



## GENERAL INFORMATION

# Basin Management Action Plans

### What is a Basin Management Action Plan (BMAP)?

A Basin Management Action Plan, or BMAP, is a water quality restoration plan that identifies strategies and projects to reduce sources of pollution to a waterway. These plans are designed to achieve a science-based pollution reduction goal, known as a Total Maximum Daily Load (TMDL). These restoration plans, which are developed in collaboration with local stakeholders, assign pollution reduction responsibilities within the watershed, detail projects that will be implemented to reduce pollution, and include water quality monitoring plans to track changes in water quality as a result of those projects.

BMAPs are designed to be implemented in five-year phases over a 20-year timeframe. They require annual check-ins to monitor progress of projects and strategies implemented to reduce pollution. Florida is the only state in the nation that has a water quality restoration program that addresses pollution sources in such a comprehensive manner.

### Why is a restoration plan needed for nutrients?

Nutrients, specifically nitrogen and phosphorous, are naturally present in the water and necessary for the healthy growth of plant and animal life. However, too much nitrogen or phosphorous can lead to water quality problems like rapid growth of algal mats, oxygen depletion in the water and harm to habitat. Excess nutrients can come from insufficient treatment at wastewater treatment facilities, stormwater runoff, densely clustered septic systems and fertilizer lost to the environment.

To address this imbalance, DEP has coordinated with local stakeholders on basin-specific projects and strategies to reduce the amount of nitrogen that can make its way to the groundwater and eventually impact the springs and rivers.

### What is the goal of a BMAP?

Based on years of water quality monitoring data and analysis, the department develops science-based water quality restoration goals to reduce sources of pollution that reach the waterway.

### What types of restoration strategies are included in BMAPs?

Common BMAP strategies include:

- more stringent permit limits on wastewater facilities
- land acquisition and conservation
- public education
- wastewater (including septic systems) and stormwater system infrastructure improvements
- agricultural best management practices
- financial assistance.

Once the BMAP is adopted, the management strategies and schedule become the compliance plan and are enforceable.

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## How are BMAPS developed?

The fundamental steps in the BMAP development process are to:

- identify and quantify pollutant sources
- allocate responsibilities for reducing pollution
- develop strategies and projects to accomplish the reductions
- establish a monitoring program to measure progress
- determine an implementation schedule
- identify financial resources to fund the necessary actions.

Various stakeholder groups participate in the development of a restoration plan for a basin. These include, but are not limited to, representatives from the DEP, the Department of Agriculture and Consumer Services, Water Management Districts, local governments, the agricultural industry and environmental organizations.

## Is public input a part of the BMAP development process?

Yes. As the management actions are implemented largely through local efforts, BMAPs are developed through collaboration with local stakeholders, encouraging the greatest amount of input and consensus possible. Public participation and feedback are vital to the development of every BMAP. DEP holds public meetings to present draft plans, take public input and answer questions. The department carefully reviews all comments received and incorporates feedback in the final adopted BMAP.

## How often are BMAPS evaluated to measure progress?

Restoration is a long-term process. BMAPs include specific project and pollution reduction milestones designed to be implemented in five-year phases over a 20-year timeframe. After adoption, the department holds regular meetings to keep stakeholders and the public apprised of progress and to generate new restoration strategies and projects.

Each BMAP is reviewed and reported on annually. These annual check-ins measure progress of projects and strategies implemented to reduce pollution. Formal updates to a BMAP are typically made every five years to improve restoration based on new science, but can be updated more frequently if necessary. This process allows BMAPs to be adapted and modified as new data and management tools become available. This adaptive management approach is important, as it allows the plan to incorporate the waterbody's response to management strategies, improved measurement tools and new technologies.