United States
Environmental Protection
Agency

Region 10
1200 Sixth Avenue
Seattle WA 98101

Alaska
Idaho
Oregon
Washington

Design

EPA

RECEIVED
FEB - 4 1992
DIV. OF HIGHWAYS
SHOSHONE, IDAHO

JAN 2 1 1992

RECEIVED
JAN 28 1992
ID. TRANSPORTATION DEPT.

Reply to
Attn of: WD-139

Jack T. Coe, Division Administrator
U.S. Department of Transportation
Federal Highway Administration
Idaho Division
3050 Lakeharbor Lane, Suite 126
Boise, Idaho 83703-6217

Dear Mr. Coe:

This is to acknowledge receipt of the revised Attachment A of our Memorandum of Understanding which includes the Eastern Snake River Plain as a Sole Source Aquifer. We concur with the revision and have incorporated the language into our copy of the memorandum.

Sincerely,

Dana A. Rasmussen
Regional Administrator

cc: C. Rountree, ITD, Boise

REFER TO	ACT	INFO
DIST ENGR		✓ (w/A)
ADE		
MTCE ENGR		
D&M		
PROJ DEV ENGR		
MATLS ENGR		
DESIGN		
LOCATION		
TRAFFIC ENGR		✓ (w/A)
DIST FUNC		
SHO RES		
RUPERT RES		
R/W		
SUPPLY		
SHOP SUPT		
MTCE FORE		
DP COORD		
EEO / SAF		
REC INSP		
DE		✓ (w/A)

RECEIVED
JAN 28 1992
DESIGN & ENVIRONMENTAL

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	DIRECTOR		
	LEGAL		
	DEPUTY DIR		
	CHF TRANS SER		
	Trans P & P		
	Hwy Safety		
✓	STATE HWY ADM		
	CHF MOTOR VEH		
	Reg Ser		
	Dr Ser		
	CHF ADMIN		
✓	CHF HWY OPER		
	Cord Admin		
	Materials		
	Misc		
	Traffic		
	Right of Way		
	Design	✓	
	Bridge		
	CHF AERO		
✓	DIST NO 3-4-5		

FHWA Idaho Division
JAN 2
RECEIVED
TO DSE 1/31/89

MEMORANDUM OF UNDERSTANDING
Between
THE FEDERAL HIGHWAY ADMINISTRATION
REGION 10, PORTLAND, OREGON
and
THE ENVIRONMENTAL PROTECTION AGENCY
REGION 10, SEATTLE, WASHINGTON
and
THE IDAHO TRANSPORTATION DEPARTMENT
BOISE, IDAHO

Sole Source Aquifer
State of Idaho

Introduction

The purpose of this memorandum is to develop an understanding between the Environmental Protection Agency (EPA), the Federal Highway Administration (FHWA) and the Idaho Transportation Department (ITD) concerning the review of Federal-aid highway projects which may affect water quality of the designated sole source aquifer listed on Attachment A, hereinafter referred to as the Aquifers. The agreement area is the collective designated "sole source area" encompassing these Aquifers. This memorandum outlines basic criteria against which projects will be evaluated and the procedures to be followed by FHWA and EPA in conducting project evaluation and formal review within the State of Idaho.

Goal and Definitions

The goal of this memorandum is to assure that each highway project that is to receive FHWA financial assistance is designed and constructed in a manner that will prevent the introduction of contaminants into a "sole source" aquifer in quantities that may create a significant hazard to public health. A "significant hazard to public health" will be deemed to occur if the level of contaminants in an Aquifer would:

(a) exceed any maximum contaminent levels set forth in the National Primary Drinking Water Standards at any point where the water may be used for drinking purposes, or

(b) exceed public health advisory levels for currently unregulated contaminants, and where treatment may be needed to achieve appropriate standards or levels.

(c) violate the intent of Executive Order 12088, "Federal Compliance with Pollution Control Standards"

In determining whether a level of contaminant would threaten public health, the following factors at a minimum shall be considered:

(1) the toxicity and transportation/transformation (in the soil) of the contaminants involved;

(2) the volume of contaminants which may enter the Aquifer; and

(3) Aquifer characteristics, i.e., geochemical, hydrological, geological, etc., and attenuation capability of the Aquifer.

Criteria and Procedures

ITD and FHWA will screen all Federal-aid highway projects to assure that action which may affect water quality in the sole source aquifers will be referred to EPA for evaluation. Examples of actions to be referred to EPA are listed in Attachment C. Maps and descriptions of designated sole source aquifers with the State are included in Attachment A.

EPA shall be provided an early opportunity to participate in the development and review all draft environmental documents for projects listed in Attachment C.

EPA agrees that all environmental documentation submitted by ITD/FHWA for evaluation or review purposes shall be responded to within thirty (30) calendar days of receipt unless:

(1) EPA requests in writing for an additional 30-day review period and request is concurred in by FHWA.

(2) EPA receives a citizen's petition prior to FHWA approval of the environmental documentation. EPA will immediately notify FHWA (in writing if time permits or by telephone if tne end of the comment period is near). EPA will re-evaluate the project, and will notify FHWA within thirty (30) days of receiving such petition information of EPA's decision.

ITD agrees that all contracts for projects in the sole source aquifer area will contain adequate provisions for the cleanup of any petroleum spill.

FHWA and ITD agree to provide EPA with a copy of the contract plans and specifications for all projects previously submitted for EPA review, and to permit EPA inspection of their construction.

General Information

Environmental documents furnished EPA under this Memorandum of Understanding will be addressed to the attention of the Office of Ground Water in EPA's Region 10 Office in Seattle. Project review comments by EPA will be addressed to the Idaho Transportation Department District Office transmitting the document with a copy to the FHWA Idaho Divison Office.

FHWA, EPA and ITD will assign a liaison officer to serve as a central contact point to be responsible for maintaining communications as to procedures and activities of their respective agency. The liaison officers are:

FHWA: Regional Environmental Program Manager
FHWA Region 10 Office
708 S.W. Third Avenue
Portland, Oregon 97204
(503) 221-2061 or FTS 423-2061

Environmental Coordinator
Division Administrator
FHWA Idaho Division
3010 W. State Street
Boise, Idaho 83703
(208) 334-1690 or FTS 554-1690

EPA: Chief, Office of Ground Water
U.S. Environmental Protection Agency
1200 Sixth Avenue, Mail Stop WD-139
Seattle, Washington 98101
(206) 442-1216 or FTS 399-1216

ITD: Environmental Planning Section Supervisor
Idaho Transportation Department
3311 West State Street
Boise, Idaho 83707

This Memorandum of Understanding is subject to revision upon agreement of the following parties.

IDAHO TRANSPORTATION DEPARTMENT

Kermit V. Kiebert
Director

Date: 3/31/88

FEDERAL HIGHWAY ADMINISTRATION

Jack T. Coe
Division Administrator

Date: October 31, 1988

M. Eldon Green
Regional Administrator

Date: Dec 12, 1988

ENVIRONMENTAL PROTECTION AGENCY

Regional Administrator

Date: January 9, 1989

ATTACHMENT A

Pursuant to the Safe Drinking Water Act (42 USC 300 h-3e), EPA has determined that the aquifer listed below is the sole or principal drinking water source for their respective designated areas. As such, no commitment for Federal financial assistance may be entered into within the boundaries of the designated area for any project which EPA determines may contaminate any of the aquifers through their recharge area (watershed) so as to create a significant hazard to public health or the environment.

