

Code 2834

Reg # 279-2876

PM-12

Lbs. Net Weight 185

RESTRICTED USE PESTICIDE

Due to acute inhalation toxicity
For retail sale to and application only by certified applicators or personnel under their direct supervision.

Furadan 10 G Insecticide—Nematicide

For Agricultural or Commercial Use Only
EPA REG. NO. 279-2712 AA EPA Est., 279-

Active Ingredient	By Wt.
*Carbofuran	10.0%
Inert Ingredients:	90.0%

2,3-Dihydro-2, 2-dimethyl-7-benzofuranyl methylcarbamate
U.S. Patent No. 3,474,171

**KEEP OUT OF REACH OF CHILDREN
WARNING**

PRECAUTIONARY STATEMENTS

Hazards to Humans (& Domestic Animals)

Warning

Poisonous if swallowed. May be fatal or harmful as a result of skin or eye contact or by breathing dust. Causes cholinesterase inhibition. Warning symptoms of poisoning include weakness, headache, sweat, ng, nausea, vomiting, diarrhea, tightness in chest, blurred vision, pinpoint eye pupils, abnormal flow of saliva, abdominal cramps, and unconsciousness. Atropine sulfate is antidotal.

Wear long-sleeved clothing and protective gloves when handling. Wash hands and face before eating or smoking. Bathe at the end of the work day. Change clothing daily and wash before reuse.

Statement of Practical Treatment

If swallowed, drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person. Get medical attention.

If in eyes, flush with plenty of water for at least 15 minutes. Get medical attention.

If on skin, wash immediately with soap and water. Remove contaminated clothing and wash before reuse.

Antidote

Note to Physician: Furadan (carbofuran) is a reversible cholinesterase inhibitor. Do not use oximes such as 2-PAM. Start by giving 2 mg atropine intramuscularly. According to clinical response, continue until signs of atropinization occur (dry mouth or dilated pupils). If in eye, instill one drop of homatropine.

For Emergency Assistance Call 716-735-3765.

See other panels for additional precautionary information.

Environmental Hazards

This pesticide is toxic to fish, birds, and other wildlife. Birds feeding on treated areas may be killed. Birds killed by carbolaran pose a hazard to hawks and other birds-of-prey, bury or otherwise dispose of dead birds to prevent poisoning of other wildlife. Cover or incorporate granules in spill areas. Runoff from treated areas may be hazardous to fish in neighboring areas. Do not apply directly to water. Do not contaminate wells, wetlands or any body of water by cleaning of equipment or disposal of waste.

Notice: It is a Federal offense to use any pesticide in a manner that results in the death of a member of an endangered species.

The use of Furadan 10 G may pose a hazard to the following Federally designated endangered/threatened species known to be found in certain areas within the named locations:

- Attwater's Greater Prairie Chicken—Texas counties including Arkansas, Austin, Brazoria, Colorado, Galveston, Goliad, Harris, Refugio and Victoria
- Alutian Canada Goose—California counties including Colusa, Merced, Stanislaus and Sutter
- Kern Primrose Sphinx Moth—Walker Basin of Kern County, California

This product may not be used in areas where adverse impact on the Federally designated endangered/threatened species, noted above, is likely. Prior to making applications, the user of this product must determine that no such species are located in or immediately adjacent to the area to be treated. If the user is in doubt whether or not the above named endangered species may be affected, he should contact either the regional U.S. Fish and Wildlife Service office (Endangered Species Specialist) or personnel of the State Fish and Game office.

(See Attachment) DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Do not use this product on Long Island, N.Y.

If prolonged intimate contact with corn and/or sorghum foliage will result, do not re-enter treated fields within 14 days of application without wearing proper protective clothing. For all other situations, do not re-enter fields less than 24 hours following application.

Cover or incorporate granules in spill areas.

STORAGE AND DISPOSAL

Pesticide Storage

Do not store in or around the home.

Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. Carefully open containers. After partial use, fold and roll back bags, clamp and close tightly. Do not put concentrate or dilute material into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Contain spills. Call FMC collect (716) 735-3765.

