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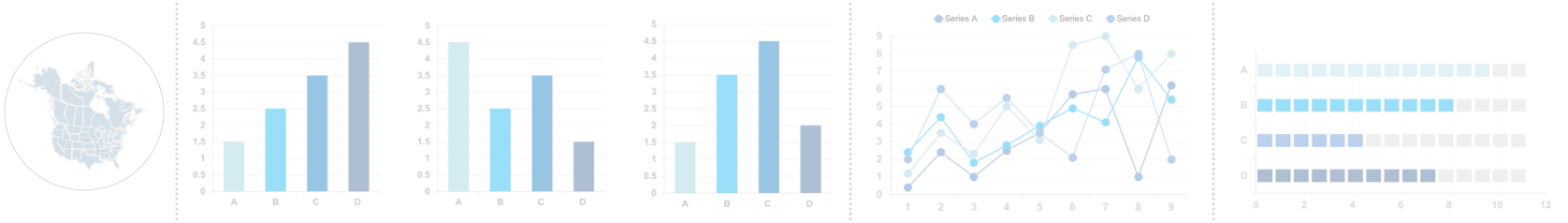
INSIGHT REPORT

U.S. Stormwater Infrastructure Market:
Key Drivers, Competitive Shifts & Investment Outlook, 2024–2030

June 2024



Summary

BACKGROUND

Stormwater management represents a growing area of investment and concern for U.S. municipalities, transportation departments, and private property owners. Since 2020, the U.S. has seen an annual average of 22.0 large-scale climate and weather disasters, compared to just 3.3 such events per year in the 1980s and 6.7 in the 2000s. Most significantly, more than three-quarters of these events are related to stormwater, including severe storms, hurricanes, and flooding.

At the same time, construction and urban development across the country are contributing to an expansion of impervious surfaces, such as asphalt and concrete, which further exacerbate flooding and water pollution from unmitigated stormwater runoff. Nearly one-third of the nation's 470,000 assessed water bodies are classified as impaired, with stormwater runoff—from urban areas, roadways, and agricultural operations—a leading contributor.

As such, a growing roster of incumbents and emerging solutions providers are carving out positions to address stormwater management, with solutions ranging from traditional gray infrastructure—i.e., drains, pumps, catch basins, chambers, and decentralized treatment systems—to newer digital platforms and alternative 'green infrastructure' solutions.

This Insight Report and accompanying data dashboard provide a comprehensive evaluation of the U.S. stormwater infrastructure market landscape, including market drivers, trends, forecasts, and company profiles of 30 leading stormwater infrastructure and equipment suppliers. Ask us about our data.

TAKEAWAYS

- Total U.S. stormwater CAPEX is projected to scale at a 6.7% CAGR, from US$34.6 billion in 2023 to US$54.5 billion in 2030. Equipment and infrastructure represents 40.0% of cumulative spend, with labor and services (e.g., engineering, construction) accounting for the remaining 60.0%.
- Three states—California, Florida, and Texas—represent the largest addressable markets, each exceeding US$1 billion in 2023. Meanwhile, the fastest-growing markets are found in Sunbelt states (e.g., Arizona, Georgia) due to stronger property development and construction trends.
- Bluefield's forecast methodology frames the market into three primary end-user segments: municipal, transportation, and commercial & industrial (C&I). C&I represents 57% of the total addressable U.S. stormwater market opportunity, as private firms are pressured to invest in decentralized infrastructure to offset on-site impacts from office buildings, parking lots, and manufacturing facilities.
- Leading stormwater infrastructure and equipment suppliers are pursuing strategic M&A and eyeing new market opportunities (e.g., agriculture, digital) to drive revenue growth, expand geographic footprints, and reduce business risk through diversification. Key players such as Advanced Drainage Systems, Oldcastle, Northwest Pipe, and IPEX are benefiting from policy, funding, and investment tailwinds across the three primary end-user segments.

Built on years of data and analysis, Bluefield Research's U.S. & Canada Municipal Water Corporate Subscription has become a key resource for companies across the value chain to identify the key states, systems, and opportunities that stand out in an already crowded field with increasing competition.

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Outline

Setting the Pace of Change – Stormwater Market Drivers & Inhibitors

An array of factors—environmental, regulatory, financial, and technological—drive growing public and private investment in stormwater management, creating opportunities for solutions providers.

Stormwater Market Drivers & Inhibitors

Climate & Environmental Risks

- Climate change is causing increasingly erratic and unpredictable precipitation patterns, including more extreme storms, hurricanes, and flash flooding events.
- Aging stormwater infrastructure is no longer sufficient to handle current and future climate-fueled precipitation, prompting greater investment in stormwater management.