Aquifer Name	Location	Federal Register Notice	Date
Spokane Valley Rathdrum Prairie	Kootenai County, ID* (aquifer only)	Vol. 43, No. 28 5566 et. seq.	02/9/78
Lewiston Basin	Nez Perce and Lewis Counties, ID	Vol. 53, No. 191 38762 et. seq.	10/3/88
Eastern Snake River Plain	South Eastern, ID**	Vol. 56, No. 194 50635 et. seq.	10/7/91

* As indicated on the aquifer map (Attachment A(1)), the aquifer is surrounded by the Streamflow source area located in Bonner, Kootenai, Shoshone, Benewah, and Latah Counties.

** As indicated on the aquifer map (attachment A(2))

Projects listed in Attachment C and located in the Streamflow source area shall be submitted to EPA for review.

Attachment A(1)

no later than March 23, 1978. All comments received will be made available to the public. Copies of all comments received and a verbatim transcript of the meeting will be available for public inspection and copying during normal working hours at the U.S. Environmental Protection Agency's Public Information and Reference Unit, Room 2922, Waterside Mall, 401 M Street SW., Washington, D.C. 20460.

All communications and correspondence should be directed to U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, MD-12, Research Triangle Park, N.C. 27711, Attn.: Mr. Joseph Padgett, 919-541-5204.

Dated: February 2, 1978.

EDWARD F. TUERK,
Acting Assistant Administrator for Air and Waste Management.

(FR Doc. 78-3478 Filed 2-8-78; 8:45 am)

[6560-01]

(FRL 831-3)

SPOKANE VALLEY-RATHDRUM PRAIRIE AQUIFER

Determination

Notice is hereby given that pursuant to section 1424(e) of the Safe Drinking Water Act (Pub. L. 93-523) the Administrator of the Environmental Protection Agency has determined that the Spokane Valley-Rathdrum Prairie Aquifer is the sole or principal source of drinking water for an area in Idaho and Washington. The Aquifer supplies water to public water supplies and individual wells in Kootenai County, Idaho, and Spokane County, Wash.

BACKGROUND

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

During the fall 1976, petitions were presented on behalf of the Idaho Coalition for Shorelands Preservation, Spokane Audubon Society, Spokane Vera Valley Citizens Committee, and Spokane Sierra Club urging the U.S. Environmental Protection Agency to make a "Sole Source" determination under section 1424(e) for the Spokane Valley-Rathdrum Prairie Aquifer in Idaho and Washington. The petitioners are interested in protecting their drinking water source from contamination. They desire controls which are not tied to local politics and industrial and commercial influence. A Notice of Receipt of this petition, together with a request for comments, was published in the FEDERAL REGISTER on January 31, 1977. In response to the notice and request for comments, written comments were received from both the public and private sectors. On March 4, 1977, the EPA held a public hearing in Spokane, Wash., to hear the views of interested persons on the Spokane Valley-Rathdrum Prairie Aquifer issue.

Among the determinations which the Administrator must make in connection with the designation of an area under section 1424(e) are: (1) Is the Aquifer the area's sole or principal source Aquifer of water supply, and (2) if contaminated, would a significant hazard to public health be created? EPA does not construe this provision to require a determination that projects planned or likely to be constructed will in fact create such a hazard; it is sufficient to demonstrate that approximately 338,000 people depend on the Spokane Valley-Rathdrum Prairie Aquifer as their principal source of drinking water, and that the aquifer is vulnerable to contamination through its recharge zone. Obviously, threats to the quality of the drinking water supply for such a large population could create a significant hazard to public health.

In public comments, the view was expressed that EPA should refrain from designating the Aquifer because a system of State and local controls to prevent contamination already existed or special 208 studies would promote the controls needed. While the existence and effectiveness of local controls are clearly relevant to the question of reviewing future Federal financially assisted projects, section 1424(e) does not make designation contingent on the absence of State or local regulations. Therefore, these factors do not properly bear on the decision whether or not to designate the Aquifer.

A. DESIGNATION OF "SOLE SOURCE" AQUIFER

The Agency has carefully reviewed both the data presented at the public hearing for the Spokane Valley-Rathdrum Prairie Aquifer and subsequent written comments. Most speakers at the hearing expressed the view t the Aquifer provided the sole source drinking water for a large area Idaho and Washington and that th would be a danger to public health if it were contaminated. A "sole sou or principal source aquifer" means aquifer which supplies 50 percent more of the drinking water for an a (large territory, usually encompass more than one county).

On the basis of the substan amount of information which is av able to this Agency and that presen by the public, the Administrator h made the following findings, which the basis for the determination no above:

1. The Spokane Valley-Rathdr Prairie Aquifer is the "sole source" high quality drinking water for ov 338,000 people, including cities a towns and people using individu wells. Current water supply treatme practice is limited to minimal disinf tion for some systems and no tre ment for other systems for drinki purposes, and there is no alternati source of drinking water supply whi could economically replace the Sp kane Valley-Rathdrum Prai Aquifer.

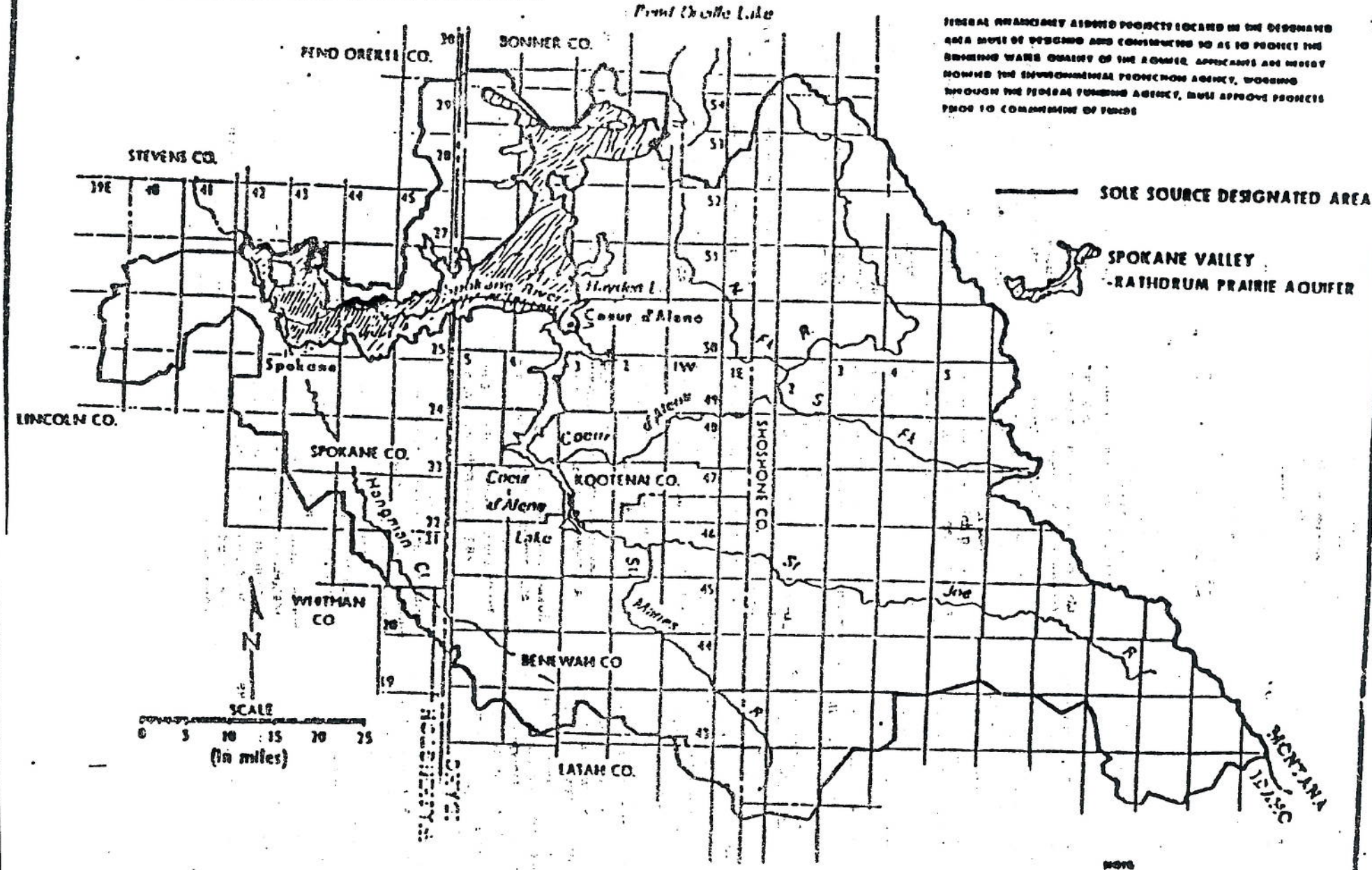
2. The Aquifer is vulnerable to co tamination through its recharge zo primarily because the glaciated so which are highly permeable. There evidence of localized contaminati from industrial sources and sept tanks. Since contamination of ground water aquifer can be difficu or impossible to reverse, contamin tion of the Spokane Valley-Rathdru Prairie Aquifer could pose a signi cant hazard to those people depende on the aquifer for drinking purposes.

