

TOWNSHIP OF HAINESPORT

ORDINANCE NO. 2024-12

AN ORDINANCE AMENDING AND SUPPLEMENTING CHAPTER 161, ARTICLE II, ENTITLED “STORMWATER CONTROL FOR MAJOR DEVELOPMENT”, TO CONFORM TO THE REVISED STORMWATER MANAGEMENT RULES

WHEREAS, Chapter 161 of the Code of the Township of Hainesport (“Township Code”) provides the stormwater management ordinance for the Township of Hainesport (the “Township”); and

WHEREAS, more specifically, Chapter 161, Article II, provides the stormwater management rules, consistent with New Jersey Department of Environment Protection (“NJDEP”) regulations; and

WHEREAS, in 2021, by way of Ordinance 2021-01, the Township Committee of the Township of Hainesport (“Township Committee”) repealed and replaced Chapter 161, Article II, to comply with NJDEP’s revised stormwater regulations; and

WHEREAS, effective July 1, 2023, NJDEP again revised its stormwater management regulations; and

WHEREAS, the Township Committee now seeks to amend Chapter 161, Article II to ensure compliance with NJDEP’s updated stormwater management regulations; and

WHEREAS, the Township Committee finds that it is within the public interest to amend Chapter 161, Article II.

NOW, THEREFORE, BE IT ORDAINED AND ENACTED by the Township Committee of the Township of Hainesport, County of Burlington, State of New Jersey, that Chapter 161, Article II, of the Code of the Township of Hainesport, shall be amended and supplemented as follows (underlined text illustrates additions, strikethrough text illustrates deletions):

“Article II Stormwater Control for Major Development

§ 161-6 Scope and purpose.

- A. [Remains unchanged].
- B. [Remains unchanged].
- C. Applicability

(1) This article shall be applicable to the following major developments:

- (a) Nonresidential major developments; and

(b) Aspects of residential major developments that are not preempted by the Residential Site Improvement Standards at N.J.A.C. 5:21.

- (2) This article shall also be applicable to all major developments undertaken by Hainesport Township.
- (3) An application required by ordinance pursuant to (C)(1) above that has been submitted prior to **September 10, 2024** shall be subject to the stormwater management requirements in effect on **September 9, 2024**
- (4) An application required by ordinance for approval pursuant to (C)(1) above that has been submitted on or after March 2, 2021, but prior to **September 10, 2024** shall be subject to the stormwater management requirements in effect on **September 9, 2024.**
- (5) Notwithstanding any rule to the contrary, a major development for any public roadway or railroad project conducted by a public transportation entity that has determined a preferred alternative or reached an equivalent milestone before July 17, 2023, shall be subject to the stormwater management requirements in effect prior to July 17, 2023.

D. [Remains unchanged].

§ 161-7 **Definitions and word usage.**

For the purpose of this ordinance, the following terms, phrases, words and their derivations shall have the meanings stated herein unless their use in the text of this Chapter clearly demonstrates a different meaning. When not inconsistent with the context, words used in the present tense include the future, words used in the plural number include the singular number, and words used in the singular number include the plural number. The word "shall" is always mandatory and not merely directory. The definitions below are the same as or based on the corresponding definitions in the Stormwater Management Rules at N.J.A.C. 7:8-1.2.

CAFRA CENTERS, CORES OR NODES

[Remains unchanged].

CAFRA PLANNING MAP

[Remains unchanged].

COMMUNITY BASIN

[Remains unchanged].

COMPACTION

[Remains unchanged].

CONTRIBUTORY DRAINAGE AREA

[Remains unchanged].

CORE

[Remains unchanged].

COUNTY REVIEW AGENCY

[Remains unchanged].

DEPARTMENT

[Remains unchanged].

DESIGN ENGINEER

[Remains unchanged].

DESIGNATED CENTER

[Remains unchanged].

DEVELOPMENT

[Remains unchanged].

DISTURBANCE

[Remains unchanged].

DRAINAGE AREA

[Remains unchanged].

EMPOWERMENT NEIGHBORHOODS

[Remains unchanged].

ENVIRONMENTALLY CONSTRAINED AREA

[Remains unchanged].

ENVIRONMENTALLY CRITICAL AREA

[Remains unchanged].

EROSION

[Remains unchanged].