Water Quality & Policy

- Untreated stormwater runoff flushes a variety of pollutants into surface water bodies (e.g., rivers, lakes, bays), impacting local water quality and ecosystem health.
- Federal, state, and local policies dictate stormwater management practices, with more stringent requirements found in states or localities with impaired water bodies.

Construction & Urban Development

- Urban/suburban environments built up with impervious surfaces (i.e., concrete, asphalt) are more likely to experience flooding, stormwater management challenges.
- Regions with high rates of residential and nonresidential construction activity are expected to see commensurate investments in stormwater management infrastructure.

Funding & Finance Opportunities

- The U.S. stormwater market is poised to benefit from an influx of federal investment, including in water infrastructure, transportation, and industrial buildout.
- At the local level, municipalities can leverage a range of options for financing stormwater infrastructure, including stormwater fees and environmental impact bonds.

Stormwater Organization & Management

- A patchwork of entities (e.g., utilities, municipal DPWs, state DOTs, flood control districts) share responsibility for stormwater, complicating management and investment.
- Commercial & industrial facilities face growing pressure to invest in on-site stormwater storage and treatment systems to offset impacts of impervious surface buildout.

Emerging Technologies & Solutions

- Green infrastructure (e.g., rain gardens, permeable pavement) provides decentralized storage and treatment capacity to augment traditional ‘gray’ infrastructure.
- Digital technology offers new tools for stormwater management, from flood monitoring and forecasting to smart ponds and stormwater network modeling/design.

Source: Bluefield Research

The Big Picture – Bluefield Stormwater Market Model Formula

Bluefield's market model evaluates each state's stormwater market size, growth, and attractiveness across four product categories, three end-user segments, and four sets of macro drivers.

Product Categories

- Capture
- Conveyance
- Storage
- Treatment

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CAPEX Breakdown

- Infrastructure & Equipment
- Labor (Engineering/ Construction)

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Built Environment by State

1. **Municipal:** Housing units by state (U.S. Census Bureau)
2. **Transportation:** Roadway miles by state (Federal Highway Admin.)
3. **Commercial & Industrial:** Facilities by state (Bureau of Labor Statistics)

X

Key Market Drivers by State

- **Climate:** Climate & weather disasters, extreme precipitation events, flood insurance claims
- **Policy:** State policy environment, MS4 violations/consent decrees, impaired water bodies
- **Development:** Construction spending growth, impervious surface coverage, stormwater runoff potential
- **Funding:** Stormwater utility revenues, SRF funding requests, stormwater needs surveys

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Total Market Size & CAGR by state, product, and end-user segment

Total U.S. market size for key product categories established by triangulating a range of sources, including company financial reports, industry needs surveys, construction data, utility budget and revenue data, and industry interviews.

Each state's baseline YoY share of national stormwater market is calculated based on share of **total 'built environment'** (i.e., representative assets across the municipal, transportation, and commercial & industrial sectors).

Each state is ranked based on **four key market drivers:** climate, policy, development, and funding. Each state's baseline market size is thereafter adjusted based on overall market attractiveness.

Source: Bluefield Research

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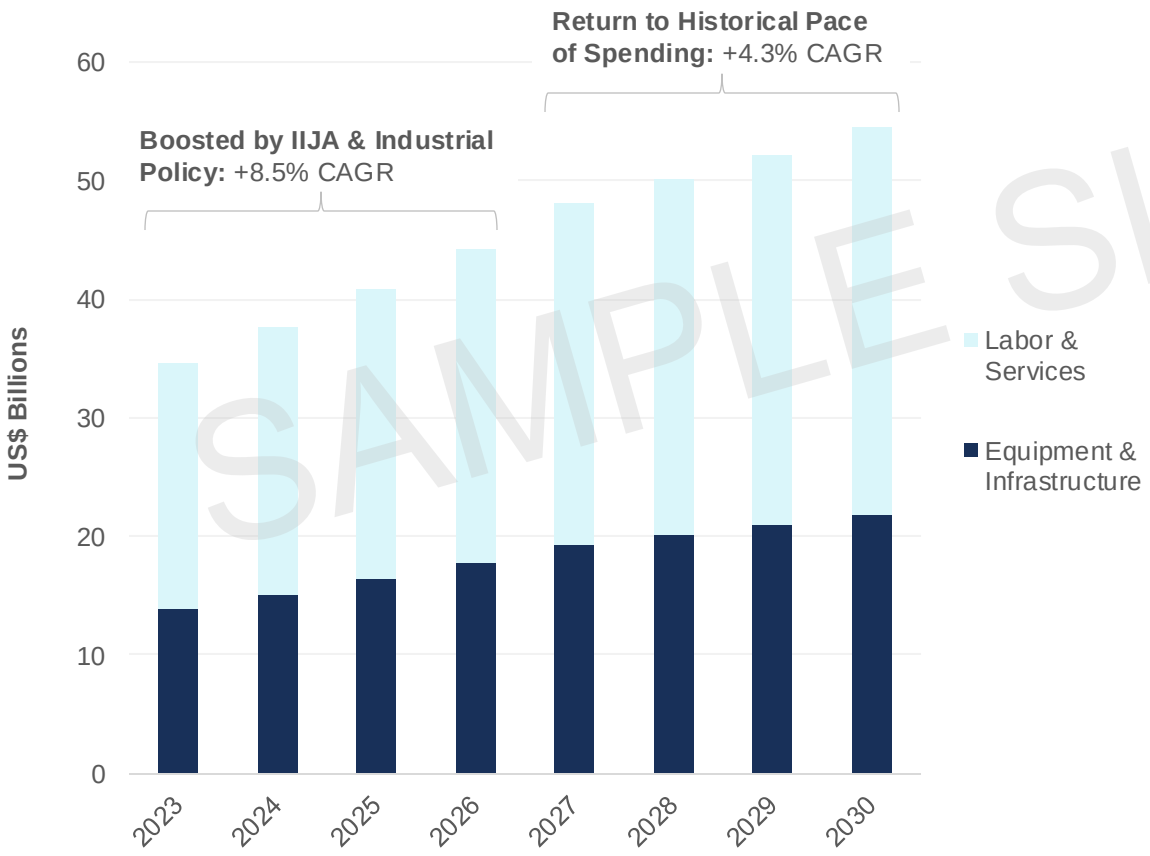
Top-Line Stormwater Capital Investment Outlook