B. DESCRIPTION OF SPOKANE VALLE RATHDRUM PRAIRIE AQUIFER R CHARGE AND STREAMFLOW SOUR ZONE

The Aquifer begins in Idaho ne Spirit Lake and Pend Oreille La stretching through the Rathdru Prairie and into the Washington Sp kane Valley through the City of Sp kane, terminating at the confluence the Spokane River and Little Spoka River. The Aquifer consists of unco solidated glacial deposits which have high capacity to store and transm large quantities of water.

Section 1424(e) of the Act requir that after publication of the Admin trator's decision, "no commitment f Federal financial assistance (throu n grant, contract, loan guarantee, otherwise) may be entered into f any project which the Administrat determines may contaminate su aquifer through a recharge zone so to create a significant hazard to pub health * * *." The recharge zone that area through which water ente or could enter into the aquifer. Th

(1) COMMENTS (WITH SUPPORTING DOCUMENTATION) APPLICABLE TO PROJECTS IN THE DESIGNATED AREA ARE ENCOURAGED.



FEDERAL FINANCIALLY ASSISTED PROJECTS LOCATED IN THE DESIGNATED AREA MUST BE REVIEWED AND CONSTRUCTED SO AS TO PROTECT THE DRINKING WATER QUALITY OF THE AQUIFER. APPLICANTS ARE ADVISED TO CONTACT THE ENVIRONMENTAL PROTECTION AGENCY, WORKING THROUGH THE FEDERAL FUNDING AGENCY, MUST APPROVE PROJECTS PRIOR TO COMMENCEMENT OF FUNDS

NOTE
DESIGNATED UNDER THE AUTHORITY OF SECTION 1424(e) OF THE SAFE DRINKING WATER ACT (PL 93-523)
FEDERAL REGISTER, VOL 43, NO. 39, THURSDAY FEBRUARY 9, 1978

EPA

SOLE SOURCE AREA
FOR THE
SPOKANE VALLEY—RATHDRUM PRAIRIE AQUIFER

ATTACHMENT 2 (1)

Attachment A(1)

recharge zone in the case of the Spokane Valley-Rathdrum Prairie Aquifer is the land area directly overlying and adjacent to the Aquifer. The Aquifer extends from near Spirit Lake and Pend Oreille Lake in Bonner and Kootenai Counties, Idaho, southwest across the Rathdrum Prairie and down the Spokane Valley to the Little Spokane River and the Spokane River in Spokane County, Wash., and it includes the cities of Spirit Lake, Athol, Rathdrum, Hayden Lake, Coeur d'Alene, Post Falls, Spokane and several other small towns. This is the zone which will receive high priority for project review.

There is an upstream headwaters area draining into the recharge zone and contributing over 90 percent of the recharge flow to the Aquifer. This is the streamflow source zone. EPA may also review projects in this outlying zone. Since such a high percentage of the recharge flow to the Aquifer originates in this area, it could have a significant impact on the quality of the water in the Aquifer. This streamflow or lake source includes the drainage area of the Spokane River-Coeur d'Alene Lake Basin (approximately 3,000 square miles) and, therefore, encompasses the area to be designated a "sole source." Some recharge occurs from precipitation on the Aquifer but the major recharge comes from Spirit Lake, Twin Lakes, Hayden Lake, Coeur d'Alene Lake, Hauser Lake, Newman Lake, Liberty Lake, Spokane River and miscellaneous tributary streams from secondary upland flow onto the Aquifer recharge zone. The area includes much of the counties of Kootenai, Benewah and Shoshone, Idaho and Spokane, Wash., and parts of the counties of Lincoln and Whitman, Wash., and Latah and Clearwater, Idaho.

The designated area includes the drainage and recharge areas to the Aquifer. The surface water drainage basin above the Pend Oreille Lake (22,900 square miles) is not included within the designated area because recharge from Pend Oreille Lake to the Aquifer is small (about 50 cubic feet per second). It is doubtful that a project located in the drainage basin above the outlet of Pend Oreille Lake could significantly impact the Aquifer.

The ground-water divide between the Aquifer and the Pend Oreille River Basin is not accurately known. Therefore, this short stretch of the boundary has been determined by applying the best hydrogeological judgment contained in the background document prepared by the U.S. Geological Survey.

The data upon which these findings are based are available to the public and may be inspected during normal business hours at the office of the Environmental Protection Agency, M/S 605, Region X, 1200 Sixth Avenue, Seattle, Wash. 98101, and at the following public libraries: Spokane, West 906 Main Street, Spokane County, East 11811 First Avenue, Wash., and 702 Lakeside, Coeur d'Alene, Idaho. The data include:

(1) Maps outlining the Spokane Valley-Rathdrum Prairie Aquifer, the recharge zone and the streamflow source zone (major replenishment area);

(2) The exact coordinates of the designated area which includes the recharge zone and the streamflow source zone;

(3) A copy of the transcript of the public hearing and copies of public comments; and

(4) A technical support document for designation of the Spokane Valley-Rathdrum Prairie Aquifer under section 1424(e) of the Safe Drinking Water Act.

A copy of the above documentation is also available at the U.S. Environment Protection Agency, Office of Public Awareness, 401 M Street SW., Washington, D.C. 20460.

The proposed National Regulations for Implementation of section 1424(e) of the Safe Drinking Water Act (Pub. L. 93-523, FEDERAL REGISTER dated September 29, 1977) contain the procedures for review of Federal financially assisted programs or actions which may contaminate "Sole Source" aquifers through the recharge zone so as to create a significant hazard to public health.