GREEN INFRASTRUCTURE

[Remains unchanged].

HUC 14 or HYDROLOGIC UNIT CODE 14

[Remains unchanged].

IMPERVIOUS SURFACE

[Remains unchanged].

INFILTRATION

[Remains unchanged].

LEAD PLANNING AGENCY

[Remains unchanged].

MAJOR DEVELOPMENT

[Remains unchanged].

MOTOR VEHICLE

[Remains unchanged].

MOTOR VEHICLE SURFACE

[Remains unchanged].

MUNICIPALITY

[Remains unchanged].

**NEW JERSEY STORMWATER BEST MANAGEMENT PRACTICES (BMP) MANUAL
or BMP MANUAL**

[Remains unchanged].

NODE

[Remains unchanged].

NUTRIENT

[Remains unchanged].

PERSON

[Remains unchanged].

POLLUTANT

[Remains unchanged].

PUBLIC ROADWAY OR RAILROAD

A pathway for use by motor vehicles or trains that is intended for public use and is constructed by, or on behalf of, a public transportation entity. A public roadway or railroad does not include a roadway or railroad constructed as part of a private development, regardless of whether the roadway or railroad is ultimately to be dedicated to and/or maintained by a governmental entity.

PUBLIC TRANSPORTATION ENTITY

A Federal, State, county, or municipal government, an independent State authority, or a statutorily authorized public-private partnership program pursuant to P.L. 2018, c. 90 (N.J.S.A. 40A:11-52 et seq.), that performs a public roadway or railroad project that includes new construction, expansion, reconstruction, or improvement of a public roadway or railroad.

RECHARGE

[Remains unchanged].

REGULATED IMPERVIOUS SURFACE

[Remains unchanged].

REGULATED MOTOR VEHICLE SURFACE

[Remains unchanged].

SEDIMENT

[Remains unchanged].

SITE

[Remains unchanged].

SOIL

[Remains unchanged].

STATE DEVELOPMENT AND REDEVELOPMENT PLAN METROPOLITAN PLANNING AREA (PA1)

[Remains unchanged].

STATE PLAN POLICY MAP

[Remains unchanged].

STORMWATER

[Remains unchanged].

STORMWATER MANAGEMENT BMP

[Remains unchanged].

STORMWATER MANAGEMENT MEASURE

[Remains unchanged].

STORMWATER MANAGEMENT PLANNING AGENCY

[Remains unchanged].

STORMWATER MANAGEMENT PLANNING AREA

[Remains unchanged].

STORMWATER RUNOFF

[Remains unchanged].

TIDAL FLOOD HAZARD AREA

[Remains unchanged].

URBAN COORDINATING COUNCIL EMPOWERMENT NEIGHBORHOOD

[Remains unchanged].

URBAN ENTERPRISE ZONES

[Remains unchanged].

URBAN REDEVELOPMENT AREA

[Remains unchanged].

WATER CONTROL STRUCTURE

[Remains unchanged].

WATERS OF THE STATE

[Remains unchanged].

WETLANDS or WETLAND

[Remains unchanged].

§ 161-8 Design and performance standards for stormwater management measures

[Remains unchanged].

§ 161-9 Stormwater management requirements for major development.

- A. [Remains unchanged].
- B. [Remains unchanged].
- C. [Remains unchanged].
- D. [Remains unchanged].
- E. Tables 1 through 3 below summarize the ability of stormwater best management practices identified and described in the New Jersey Stormwater Best Management Practices Manual to satisfy the green infrastructure, groundwater recharge, stormwater runoff quality and stormwater runoff quantity standards specified in § 161-9 O, P, Q and R.

When designed in accordance with the most current version of the New Jersey Stormwater Best Management Practices Manual, the stormwater management measures found at N.J.A.C. 7:8-5.2(f), Tables 5-1, 5-2 and 5-3, and listed below in Tables 1, 2 and 3 are presumed to be capable of providing stormwater controls for the design and performance standards as outlined in the tables below. Upon amendments of the New Jersey Stormwater best management practices to reflect additions or deletions of BMPs meeting these standards, or changes in the presumed performance of BMPs designed in accordance with the New Jersey Stormwater BMP Manual, the Department shall publish in the New Jersey Registers a notice of administrative change revising the applicable table. The most current version of the BMP Manual can be found on the Department's website at: https://njstormwater.org/bmp_manual2.htm.--<https://dep.nj.gov/stormwater/bmp-manual/>.