To contain spill: If liquid, dike surrounding area or absorb with sand, cat litter or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

Pesticide Disposal

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal

Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Use Caution

Do not rotate to a succeeding crop other than alfalfa, corn (field pea or sweet), cotton, cucurbit, cucumbers, melons, pumpkins or squash, grapes, peanuts, peppers, potatoes, rice, small grains (barley, oat, wheat), sorghum, soybeans, strawberries, sugar beets, sugar cane or tobacco. Tomatoes, cabbage, peas, beets, blueberries, and dry beans.



FMC Corporation
Agricultural Chemical Group
2000 Market Street
Philadelphia Pennsylvania 19103

Application did not exceed 6.7 lbs. per acre of Furalan 5 G, 13 lbs. per acre of Furalan 10 G or 2 pt. 10 fl. oz. per acre. Furalan 4 F. Any other crop may be planted if it is not harvested or grazed

Field Corn, Popcorn, Sweet Corn—Conventional Minimum & No Tillage
 Corn Rootworms (Northern, Southern & Western), Flea Beetles, Wireworms, and in the control of White Grubs and first generation European Corn Borer, reduce losses due to Stalk Rot by reducing the incidence of insect wounds which permit entry by the Stalk Rot Fungi; Armyworm control for approximately 4 to 6 weeks after planting and suppression of cutworms—Use 12 ounces of Furalan 10 G per 1,000 linear feet of row (10 lbs. per acre with 40 inch row spacing). Early season suppression of Common Stalk Borer—Use 24 to 36 ounces per 1000 linear feet of row (20 to 30 lbs. per acre with 40 inch row spacing). Apply in a 7 inch band ahead of the planter press wheel and incorporate into the top 1 inch of soil by use of special covering devices or by dragging a short length of chain.—OR—Direct the granules into the planter shoe with the seed.—OR—Place the applicator tube directly behind the planter shoe so that the granules drop into the furrow and mix with the covering soil

Lesion Nematodes (Northeast and Midwest Corn States including Colorado and Wyoming)—Use 12 to 24 ounces per 1000 linear feet of row (10 to 20 lbs. per acre with 40 inch row spacing). Apply "at planting" as above (in a covered band or in the seed furrow).

European Corn Borer (first generation)—Use 24 to 36 ounces per 1000 linear feet of row (20 to 30 lbs. per acre with 40 inch row spacing) "at planting" as above (in a covered band or in the seed furrow).

Seed Corn Maggot—Use 12 ounces per 1,000 linear feet of row (10 lbs. per acre with 40 inch row spacing). **Southwestern Corn Borer (second to third generation)**—Use 18 to 36 ounces per 1000 linear feet of row (15 to 30 lbs. per acre with 40 inch row spacing). **Southern Corn Billbug (Southeastern States)**, and to aid in the control of Leafhoppers and thereby reduce losses due to Maize Chlorotic Dwarf Virus and Corn Stunt diseases—Use 24 to 36 ounces per 1000 linear feet of row (20 to 30 lbs. per acre with 40 inch row spacing). Apply into the seed furrow as noted above.

Nematodes (Sting, Stunt, Stubby Root, Root-Knot, Dagger, Lesion, Lance, and Spiral)—Use 18 to 24 ounces per 1,000 linear feet of row (15 to 20 lbs. per acre with 40 inch row spacing). Apply at planting time in a 7 to 15 inch band and incorporate into the top 3 inches of soil.

Field Corn, Popcorn—Post Plant Northern & Western Corn Rootworm—Use 12 ounces of Furalan 10 G per 1000 linear feet of row (10 lbs. per acre with 40 inch row spacing) per acre by banding over the row or by side dressing both sides of the row and cultivating into the soil.

Field Corn—Foliar Application
 Southwestern Corn Borers and European Corn Borers—Use 10 lbs. per acre. Apply with aircraft by broadcasting over the corn plants or with ground equipment by directing the granules into the corn whorls. Apply when eggs begin to hatch. Do not make a foliar application if Furalan 10 G was applied at more than 12 ounces per 1000 linear feet of row (10 lbs. per acre with 40 inch row spacing) at planting. Do not make more than two foliar applications per season.