Bluefield projects that total U.S. stormwater CAPEX will scale at a 6.7% CAGR from US$34.6 billion in 2023 to US$54.5 billion in 2030, for a cumulative total of US$362.0 billion over eight years.

Top-Line U.S. Stormwater CAPEX Forecast by Spend Type, 2023–2030



Note: Values expressed in 2023 US$
Source: Bluefield Research

Analysis

Strong tailwinds drive near-term stormwater equipment and service spending, with a return to more moderate growth anticipated later in the decade.

- Equipment and infrastructure is expected to account for roughly 40% of total stormwater CAPEX through 2030, scaling from US$13.8 billion in 2023 to US$21.8 billion in 2030.
- Labor and services (e.g., engineering, design, construction) account for the remaining 60% of stormwater CAPEX, growing from US$20.8 billion in 2023 to US$32.7 billion in 2030.
- Bluefield projects that real, inflation-adjusted annual growth in stormwater CAPEX will reach 8.5% through 2027 as the near-term influx of federal infrastructure investment and industrial policy initiatives (e.g., IIJA, IRA, CHIPS) drive public and private construction activity.
- Bluefield anticipates that stormwater CAPEX growth will revert to a more moderate historical rate of 4.3% from 2027 through 2030 as federal water and transportation infrastructure funding programs expire and industrial players complete onshoring and capacity expansion initiatives.

Competitive Trends – Emerging Directions for Traditional Stormwater Players

Five key trends underpin competitive dynamics and strategic positioning in the stormwater infrastructure market. Leading players are pursuing M&A and eyeing new market opportunities (e.g., agriculture, digital) to drive revenue growth and reduce business risk through diversification.

Competitive Trends in the Stormwater Market

Emerging Trends	Details
Geographic Expansion	• Tuck-in acquisitions of smaller companies that have product or services offerings that complement buyers' core competencies. • Tend to extend geographic reach or manufacturing capability through additional production or distribution facilities and staff.
Adjacent Markets	• Lateral movement into product and equipment markets where crossover and synergies can occur (i.e., pipe manufacturers exploring trenchless technology for stormwater piping/culvert installations, or on-site wastewater treatment systems with similar storage needs as stormwater).
Digital Solutions	• Investor appeal driving near-term interest in digital, vertical integration a longer-term benefit. • Bridge between grey and green infrastructure—grey hardware and software to control and optimize green infrastructure (e.g., smart controls downstream of detention ponds). • Strategic partnerships easing traditional infrastructure players into digital solutions.
Circular Economy & ESG	• Use of recycled material (plastic resins, metals) key to production process and an opportunity for ESG reporting. • Investments in rainwater harvesting (storage, treatment) indicate growing foothold for on-site capture and reuse. • Emphasis on material science to find lower-emissions, lower-pollution building materials and product components.
Agricultural Drainage	• Agriculture seen as untapped market for stormwater infrastructure players, particularly as landowners view field drainage solutions as a high-return investment (i.e., improved crop yield). • Opportunities for runoff capture and treatment, though regulators hesitant to hold farmers accountable for pollution. • Offers diversified market opportunity to traditional residential and commercial positions.

