

Appendix A

U.S. EPA Sole Source Aquifer Documentation



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

September 5, 2008

CH2M HILL
225 E. Robinson Street
Suite 505
Orlando, FL 32801-4322

Subject: Sole Source Aquifer Review for Wekiva Parkway, Florida

Dear Ms. Jorza:

The U.S. Environmental Protection Agency (EPA), Region 4, has received your request to assess the above referenced projects and we have reviewed them pursuant to Section 1424(e) of the Safe Drinking Water Act. The assessment is to determine if the project lies within the boundaries (recharge and streamflow source zones) of an EPA designated Sole Source Aquifer (SSA); and to determine if the project poses potential, adverse health or environmental impacts. A sole source aquifer is the sole or principal water source for a designated area. If the aquifer is contaminated, there would be a significant hazard to public health and an economic burden for those using the aquifer to tap into and deliver drinking water from another water source.

Regulatory groups within the EPA responsible for administering other programs may, at their own discretion and under separate cover, provide additional comments. **The project has been determined to lie outside of the designated boundaries of all sole source aquifers in Region 4. A sole source aquifer review for this project is not required.**

Thank you for your concern with the environmental impacts of this project. If you have any questions, please contact me at 404-562-9443.

Sincerely,

A handwritten signature in black ink that reads "Alanna M. Conley". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Alanna M. Conley
Environmental Scientist
Ground Water and UIC Section



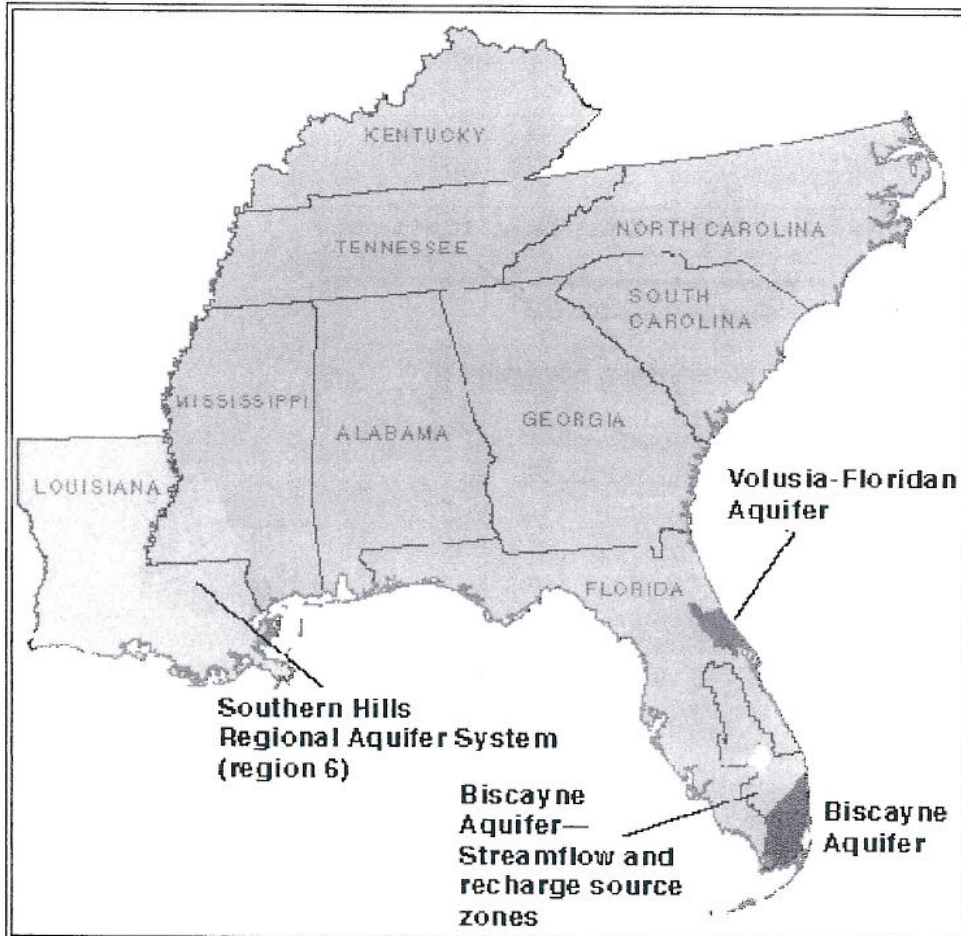
U.S. Environmental Protection Agency Source Water Protection