Corn Insecticide Applicator Settings
 Furalan 10 G is a dense, free-flowing insecticide requiring accurate equipment calibration to apply the recommended amount per acre. Always calibrate your planter at the speed which you plan to travel during the planting operation. The following are approximate settings for guidance in calibration:

Application Rate	Applicator Gauge Setting								
	10 lbs./A			15 lbs./A			20 lbs./A		
Planter Speed (MPH)	4	6	8	4	6	8	4	6	8
Equipment									
Allis Chalmers	5	5	5	8	8	8	10	10	10
Gandy 901 Series									
Snap on	18	21	24	21	26	29	24	29	34
Bolt on	17	21	24	21	26	30	24	30	34
IHC Cyclo Planter									
Gale	1	1	2	1	2	3	2	3	4
Dial	6	9	4	9	6	3	4	3	2
John Deere									
Max Emerge (even numbered notches—0-10-20-30-40)	11	14	17	14	19	22	17	22	26
Max Emerge (odd numbered notches—5-15-25-35-45)	13	19	24	19	26	31	24	31	35
John Deere									
Range	1	1	2	2	2	2	2	2	3
Notch	26	33	10	1	12	24	8	24	6
Noble									
Round Opening	8	11	13	11	15	18	13	18	23
Rectangular Opening	11	15	20	15	22	27	20	27	33

When the granular application equipment is set to deliver Furalan 10 G at a rate of 12 ounces per 1000 linear feet, the total amount applied per acre will vary depending on row spacing. Use the table below to determine your Furalan needs for each acre.

Row Spacing (inches)	40"	38"	36"	30"	28"
Furalan 10 G (lbs. per acre)	10	10.5	11	13	14

Cotton
 Thrips—Use Furalan 10 G at 10 lbs. per acre (40 inch row spacing) 12 ounces per 1000 linear feet. Apply in the seed furrow at planting. Do not feed cotton forage

Cranberries
 For control of Black Vine Weevils—Use Furalan 10 G at 20 lbs. per acre. For control of adult weevils and larvae, spread granules uniformly over soil surface using a rotary spreader. Make one application about June 15 to 25 and repeat one month later. Incorporate granules by following each application with sprinkler irrigation. For use only on cranberry bogs that are sprinkler irrigated and are not flooded for purposes of irrigation or harvest. Do not apply within 60 days of harvest. For use only in the State of Washington.

Cucurbits (Cucumber, Melons, Squash, Pumpkins)
 Nematodes (Root-Knot, Sting, Lance)—For use in Southeastern States—Use Furalan 10 G at the rate of 2 1/4 lbs. per 1000 linear feet of row (20 lbs. per acre based on 60 inch row spacing). Apply in a 12 to 15 inch band and incorporate into the top 3 inches of soil

Grasses (For use in California)
 For control of Nematodes (Root-Knot, Dagger and Lesion) and Grape Phylloxera—Broadcast Furalan 10G at 100 lbs. per acre over the soil surface between the vine rows and immediately incorporate. Do not apply within 200 days of harvest. Remove dense weed growth prior to treatment. Do not use on soils of pH 8.0 or greater. Retreat as necessary but do not make more than one application per crop year

Peanuts
 Do not feed treated peanut forage to dairy animals or animals being finished for slaughter.

In-furrow at planting application method:
 Thrips, Potato Leafhopper and as an aid in the control of Southern Corn Rootworm in Southeastern States—Use in-furrow at planting, 5 to 10 lbs. per acre (36 inch row spacing); 1/2 to 3/4 lb. per 1000 linear feet of row.

Row banding application method:
 Nematodes (Root-Knot, Sting, Stunt, Lesion, Ring) in Southeastern States and in the Southwestern States of Texas and Oklahoma; and in the Southeastern States to aid in the control of Potato Leafhopper and Southern Corn Rootworm and for control of Thrips—Apply Furalan 10 G in a band over the row prior to planting and incorporate 3 inches into the soil. Use the rate indicated below for various band widths. Additional control measures may be needed late in the season for Potato Leafhopper.