- F. [Remains unchanged].
- G. [Remains unchanged].
- H. [Remains unchanged].
- I. [Remains unchanged].
- J. [Remains unchanged].
- K. [Remains unchanged].
- L. [Remains unchanged].
- M. [Remains unchanged].
- N. [Remains unchanged].
- O. [Remains unchanged].
- P. Groundwater recharge standards. This subsection contains the minimum design and performance standards for groundwater recharge as follows:
 - (1) The design engineer shall, using the assumptions and factors for stormwater runoff and groundwater recharge calculations at § 161-10, either:
 - (a) Demonstrate through hydrologic and hydraulic analysis that the site and its stormwater management measures maintain 100% of the average annual preconstruction groundwater recharge volume for the site; or
 - (b) Demonstrate through hydrologic and hydraulic analysis that the increase of stormwater runoff volume from preconstruction to post-construction for the projected two-year storm, as defined and determined pursuant to § 161-10D of this ordinance, is infiltrated.
 - (2) This groundwater recharge requirement does not apply to projects within the “urban redevelopment area,” or to projects subject to 4 below.
 - (3) The following types of stormwater shall not be recharged:
 - (a) Stormwater from areas of high pollutant loading. “High pollutant loading areas” are areas in industrial and commercial developments where solvents and/or petroleum products are loaded/unloaded, stored, or

applied, areas where pesticides are loaded/ unloaded or stored; areas where hazardous materials are expected to be present in greater than “reportable quantities” as defined by the United States Environmental Protection Agency (EPA) at 40 CFR 302.4; areas where recharge would be inconsistent with Department-approved remedial action work plan approved pursuant to the Administrative Requirements for the Remediation of Contaminated Sites rules, N.J.A.C. 7:26C, or Department landfill closure plan and areas; and areas with high risks for spills of toxic materials, such as gas stations and vehicle maintenance facilities; and

- (b) Industrial stormwater exposed to source material. “Source material” means any material(s) or machinery, located at an industrial facility, that is directly or indirectly related to process, manufacturing or other industrial activities, which could be a source of pollutants in any industrial stormwater discharge to groundwater. Source materials include, but are not limited to, raw materials; intermediate products; final products; waste materials; by-products; industrial machinery and fuels, and lubricants, solvents, and detergents that are related to process, manufacturing, or other industrial activities that are exposed to stormwater.

Q. [Remains unchanged].

R. Stormwater runoff quantity standards.

- (1) This subsection contains the minimum design and performance standards to control stormwater runoff quantity impacts of major development.
- (2) In order to control stormwater runoff quantity impacts, the design engineer shall, using the assumptions and factors for stormwater runoff calculations at § 161-10, complete one of the following:
 - (a) Demonstrate through hydrologic and hydraulic analysis that for stormwater leaving the site, post-construction runoff hydrographs for the current and projected two-, ten-, and 100-year storm events, as defined and determined in § 161-10 C and D, respectively, of this ordinance, do not exceed, at any point in time, the preconstruction runoff hydrographs for the same storm events;
 - (b) Demonstrate through hydrologic and hydraulic analysis that there is no increase, as compared to the preconstruction condition, in the peak runoff rates of stormwater leaving the site for the current and projected two-, ten- and 100-year storm events, as defined and determined pursuant to § 161-10 C and D, respectively, of this ordinance, and that the increased volume or change in timing of stormwater runoff will not increase flood damage at or downstream of the site. This analysis shall include the analysis of impacts of existing land uses and projected land uses assuming full development under existing zoning and land use ordinances in the drainage area; or
 - (c) Design stormwater management measures so that the post-construction peak runoff rates for the current and projected two-, ten- and 100-year

storm events, as defined and determined in § 161-10 C and D, respectively, of this ordinance, are 50%, 75% and 80%, respectively, of the preconstruction peak runoff rates. The percentages apply only to the post-construction stormwater runoff that is attributable to the portion of the site on which the proposed development or project is to be constructed;
or

- (d) In tidal flood hazard areas, stormwater runoff quantity analysis in accordance with Subsection R(2)(a), (b) and (c) above is required unless the design engineer demonstrates through hydrologic and hydraulic analysis that the increased volume, change in timing, or increased rate of the stormwater runoff, or any combination of the three will not result in additional flood damage below the point of discharge of the major development. No analysis is required if the stormwater is discharged directly into any ocean, bay, inlet, or the reach of any watercourse between its confluence with an ocean, bay, or inlet and downstream of the first water control structure.