Recent Additions | Contact Us | Search: **GO**

[EPA Home](#) > [Water](#) > [Ground Water & Drinking Water](#) > [Source Water Protection](#) [Source Water Protection](#) > Designated Sole Source Aquifers in EPA Region IV

Designated Sole Source Aquifers in EPA Region IV

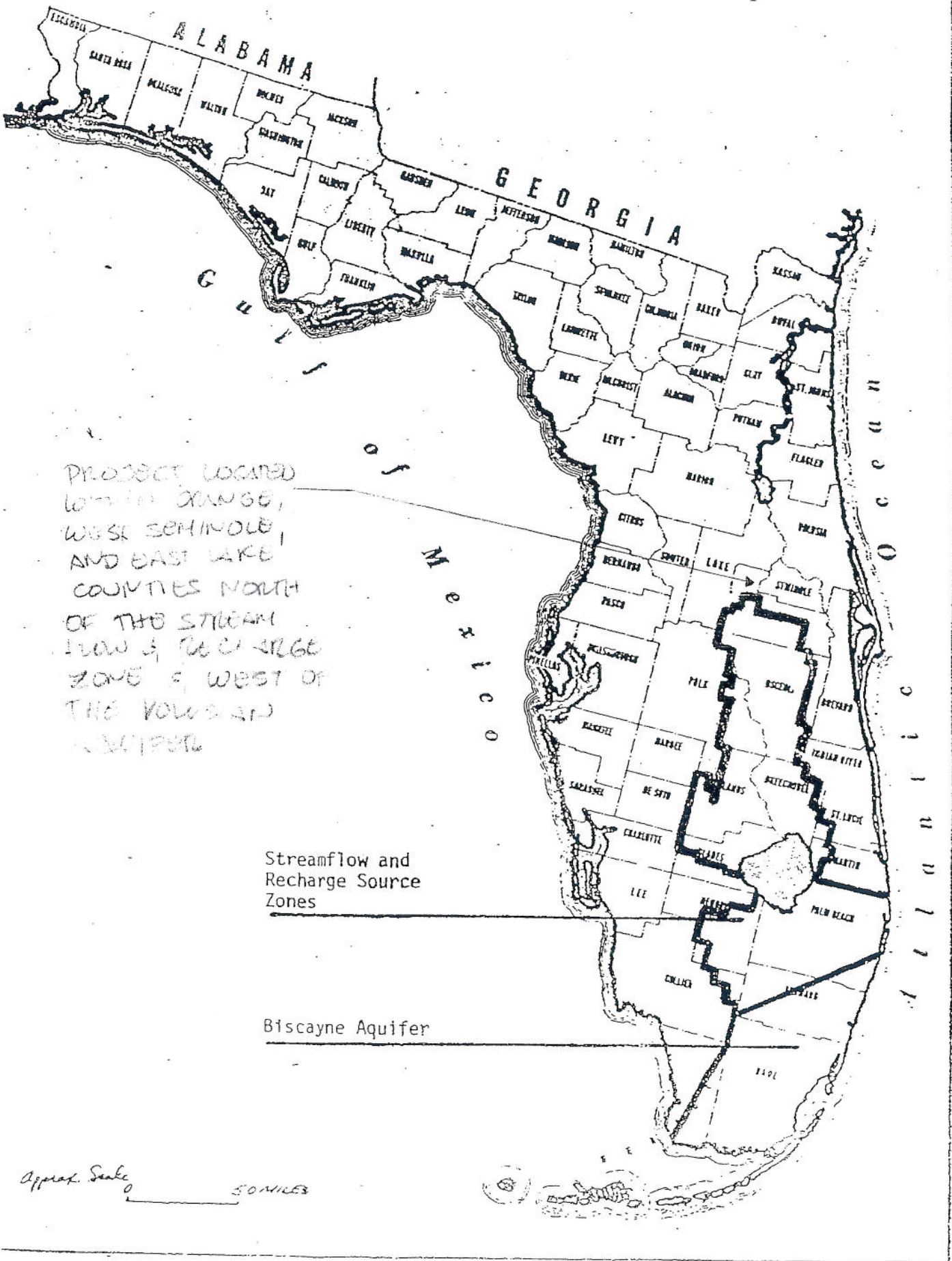
Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee



The 3 Sole Source Aquifer designations in Region IV are listed below. Contact the Regional Sole Source Aquifer coordinator for more information.

