

MINUTES

MONTANA HOUSE OF REPRESENTATIVES 52nd LEGISLATURE - REGULAR SESSION

SUBCOMMITTEE ON HUMAN SERVICES & AGING

Call to Order: By CHAIRMAN DOROTHY BRADLEY, on January 15, 1991,
at 8:05 a.m.

ROLL CALL

Members Present:

Rep. Dorothy Bradley, Chairman (D)
Sen. Mignon Waterman, Vice Chairman (D)
Rep. John Cobb (R)
Rep. John Johnson (D)
Sen. Tom Keating (R)
Sen. Dennis Nathe (R)

Staff Present: Taryn Purdy, Senior Fiscal Analyst (LFA)
Dan Gengler, Budget Analyst (OBPP)
Faith Conroy, Secretary

Please Note: These are summary minutes. Testimony and
discussion are paraphrased and condensed.

Announcements/Discussion:

DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES (DHES)

Dale Taliaferro, Health Services Division Administrator,
distributed an analysis of the community tuberculosis control
program showing the costs of Galen staying open compared with
costs if it were closed. EXHIBIT 1

EXECUTIVE ACTION ON LICENSING, CERTIFICATION AND CONSTRUCTION BUREAU (CONT.)

Tape 1A

REP. COBB said he wanted to include in the budget proposed step
increases for surveyors because of uncertainties with the
proposed pay plan.

MOTION: REP. COBB moved approval of the LFA budget, including
step increases for surveyors.

VOTE: The motion PASSED 5-1, with CHAIRMAN BRADLEY voting no.

CHAIRMAN BRADLEY asked Ms. Purdy to explain the funding match in
nursing home reform and the request for an additional 15 FTEs.

Ms. Purdy said the federal government requires a 10 percent state match of federal Medicaid expenditures. The match will rise to 15 percent in federal FY 92, 20 percent in federal FY 93 and 25 percent in federal FY 94 and beyond. The budget modification includes an increase in the General Fund to correspond to the increased matching requirement. The modification figures do not reflect the indirect charge decision by the subcommittee. **Mr. Hoffman** said the budget modification includes pay exceptions for surveyors.

SEN. KEATING asked if the services could be contracted out. **Ray Hoffman, DHES Administrator**, said the money must be used for independent contractors who provide services to the general public. The amount of control the Department would have to have over the individuals would probably exclude them from such contracts.

SEN. NATHE asked if the positions were already filled. **Mr. Hoffman** said the positions were approved in a budget amendment last October but were not filled yet. They were for the satellite bureau in Billings.

CHAIRMAN BRADLEY asked what would happen if the Department had 10 additional FTE instead of 15. **Mr. Hoffman** said 15 was the minimum needed and that anything less would put the Department in jeopardy with the federal government on certain issues. Initially, the program sought more than 15 FTEs.

SEN. NATHE asked how many surveyors were employed by the Department and how many facilities were surveyed. **Mr. Davis** said 16 surveyors are in the field and the Department is seeking 15 more. He listed more than 400 facilities served, but stressed that changes in the survey process were driving the need for the additional FTEs. The new process takes twice as long to complete.

SEN. KEATING asked if the Bureau will be involved in the new rural hospital program. **Mr. Davis** said yes. The Bureau anticipates four to five medical assistance facilities to be operating within six months.

MOTION: **REP. COBB** moved approval of 10 additional FTEs, instead of the requested 15 FTEs, with figures to be adjusted by the LFA.

DISCUSSION: **SEN. NATHE** asked how much General Fund money would be saved by approving 10 FTE instead of 15. **Ms. Purdy** said about one-third the budgeted amount.

SEN. WATERMAN asked if the cost would increase in the next couple of years as the state is required to take more responsibility. **Ms. Purdy** said there will be a slight increase because of the indirect charges that will be applied.

SEN. WATERMAN asked if the cost will more than double in two years because the state's matching requirement will increase from

10 percent to 25 percent. Ms. Purdy said the \$50,000 cost will probably increase by \$20,000.

VOTE: The motion PASSED 4-2, with CHAIRMAN BRADLEY and SEN. KEATING voting no.

Mr. Davis summarized the Bureau's request for contracted services. EXHIBIT 9 from Jan. 14, 1991, minutes.

MOTION: SEN. NATHE moved approval of the additional funding for contract services.

DISCUSSION: SEN. NATHE said he believes contract services is the least expensive way to meet additional federal requirements, especially with uncertainties about the workload. Mr. Davis said approval will enable the Bureau to hire outside help.

SEN. NATHE asked if the appropriation would be line-itemed. CHAIRMAN BRADLEY said that language would be part of the motion.

AMENDMENT: SEN. NATHE amended his motion to add that the appropriation would be line-itemed.