(3) [Remains unchanged].

§ 161-10 Calculation of stormwater runoff and groundwater recharge.

A. Stormwater runoff shall be calculated in accordance with the following:

(1) The design engineer shall calculate runoff using ~~one of~~ the following methods:

- ~~(a) USDA Natural Resources Conservation Service (NRCS) methodology, including the NRCS Runoff Equation and Dimensionless Unit Hydrograph, as described in Chapters 7, 9, 10, 15 and 16, Part 630, Hydrology National Engineering Handbook, incorporated herein by reference as amended and supplemented. This methodology is additionally described in Technical Release 55 – Urban Hydrology for Small Watersheds (TR-55), dated June 1986, incorporated herein by reference as amended and supplemented. Information regarding the methodology is available from the Natural Resources Conservation Service website at https://www.nres.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1044171.pdf <https://directives.sc.egov.usda.gov/viewerFS.aspx?hid=21422> or at United States Department of Agriculture Natural Resources Conservation Service, New Jersey State Office, 220 Davison Avenue, Somerset, New Jersey 08873; or~~
- ~~(b) The Rational Method for peak flow and the Modified Rational Method for hydrograph computations. The Rational and Modified Rational Methods are described in "Appendix A 9 Modified Rational Method" in the Standards for Soil Erosion and Sediment Control in New Jersey, January 2014. This document is available from the State Soil Conservation Committee or any of the soil conservation districts listed at N.J.A.C. 2:90-1.3(a)3. The location, address, and telephone number for each soil conservation district is available from the State Soil Conservation Committee, PO Box 330, Trenton, New Jersey 08625. The document is~~

also available at: <http://www.nj.gov/agriculture/divisions/anr/pdf/2014NJSoilErosionControlStandardsComplete.pdf>.

- (2) For the purpose of calculating ~~runoff coefficients~~ curve numbers and groundwater recharge, there is a presumption that the preconstruction condition of a site or portion thereof is a wooded land use with good hydrologic condition. The term "~~runoff coefficient~~" "curve number" applies to both the NRCS methodology above at § 161-10A(1)(a) ~~and the Rational and Modified Rational Methods at §161-10A(1)(b)~~. A runoff coefficient curve number or a groundwater recharge land cover for an existing condition may be used on all or a portion of the site if the design engineer verifies that the hydrologic condition has existed on the site or portion of the site for at least five years without interruption prior to the time of application. If more than one land cover ~~have~~ has existed on the site during the five years immediately prior to the time of application, the land cover with the lowest runoff potential shall be used for the computations. In addition, there is the presumption that the site is in good hydrologic condition (if the land use type is pasture, lawn, or park), with good cover (if the land use type is woods), or with good hydrologic condition and conservation treatment (if the land use type is cultivation).
- (3) In computing preconstruction stormwater runoff, the design engineer shall account for all significant land features and structures, such as ponds, wetlands, depressions, hedgerows, or culverts, that may reduce preconstruction stormwater runoff rates and volumes.
- (4) In computing stormwater runoff from all design storms, the design engineer shall consider the relative stormwater runoff rates and/or volumes of pervious and impervious surfaces separately to accurately compute the rates and volume of stormwater runoff from the site. To calculate runoff from unconnected impervious cover, urban impervious area modifications as described in the NRCS Technical Release 55 — Urban Hydrology for Small Watersheds or other methods may be employed.
- (5) If the invert of the outlet structure of a stormwater management measure is below the flood hazard design flood elevation as defined at N.J.A.C. 7:13, the design engineer shall take into account the effects of tailwater in the design of structural stormwater management measures.