Lois Hill
US EPA Region IV, Water Division
61 Forsyth St., SE
Atlanta, GA 30303-3104
phone: (404)562-9472
email: hill.lois@epa.gov

DESIGNATED SOLE SOURCE AQUIFERS IN REGION IV:



PROJECT LOCATED
 WITHIN ORANGE,
 WEST SEMINOLE,
 AND EAST LAKE
 COUNTIES NORTH
 OF THE STREAM
 FLOW & RECHARGE
 ZONE F, WEST OF
 THE VOLUSIAN
 RIVER

Streamflow and
 Recharge Source
 Zones

Biscayne Aquifer

Approx. Scale
 50 MILES

Copies of the Proposed Remedial Order may be obtained by written request addressed to:

Milton Jordan, Director, Division of Freedom of Information and Privacy Act Activities, Forrestal Building, Room CB-145, 1000 Independence Avenue, SW., Washington, D.C. 20585.

Copies of the Proposed Remedial Order may be obtained in person from:

Office of Freedom of Information, Reading Room, Forrestal Building, Room CA-152, 1000 Independence Avenue, SW., Washington, D.C. 20585.

Issued in Washington, D.C., September 17, 1979.

Paul L. Bloom,

Special Counsel for Compliance.

(FR Doc. 79-3127 Filed 10-10-79; 8:45 am)

BILLING CODE 6450-01-M

ENVIRONMENTAL PROTECTION AGENCY

[FRL 1264-3]

Biscayne Aquifer; Notice of Determination

Notice is hereby given that pursuant to Section 1424(e) of the Safe Drinking Water Act (P.L. 93-523) the Administrator of the Environmental Protection Agency has determined that the Biscayne Aquifer is the sole or principal source of drinking water for public supply systems and individual wells in designated portions of Broward, Dade, Monroe, and Palm Beach Counties in Southeast Florida, and that the Biscayne Aquifer, if contaminated, would create a significant hazard to public health.

Background

The Safe Drinking Water Act was enacted on December 16, 1974. Section 1424(e) of the Act states:

"If the Administrator determines, on his own initiative or upon petition, that an area has an aquifer which is the sole or principal drinking water source for the area and which, if contaminated, would create a significant hazard to public health, he shall publish notice of that determination in the Federal Register. After the publication of any such notice, no commitment for Federal financial assistance (through a grant, contract, loan guarantee, or otherwise) may be entered into for any project which the Administrator determines may contaminate such aquifer through a recharge zone so as to create a significant hazard to public health, but a commitment for Federal financial assistance may, if authorized under another provision of law, be entered into to plan or design the project to assure that it will not so contaminate the aquifer."

On May 8, 1978, a petition was presented on behalf of Joseph F. Pedersen

Jr., Nancy Carroll Brown, Marjory Stoneman Douglas, Marilyn Reed, Daniel F. Jackson, Ph. D., Pamela Pierce and Michael F. Chenoweth urging the U.S. Environmental Protection Agency to make a "Sole Source" determination under Section 1424(e) for the Biscayne Aquifer in Southeast Florida. The stated interest of the petitioners was in protecting their drinking water source from contamination.

A notice was published in the Federal Register on September 8, 1978, which acknowledged receipt of this petition and solicited comments, data, and references to additional sources of information which might contribute to the factual record. On October 26 and 27, 1978, EPA held public hearings in Miami and Sebring, Florida, to hear the views of parties interested in the Biscayne Aquifer determination issue. In addition to presentations made at the hearings, many individuals and groups submitted written comments.