VOTE: The motion PASSED unanimously.

The subcommittee agreed to have Ms. Purdy and Department officials prepare language on the federally mandated funding mix of one-third each in state licensure, Medicare and Medicaid. CHAIRMAN BRADLEY said she hopes less General Fund money will be used than indicated in the funding split. The subcommittee will review the figures in two years to ensure the outcome was as had been anticipated.

SEN. NATHE asked if approval of fewer FTEs would affect teams for the satellite office in Billings. Mr. Davis said the Bureau initially planned to put 10 to 12 new positions in Billings. Some additional FTEs are needed in Helena, so the reduction will affect how many can be located in Billings.

CHAIRMAN BRADLEY asked for a motion on the equipment budget. She noted the LFA figures for equipment were determined from a three-year average. The executive budget is based on the 1991 actual appropriation.

SEN. KEATING asked Mr. Hoffman if the Department had a list of equipment needs. Mr. Hoffman said the executive budget had zero-based equipment.

MOTION: SEN. KEATING moved approval of the executive budget for equipment.

VOTE: The motion FAILED on a tie vote, 3-3, with CHAIRMAN

BRADLEY, SEN. NATHE and REP. JOHNSON voting no.

MOTION: REP. JOHNSON moved approval of the LFA budget for equipment.

DISCUSSION: CHAIRMAN BRADLEY said the difference between the two budgets was a small amount, but the issue was whether the subcommittee wanted to force priorities within the Department.

SEN. KEATING asked for an explanation of the funding source. Ms. Purdy said the funding was split into thirds, in the manner discussed earlier.

VOTE: The motion PASSED 4-2, with SEN. KEATING and REP. COBB voting no.

CHAIRMAN BRADLEY asked for a motion on the budget for personal services and operating expenses.

MOTION: REP. COBB moved approval of the personal services and operating expenses as determined in the LFA budget for FY 92 and FY 93, adjusted for previous votes of the subcommittee.

VOTE: The motion PASSED 5-1, with SEN. KEATING voting no.

HEARING ON ENVIRONMENTAL SCIENCES DIVISION

Steve Pilcher, Environmental Sciences Division Administrator, provided an overview of the Division. EXHIBIT 2

Ms. Purdy distributed budget summaries for the Division. EXHIBIT 3

Adrian Howe, Occupational Health Bureau Chief, provided an overview of the Bureau. EXHIBIT 4

Tape 1B

Mr. Howe said the Bureau projected that 150 people in Montana would be accredited under the Asbestos Abatement Control program. More than 650 people have been accredited so far.

CHAIRMAN BRADLEY distributed Environmental Quality Council documents for review before testimony begins on the Water Quality Bureau. EXHIBIT 5-6

ADJOURNMENT

Adjournment: 8:55 a.m.

HOUSE HUMAN SERVICES & AGING SUBCOMMITTEE

January 15, 1991

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REP. DOROTHY BRADLEY, chairman



FAITH CONROY, Secretary

DB/fc

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HOUSE OF REPRESENTATIVES
HUMAN SERVICES SUBCOMMITTEE

ROLL CALL

DATE 1/15/91

NAME	PRESENT	ABSENT	EXCUSED
REP. JOHN COBB	✓		
SEN. TOM KEATING	✓		
REP. JOHN JOHNSON	✓		
SEN. DENNIS NATHE	✓		
SEN. MIGNON WATERMAN, VICE-CHAIR	✓		
REP. DOROTHY BRADLEY, CHAIR	✓		

HR:1991
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EXHIBIT 1 EXHIBIT # 1
DATE 1-15-91 1/15/91
Human Serv.
Subc.

DEPARTMENT OF
HEALTH AND ENVIRONMENTAL SCIENCES



STAN STEPHENS, GOVERNOR

COGSWELL BUILDING

STATE OF MONTANA

FAX # (406) 444-2606

HELENA, MONTANA 59620

MEMORANDUM

TO: Human Services Joint Subcommittee of House Appropriation and Senate Finance and Claims Committees

FROM: Judith Gedrose *J. Gedrose*

DATE: January 14, 1991

SUBJECT: Response to questions about Community Tuberculosis Control

Please find attached a copy of information regarding the cost of community tuberculosis control. In the attached table, I have compared the budget originally developed for the program if Galen closes (column 3) to the cost of a DHES community control program if Galen were to stay open (column 6).