B. [Remains unchanged].

C. The precipitation depths of the current two-, 10-, and 100-year storm events shall be determined by multiplying the values determined in accordance with items 1 and 2 below:

- (1) The applicant shall utilize the National Oceanographic and Atmospheric Administration (NOAA), National Weather Service's Atlas 14 Point Precipitation Frequency Estimates: NJ, in accordance with the location(s) of the drainage area(s) of the site. This data is available at:

https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=nj; and

- (2) The applicant shall utilize Table 5: Current Precipitation Adjustment Factors below, which sets forth the applicable multiplier for the drainage area(s) of the site, in accordance with the county where the drainage area(s) of the site is located.

Table 5			
Current Precipitation Adjustment Factors			
<u>County</u>	<u>2-year Design Storm</u>	<u>10-year Design Storm</u>	<u>100-year Design Storm</u>
<u>Burlington</u>	<u>0.99</u>	<u>1.01</u>	<u>1.04</u>

- D. Table 6: Future Precipitation Change Factors provided below sets forth the change factors to be used in determining the projected two-, 10-, and 100-year storm events for use in this chapter, which are organized alphabetically by county. The precipitation depth of the projected two-, 10-, and 100-year storm events of a site shall be determined by multiplying the precipitation depth of the two-, 10-, and 100-year storm events determined from the National Weather Service's Atlas 14 Point Precipitation Frequency Estimates pursuant to (c)1 above, by the change factor in the table below, in accordance with the county where the drainage area(s) of the site is located.

Table 6			
Future Precipitation Change Factors			
<u>County</u>	<u>2-year Design Storm</u>	<u>10-year Design Storm</u>	<u>100-year Design Storm</u>
<u>Burlington</u>	<u>1.17</u>	<u>1.18</u>	<u>1.32</u>

§ 161-11 **Sources for technical guidance.**

- A. Technical guidance for stormwater management measures can be found in the documents listed below, which are available to download from the Department's website at: http://www.nj.gov/dep/stormwater/bmp_manual2.htm.
<https://dep.nj.gov/stormwater/bmp-manual/>.
- (1) Guidelines for stormwater management measures are contained in the New Jersey Stormwater Best Management Practices Manual, as amended and supplemented. Information is provided on stormwater management measures such as, but not limited to, those listed in Tables 1, 2, and 3.
- (2) Additional maintenance guidance is available on the Department's website at: https://www.njstormwater.org/maintenance_guidance.htm.
<https://dep.nj.gov/stormwater/maintenance-guidance/>.
- B. Submissions required for review by the Department should be mailed to: ~~the Division of Water Quality, New Jersey Department of Environmental Protection, Mail Code 401-02B, PO Box 420, Trenton, New Jersey 08625 0420. The Division of Watershed~~

§ 161-12 **Solids and floatable materials control standards.**

[Remains unchanged].

§ 161-13 **Safety standards for stormwater management basins.**

A. [Remains unchanged].

B. [Remains unchanged].

C. Requirements for trash racks, overflow grates and escape provisions.

(1) A trash rack is a device designed to catch trash and debris and prevent the clogging of outlet structures. Trash racks shall be installed at the intake to the outlet from the Stormwater management BMP to ensure proper functioning of the BMP outlets in accordance with the following:

(a) The trash rack shall have parallel bars, with no greater than six-inch spacing between the bars;

(b) The trash rack shall be designed so as not to adversely affect the hydraulic performance of the outlet pipe or structure;

(c) The average velocity of flow through a clean trash rack is not to exceed 2.5 feet per second under the full range of stage and discharge. Velocity is to be computed on the basis of the net area of opening through the rack; and

(d) The trash rack shall be constructed of rigid, durable, and corrosion-resistant material and designed to withstand a perpendicular live loading of 300 pounds per square foot.

(2) An overflow grate is designed to prevent obstruction of the overflow structure. If an outlet structure has an overflow grate, such grate shall meet the following requirements:

(a) The overflow grate shall be secured to the outlet structure but removable for emergencies and maintenance.

(b) The overflow grate spacing shall be no ~~less~~ greater than two inches across the smallest dimension.

(c) The overflow grate shall be constructed and installed to be rigid, durable, and corrosion resistant and shall be designed to withstand a perpendicular live loading of 300 pounds per square foot.