After the December 7, 1978, deadline for submission of comments by the public, EPA reviewed all comments received as well as pertinent technical information on the Aquifer. The following facts emerged during the course of the review:

1. The Biscayne Aquifer is the "sole source" of drinking water for over 3,000,000 people in Southeast Florida, including those in cities and towns and those using individual wells.
2. The Biscayne Aquifer is highly permeable and vulnerable to contamination through its recharge zone, which permits rapid and direct infiltration of recharge waters and contaminants. Pollutants can readily enter the aquifer from land surfaces, controlled canals, septic-tank and other drain fields, drainage wells, solid-waste disposal sites, pits, ponds, lagoons, and other places where good hydraulic connections exist between the source of pollutants and the Aquifer.
3. There is evidence of localized contamination of the Aquifer from solid waste disposal sites and septic-tank drainfields.
4. Current practice for treatment of Biscayne Aquifer water used for drinking purposes ranges from complete chemical preparation and sand filtration for some systems to little or no treatment for others.
5. None of the systems treating Biscayne Aquifer water include processes to remove all chemical contaminants which may be hazardous to public health.
6. After reviewing the public hearings and written comments, there were no significant adverse comments to contradict any of the above conclusions.

Area of Review

Section 1424(e) requires that after publication of the Administrator's determination:

" * * * no commitment for Federal financial assistance (through a grant, contract, loan guarantee, or otherwise) may be entered into for any project which the Administrator determines may contaminate such aquifer through a recharge zone so as to create a significant hazard to public health * * * "

The recharge zone is that area through which water enters or could enter into the Aquifer.

The area in which projects may be reviewed is the area encompassed by: (1) the boundary of the Biscayne Aquifer; and (2) its streamflow source zones.

Description of Biscayne Aquifer and Its Recharge and Streamflow Source Zones

The Biscayne Aquifer supplies all municipal water-supply systems in Southeast Florida from Palm Beach County southward, including the system supplying the Florida Keys. The surface boundary of the Aquifer's recharge zone is identical with the boundary of the Aquifer.

The Biscayne Aquifer lies within an area of south Florida bounded by the Atlantic Ocean and Gulf of Mexico between Whitewater Bay in Monroe County and Delray Beach in Palm Beach County and by a line drawn from the mouth of Whitewater Bay northeasterly and northerly to the intersection of the northern boundary of Monroe County and the western boundary of Dade County and thence northerly and northeasterly to the intersection of the North New River Canal and the boundary line separating Broward and Palm Beach Counties and finally east-northeasterly to Delray Beach. The enclosed area includes all of Dade County and parts of Broward, Monroe and Palm Beach Counties.

The streamflow source zone is within the boundaries of the South Florida Water Management District. It includes those portions of the District which ultimately reach the recharge zone by flow through canals or by natural drainage or by a combination of both. That area presently includes designated portions of Broward, Charlotte, Collier, Dade, Glades, Hendry, Highlands, Lake, Lee, Martin, Monroe, Okeechobee, Orange, Osceola, Palm Beach, Polk and St. Lucie Counties. Some of the drainage basins which are included in the streamflow source zone are: Taylor Creek Basin, Fisheating Creek Basin and Kissimmee River Basin. A map of the area encompassed by the Biscayne Aquifer surface boundary and

SR 4291
414
is totally
with
SJRNM D
jurisdiction

streamflow source zone may be inspected at the public libraries in above-listed counties or at the offices of EPA Region IV, 345 Courtland Street, N.E., Atlanta, Georgia 30308.

Information

The information utilized in the determination includes:

- (1) The Petition.
- (2) Written and verbal comments submitted by the public and EPA's response to these comments.
- (3) A technical support document: Biscayne Aquifer, Southeast Florida" by H. Klein and J. E. Hull, U.S. Geological Survey, Water Resources Investigations 78-107, USGS, September 1978.
- (4) A map of the area within which projects will be subject to review. The proposed national regulations for implementation of Section 1424(e) of the Safe Drinking Water Act were published in the Federal Register dated September 11, 1977. They contain procedures for review of Federal financially assisted programs or actions which may contaminate "Sole Source" aquifers through the recharge zone as to create a significant hazard to public health. They are being used as interim guidance until promulgation of final regulations.

Project Review

EPA is currently working with Federal agencies which give financial assistance to projects, to develop procedures for notifying EPA of projects in the area of review which might contaminate the Aquifer.

EPA will evaluate such projects and, where necessary, will conduct an in-depth review, including soliciting public comments where appropriate.

More stringent review criteria will be applied to those projects that have a later potential for contaminating the aquifer, such as those located within recharge zone.

When reviewing projects, EPA will consult with State and local control agencies to ensure that their views can be given full consideration and that their mechanisms for protecting the Aquifer are utilized to the maximum extent.

Federal funding will be withheld from projects found by review to be unacceptable when changes cannot be initiated which will make the project acceptable to EPA.