MDHES TB CONTROL BUDGET

Original for Galen Closure		FY92		Modified for Subcommittee if Galen doesn't close
OBJ EXP	Explanation	AMT.	Explanation	
0000	FTE 1.5	24404	Grade 15 PHN Consil full-time	24404
		7337	Grade 8 Adm. Aide half-time	No FTE proposed 0
1100	Empl Bene	7142	22.5% of salaries	5491
2nd Level	2nd Level	38883	TOTAL PERSONNEL	29895
2102	Pharmacist	4649	For prev tx drugs-90refills/mo+mail	4649
2190	Printing	700	Forms for t.b. registry	700
2193	Xeroxing	100	Maintain liason with local health	100
2158	CompSysSupport	120	Will use EPIINFO software	120
2108	Legal&CourtCosts	800	16hrs of legal re court orders&statute	Less if Galen open 200
2109	Physician Specialist	500	10 visits for complicated cases	No need if Galen open 0
2116	Hospital&Home Hlth	43000	36000/subacute(4*180*50)7000/acute 14days	No need for acute if Galen ope 36000
2174	Maintainence&Support	480	Data network services	480
2nd Level	2nd Level	50349	TOTAL CONTRACTED	42249
2208	Lab supplies	2208	Bactec 480 culture system	2208
2204	Educational	200		200
2222	Drugs	791	Tx for prev-180 people/6mos(Galen.0244/d)	791
2223	Chest X-rays	1480	20 per year as last resort	Reduce to 10 if Galen open 740
2224	Pamphlets	100		100
2241	Ofc Supplies	500		500
2276	Shipping Matl	100	Miscellaneous shipping	100
2241	A-station	450	From prison	450
2236	Chair	195	Lowback exec	195
2nd Level	2nd Level	6024	TOTAL SUPPLIES	5284
2304	Postage&Mailing	500	Mail for program(qtrly rprts etc.)	500
2370	TeleEquipDofA	210		210
2385	LongDist DofA	900	For continuity of patient followup	900
2387	Credit Card	200		200
2316	Installation	200	for 2 people	For 1 person 100
2nd Level	2nd Level	2010	TOTAL COMMUNICATIONS	1910
2401	In-State Personal Car	100		100
2402	In-State Commercial	100		100
2404	In-State Motor Pool	1320	20ds/300miles/.22cents	1320
2407	In-State Meals	580	40ds/14.50	580
2408	In-State Lodging	499	20ds/24.96	499
2412	Out-State Commercial	1000	Atlanta-T.B Today	1000
2418	Out-State Lodging	450	T.B. Today	450
2430	Out-State Meals	225	T.B. Today	225
2nd Level	2nd Level	4274	TOTAL TRAVEL	4274
2527	Rent	908		908
2nd Level	2nd Level	908	TOTAL RENT	908
2701	Bldgs&Grounds	76		76
2750	Maintainence	120		120
2nd Level	2nd Level	196	TOTAL MAINTAINENCE	196
2802	Subscriptions	150	ATS Journal	150
2809	Education/Trng	150	2 conferences	150
2822	Freight&Express	100	Misc. shipping	100
2827	Indirect/Adm Costs	7276		For 1 person 4544
2nd Level	2nd Level	7676	TOTAL OTHER	4944
3106	Computer	1572	To maintain data base	1572
2nd Level	2nd Level	1572	TOTAL EQUIPMENT	1572
	TOTAL	111891		91231

Steve Pilcher, admin of Env. Sci. Div.

Exhibit #2

1/15/91

Human Serv.
Subcom.

EXHIBIT 2
DATE 1-15-91
HB _____

**ENVIRONMENTAL SCIENCES DIVISION
MONTANA DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES**

The Environmental Sciences Division of the Montana Department of Health and Environmental Sciences is responsible for a wide range of program efforts, all designed to protect public health and our environment. These are highly visible and sometimes controversial programs that touch the lives of nearly all of Montana's citizens. Seldom does a day go by that some aspect of our environmental programs does not gain media attention. Montana's Constitution, which guarantees a clean and healthful environment for all citizens, seems to set the stage for our efforts. In recent years, environmental programs have experienced considerable growth in response to demands directly from the public or indirectly through legislatively imposed requirements. Today, approximately 170 FTE in 5 Bureaus are involved in carrying out nearly 30 different public health and environmental protection programs. These bureaus include the Air Quality Bureau, Food and Consumer Safety Bureau, Occupational Health Bureau, Solid and Hazardous Waste Bureau and the Water Quality Bureau.

Each of these bureaus is charged with administration of several state mandated programs while three bureaus, Air Quality, Solid and Hazardous Waste Management and Water Quality, have the added responsibility of administering federally mandated programs through a process called "primacy". Such program delegation allows the State of Montana to play a stronger role in the way in which federal programs impact Montana citizens and also gives us access to considerable federal funding to offset program costs. The issue of primacy has been nicely summarized by your analyst beginning on page B-10 of the LFA budget book. Primacy is an important issue to our environmental programs and in my mind to the people of Montana. Loss of primacy in any of these programs could have both a programmatic and financial impact on our state.

