

# REFLECTION FACT SHEET

## **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.
- Plans are designed to achieve a science-based pollution reduction goal, known as a Total Maximum Daily Load (TMDL).
- Restoration plans are developed with stakeholders or those who may contribute to nonpoint source pollution and others who use and rely on our water. Detailed projects are created that assign stakeholders responsibilities to reduce pollution and monitor water quality.
- 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 like nitrogen and phosphorus are naturally present in the water and necessary for the healthy growth of plant and animal life.
- However, too much nitrogen or phosphorus can lead to water quality problems like rapid growth of algae, oxygen depletion in the water, and harm to habitat.
- Excess nutrients can come from insufficient treatment at wastewater treatment facilities, storm water runoff, densely clustered septic systems and fertilizer lost to the environment.
- To address this imbalance, specific projects and strategies have been developed to reduce the amount of nitrogen that can make its way to the groundwater and eventually impact the springs and rivers.

## **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 storm water system infrastructure improvements
  - agricultural best management practices
  - financial assistance
- Once the BMAP is adopted by Florida Department of Environmental Protection Secretarial Order, the management strategies and schedule become the compliance plan and are enforceable.

## **HOW ARE BMAPS DEVELOPED?**

- Various stakeholder groups participate in the development of a restoration plan for a basin.

## 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.

## 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.

## WHAT STRATEGIES ARE BEING USED TO MITIGATE NITROGEN POLLUTION IN OUR WATER?

- Research trials on agriculture to advance Best Management Practices (BMPs), constructed wetlands to provide wastewater treatment, upgrading septic systems.

## WHAT TECHNOLOGY TOOLS CAN FARMERS UTILIZE TO PROTECT AND CONSERVE WATER?

- Adopting Best Management Practices (BMPs) like soil moisture sensors, using the 4 R's (the right source, the right rate, the right time, and the right place), cover crops, and conservation tillage.