(3) Stormwater management BMPs shall include escape provisions as follows:

(a) If a stormwater management BMP has an outlet structure, escape provisions shall be incorporated in or on the structure. Escape provisions include the installation of permanent ladders, steps, rungs, or other

features that provide easily accessible means of egress from stormwater management BMPs. With the prior approval of the municipality pursuant to § 161-13C, a freestanding outlet structure may be exempted from this requirement;

- (b) Safety ledges shall be constructed on the slopes of all new stormwater management BMPs having a permanent pool of water deeper than 2 1/2 feet. Safety ledges shall be comprised of two steps. Each step shall be four feet to six feet in width. One step shall be located approximately 2 1/2 feet below the permanent water surface, and the second step shall be located one foot to 1 1/2 feet above the permanent water surface. See § 161-13E for an illustration of safety ledges in a stormwater management BMP; and
- (c) In new stormwater management BMPs, the maximum interior slope for an earthen dam, embankment, or berm shall not be steeper than three horizontal to one vertical.

D. [Remains unchanged].

E. [Remains unchanged].

§ 161-14 **Requirements for site development stormwater plan.**

[Remains unchanged].

§ 161-15 **Maintenance and repair.**

A. [Remains unchanged].

B. General maintenance.

(1) [Remains unchanged].

(2) [Remains unchanged].

(3) [Remains unchanged].

(4) [Remains unchanged].

(5) [Remains unchanged].

(6) [Remains unchanged].

(7) [Remains unchanged].

(8) The requirements of § 161-15B(3) and (4) do not apply to stormwater management facilities that are dedicated to and accepted by the municipality or another governmental agency, subject to all applicable municipal stormwater general permit conditions, as issued by the Department.

Note: It may be appropriate to delete requirements in the maintenance and repair plan that are not applicable if the ordinance requires the facility to be dedicated to the municipality. If the municipality does not want to take this responsibility, the ordinance should require the posting of a two-year maintenance guarantee in

accordance with N.J.S.A. 40:55D-53. Maintenance and inspection guidance can be found on the Department's website at:
https://www.njstormwater.org/maintenance_guidance.htm
<https://dep.nj.gov/stormwater/maintenance-guidance/>.

(9) [Remains unchanged].

C. [Remains unchanged].

§ 161-16 Violations and penalties.

[Remains unchanged].

§ 161-17 Severability.

[Remains unchanged].

§ 161-18 Effective Date.


This article shall be in full force and effect ~~beginning March 3, 2021, and~~ from and after its adoption and any publication as required by law.

NOTICE OF PUBLIC HEARING

**HAINESPORT TOWNSHIP
ORDINANCE NO. 2024-12**

The Ordinance published herewith was introduced and passed upon first reading at the regular meeting of the Township Committee of the Township of Hainesport held on August 13, 2024. It will be further considered for passage after a public hearing at the regular meeting to be held on September 10, 2024 at the Municipal Building, One Hainesport Centre, Hainesport, New Jersey at 6:30 PM at which time and place any persons desiring to be heard upon the same will be given an opportunity to be heard. During the week prior to and up to and including the date of such meeting or further consideration, copies of said Ordinance in its entirety may be obtained from the Township Clerk.

Dated: August 13, 2024



Paula L. Kosko, RMC, Township Clerk
Township Administrator

Committee member	Motion	Second	Yes	No	Abstain	Absent
Evans			X			
Montgomery			X			
Clauss	X		X			
Tordy		X	X			
Gilmore			X			

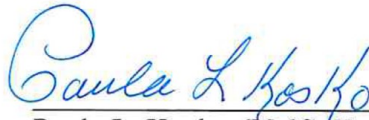
NOTICE OF FINAL PASSAGE

**HAINESPORT TOWNSHIP
ORDINANCE NO. 2024-12**

Notice is hereby given that Ordinance No. 2024-12 as entitled above has been finally adopted on final reading by the governing body of Hainesport Township after a public hearing at a meeting held on September 10, 2024. Said Ordinance shall take effect in accordance with the law.

ATTEST:

Dated: September 10, 2024



Paula L. Kosko, RMC, Township Clerk
Township Administrator

ACKNOWLEDGMENT OF
APPROVAL BY:

Dated: Sept 10, 2024



LEILA GILMORE
Mayor of Hainesport Township

Committee member	Motion	Second	Yes	No	Abstain	Absent
Evans						
Montgomery						
Clauss						
Tordy						
Gilmore						

Introduced: August 13, 2024
First Publication: August 18, 2024
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Final Publication: September 15, 2024