EPA Region X is working with the Federal agencies, which may in the near future fund projects in the area of concern to EPA, to develop interagency procedures whereby EPA will be notified of proposed commitments for projects which could contaminate the aquifer. Although the project review process cannot be delegated, the Regional Administrator in Region X will rely to the maximum extent possible upon any existing or future State and local control mechanisms in protecting the ground-water quality of the Spokane Valley-Rathdrum Prairie Aquifer.

Dated: January 31, 1978.

DOUGLAS M. COSTLE,
Administrator.

[FR Doc. 78-3478 Filed 2-8-78; 8:45 am]

[6560-01]

[FRL 852-4; OPP-66041]

PESTICIDE PROGRAMS

Cancellation of Registration of Pesticide Products

Pursuant to section 6(a)(1) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended (86 Stat. 973, 89 Stat. 751, 7 U.S.C. 136(a) et seq.), the firms listed below have requested that the Environmental Protection Agency (EPA) cancel the registrations of several pesticide products. Such cancellation shall be effective within 30 days after receipt of a certified letter from EPA or publication of this notice in the FEDERAL REGISTER, whichever occurs later, unless the registrant or an interested person with the concurrence of the registrant, requests that the registration be continued in effect.

The Agency has determined that the distribution and sale of stocks of these products which were in existence on the effective date of cancellation would not be inconsistent with the purposes of FIFRA and would not have an unreasonable adverse effect on the environment. Pursuant to section 6(a)(1) of FIFRA, therefore, the distribution and sale of existing stocks of these products shall be permitted until the supply is exhausted or for one year from receipt of the notice of intended cancellation sent to each registrant by certified mail, whichever occurs earlier; *Provided*, That these products shall be used only in a manner consistent with the label and labeling registered with EPA.

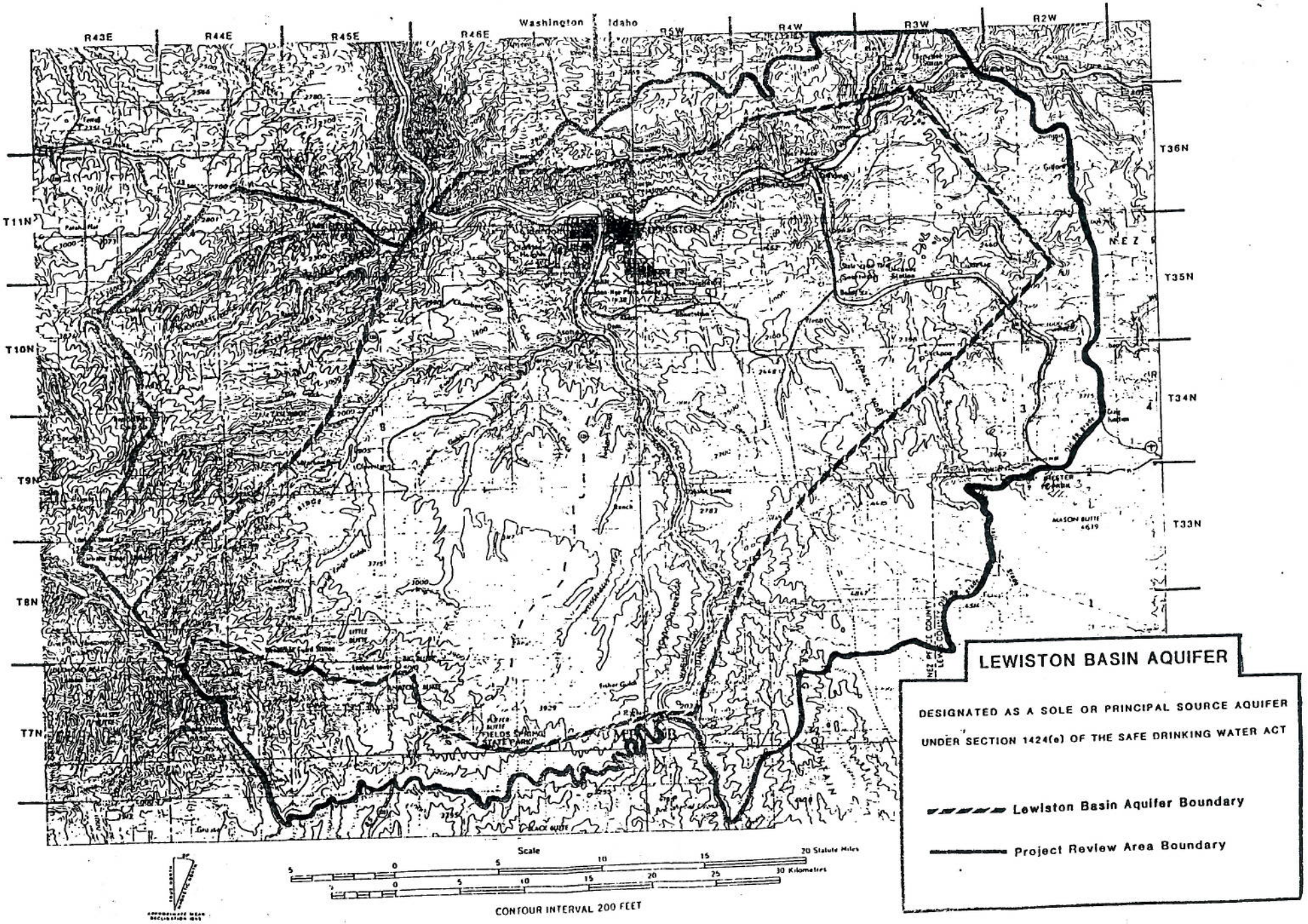
Requests that the registration of these products be continued may be submitted in triplicate to the Product Control Branch, Registration Division (WH-567), Office of Pesticide Programs, EPA, 401 M Street SW., Washington, D.C. 20460. Any comments filed regarding this notice of intended cancellation will be available for public inspection in the office of the Product Control Branch from 8:30 a.m. to 4 p.m. Monday through Friday.

The registrants concerned and the products affected by this action are listed below.

Dated: February 2, 1978.

EDWIN L. JOHNSON,
Deputy Assistant Administrator for Pesticide Programs.

EPA Reg. No.	Product name	Registrant
4-127	Bonide Park Green Pellets Mosquito Larvacide.	Bonide Chemical Co., 2 Wurz Ave., Yorkville, N.Y. 13495.
53-15	Dogones Dog Repellent Outdoor Spray.	The Hygenex Co., Inc., P.O. Box 4500, Copley, Ohio 44321.
100-499	Geigy Garden-Tox.	Ciba-Geigy Corp., Agricultural Division, P.O. Box 11422, Greensboro, N.C. 27409.
192-30	Raleigh Malathion Insecticide Powdered.	W. T. Raleigh Co., 223 East Main St., Freeport, Ill. 61032.


Washington
Idaho
R43E
R44E
R45E
R46E
R5W
R4W
R3W
R2W
T36N
T35N
T34N
T33N
T11N
T10N
T9N
T8N
T7N
LEWISTON
NEZ PERCE
MASON BUTTE
4619
FIELDS SPRING STATE PARK
Scale
20 Statute Miles
30 Kilometers
CONTOUR INTERVAL 200 FEET
LEWISTON BASIN AQUIFER
DESIGNATED AS A SOLE OR PRINCIPAL SOURCE AQUIFER
UNDER SECTION 1424(e) OF THE SAFE DRINKING WATER ACT
Lewiston Basin Aquifer Boundary
Project Review Area Boundary

Environmental Protection Agency (EPA) has determined that the Lewiston Basin Aquifer in parts of Idaho and Washington, is the principal source of drinking water for the Lewiston Basin and that the aquifer, if contaminated, would create a significant hazard to public health. As a result of this action, federal financially-assisted projects proposed in the project review area will be subject to EPA review to assure that these projects are designed and constructed so that they do not create a significant hazard to public health.

