

**Vegetarian Newsletter**  
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**On Your Mark, Get Set, Go BMP! The BMPs for Vegetables are here...**

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Several events surrounding the, "Florida vegetable and agronomic crop water quality/quantity Best Management Practices manual," have occurred in the last few months. In November 2005, 6,000 copies of the manual have been printed, and most of them were distributed to agents participating in a BMP in-service training in held at the Suwannee River Water Management District in Live Oak, FL. In February of 2006, the BMP manual that covers the vegetable industry in Florida was approved by rule. Also, UF-IFAS held a cross-commodity information forum on BMPs. Below are sets of questions/answers that have been formulated by county agents, specialists, growers, stakeholders and/or agricultural suppliers throughout this process. The questions are grouped under headings of (1) Alphabet soup, (2) Legislative authority and regulations behind the BMPs, (3) The BMP manual for vegetable crops grown in Florida, (4) BMP selection and implementation, (5) The process of signing up, (6) After signing up, (7) Sources of information, and (8) Technical points. All answers are current as of February 2006, but some of them may evolve as needed.

**1. Alphabet soup**

**What does UF-IFAS mean?**

University of Florida's Institute of Food and Agricultural Sciences. UF-IFAS maintains production recommendations that are the basis for the BMPs.

**What does FDACS mean?**

Florida Department of Agriculture and Consumer Services. FDACS has been charged with developing and implementing state-wide commodity-specific BMP programs.

**What does OAWP mean?**

The Office of Agricultural Water Policy is leading the BMP program. Important documents including the BMP manual for vegetables can be found at [www.floridaagwaterpolicy.com](http://www.floridaagwaterpolicy.com).

Florida Department of Environmental Protection. One of the FDEP missions is to develop TMDLs.

#### What does NRCS mean?

Natural Resource Conservation Service. It is the branch of the Farm Service Agency charged with nutrient management plans. NRCS also administers some cost-share programs.

#### What does CNR mean?

Crop Nutritional Requirement represents the amount of a nutrient needed to achieve economical yields.

#### What does LBF mean?

Linear Bed Feet is the length of vegetable rows present in a field at a given bed spacing. For example, there are 7,260 LBF in 1 planted acre of tomato on 6 foot centers ( $43,560 \text{ units} / 6 \text{ units} = 7,260 \text{ LBF}$ )

#### What does BMP mean?

Best Management Practices are specific cultural practices that allow for economical yields while minimizing the environmental impact of production.

#### What does TMDL mean?

A Total Maximum Daily Load is the maximum amount of a pollutant a water body can receive and still meet its water quality standards for its intended use. A TMDL also provides a load allocation to different land owners in a watershed.

#### What does BMAP mean?

A Basin Management Action Plan is a document developed over a 5-year cycle and updated every 5 years that describes a watershed's problems and how participants plan to address it. A key purpose of the BMAP is the equitable reduction of pollutant loadings to meet the TMDL established for an impaired water body. The BMAP also includes performance measures for both water resource monitoring and the implementation of BMPs and other management strategies and control.

**What does SWFWMD mean?**

South West Florida Water Management District

**What does SJRWMD mean?**

St. John's River Water Management District.

**What does SRWMD mean?**

Suwannee River Water Management District.

## **2. Legislative authority and regulations behind the BMPs**

**What is the Federal legislation authorizing the BMP program?**

Section 303(d) of the Federal Clean Water Act requires states to identify impaired water bodies and establish TMDLs for pollutants entering these water bodies.

**What acts did the Florida legislature pass to implement the FCWA?**

In 1987, the Florida legislature passed the Surface Water Improvement and Management (SWIM) Act requiring the five Florida water management districts to develop plans to clean up and preserve Florida lakes, bays, estuaries, and rivers. In 1999, the Florida Watershed Restoration Act defined the process for the development of TMDLs.

**What is the goal of the BMP program?**

The goal of the BMP program is to comply with state and federal water quality regulations

**What are the statutory benefits of participating in the BMP program for vegetables in Florida ?**

There are 3 benefits:

Waiver of liability from reimbursement of cost and damages associated with the evaluation, assessment, or remediation of nitrate contamination of ground water (Florida Statutes 376.307)

Presumption of compliance with water quality standards (F.S. 403.067 (7)(d))

Eligibility for cost-share programs (F.S. 570.085 (1)).

**Does the Vegetable and Agronomic Crop manual apply to the entire state of Florida?**

Yes; however growers in the Everglades Agricultural Area or the C-139 Basin must follow the regulatory requirements of the SFWMD instead.

**Who has the primary responsibility of compliance with BMPs and TMDLs?**

The land owner is. However, this responsibility may be shared through the lease. Some cost-share programs require the signatures of both land owner and leasee (grower). Currently, only the grower has to sign the Notice of Intent (NOI) to participate in the BMP program.