Band Width	Rate/Acre (36 inch rows)	Rate/1000 linear feet
12 inches	20 to 40 lbs.	1 1/2 to 2 1/4 lbs.
18 inches	30 to 50 lbs.	2 to 3 1/2 lbs.

Banded Pegging—Time Application Method
 For control of Southern Corn Rootworm in the Southeastern States—Use Furalan 10 G at 11 to 22 ounces per 1000 linear feet (10 to 20 lbs. per acre with 36 inch row spacing). Apply on a 14 to 18 inch band over the row when pegs begin to form or up to 30 days after pegging begins (approximately 60 to 90 days after planting). Incorporate granules immediately if vine growth permits. Do not apply Furalan 10 G at pegging if Furalan 10 G was used in a band at planting.

Peppers
 Green Peach Aphid—(Delmarva Peninsula & South Jersey only). European Corn Borer—Make two applications of Furalan 10 G by side-dressing on either one or both sides of the row. Make a first application two to four weeks after transplanting using 20 lbs. per acre (equivalent to 1/4 lb. per 500 linear feet with 38 inch rows). Make the second application four to six weeks later using 30 lbs. per acre (1 lb. per 500 linear feet). Do not make the second application within 21 days of harvest

Potatoes
 Colorado Potato Beetle, European Corn Borer, Potato Flea Beetle, Potato Leafhopper, Tuber Flea Beetle, Green Peach Aphid (Western and Northeastern States including the Delmarva Peninsula); Potato Tuberworm (Virginia only); and to aid in the control of Wireworm—Use 2 1/4 lbs. of Furalan 10 G per 1000 linear feet of row (30 lbs. per acre 38-inch row spacing) Apply directly into the bottom of the furrow during the planting operation

Sorghum
 Chinch Bug, Corn Leaf Aphid, Flea Beetle, Greenbug, Lesion Nematode, Seedcorn Maggot, Southern Corn Rootworm, Wireworm, Yellow Sugarcane Aphid and aids in the control of White Grubs and Cut

worms—Use only on grain sorghum or sorghum grown for forage. Do not graze or harvest sorghum grown for forage within 75 days of application.

For Corn Leaf Aphid, Greenbug, Yellow Sugarcane Aphid—Use 9 to 12 ounces of Furdan 10 G per 1000 linear feet of row (7.5 to 10 lbs. per acre with 40 inch row spacing) applied directly into the seed furrow—OR—Use 12 ounces of Furdan 10 G per 1000 linear feet of row (10 lbs. per acre with 40 inch row spacing) applied in a 7 inch band over the row and incorporate the granules into the top 1 inch of soil by the use of a press wheel, dragging a short length of chain or suitable device.

For Corn Root Weevil, Southern Corn Rootworm, Lesion Nematode, Wireworm, Seedcorn Maggot (in furrow application only), and to aid in the control of White Grubs and Cutworms—Use 12 ounces of Furdan 10 G per 1000 linear feet of row (10 lbs. per acre with 40 inch row spacing). Apply at planting as noted above.

Equivalent pounds of Furdan 10 G per acre for various row spacings are as follows.

	Amount of Furdan 10 G per 1000 Linear Feet of Row	Pounds of Furdan 10 G per Acre for Various Row Spacings				
		40"	36"	34"	30"	20"
In Furrow	9 Ounces	7.5	8.25	8.75	10	15
	12 Ounces	10	11	11.50	13	20
7 inch Band	12 Ounces	10	11	11.50	13	20

When a rate range is indicated, use the higher rate when heavier pest infestations are anticipated.

Soybeans

Nematodes (Root-Knot, Cyst, Stunt, Ring, Sting, Spiral, Lesion, Lance, Dagger, Stubby-Root)—Use Furdan 10 G at 18 to 24 ounces per 1000 linear feet (equivalent to an application of 15 to 20 lbs. per acre on a 40-inch row spacing) at planting in a 7-inch band and mix with the covering soil.

—OR—

Apply Furdan 10 G at 18 ounces per 1000 linear feet (equivalent to an application of 15 lbs. per acre on a 40-inch row spacing). Apply at planting by directing the granules into the planter shoe with the seed or by placing the applicator tube directly behind the planter shoe so that the granules drop into the furrow and mix with the covering soil.