During the next three days you will meet and receive information from a number of individuals from the Environmental Sciences Division, each of whom plays a very important part in the State's environmental program. We have elected to involve these key people to allow those most familiar with a program to discuss the same and to provide you with an opportunity to ask questions of the people who make the programs work. In order to make the best use of your time, I will not attempt to cover each of these programs in the Division overview but will instead defer to Bureau Chiefs and Program Managers to provide specific program details.

To assist in your review and consideration of Division programs, I have provided each of you with a copy of a document that summarizes the functions and responsibilities of the Environmental Sciences Division. This document was developed to assist the public by summarizing division functions and providing names of contact individuals by program. The document contains an organizational chart, a list of contact people, a summary of bureau program responsibilities, and a list of statutes and rules administered by the division. A review of this list of statutes and rules quickly reminds us of the magnitude and variety of division responsibilities.

ENVIRONMENTAL SCIENCES DIVISION ADMINISTRATION

Providing management and coordination to this large and diverse group is the responsibility of the Division Administration office. Many of our current environmental problems crossover program and bureau lines. It is the responsibility of the Division Administration Office to ensure that communication exists between appropriate program staff and that the public or regulated community is not receiving mixed or conflicting signals from this agency.

In addition to the general coordination responsibilities, the Division Administration Office is responsible for coordinating the review of Environmental Assessments and Environmental Impact Statement prepared by other State or Federal agencies, coordinating the preparation of Environmental Impact Statements by the division, coordinating the DHES Emergency Response Team, providing right-to-know information, and planning and implementation of other special projects. A total of three FTE are assigned to the Division Administration Office.

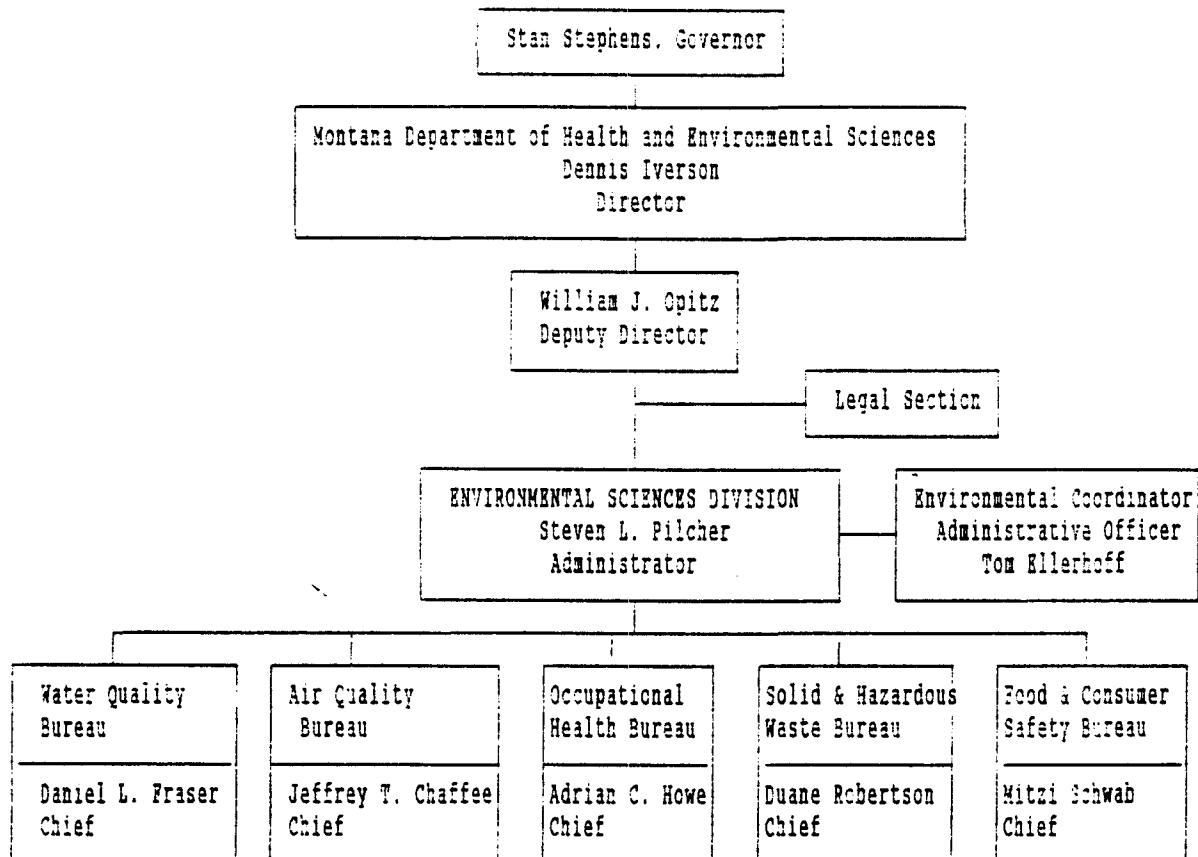
While there would appear to be no major issues in the Division Administration budget I must remind the committee of the importance of providing the requested spending authority in the Environmental Quality Protection Fund. These funds allow the State of Montana to respond to major environmental threats when a responsible party cannot be found or a true environmental emergency exists. Examples of instances where this authority was utilized in the past include the Whitefish Lake diesel fuel spill by Burlington Northern, the C.U.T. fuel spill in Park County, the ARRO Refinery at Lewistown, and numerous other sites being addressed under the State Mini-Superfund effort. As costs are recovered in these clean-up efforts they are returned to the account.