**Will participating in the BMP program provide legal protection from third party litigations?**

No. Participation in the BMP program only provides protection from law suites from the state for violation of water quality standards through the presumption of compliance.

### What do I need to do to be in compliance?

In accordance with the 1999 Florida Watershed Restoration Act, once growers pledge to implement the appropriate BMPs that have been adopted in state code, then they are provided a presumption of compliance with state water quality standards. In practice, several things must be done: (1) develop and implement a BMP plan, (2) file an NOI to participate, (3) an FDACS Implementation Team “Verifies Installation of BMPs”, and (4) FDACS field staff conducts periodic follow-ups. In practice, (1) and (2) get the presumption of compliance, and (3) and (4) allow to keep it.

### What happens if a grower chooses not to adopt the BMPs?

A grower who chooses not to adopt or implement BMPs is not afforded the opportunity to receive cost-share funds and does not receive the presumption of compliance. Moreover, this grower may have to incur water quality monitoring costs to demonstrate that they are not contributing to water quality impairment.

### What cost-share programs will be available and how might this affect growers farming on leased land(s)?

Realistically speaking, FDACS has not contemplated a statewide cost-share program as an adjunct to the BMP manual. Rather, regional cost-share programs are currently underway in the SRWMD, SJRWMD and SWFWMD areas. We are not aware of negative effects on lessees provided they can produce documentation demonstrating that they have a legally binding agreement that enables them to farm a particular parcel for a certain period of time.

## **3. The BMP manual for vegetable crops grown in Florida**

### What is the correct title of the BMP manual for vegetables?

Florida vegetable and agronomic crop water quality/quantity Best Management Practices manual

### What is the purpose of the BMP manual for vegetable crops?

The BMP manual is a resource document that cites existing publications (mainly from UF-IFAS and NRCS) and that

- (1) provides background on the state-wide BMP program,
- (2) lists all the possible BMPs,
- (3) provides a selection mechanism for building a customized BMP plan,
- (4) outlines record-keeping requirements, and
- (5) explains how to participate in the BMP program.

#### Where can the manual be found?

The manual can be found in its electronic form at [www.floridaagwaterpolicy.com](http://www.floridaagwaterpolicy.com) and in printed form from DACS or your county Extension office.

#### Will the manual be edited/modified? If so, how can I be informed about updates?

The BMP manual is a living document that will require periodic updates as new technical information becomes available. By faxing or mailing the form provided with the printed copies of the BMP manual, you will become a recipient of BMP updates from FDACS.

#### How will the BMP manual become law?

The manual has been adopted by reference and by rule 5M-8 of the Florida Administrative Code on February 9, 2006.

#### What does “adopted by reference” mean?

It means that the rule refers to the content of the manual. The manual itself is not part of the rule. The advantage of adoption “by rule” is that the manual content can be updated without having to modify the rule.

#### What are the different sections of the rule 5M-8 of the Florida Administrative Code?

They are Purpose, Approved BMPs, Presumption of Compliance, Notice of Intent to Implement, and Recordkeeping.

What will happen if the voluntary BMP program “does not work”?

It will be replaced by a more stringent regulatory program.

#### **4. BMP selection and implementation**

Am I already implementing some BMPs?

Most likely, yes.

Will I get “credit” for BMPs already implemented?

Definitely yes.

Do I have to do all the BMPs listed in the manual?

No.

How many of the BMPs will a grower need to implement to get the presumption of compliance?

This is a case-by-case decision making process that depends upon a number of variables. There is no set number of BMPs that a grower is required to implement. Growers must follow the BMP Decision Tree Flowchart on pages 7 and 8 of the manual to determine the appropriate number of BMPs. It is estimated that most growers would need to implement between 7 to 14 out of a total of 49 BMPs contained in the manual.

Is participation the BMP program voluntary?

BMPs are non-regulatory, which makes it a largely voluntary process for Florida growers. However, if and when the FDEP drafts a BMAP for a particular basin, growers must demonstrate that they have implemented BMPs, or else growers are required to monitor their discharge to ensure that they are not contributing to water quality impairment.

**Do I have to do keep records of BMPs implementation?**

Yes. Specific logo signs in the BMP manual inform the user of specific record keepings.

## **5. The Process of signing up**

**Where will a grower go to fill out the notice of intent (NOI)?**

A grower can fill out their NOI, which is contained in Appendix A-6 of the manual, and mail it to FDACS at the address listed on the NOI, or can submit their NOI online using the Department's BMP Tracking System. If needed, they can request assistance through FDACS, UF-IFAS Extension and/or the BMP Implementation Team in their region.

**How will the Total Maximum Daily Load (TMDL) process affect growers and what are its effects on BMP sign-up?**

The TMDL is a numeric load number that is individually derived for each impaired waterbody in the state. Growers in impaired watersheds must collectively demonstrate that they are implementing BMPs in order to meet minimum BMP participation rates. This can only be realized through the sign-up process and subsequent NOI submittal.