EFFECTIVE DATE: This determination shall be promulgated for purposes of judicial review at 1:00 p.m. Eastern time on October 17, 1988.

ADDRESSES: The data upon which these findings are based are available to the public and may be inspected during normal business hours at the Asotin County Library, Main Branch, Sixth and Chestnut, Clarkston, Washington; Asotin County Library, Heights Branch, 2038 Fourth Avenue, Clarkston, Washington; Nez Perce County Library, Lapwai Branch, 105 Main Street, Lapwai, Idaho; Lewiston City Library, Taceminicum Branch, 428 Thaine Road, Lewiston, Idaho; Lewiston City Library, Carnegie Branch, Pioneer Park, Lewiston, Idaho; EPA Idaho Operations Office, 422 West Washington Street, Boise, Idaho; and EPA Region 10 Library, 1200 Sixth Avenue, Seattle, Washington.

FOR FURTHER INFORMATION CONTACT: Jonathan Williams at (206) 442-1541 or FTS 399-1541.

SUPPLEMENTARY INFORMATION: Notice is hereby given that pursuant to section 1424(e) of the Safe Drinking Water Act [42 U.S.C., 300f, 300h-3(e), Pub. L. 93-523] the Region 10 Administrator of the U.S. Environmental Protection Agency has determined that the Lewiston Basin Aquifer located in Asotin and Garfield Counties, Washington, and Nez Perce and Lewis Counties, Idaho, is the principal source of drinking water for much of the aquifer service area. Pursuant to section 1424(e), federal financially-assisted projects proposed for construction in the project review area will be subject to EPA review.

I. Background

Section 1424(e) of the Safe Drinking Water 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 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 the law, be entered into to plan or design the project to assure that it will not so contaminate the aquifer."

On December 27, 1987, the Region 10 Office of the U.S. Environmental Protection Agency (EPA) received a petition from the Asotin County Public Utility District (PUD) requesting that EPA designate the "Russell Aquifer" as a sole source aquifer. The PUD provided additional information through a revised petition which was received by EPA on February 1, 1988.

The "Russell Aquifer" was defined as the upper 600 feet of the Grande Ronde Formation within the Lewiston Basin by a hydrogeological report published in 1980. EPA has combined the Grande Ronde Formation with other water-bearing rocks of the Lewiston Basin and labeled the aquifer system as the Lewiston Basin Aquifer.

In order to obtain public comment, EPA distributed a press release on May 4, 1988, stating that (1) the EPA Regional Office was considering designation of the Lewiston Basin Aquifer as a sole source aquifer, (2) a Resource Document summarizing the bases for the proposal was available for review, (3) public comments were being requested, and (4) a public hearing was to be held on May 27, 1988. Legal notices, announcing distribution of the Resource Document, the public hearing, and the closure date for public comment, were printed in the Lewiston Tribune on May 9, 1988, and the Clarkston Valley American on May 11, 1988. The public hearing was held in Clarkston, Washington, as scheduled, and the public comment period remained open until June 2, 1988.

On May 31, 1988, EPA received a letter from the Idaho Water Resource Board which requested a 60 day extension of the public comment period. EPA granted the request. An additional public meeting was conducted in Lewiston, Idaho on July 19, 1988. Written testimony was received through August 5, 1988.

II. Basis For Determination

Among the determinations which the Regional Administrator must make in connection with the designation of an

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[FRL-3457-8]

Sole Source Designation of the Lewiston Basin Aquifer, Asotin and Garfield Counties, WA, and Nez Perce and Lewis Counties, ID

AGENCY: U.S. Environmental Protection Agency.

ACTION: Final determination.

SUMMARY: Pursuant to section 1424(e) of the Safe Drinking Water Act, the Region 10 Administrator of the U.S.

area under section 1424(e) are: (1) Whether the aquifer is the sole or principal source of drinking water in the area, and (2) whether, if contaminated, a significant hazard to public health would result.

Based on the information available to this Agency, the Regional Administrator has made the following findings, which are the bases for the determination noted above:

1. The Lewiston Basin Aquifer directly supplies about 68 percent of the drinking water used in the area.

2. No economically feasible alternative drinking water sources exist within the area or nearby which could supply all those who now depend upon the aquifer as their source of drinking water.

3. Since the aquifer system represents the principal source of drinking water for the area, contamination of the aquifer would pose a significant hazard to public health.

III. Description of the Lewiston Basin Aquifer

(Information in this section represents an unfootnoted summary of material from: *Support Document for Designation of the Lewiston Basin Aquifer as a Sole Source Aquifer*, issued in September of 1988 by the Region 10 Office of Ground Water.)

The Lewiston Basin covers approximately 500 square miles of southeastern Washington and western north-central Idaho, including part of the Nez Perce Indian Reservation. The structural and topographic basin, bounded by faults and anticlinal folds, represents a ground-water basin within the Columbia Plateau.

Basalts of the Columbia River Group, and especially those of the Grande Ronde Formation, store and transmit most of the ground water in the Lewiston Basin. The basalt itself is dense and impermeable to water, but the basalt flows are fractured throughout. Most ground water moves laterally along flow tops (composed of vesicular and broken basalt formed by rapid cooling at the top of the flow), but some water also moves between flow tops through the entablature and colonnade. Very thin basalt flows may consist only of a flow top and an intensely fractured base which forms a good hydrologic connection with the underlying flow top. The center portions of thick flows, although not impermeable, may restrict vertical ground-water movement enough to act as confining beds.

Sedimetary deposits between basalt flows, called interbeds vary greatly in their thickness and ability to transmit water. Ground water moves easily through coarse-grained interbeds but hardly at all through fine-grained units. Fine-grained interbeds, which act as confining units, occur commonly in the Wanapum and Saddle Mountains Formations but rarely between flows of the Grande Ronde Basalt.

Unconsolidated sedimentary material, composed mostly of gravel and sand with some silt, covers much of the triangular lowland at the confluence of the Snake and Clearwater Rivers, and parts of the Lapwai Valley. The unconsolidated sediments do transmit water to the underlying basalt and, where adequate recharge exists, form water table aquifers atop the basalt aquifer system.

Major faults and anticlinal folds form most of the hydrogeological boundaries of the Lewiston Basin. Faults act as ground-water barriers by offsetting highly permeable flow tops. Also, the pulverized rock in the fault zone weathers to form a clay-rich plane for low permeability. Tight folds, caused by stress intense enough to severely deform the basalt, but not so strong as to offset the beds. Crush and compact the flow tops so that they transmit water much more slowly. Major anticlinal folds, where the strata dip downward from the fold axis, also act as regional ground-water divides. Faults and anticlinal folds, as mapped by the U.S. Geological Survey and Idaho Bureau of Mines and Geology, form all but the southwestern boundaries of the ground-water basin. The southwestern boundary has been drawn along a major topographic divide in the Blue Mountains which acts as a regional ground-water divide. No water budget studies for the basin, which would serve to check the hydrogeological significance of the boundaries, have been published.