Source: Bluefield Research

Advanced Drainage Systems (ADS)

Company Overview

ADS is an international provider of stormwater products and services spanning capture, conveyance, storage, and treatment positions in a variety of end-markets. ADS operates over 70 manufacturing facilities worldwide and has become one of the largest domestic recyclers of HDPE and polypropylene (“PP”) resins.

ADS’s target markets include residential, agriculture, transportation, commercial/mixed use, timber, mining, and sports and golf. Combining product adaptability, market diversity, and a commitment to sustainable infrastructure, ADS is positioning for a global transition toward a low-carbon future in stormwater management.

In addition to stormwater solutions, ADS also offers products for the on-site septic and decentralized wastewater markets.

Key Statistics

Company Headquarters: Hilliard, Ohio (U.S.)

Year Founded: 1966

Employees: 1,000–5,000

Ownership: Public

Est. Total Company Revenue (2023): US$3.07B

Stormwater Business Focus: Pipe, treatment

Stormwater Product Offerings

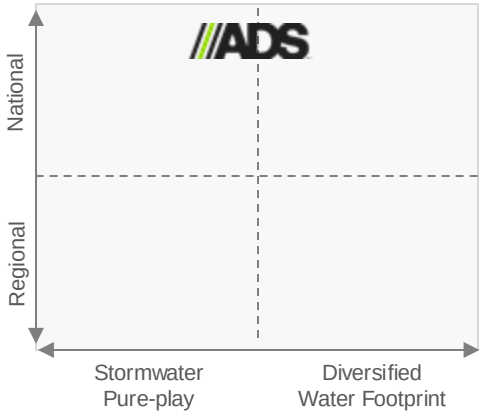
Capture	Conveyance	Storage	Treatment
●	●	●	●

Catch Basins	Wells	Pipes	Pumps	Vaults	Chambers	Separators	Interceptors
●	●	●		●	●	●	●

Recent Market Activity

- On 22 January 2024, ADS and Rainwater Management Solutions (RMS) announced a strategic partnership to advance end-to-end stormwater treatment system solutions for commercial and residential customers.
- In May 2022, ADS expanded on-site septic and stormwater offerings through the acquisition of Cultec, Inc.
- In January 2022, ADS released the EcoPure BioFilter, a low-impact development (LID) and green infrastructure solution for new construction and retrofit commercial jobs.
- In August 2019, ADS acquired Infiltrator Water Technologies for US$1.1 billion. This acquisition expanded ADS’s presence in the on-site septic and decentralized wastewater markets.
- In August 2017, ADS acquired DURASLOT, Inc., a manufacturer of stormwater collection surface drains used in a variety of construction applications, broadening its solutions portfolio and sales network.
- In February 2017, ADS acquired Plastic Tubing Industries, a manufacturer of HDPE pipe and related accessories, for US$9.5 million. This acquisition expanded ADS’s presence in the Southeastern U.S.

Strategic Positioning



Source: ADS, Bluefield Research

Data Navigator

Data underpins Bluefield's breadth of insight reports and analysis. Our Data Navigator platform supports corporate subscription clients with direct access to a range of municipal water data through an interactive, flexible platform.

Related U.S. & Canada Municipal Water Data Dashboards

U.S. IIJA Water Funding

IIJA Five-Year Water Spending Breakdown, $US

- Number of Borrowers
- Pending Loans
- Closed Loans, Value of Closed Loans
- Borrowers Mapped
- States Ranked by WIFIA Loans Selected and Closed
- Borrowers Ranked by Loan Amounts Broken by Loan Status

U.S. Stormwater Infrastructure Market, 2024–2030

Dashboard Widgets:

- Total Expenditure by State Heat Map
- Expenditure by State, by Region, by CAPEX Type, by Product Type, by User Segment
- Expenditure Forecast by CAPEX Type
- Expenditure Forecast by Product Type

Collaborative Delivery Policies & Projects

Dashboard Widgets US$:

- Legislation Approved Mapped by State
  - Design-Build
  - Progressive Design-Build
  - CMAR Legislation
  - PPPs
- State Policy Data Table
- Identified Projects by State

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Global companies across the value chain are developing strategies to capitalize on greenfield opportunities in water − new build, new business models, and private investment. Bluefield Research supports a growing roster of companies across key technology segments and industry verticals addressing risks and opportunities in the new water landscape.

Companies are turning to Bluefield for in-depth, actionable intelligence into the water sector and the sector's impacts on key industries. The insights draw on primary research from the water, energy, power, mining, agriculture, financial sectors and their respective supply chains.

Bluefield works with key decision makers at utilities, project development companies, independent water and power providers, EPC companies, technology suppliers, manufacturers, and investment firms, giving them tools to define and execute strategies.

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