

how should a community prepare to use it?

Committing to adopting the BMP Manual is a significant step. But like many policy shifts, **implementing the BMP Manual is a process that requires commitment, education, and resources.**

The BMP Manual will change “business as usual” for municipal staff, developers, designers, and maintenance crews. Overall stormwater management costs should decrease over time, but there will be a learning curve for all involved. Reviewers will need new skills and possibly new staff. Over time, operations and maintenance resources will shift from cleaning catch basins and replacing culverts, to maintaining vegetation and removing sediment from swales and wetlands. Regardless, communities must plan to make an informed choice and a smooth transition to the new practices. Commitment throughout the process will help communities maximize their return on investment in stormwater BMPs.

Communities that have adopted

the BMP Manual provide a road map to help other communities.

Communities that think through the entire process will be better equipped to adopt and implement the BMP Manual and will realize its benefits.

Communities should consider these steps to evaluate their operations and educate their staff, elected officials, and development community.



Identify Staff & Resources

Communities will require staff to review stormwater studies and development plans for proper BMP application and design. The exact number will depend on the amount of development and the availability and expertise of existing staff.

The BMP Manual was designed to streamline the evaluation process by adapting familiar stormwater engineering principles. Regardless, BMP evaluations will add new wrinkles to the stormwater planning and review process, particularly in the first few months and years of the program. Reviewers will have to learn new principles and review a wider variety of stormwater management practices. Field staff will be needed to approve new BMPs. Adopting the BMP Manual will involve the following functions.

- Reviewing BMP evaluations and site plans
- Reviewing water quality hydrology calculations and BMP designs
- Inspecting BMP construction
- Enforcement of other code provisions;

- Landscape requirements
- Noxious weed control
- Stormwater design criteria (if different from APWA 5600)
- Operations and maintenance of public BMPs

Communities should integrate stormwater BMPs into every step of the project development process to streamline staff reviews and development applications. For example, the BMP evaluation process uses familiar Natural Resources Conservation Service (NRCS) principles that are typically required for preliminary stormwater analyses. The BMP Manual provides “rules of thumb” for each BMP that consultants and staff can use to evaluate the preliminary site plan. BMP locations should be provided as part of the stormwater management plan at every step of the review process; soon reviews will become routine. Training and education will go a long way toward streamlining reviews, as plan reviewers and engineers become familiar with BMP planning and design. Similarly, field inspectors must become familiar with BMP construction specifications.



*Plan review
for Oakbrook subdivision
Clay County, Missouri*

Educate Staff and the Development Community

Adopting the BMP Manual and implementing stormwater BMPs will require a commitment to goals and practices and a new way of looking at stormwater management. Education helps people become comfortable with and adapt to change. Communities must become familiar with the BMP Manual: its purpose, benefits, and use. To make a lasting commitment, elected officials and administrators need to understand how watershed management impacts all aspects of their operations and community. They must understand how stormwater BMPs will meet their regulatory requirements, avoid future liabilities, and improve their communities. Staff must understand how the BMP Manual can enhance stormwater management, improve site designs, reduce future costs, and provide amenities and recreational opportunities. The development community needs to know that their overall costs can be reduced while their development quality and amenity value improve, and that the new requirements won't

slow the review process. Communities should develop an education plan that brings in all of the following people, depending on who begins the push to adopt the BMP Manual.

Determine How to Apply It

Once communities have reviewed their operations and educated their stakeholders, they must decide on the best adoption strategy for their community. MARC and APWA encourage communities to implement the BMP Manual to the fullest extent possible based on their resources and situation. The more fully they implement the manual, the more comprehensive the tools and benefits they provide to the community. However, implementing the BMP Manual will require a public-private partnership and expertise, time, and financial resources – particularly in the first months and years. The following table summarizes the options and corresponding advantages and considerations.



*Permeable walkway
Lenexa Conference Center,
Lenexa, Kansas*

Application Method

Advantages

Considerations

Full adoption by ordinance

Comprehensive benefits
Most options and flexibility
Full political and legal backing

More complex
More staff resources to implement

Full adoption by administrative policy

Comprehensive benefits
Most options and flexibility
Administrative backing

More complex
More staff resources to implement
Potentially less political backing

Partial adoption/initial measures

Improves current practices
Simplest to understand
Less staff required
Allows phased implementation

Less comprehensive
Fewer options and less flexibility
May not satisfy regulations

Recommended guidance only

Least staff resources to implement
Site plan negotiating tool

No guarantee of implementation
Will require engineering review