Rivers and creeks flow across the structural barriers which act as boundaries for the ground-water basin. Federal financially assisted projects located in the drainage basins of surface streams which recharge ground water within the Lewiston Basin may constitute significant sources of contamination to the aquifer. While the entire streamflow source area includes all of the Snake River drainage upstream from Silcott, Washington, only a portion of the streamflow source area immediately adjacent to the ground-water basin has been delineated for project review purposes.

The boundaries of the project review area, which are shown on a 1:250,000 scale map in the Support Document, are as follows: Beginning west from the confluence of the Grande Ronde and Snake River up to the Grande Ronde River to Menatchee Creek; north up to Menatchee Creek to the ridge separating Menatchee Creek and Saddle Spring Creek; northwest along the ridge separating the two creek basins, over Mt. Horrible, to the unimproved road between Saddle Spring and Misery Spring; northwest along the road to Clearwater Range Station; north along the ridge road separating the Charley and Pataha Creek basins to the intersection of Washington state highway 128, about 2 miles west of Peola; nowthwest about three miles to the Sweeny Gulch Road; northwest on the Sweeny Gulch Road, which generally follows the ridge between the Pataha and Alphowa Creek basins, to U.S. Highway 12; east along Highway 12 to where the Vista Fault trace crosses the highway, about 1 mile east of the Head of Pow Wah Kee gulch and about 2 miles west of Silcott, Washington; northeast and east along the Vista Fault, as mapped by the U.S. Geological Survey, to a high-duty, mostly unimproved road which extends from U.S. Highway 195 to the north side of the Snake River; northeast along the road to U.S. Highway 195; southeast on U.S. Highway 195 to its intersection with U.S. Highway 95; northeast on U.S. highway 95 about 8 miles to the light-duty road which heads east to Catholic Creek; east, southeast, and east along the road to Catholic Creek; north along the Catholic Creek Road about 2 miles to its intersection with the road to Howard Gulch; east to Howard Gulch and then north along the Howard Gulch Road to the Nez Perce-Latah County line, east along the latitude of the county line about 7 miles, across Idaho state Highway 3, to the light-duty road which reaches the north bank of the Clearwater River about 1 mile downstream from the where Pine Creek meets the Clearwater; south on that road to the Clearwater River; southeast for 2 miles along a prominent ridge to the road between Cottonwood Creek and the town of Summit; south and east to Summit; south along the road through the towns of Gifford and Lookout to the town of Reuban; south along the railroad between Ruban and Craig Junction; generally southwest along an old railroad grade to its end about 4 miles southeast of Soldiers Meadow Reservoir; west along the unimproved road to Craig Mountain; south along the unimproved Craig Mountain Road, and then southwest to the Snake River along the unimproved road which reaches the river about 1 mile upstream from Shovel Creek Rapids; north to the confluence of the Grande Ronde and Snake Rivers, the point of beginning.

On a grand scale, ground water moves from the high elevation areas of the Lewiston Basin, mostly through the basalt flow tops, towards the lower elevation areas of the basin. Generalized water level contours for the Grande Ronde Basalt range from over 5000 feet near the crest of the Blue Mountains to less than 800 feet along the Snake River. However, geologic features within the basin act to intercept, direct, or dramatically slow the ground water as it moves through the gently sloping basalt beds.

Recharge to the Lewiston Basin aquifer system occurs principally from streamflow infiltration. Streamflow infiltration to the basalt aquifers occurs mostly where rivers and creeks flow over basalt flow tops, which happens where basalt beds dip more steeply than the surface drainage gradient. Although no streamflow data have been obtained to measure the amount of recharge, water level records to deep wells in the Lewiston-Clarkston area suggest excellent hydrologic communication between surface water sources and the Grande Ronde Formation.

Precipitation easily recharges the basalt and unconsolidated sediment lying at or near the surface. At lower elevations, however, scant precipitation and high evaporation rates probably allow recharge via precipitation on a sporadic basis only. Precipitation may significantly recharge the basalt aquifers at higher elevations, but hydrogeologic impediments (canyons and dikes) may prevent much of that ground water from reaching the water supply wells in the Lewiston-Clarkston area.

Excess irrigation water, which recharges water table aquifers in the unconsolidated sediments, also partly recharges aquifers of the Wanapum and Saddle Mountains Formations in parts of the Lewiston-Clarkston area. Predominately lateral flow through the upper basalt and fine-grained interbeds combine to prevent most excess irrigation water from percolating to the Grande Ronde Basalt before reaching a discharge point.

Shallow ground water discharges mostly as springs along deeply incised surface drainages, whereas production wells tap much of the deeper ground water in the Lewiston-Clarkston area. Earlier investigations have identified areas where ground water from the Grande Ronde Formation discharged naturally to the Snake River before construction of Lower Granite Dam. However, with the filling of the Lower Granite Reservoir (February of 1973), the static water levels in wells near the river rose but remained below the elevation of the reservoir surface. Thus, it seems that the reservoir now provides partial recharge to the aquifer in the Lewiston-Clarkston area.

Rates of production [artificial discharge] from wells within the Grande Ronde Formation are considerably higher than those from the overlying basalt and unconsolidated sediments. The Asotin County PUD wells produce at rates of 1345 to 4220 gallons per minute [gpm] from the top 800 feet of the Grande Ronde Basalt. In contrast, wells completed in the Wanapum and Saddle Mountains Formations average 10 to 30 gpm.

Public water supply wells in the Lewiston-Clarkston area produce excellent quality water from the Grande Ronde Formation. The water typically contains fewer than 350 parts per million [ppm] total dissolved solids [TDS], and requires no treatment before drinking. The chemistry of water withdrawn from the Grande Ronde Formation appears typical for ground water from the Columbia River Basalt. Published reports have documented contaminated ground water in alluvial sediments of Lapwai Creek, probably from septic tank and drain field usage.

Aquifer units within the Lewiston Basin are vulnerable to contamination for one or more of the following reasons: (1) They occur at or near the surface, where precipitation, excess irrigation, and other artificial recharge can introduce contaminants to the subsurface; (2) they are extensively recharged by surface waters; (3) they are hydrologically connected to near-surface aquifers, either naturally or by wellbores.

The most valuable portion of the Lewiston Basin aquifer system from a drinking water standpoint, the upper 800 feet of the Grande Ronde Formation, is most vulnerable to contamination from surface water recharge. Therefore, any project or activity which would threaten the water quality of a possible surface water recharge area would pose a threat to the principal source of drinking water within the Lewiston Basin. The Grande Ronde Basalt aquifer could also suffer if the overlying water-bearing strata became contaminated.

Aquifers in the unconsolidated sediments and upper basalt units are susceptible to contamination from surface activity since they lie close to the surface in the most populous portions of the Lewiston Basin. Possible sources of contamination include improper storage, handling or disposal of hazardous materials, septic tank effluent, storm runoff, pesticides, and chemical fertilizers. Although the shallow aquifer units serve far fewer people than the Grande Ronde Formation, they do serve as the sole source of drinking water for numerous households. Also, they are hydrologically connected to the Grande Ronde Basalt (although poorly in many areas). But most importantly, they discharge to surface waters which, in turn, recharge the Grande Ronde Formation.