I would be happy to try to answer any questions that the committee might have.

EXHIBIT 2
DATE 1-15-91
HB Hum. Serv. Sub.

THE ENVIRONMENTAL SCIENCES
DIVISION SUMMARY OF
PRIMARY FUNCTIONS AND
RESPONSIBILITIES

MONTANA DEPARTMENT OF
HEALTH & ENVIRONMENTAL SCIENCES
COGSWELL BUILDING
HELENA, MT 59620



Branch Office:

Billings

Jerry Burns - Water Quality & Branch Office Manager,
Vern Heisler - Water Quality, Gerald Cormier - Food and
Consumer Safety Bureau, Jim Hughes & Ella Coenenberg -
Air Quality

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DIVISION

DIVISION OF ENVIRONMENTAL SCIENCES

STEVEN L. PILCHER, ADMINISTRATOR

COGSWELL BUILDING, ROOM A107

HELENA, MONTANA 59620

(406) 444-3948

THE DIVISION INCLUDES FIVE BUREAUS:

AIR QUALITY BUREAU

FOOD AND CONSUMER SAFETY BUREAU

OCCUPATIONAL HEALTH CENTER

SOLID AND HAZARDOUS WASTE BUREAU

WATER QUALITY BUREAU

CONTACT PEOPLE

FOOD & FOOD PRODUCTS:

- (1) Mitzi Schwab, Chief
Food & Consumer Safety Bureau
Working Hours: 444-2408
Non-working hours: 227-8547
- (2) Colin S. Campbell
Food & Consumer Safety Bureau
Working Hours: 444-2408
Non-working hours: 443-6309
- (3) Eastern Part of Montana
Gerald Cormier
Food & Consumer Safety Bureau
Working Hours: 657-2619
Non-working hours: 656-4770

**RADIATION & RADIOACTIVE MATERIALS
ALSO ASBESTOS PROGRAM:**

- (1) Adrian C. Howe, Chief
Occupational Health Bureau
Working hours: 444-3671
Non-working hours: 442-7491

DRINKING WATER OR STREAM POLLUTION:

- (1) Daniel L. Fraser, P.E.
Water Quality Bureau
Working hours: 444-2406
Non-working hours: 443-2322
- (2) Michael J. Pasichnyk
Water Quality Bureau
Working hours: 444-2406
Non-working hours: 442-7692

SOLID AND HAZARDOUS WASTE:

- (1) Duane L. Robertson, Chief
Solid and Hazardous Waste Bureau
Working hours: 444-2821
Non-working hours: 442-6952
- (2) Roger C. Thorvilson
Waste Management Section
Working hours: 444-1430
Non-working hours: 443-5504
- (3) John Geach
Underground Storage Tank Section
Working hours: 444-5970

Nonworking hours: 442-7107

- (4) Vic R. Andersen
Superfund Section
Working Hours: 444-1420

HAZARDOUS MATERIALS RESPONSE

- (1) Tom Ellerhoff
Environmental Sciences Division
Working hours: 444-3948
Non-working hours: 443-4225

COMPRESSED & LIQUID GASES, FUMES

- (1) Jeffrey T. Chaffee, Chief
Air Quality Bureau
Working hours: 444-3454
Non-working hours: 442-0261
- (2) Robert Raisch
Air Quality Bureau
Working hours: 444-3454
Non-working hours: 442-2841

BIOLOGICAL: (Vaccines: polio, flu, measles, virus, etc.):

- (1) Judith Gedrose, R.N., M.N.
State Epidemiologist
Working hours: 444-4740
Non-working hours: 444-4740
- (2) Douglas O. Abbott, Ph.D., Chief
Microbiology Laboratory
Working hours: 444-3444
Non-working hours: 443-7831
- (3) John D. Hawthorne, Chief
Chemistry Laboratory
Working hours: 444-3444
Non-working hours: 442-4607

UNDECIDED OR ALL ELSE FAILS:

- (1) Steven L. Pilcher
Administrator
Environmental Sciences Division
Working hours: 444-3948
Non-working hours: 443-2642