Mexican Bean Beetle (larvae)—Use Furdan 10 G at 18 ounces per 1000 linear feet (equivalent to 15 lbs. per acre on a 40-inch row spacing) at planting in a 7-inch band and mix with the covering soil.

—OR—

Apply Furdan 10 G at 12 to 18 ounces per 1000 linear feet (equivalent to an application of 10 to 15 lbs. per acre on a 40-inch row spacing). Apply at planting by directing the granules into the planter shoe with the seed or by placing the applicator tube directly behind the planter shoe so that the granules drop into the furrow and mix with the covering soil.

Sugar Beet

Sugar Beet Root Maggot—Use 13 ounces of Furdan 10 G per 1,000 linear feet of row (20 lbs. per acre using 22 inch row spacing). Apply granules in a 6 to 7 inch band and incorporate into the top 1 inch of soil using a suitable device or use 6.5 ounces of Furdan 10 G per 1,000 linear feet of row (10 lbs. per acre using 22 inch row spacing) by applying granules in a "modified in-furrow" application. (Drop granules from a tube in a narrow band of 1 to 2 inches in front of the planter disks and allow some granules to fall into seed furrow with seed.)

Sugar Beet Application Rates

When the granular application equipment is set to deliver Furdan 10 G at rates of 6.5 or 13 ounces per 1,000 linear feet, the total amount applied per acre will vary depending on row spacing. Use the table below to determine your Furdan needs for each acre.

Ounces of Furdan 10 G per 1,000 Linear Feet of Row	Pounds of Furdan 10 G per Acre for Various Row Spacings			
	20"	22"	24"	30"
6.5	10.5	9.5	9	7
13	21	19	17.5	14

Sugarcane

Apply Furdan 10 G at the rate of 2 1/2 to 5 lbs. per 1000 linear feet of row (equivalent to 20 to 40 lbs. per acre based on 60 inch row spacings). Do not use in Hawaii.

Plant cane

Nematodes (Root-Knot & Stunt), Wireworm—Apply the above rate as a 15 inch band directly over the planted cane and cover with soil.

Stubblecane

Wireworm (Florida only), Nematodes (Root Knot & Stunt) Apply the above rate as a 15 inch band over the stubble row. Use any time after harvest until regrowth reaches 18 inches. Cover with a 1 to 2 inch layer of soil. Covering with more than 2 inches of soil may reduce stand.

Sunflowers (Confectionary and Oil)

Sunflower Stem Weevils, Grasshoppers—Use 12 to 24 ounces of Furdan 10G per 1,000 linear feet of row (13 to 26 lbs. per acre with 30 inch row spacing). Sunflower beetle—Use 24 ounces of Furdan 10G per 1,000 linear feet of row (26 lbs. per acre with 30 inch row spacing). Apply at plant by directing the granules into the planter shoe with the seed or by placing the applicator tube directly behind the planter shoe so that the granules drop into the furrow and mix with the covering soil—OR—Apply at planting in a 7 inch band and mix with the covering soil. When a rate range is indicated, use higher rate when heavier insect infestation is anticipated.

Tobacco—All Types Except Flue-Cured

For control of Flea Beetles, Hornworms and to aid in the control of Budworms—Use Furdan 10 G at 60 lbs. per acre. Broadcast granules over the soil surface prior to transplanting and incorporate into the top 3 inches with a suitable device.

For full season control of Flea Beetles only—Use Furdan 10 G at 30 to 40 lbs. per acre—OR—for full season control of Flea Beetles and approximately 60 days control of Hornworms—Use Furdan 10 G at 40 lbs. per acre. Apply broadcast as noted above.

Tobacco—Flue-Cured

For control of Stunt Nematodes, Flea Beetles, Hornworms, Wireworms and to aid in the control of Root-Knot Nematode and Budworms—Use Furdan 10 G at 60 lbs. per acre. Broadcast granules over the soil surface prior to transplanting and incorporate into the top 3 inches with a suitable device. Form beds and plant as usual. This product may induce flecking of the bottom or lower leaves.