**Who and by what process will the growers' BMPs be approved so the grower gets the presumption of compliance?**

The NOI submittal constitutes entry into the BMP program. The rule language also states that participating growers are to implement BMPs in accordance with the timeline on the Candidate BMP Checklist, which is on the back of the NOI form, and growers must also maintain recordkeeping documentation, as applicable.

Will the BMPs change from year-to-year so that a grower needs to re-file a NOI each year?

No, the BMPs will not change year-to-year and a grower's original NOI will remain in force as long as they demonstrate “good faith” in order to stay abreast of current BMP requirements. Keep in mind that some changes to the manual will likely occur over time

Is there a deadline for signing up and how long is the presumption of compliance good for?

A grower can sign up and submit a NOI at any time; however, time is of the essence in impaired basins that are developing Basin Management Action Plans as FDACS is responsible for validating minimum BMP participation rates. The presumption of compliance is good in perpetuity, provided that the grower continues to implement current BMPs and maintains records.

What is the best way to respond to a grower who is tentative about filing the NOI?

There is no charge for filing, no monetary penalty for non-compliance, and the NOI serves as your “regulatory shield” for potential future regulatory actions involving water quality issues.

How does a producer address different crops on the same farm? For example, some mulched, some non-mulched. Under what circumstances would a grower need one or more NOIs based on different parcels, separate production units, different practices, etc.?

Many of the BMPs are applicable to multiple crop types. The best way to proceed is to first evaluate farm fields based on general cultural categories, such as field crops and mulched crops and use the decision tree flowchart accordingly. FDACS would not anticipate receiving different NOIs based on different production units once this distinction is made. Plasticulture production principles are fairly similar throughout the state, regardless of crop type. For starters, only submit different NOIs when parcel identification numbers are different or when growing both vegetable and agronomic crops in different counties.

## **6. After signing up**

What if the guidelines change or get more stringent? Am I grandfathered in?

This is an interesting question, but in keeping with our earlier response, the presumption of compliance is good in perpetuity, provided the grower continues to implement current BMPs and maintains records. It is FDACS' responsibility under law to keep the manuals updated using the best available science – growers are responsible to implement the BMP recommendations.

Is someone going to come out and inspect my fertilizer records?

Yes. Over time, as FDACS more fully develops their quality assurance program, it is reasonable to believe that a Department employee would ask to inspect fertilizer records at some juncture.

Will someone come out each year to inspect and make sure I've done what I said I'd do?

Given the amount of vegetable and agronomic farms in the state, it is unreasonable to believe that a Department employee will inspect your operation annually.

When will the web-based BMP Tracking System be fully deployed and who is the anticipated user?

The new BMP tracking system is a software program maintained by FDACS and is expected to be operational by Spring of 2006. First level users will be UF-IFAS extension and FDACS staff in order to ensure its readiness.

## **7. Sources of information**

I get my soil test and fertilizer recommendations from my consultant/dealer, does that count?

Fertilizer recommendations can be provided from a private consultant or fertilizer dealer as long as the recommendations are based on a calibrated and correlated soil test. The recommendations must also be based on credible scientific research conducted in Florida on representative crops and soils.

Does the recommendation from a consultant satisfy the criteria on page 93 as a credible research institution (some companies do their own research) and what site-specific conditions or documented data would support that approach?

A “credible” research institution (whether it be a private lab, private consultant, or fertilizer company) is one that conducts research by true scientific method involving hypotheses testing, etc., and solicits peer-review of research results and conclusions. It is the peer review and independent verification that makes the research credible. Obviously, research results and resulting recommendations from various land-grant universities in the Southeastern U.S. would qualify under this scenario.

What about growers who have short leases (1 season or sometimes just part of the season) - how can we work with them on BMPs? In this instance, who is ultimately responsible to submit the NOI?

Undoubtedly, these individuals will be hard to track down. Further complicating this fact is the issue of absentee landowners. Our recommendation is to educate the landowner or leaseholder and work with the water management districts to educate their permitting staff relative to BMP programs since some of these leased farm lands may require a Water or Consumptive Use Permit, which can be issued to both the landowner and leasee. This will help to locate these individuals; however, under Florida Law, the landowner and leaseholder are the only individuals entitled to receive the benefits associated with the NOI. Lastly, NOIs on a particular parcel are not transferable to another leased parcel.

## **8. Technical points**

Does a calibrated soil test exist for the calcareous soils of South Miami-Dade County?

There currently is a partially calibrated soil test for Miami-Dade calcareous soils, as it has been somewhat problematic to develop a true calibrated soil test in this area because the farmed soils are high in P and K. The IFAS Extension Soil Testing Lab in Gainesville still does the Ammonium Bicarbonate-DTPA test for P, with the results interpreted as either high or low.