HUMAN POISONING

- (1) Poison Control Center (by swallowing or breathing):
1-800-525-5042

**BUREAUS AND
SECTIONS**

EXHIBIT 2
DATE 1-15-91
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AIR QUALITY BUREAU

Jeffrey T. Chaffee, P.E., Chief
Room All6
Cogswell Building
Helena, Montana 59620
(406)444-3454

I. Administration

- A. Policy
- B. Personnel management
- C. Office management
- D. Budgeting
- E. Training
- F. Rule revision

II. Engineering & Enforcement
Harry C. Keltz

- A. Permits
- B. Inspections/Compliance
- C. Enforcement
- D. Smoke management
- E. Emission inventory
- F. Open burning control
- G. Complaint investigations

III. Operations
Stan Sternberg

- A. Monitoring
- B. Data collection
- C. Equipment repair and calibration
- D. Modeling
- E. Data processing
- F. Chemical laboratory coordination
- G. Tribal air program coordination

IV. Air Toxics and Planning
Robert Raisch

- A. State implementation plans (SO₂, PM10, Lead & CO)
- B. Non-attainment studies
- C. Air toxic program development
- D. Wood stoves
- E. Quality assurance

V. Billings Regional Office
James Hughes
Eastern Montana College
Box 108
Billings, MT 59101-0298
(406)657-2617

- A. Permits
- B. Inspections/Compliance
- C. Enforcement
- D. Emission inventory
- E. Complaint investigation

FOOD AND CONSUMER SAFETY BUREAU

Mitzi A. Schwab, M.S., R.S., Chief
Room A104
Cogswell Building
Helena, Montana 59620
(406)444-2408

This bureau has seven sections and one branch office.

I. Food, Drug and Cosmetic Section
Colin S. Campbell, R.S.

- A. Packaging and labeling
- B. Adulteration monitoring and sample collection
- C. Misbranding
- D. Embargo of contaminated, adulterated or misbranded products
- E. Food manufacturing establishment inspection
- F. Food-borne illness investigation
- G. Food products consumer complaint investigation
- H. Coordination with FDA and USDA
- I. Product recall activities

II. Food Service Establishment Section
Ben Quinones, M.S., R.S.

- A. Full service food service establishments
- B. Temporary food service operations
- C. Bar, tavern & lounge operations
- D. Mobile food service operations
- E. General public food service activities
 - 1. Plan review
 - 2. Complaint investigation
 - 3. Training of employees & management
 - 4. Consultation & inspection service
 - 5. Local health authority assistance
 - 6. On-the-job training of local sanitarians
 - 7. Evaluation of local health agency food protection programs
 - 8. Enforcement actions

III. Public Housing, Schools & Institutions Section
Keith D. Bell, R.S.

- A. Hotels and motels
- B. Tourist homes
- C. Rooming houses and retirement homes
- D. Bed & breakfast operations
- E. Schools
- F. State institutions (non-medical)
- G. Migrant worker housing and related environment
- H. Community homes for the developmentally disabled

EXHIBIT 2
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I. Day care centers

1. Plan review
2. Complaint investigation
3. Training of employees & management
4. Consultation & inspection services
5. Local health authority assistance
6. On-the-job training of local sanitarians
7. Evaluation of local health agency programs
8. Enforcement actions

IV. Vector Control Section

Kenneth L. Quickenden, Ph.D., R.S.

A. Surveillance of:

1. Mosquitoes and other insect and rodent pests or vectors affecting communities or food.
2. Pesticides used for community pests and related vectors

B. Technical consultation and laboratory services to local areas

C. Sanitarian and mosquito control worker training

D. Promotion of local vector control programs

E. Program plan review, surveys and monitoring

F. Investigation of vector-borne diseases or pest related trauma

G. New product evaluations

H. Biological and integrated control of mosquitoes

I. Special local need pesticide registration reviews

V. Trailer Court/Campground, Spa & Swimming Pool Section

A. Trailer courts or mobile home parks

B. Campgrounds

C. Work camps

D. Youth camps

E. Spas

F. Swimming pools

1. Plan review
2. Complaint investigation
3. Training of employees & management
4. Consultation & inspection service
5. Local health authority assistance
6. On-the-job training of local sanitarians
7. Evaluation of local programs
8. Enforcement actions

VI. Licensing and Local Board Inspection Fund Account

Carol Patterson

A. New establishment license application

- B. License renewal procedures
- C. Delinquent license investigation
- D. Management of bureau license and local board inspection fund account data