The Lewiston-Clarkston area accounts for most of the drinking water consumed in the Lewiston Basin. The city of Lewiston uses water withdrawn from the Clearwater River for most of its needs but depends upon wells which produce from the Grande Ronde Formation for about 17 percent of its consumption. All other public water purveyors in the Lewiston Basin depend entirely upon wells which produce from the Grande Ronde Formation. Private users, such as food processors, who depend upon large volumes of high quality water derive their supplies exclusively from wells completed in the Grande Ronde Basalt. Individual households which need only small quantities of ground-water utilize the basalts and sediments which overlie the Grande Ronde Formation. Overall, ground water supplies about 68 percent of the water consumed within the basin, which is well above the 50 percent required for sole source designation.

Surface water supplies capable of serving the Lewiston Basin are physically and legally available, but using the available surface water would be economically infeasible. The main water purveyors for the area, the city of Lewiston and the Asotin County PUD, have water rights which would allow them to legally withdraw enough surface water to supply the whole area. In fact, the Asotin County PUD alone has legal access to approximately 43 million gallons per day from the Snake River—enough to supply the peak water usage for the entire basin. However, public and private water purveyors have not fully utilized surface water sources because the Grande Ronde Basalt provides higher quality water at a far lower cost. Surface water from the Snake and Clearwater Rivers requires filtration and disinfection before municipal use. Also, surface water treatment, storage, transmission and distribution facilities cost considerably more to build and operate than systems using high quality ground water.

In order to be considered "economically feasible", according to EPA guidelines, an alternative water source must not cost the typical household more than 0.4 to 0.6 percent of the average annual household income for the area. Conservative cost estimates

erated by the Asotin County PUD
licate that the cost of using surface
ter render that alternative source
nomically infeasible for all the public
ter purveyors in the basin. The cost
replacing individual homeowner wells
th a surface water supply would be
siderably higher.

roject Review

When EPA publishes a determination
a sole or principal drinking water
rce, the consequence is that no
nmitment for federal financial
istance may be made if the
ministrator finds that the federal
ancially-assisted project may
taminate the aquifer through a
harge zone so as to create a
nificant hazard to public health [Safe
nking Water Act section 1424(e), 42
.C. 300h-3(e)]. In many cases, these
eral financially-assisted projects may
o be analyzed in a National
vironmental Policy Act (NEPA)
ument, 42 U.S.C. 4332(2)(c).
o streamline EPA's review of the
sible environmental impacts upon
signated aquifers, when an action is
alyzed in a NEPA document, the two
iews will be consolidated, and both
horities will be cited. The EPA
iew under the Safe Drinking Water
t of federal financially-assisted
jects potentially affecting sole or
ncipal source aquifers will be
luded in the EPA review of any NEPA
ument accompanying the same
eral financially-assisted project. The
er transmitting EPA's comments on
nal Environmental Impact
ment to the lead agency will be the
icle for informing the lead agency of
A's actions under section 1424(e).

Discussion of Public Comment

During the initial public comment
iod, comments were submitted by the
z Perce Tribe, the Idaho Water
source Board, and the Snake River
servation Council. The Nez Perce
be submitted information by
ephone about the present and
ected population of the Lapwai
lley which suggests that ground water
l become an increasingly valuable
ource in the area, referred EPA to a
te agency in an effort to document
es of ground-water contamination,
d requested that implementation of
sole source program respect their
vereign status. The Idaho Water
source Board requested that the
blic comment period remain open for
additional 60 days so that they could
ther evaluate the proposal. The Snake
er Preservation Council wrote to
press their support for the proposed
signation.

The comments from the Nez Perce Tribe, although neither in support of or opposition to designation, are interpreted to underscore the value of ground-water protection in the Lewiston Basin. EPA will respect the Nez Perce Tribal authority and work appropriately with the Tribe on an equivalent basis as with state and local jurisdictions. Implementation of the project review portion of section 1424(e) of the Safe Drinking Water Act will occur through memoranda of Understanding (MOUs) between EPA and federal funding agencies. These MOUs will identify the types of projects EPA will review, and will specify timeframes for project reviews. Therefore, EPA will work directly through federal funding agencies on project review decisions and with local, state, and tribal governments on program coordination.

In response to the Idaho Water Resource Board, EPA reviewed its efforts to publicize the proposed action and make the Resource Document available to public officials, interested agencies, and the general public. The Agency is satisfied that appropriate steps were taken to enlist public comment. The technical criteria for evaluation of the aquifer for determination as a principal source of drinking water supply for the aquifer service area are well defined in EPA guidelines which were published in February 1987. The petitioners documented through their analysis that the aquifer meets the criteria for principal source definition. Region 10 offered to brief the Water Resource Board or its individual members. No new data were presented or suggested as being available. Nevertheless, EPA granted the request to extend the public comment period. Delaying the designation decision precluded local, state and tribal jurisdictions from eligibility to apply for sole source aquifer demonstration grants. To date, however, Congress has not appropriated any of the authorized funds.

During the extended public comment period, EPA received comments from the Nez Perce Tribe, the Asotin County Public Utility District (PUD), the Lewiston Orchards Irrigation District and the Idaho Water Resource Board. The Nez Perce Tribe confirmed in writing some of the comments submitted by telephone on June 2, 1988. The Asotin County PUD submitted a cost estimate addendum which demonstrates that the cost of replacing ground water with available surface water would be even higher than originally calculated. The Lewiston Orchards Irrigation District wrote in support of sole source designation, urging the Regional Administrator to make a determination by June 18, 1988. The Idaho Water Resource Board wrote to communicate continuing reservations about the proposed designation, although the Board stated that they "will not oppose" sole source designation of the Lewiston Basin Aquifer.

VI. Summary

Today's action only affects the Lewiston Basin Aquifer in Asotin and Garfield Counties, Washington, and Nez Perce and Lewis Counties, Idaho. This action provides a review process to ensure that necessary ground-water protection measures are incorporated into federal financially-assisted projects.

Robie G. Russell,

Regional Administrator.