Issued: October 2, 1979.

Glas M. Costello,
Regional Administrator.

RC-79-31238 Filed 10-10-79 2:45 pm

[OPP-30000/248; FRL 1334-6]

Preliminary Notice of Determination Concluding the Rebuttable Presumption Against Registration of Pesticide Products Containing Thiophanate-Methyl; Notice of Availability of Position Document

I. Introduction

On December 7, 1977, the Environmental Protection Agency issued a notice of rebuttable presumption against registration and continued registration ("RPAR") of pesticide products containing thiophanate-methyl (42 FR 61971), a pesticide used mostly on turf and ornamentals to control fungus, and thereby initiated the Agency's public review of the risks of thiophanate-methyl. This Notice constitutes the Agency's Preliminary Notice of Determination pursuant to 40 CFR 162.11(a)(5), terminating the thiophanate-methyl RPAR.

The Agency has concluded that the presumption against thiophanate-methyl for mutagenicity effects on the basis of point mutations and non-disjunction has been successfully rebutted. The Agency has also concluded that the presumption issued against the use of thiophanate-methyl based on significant local reductions in earthworm populations has been rebutted.

On the basis of these determinations, the Agency has determined not to propose the issuance of a cancellation notice with respect to thiophanate-methyl. Hence, the registration will be allowed to continue in effect without modifications in the terms and conditions of registration. The Agency is however, requiring registrants and applicants for registration to submit additional data concerning mutagenic effects.

In view of the scientific issues raised in the mutagenicity presumption, the Agency is submitting this Notice of Determination and the accompanying position document for review by the Scientific Advisory Panel even though there is no statutory requirement for such a review. The Agency will consider the comments of the Scientific Advisory Panel before taking final action on its proposed decision regarding thiophanate-methyl and issuing a final Notice of Determination.

The remainder of this Notice and accompanying Position Document (PD 2) set forth in detail the Agency's analysis of comments submitted during the rebuttal phase of the thiophanate-methyl RPAR, and the Agency's reasons and factual bases for its proposed determination not to initiate

thiophanate-methyl. The Notice is organized into four sections. Section I is this introduction. Section II, titled "Legal Background," sets forth a general discussion of the regulatory framework within which action is taken by the Agency. Section III sets forth the Agency's determinations concluding the thiophanate-methyl RPAR; Section III and the accompanying Position Document set forth the bases for these determinations. Section IV, titled "Procedural Matters," provides a brief discussion of the procedures which will be followed in implementing the termination of the rebuttable presumption against thiophanate-methyl.

II. Legal Background

In order to obtain a registration for a pesticide under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended ("FIFRA"), a manufacturer must demonstrate that the pesticide satisfies the statutory standard for registration. That standard requires (among other things) that the pesticide perform its intended function without causing "unreasonable adverse effects" on the environment [Section 3(c)(5)]. "Unreasonable adverse effects on the environment" are defined to include "any unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide" (FIFRA Section 2(bb)). In effect, this standard requires a finding that the benefits of the use of any pesticide exceed the risks of use, when the pesticide is used in accordance with commonly recognized practice. The burden of proving that a pesticide satisfies the registration standard continues as long as the registration remains in effect. Under Section 6 of FIFRA, the Administrator is required to cancel the registration of a pesticide or modify the terms and conditions of registration whenever he determines that the pesticide no longer satisfies the statutory standard for registration.¹

¹ Another part of the statutory standard for registration is that the pesticide must satisfy the labeling requirements of FIFRA. These requirements are set out in the statutory definition of "misbranded" [FIFRA Section 3(q)]. Among other things, this section provides that a pesticide is misbranded if:

"The labeling . . . does not contain directions for use which are necessary for effecting the purpose for which the product is intended; . . . complied with, together with any . . . imposed under Section 3(d) . . . are necessary to protect health and the environment.

The Agency can require changes to the label for use of a pesticide in most circumstances, by finding that the pesticide is misbranded, the label is not changed, or by finding that the pes-

COUNTIES WITHIN THE BISCAYNE AQUIFER AREAStreamflow & Recharge Source ZoneRecharge Zone & Aquifer Area

Lake
Orange
Polk
Osceola
Highlands
Okeechobee
Glades
St. Lucie
Martin
Hendry
Palm Beach
Collier

Broward
Dade
Monroe