VII. Special Programs

- A. Consumer Product Safety
 - 1. Packaging & labeling
 - 2. Product complaint & injury investigation
 - 3. Product monitoring & sampling
 - 4. Consumer hazard product alert releases
- B. Montana Clean Indoor Air Act
 - 1. Complaint investigation
 - 2. Consultation
- C. Jails
Keith D. Bell, R.S.
 - 1. Consultation
 - 2. Complaint investigation
 - 3. Local health authority assistance
- D. Upholstered Product Labeling Enforcement
Keith D. Bell, R.S.
- E. Cesspool, Septic Tank and Privy Cleaner Licensing

VIII. General Activities

- A. Public information and assistance
- B. Promotion of and assistance in establishing local environmental health programs
- C. Establishment of health standards
- D. Development of continuing education programs

IX. Branch Office - Billings, Montana Gerald V. Cormier, R.S.

Eastern Montana College
Petro Hall Room 303
P.O. Box 108
Billings, Montana 59101
(406) 657-2619

- A. Consultation and assistance to local sanitarians in Eastern Montana
- B. Field investigations and inspections
- C. Local sanitarian training
- D. Staff assistance for all bureau programs

EXHIBIT 2
DATE 1-15-91
HE Dum. New. Dub.

OCCUPATIONAL HEALTH BUREAU

Adrian C. Howe, Chief
Room A113
Cogswell Building
Helena, Montana 59620
(406)444-3671

This bureau has three sections.

I. Industrial Hygiene
William A. Hooper

A. Work place inspection

1. Survey for excess dust, gas, mist, fumes, noise, lighting, heat
2. Biological sampling
3. Dust and gas control systems
4. Ventilation

- B. Laboratory: sampling and analysis of urine, blood, air, dust, water, etc.
- C. Complaint investigation, consultation, and plan review
- D. Emergency response to incidents involving hazardous substances

II. Radiation

Adrian C. Howe or George Eicholtz

- A. All ionizing radiation: medical and dental X-ray, accelerators, fluoroscopes, radionuclides, well logging, naturally occurring radioactivity, designing radiation protection
- B. Radiation surveillance of food, water, soil, air, milk, and fallout
- C. Radiation laboratory: sampling and analysis of food, water, soil, air, milk, radon, etc.
- D. Plan review, shielding requirements, and consultation
- E. Radioactive materials disposal
- F. Emergency response to incidents involving radioactive materials

3. Asbestos
Adrian C. Howe

- A. Accreditation of asbestos inspectors, management planners, contractors, supervisors and workers.
- B. Accreditation of asbestos training courses
- C. Approval of asbestos mitigation plans and issuance of asbestos project permits.

SOLID AND HAZARDOUS WASTE BUREAU

Duane L. Robertson, Chief
836 Front Street
Helena, MT 59620
(406)444-2821

This bureau has three sections

I. Superfund and State Superfund Section
Vic R. Andersen

A. Federal Superfund sites - Karen Zackheim

1. Identify and investigate potential new sites
2. Site ranking and prioritizing for National Priority List
3. Detailed characterization and investigations of sites
4. Evaluation and selection of cleanup alternatives based on specific regulatory standards and criteria
5. Site cleanup
6. Long-term operation and maintenance

B. State Superfund sites - Carol Fox

1. Identify and investigate potential new sites
2. Site ranking and prioritization for State list
3. Detailed characterization and investigation of sites
4. Evaluation and selection of cleanup alternatives based on specific regulatory standards and criteria
5. Site cleanup
6. Maintain enforcement actions to require responsible parties to perform investigations and cleanups
5. RDG grants administration

II. Waste Management Section
Roger C. Thorvilson

A. Hazardous Waste Regulation - Don Vidrine

1. Inspection of hazardous waste generators and transporters
2. Field investigation and sampling of hazardous waste sites
3. Technical assistance
4. Emergency response to hazardous materials episodes
5. Manifest tracking of hazardous waste
6. Hazardous waste minimization and recycling activities

B. Hazardous Waste Facility Management - Don Vidrine

1. Permitting of hazardous waste management

- facilities
- 2. Facility closure, post-closure, and corrective action activities
- 3. Monitoring systems and monitoring wells
- 4. Facility inspections
- 5. Review of engineering designs for waste management systems

C. Solid Waste - Tony Grover

- 1. Licensing of Solid Waste Management Units
- 2. Review of operational plans
- 3. Inspection
- 4. Enforcement
- 5. Solid waste classification
- 6. Operation and maintenance oversight
- 7. Complaint investigation
- 8. Technical assistance
- 9. Assistance in creation of refuse disposal districts
- 10. Groundwater monitoring of landfills

D. Junk Vehicle - John Dilliard

- 1. Motor vehicle wrecking facility licensing
- 2. County motor vehicle graveyards
- 3. Crushing and recycling of junk vehicles
- 4. Deposit of fees--special junk vehicle assessment fee
- 5. Enforcement
- 6. Review and approval of County Junk Vehicle Program budgets

