WERF	Water Environment Research Federation
WPC	Western Pennsylvania Conservancy
WRDA	Water Resources Development Act
WWF	Wet Weather Flow
WWP	Wet Weather Plan
WWPU	Wet Weather Plan Update
WWTP	Wastewater Treatment Plant