



STORMWATER MANAGEMENT NEWSLETTER

FIRST
QUARTER
2026

Moving Towards a Resilient Future

A summary of stormwater resiliency goals & activities is provided below. The original dates are included following discussions with the Orange County Board of County Commissioners on 5/2/2023, 5/23/2023 and 6/4/2024.

Understanding the FDEP NPDES Permit for Phase I MS4 Communities

The county's natural environment is one of its greatest assets, and protecting it requires teamwork between the federal government, state agencies, local governments, and the public. One important part of that effort is the **National Pollutant Discharge Elimination System (NPDES)** permitting program, which regulates point sources that discharge pollutants into US waters.

What Is an MS4?

A **Municipal Separate Storm Sewer System (MS4)** is the network of storm drains, pipes, ditches, and ponds that collect rainwater and carry it away from streets and neighborhoods. Unlike wastewater systems, some older parts of the county's MS4 do not treat storm water before it flows into local rivers, lakes, and coastal waters. That means anything that enters a storm drain could go straight into the environment.

What Is the Phase I MS4 Permit?

Under the federal Clean Water Act, Orange County is required to obtain an **NPDES Phase I MS4 permit** from the Florida Department of Environmental Protection (FDEP). This permit requires local governments to take specific steps to reduce pollution carried by stormwater runoff. These communities must develop and implement a comprehensive **stormwater management program** that addresses:

- **Public education and outreach:** Helping residents understand how everyday actions affect water quality.
- **Illicit discharge detection and elimination:** Preventing illegal dumping or accidental releases into storm drains.
- **Construction site runoff control:** Ensuring builders use proper erosion and sediment controls for active construction sites and conducting regular compliance inspections.
- **Facility Runoff:** Ensuring that control measures are in place and operational for municipal, industrial and high-risk facilities and conducting regularly scheduled site inspections.
- **Post-construction stormwater management:** Requiring long-term practices like retention ponds, swales, and green infrastructure.
- **Pollution prevention and good housekeeping:** Improving how local agencies maintain roads, parks, and public facilities.

Why It Matters

Stormwater pollution is one of the leading causes of water quality problems in Florida. Runoff can carry fertilizers and pesticides; oil and automotive fluids; litter and debris; sediment from construction sites; and bacteria from pet waste.

The Phase I MS4 permit helps local governments, like Orange County, reduce these pollutants, protect wildlife, and maintain clean waterways for generations to come. The next version of the permit is expected in mid-2026 and will have additional requirements that the county will have to meet regarding inspections and water quality protection.

STORMWATER AWARENESS WEEK
»»» JUNE 1-5, 2026 «««

✓ Completed ■ Started ⊗ Planned

Short-Term Goals & Projects (Nov 2023 - May 2024)

- ✓ **Project Manager Appointment:** A new Project Manager was hired to focus on sustainability and resiliency efforts, acting as a liaison for countywide projects and grants.
- ✓ **Stormwater Utility Fee (SUF) Phase 1 Study:** Initial feasibility studies are underway to assess funding needs for stormwater services, analyzing impervious surfaces and forecasting revenue requirements. A BCC update was provided in May of 2025.
- ✓ **Private Stormwater Management Coordination:** The county is developing a GIS-based inventory of county-owned systems and certain privately owned systems. Furthermore, an outreach campaign to educate private owners has launched.
- ✓ **Rainfall Intensity Study:** This study evaluates changes in rainfall patterns across Orange County, helping to refine stormwater design standards. A BCC update was provided in April 2025 and study completion in mid-2025.
- ✓ **Realtime Flood Forecasting (RTFF):** Predictive models have been completed for critical areas (Orlo Vista, Little and Big Econlockhatchee) and are prepared to aid in storm response and emergency planning.

Mid-Term Goals & Projects (May 2024 - May 2025)

- **SUF Phase 2:** Further refinement of the SUF is planned, with additional data collection and public meetings anticipated.
- ⊗ **Countywide Resiliency Study:** Following the county's Vulnerability Assessment, this study aims to identify at-risk assets, focusing on flood-vulnerable populations and securing funding for resiliency improvements.
- **Master Stormwater Basin Plans:** These ongoing studies update countywide drainage system data, evaluating deficiencies and supporting FEMA floodplain delineation updates, while guiding future projects to address flood control and water quality.

Long-Term Goals & Projects (May 2025 +)

- ⊗ **Stormwater Utility Fee (SUF) Implementation:** The BCC will decide on SUF funding mechanisms based on the Phase 1 and 2 studies, directing investments into prioritized projects.
- ⊗ **Countywide Predictive Flood Modeling:** Expanding the RTFF to cover all regions will support proactive storm response and asset protection. Funding secured, contract to be issued in mid 2026.
- **Low Impact Development (LID) Initiatives:** Budgeting and implementing LID designs for older infrastructure and road projects will be evaluated to meet updated water quality standards and support sustainable development.
- **Drainage Manual:** Development of a comprehensive document that will house all of the technical components related to drainage.
- **Orlo Vista Integrated Water Resource Project:** Innovative measures are underway to lower pond levels in Orlo Vista, enhancing flood storage capacity, and reducing nutrient loads. Funding has been secured and the notice to proceed for design is estimated to be Spring 2026.