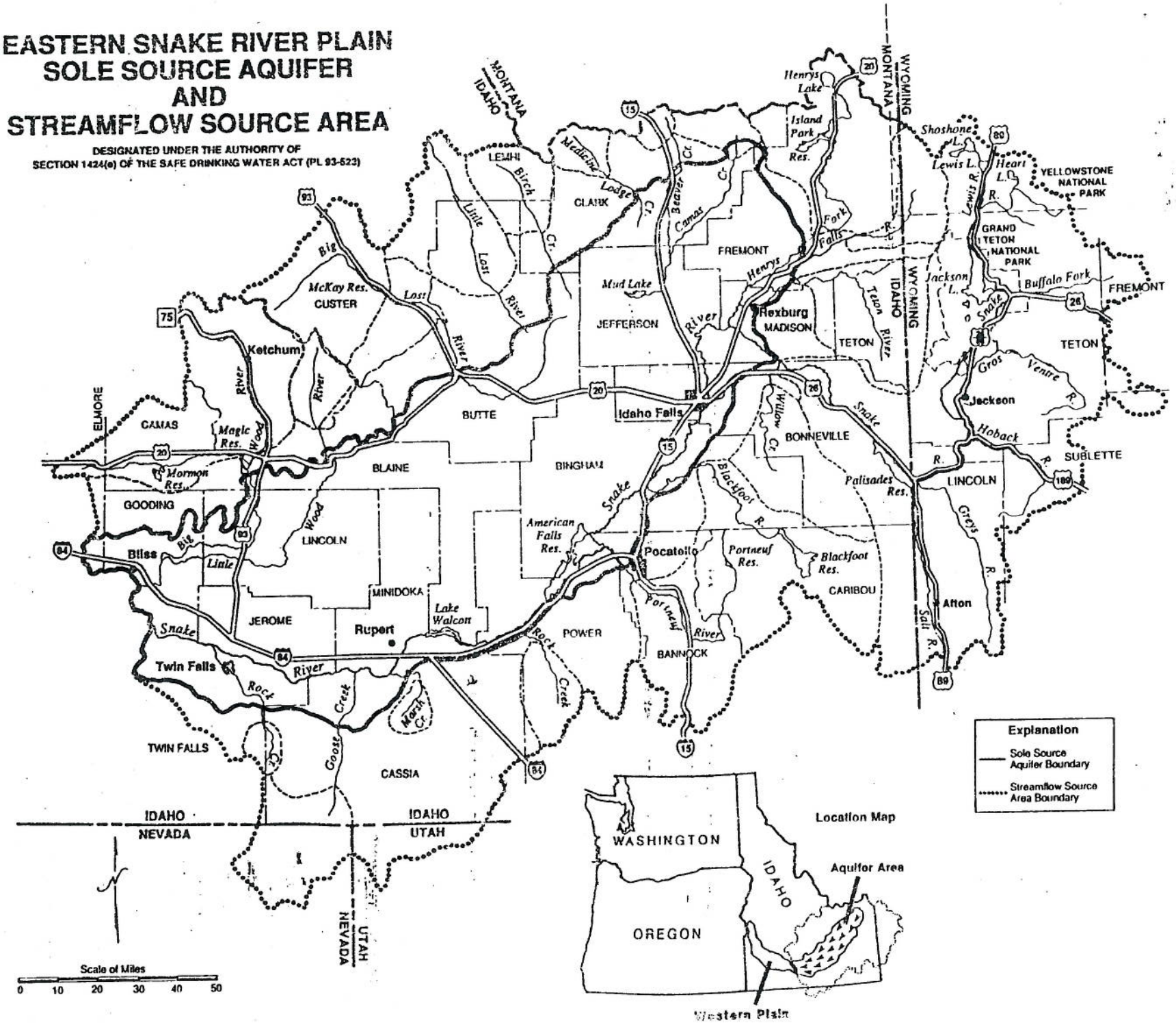
Date: September 16, 1988.

[FR Doc. 88-22822 Filed 9-30-88; 8:45 am]

BILLING CODE 6560-50-M

EASTERN SNAKE RIVER PLAIN SOLE SOURCE AQUIFER AND STREAMFLOW SOURCE AREA

DESIGNATED UNDER THE AUTHORITY OF SECTION 1424(e) OF THE SAFE DRINKING WATER ACT (PL 93-523)



A(2)

ATTACHMENT B

Projects that need not be referred to EPA:

Resurfacing; lighting; signing; pavement marking; guardrail; signalization; freeway surveillance and control system; railroad protective devices; glare screening; median barriers; energy attenuators; and the temporary replacement of highway facilities damaged by natural disasters or catastrophic failures.

ATTACHMENT C

Federally-funded projects within the designated aquifer listed below shall be submitted to EPA for evaluation and comment:

1. All projects documented by an Environmental Impact Statement or those which indicate in the environmental assessment possible adverse impacts on the aquifer.

2. All projects that include:

   a. Addition of drainage wells, detention or retention basins or new wetland areas;

   b. Extensive grading and/or blasting;

   c. Rest areas, weigh stations or scenic overlooks with new expanded sewage disposal stations;

   d. Use of any pesticides, herbicides, or fertilizers in excess of the labeling requirements for application methods and rates.

   e. Clean-up or containment facilities for trucks leaking substances that are or may be hazardous materials or petroleum products, or

   f. Opening of a new material source which could result in a potential contamination or in the use of mining tailings or aggregates containing radon gas.

3. Other projects in which FHWA determines may impact the aquifer.

August 1987

NATIONAL PRIMARY DRINKING WATER REGULATIONS[1]
(40 CFR Part 141)

Inorganics	Arsenic	0.05 mg/l
	Barium	1.0 mg/l
	Cadmium	0.010 mg/l
	Chromium	0.05 mg/l
	Lead	0.05 mg/l
	Mercury	0.002 mg/l
	Nitrate (as N)	10 mg/l
	Selenium	0.01 mg/l
	Silver	0.05 mg/l
	Fluoride	4 mg/l
Pesticides	Endrin	0.0002 mg/l
	Lindane	0.004 mg/l
	Methoxychlor	0.1 mg/l
	Toxaphene	0.005 mg/l
	2,4 - D	0.1 mg/l
	2,4,5 - TP Silvex	0.01 mg/l
Microbiological	Coliform bacteria	1/100 ml *
Physical/Microbiological	Turbidity	1 NTU **
Radiological	Radium - 226 + radium - 228	5 pCi/l
	Gross alpha particle activity	15 pCi/l
	Beta particle and photon radioactivity	4 mrem(annual dose equ
Volatile Organics	Total Trihalomethanes	0.10 mg/l
	Trichloroethylene	.005 mg/l
	Carbon Tetrachloride	.005 mg/l
	1,2 Dichloroethane	.005 mg/l
	Vinyl Chloride	.002 mg/l
	Benzene	.005 mg/l
	para - Dichlorobenzene	.075 mg/l
	1,1 - Dichloroethylene	.007 mg/l
	1,1,1 Trichloroethane	0.2 mg/l

* as a monthly average; individual samples may be higher
** up to 5 NTU in some circumstances

NATIONAL SECONDARY DRINKING WATER REGULATIONS[2]
(40 CFR Part 143)

Chloride	250 mg/l
Color	15 color units
Copper	1 mg/l
Corrosivity	Non-corrosive
Foaming Agents	0.5 mg/l
Iron	0.3 mg/l
Manganese	0.05 mg/l
Odor	3 threshold odor number
pH	6.5 - 8.5
Sulfate	250 mg/l
TDS	500 mg/l
Zinc	5 mg/l
Fluoride	2 mg/l

1) Regulated for health concerns
2) Regulated generally for aesthetic concerns

EPA PRIORITY LEACHERS *(Current as of October 21, 1987 but could change)*

acifluorfen
alachlor
aldicarb
aldicarb sulfone
aldicarb sulfoxide
ametryn
atrazine
atrazine, dealkylated
baygon
bromacil
butylate
carbaryl
carbofuran
carbofuran-3OH
carboxin
carboxin sulfoxide
chloramben
alpha-chlordane
gamma-chlordane
chlorothalonil
cyanazine
cycloate
2.4-D
dalapon
dibromochloropropane
DCPA
DCPA acid metabolites
diazinon
dicamba
5-hydroxy dicamba
3,5-dichlorobenzoic acid
1,2 dichloropropane
dieldrin
diphenamid
dinoseb
disulfoton
disulfoton sulfone
diuron
endrin
ethylene dibromide
ETU
fenamiphos sulfone
fenamiphos sulfoxide
fluormeturon
heptachlor
heptachlor epoxide
hexachlorobenzene
hexazinone
methomyl
methoxychlor
methyl paraoxon
metolachlor
metribuzin
metribuzin DA
metribuzin DADK
metribuzin DK
nitrates
oxamyl
pentachlorophenol
pichloram
pronamide metabolite, RH 24,580
propachlor
propazine
propham
simazine
2.4,5-T
2.4,5-TP
tebuthiuron
terbacil
trifluralin

Attachment D
2 of 2