For full season control of Flea Beetles and approximately 60 days control of Hornworms—Use Furdan 10 G at 40 lbs. per acre. Apply broadcast as noted above. Note leaf flecking caution listed above.

Cottonwood

Cottonwood Twig Borer, Cottonwood Leaf Beetle, Clearwing Borer—In Commercial Plantations use 10 to 20 lbs. per acre (12 ft. row spacing) or 2 1/4 to 5 1/2 lbs. per 1000 linear feet of row. Apply during June or July to the root zone of the cutting by the use of a granular subsoil applicator as a sidedress 10 to 12 inches from the trees in a continuous band on both sides of the trees. In Nursery Plantings use 40 lbs. per acre (40 inch row spacing) or 3 lbs. per 1000 linear feet of row. Apply during May or June to the root zone of the cutting, sidedressing 10 to 12 inches from the trees in a continuous band on both sides of the trees.

Pine Seedlings

Pales Weevil and Pitch-Eating Weevil control in pine plantations—Use 10 grams (1 teaspoon) per seedling at transplanting. Distribute the granules in a 6 inch radius on the soil around each seedling. Cover granules with soil. Do not use at planting if seedlings were treated with Furdan 4 F slurry root dip.

Southern Pine Seed Orchards

Seedbugs, Coneworms, Coneborers—Use 4 to 8 ounces per inch of tree diameter. Cone Beetles—Use 8 ounces per inch of tree diameter. Broadcast within the drip area of the tree and incorporate with a suitable device. Make one (1) application in winter or early spring. Do not graze or feed orchard plants or plant parts.

Siberian Elm

Elm Leaf Beetle control by commercial applicators only and in the States of Colorado, Nebraska, Kansas, New Mexico, Arizona, Utah and Wyoming only. Apply Furdan 10 G before insects appear in the spring.

at the rate of 1/2 ounce per inch of trunk circumference. Measure the circumference (girth) of the tree 3 to 4 feet above the ground. Dig one hole for each inch of girth. 3 to 9 inches deep under the drip line of the tree. Thoroughly soak area under the tree. Place granules required in each hole. Replace soil plug immediately and compress soil. Keep treated areas soaked with water for 14 days.

If Girth of Tree is	Locate Holes Away from Trunk	Amount of Fursden 10 G
1 to 10 inches	1 ft.	0.5 to 5 ounces
14 to 20 inches	3 ft.	7 to 10 ounces
24 to 80 inches	6 ft. & 12 ft. (alternating)	12 to 20 ounces
44 to 80 inches	10 ft. & 12 ft. (alternating)	22 to 40 ounces
80 inches and larger	12 ft. & 20 ft. (alternating)	40 ounces

Dealers Should Sell in Original Packages Only.

Terms of Sale or Use: On purchase of this product buyer and user agree to the following conditions.

Warranty: FMC makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. Except as so warranted, the product is sold as is. Buyer and user assume all risk of use and/or handling and/or storage of this material when such use and/or handling and/or storage is contrary to label instructions.

Directions and Recommendations: Follow directions carefully. Timing and method of application, weather and crop conditions, mixture with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the seller and are assumed by buyer at his own risk.

Use of Product: FMC's recommendations for the use of this product are based upon tests believed to be reliable. The use of this product being beyond the control of the manufacturer, no guarantee, expressed or implied, is made as to the effects of such or the results to be obtained if not used in accordance with directions or established safe practice.

Damages: Buyer's or user's exclusive remedy for damages for breach of warranty or negligence shall be limited to direct damages not exceeding the purchase price paid and shall not include incidental or consequential damages.

ATTACHMENT

Carbofuran is a chemical which can travel (seep or leach) through soil and can contaminate ground water which may be used as drinking water. Carbofuran has been found in ground water as a result of agricultural use. Users are advised not to apply carbofuran where the water table (ground water) is close to the surface and where the soils are very permeable, i.e., well-drained soils such as loamy sands. Your local agricultural agencies can provide further information on the type of soil in your area and the location of ground water.