III. Underground Storage Tank (UST) Section
John Geach

A. Leak Prevention Program - Frank Gessaman

- 1. Identification of tank owners/operators
- 2. New tank design and construction standards
- 3. Financial responsibility requirements
- 4. Record keeping/inventory requirements
- 5. UST installer/remover licensing and permitting
- 6. UST installation, repair or removal

B. Corrective Action Program - Doug Rogness

- 1. Investigation of complaints of leaking tanks
- 2. Mitigation of vapor and groundwater impacts from leaking tanks
- 3. Remediation of tank leaks
- 4. Cost recovery

WATER QUALITY BUREAU

Daniel L. Fraser P.E., Chief
Room A206
Cogswell Building
Helena, Montana 59620
(406)444-2406

This bureau has five sections and one branch office.

I. Drinking Water/Subdivision

A. Municipal Water Supply
Jim Melstad

1. Review of plans for public water and sewer systems
2. Inspections of public water and sewer systems
3. Primacy agent for the Safe Drinking Water Act
4. Monitors public water systems' water quality
5. Training of operators and coordination or training within the state
6. Technical assistance to operators
7. Assistance to owners of private wells
8. Assistance to Board of Plumbers and Board of Water Well Contractors
9. Giardia and surface water source studies

B. Subdivision Review
Rick Duncan

1. Application and plan review for:
 - a. Water supply
 - b. Sewage disposal
 - c. Solid waste disposal
 - d. Storm drainage
2. Local health department assistance and training
3. Inspection

C. Water and Wastewater Operator Certification
Rosemary Fossum

1. Licensing application and renewals
2. Training material
3. Examinations
4. Data management for continuing education credits
5. Compliance

II. Municipal Construction Grants and Loans for Sewage Disposal
Scott Anderson, P.E.

A. Applicant assistance

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- B. Priority establishment
- C. Plan reviews
- D. Operator training, technical assistance and statewide training coordination
- E. Total administration of the Federal Construction Grant Program
- F. Total administration of the State Revolving Loan Program
- G. Inspection

III. Waste Discharge Permits (Surface and Groundwater)
Frederick C. Shewman, Ph.D., P.E.

- A. Waste discharge permits
- B. Plan reviews for water quality standard and compliance
- C. Compliance monitoring
- D. Groundwater pollution control
- E. Uranium solution mining
- F. Complaint investigation
- G. Water quality violations
- H. Emergency response coordination
- I. Leaking underground storage tanks
- J. Water pollution control property tax classification

IV. Water Quality Management
Loren L. Bahls, Ph.D.

- A. Water quality monitoring and assessment
- B. Water quality management planning
- C. Nonpoint source pollution control

V. Technical Studies and Support
Abe Horpestad, Ph.D.

- A. Environmental impact studies
- B. Water quality data processing
- C. Special studies

VI. Billings Branch Office (406) 657-2294
Jerry Burns, P.E.
Eastern Montana College Room 310
P.O. Box 108
Billings, Montana 59101-0298

- A. Water quality surveillance
- B. Agricultural wastewaters
- C. Industrial wastewaters
- D. Community wastewaters
- E. Inspections
- F. Assist local programs
- G. Complaint investigations

ENVIRONMENTAL COORDINATION

Tom Ellerhoff
Room A107
Cogswell Building
Helena, Montana 59620
(406)444-3948

If it is determined that the department is the lead agency in the preparation of an environmental impact statement and the responsibility falls in the Environmental Sciences Division, the bureau having the primary responsibility for plan review, permit issuance, etc., becomes the lead bureau with the responsibility for preparation and circulation of an impact statement. Impact statements are coordinated through the division administration office. The division administration office is also responsible for coordinating: a) the preparation of the biannual Montana/EPA Agreement which outlines state and federal programs for the coming fiscal years, b) Major Facility Siting Act reviews and c) represents DHES environmental health programs on a variety of assigned interagency committees and cooperative projects.

ENFORCEMENT ACTIONS

Each bureau has an enforcement coordinator whose responsibility it is to prepare a preliminary documentation file which is reviewed by the bureau chief and administrator. Once the validity and adequacy of the violation documentation is established, the file is passed to the Director and the Legal Division for review and action.

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BOARDS AND COUNCILS

MONTANA BOARD OF HEALTH AND ENVIRONMENTAL SCIENCES

Howard Toole, Chairman

Attorney At Law

126 E. Broadway, #25

Missoula, MT 59802

Health Department Contact: Dennis Iverson

AIR POLLUTION CONTROL ADVISORY COUNCIL

Rodney James, Chairman

Department of Environmental Engineering

Montana Tech

Butte, MT 59701

Health Department Contact: Jeffrey T. Chaffee

PETROLEUM BOARD ADVISORY COUNCIL

Howard Wheatley, Chairman

1919 Cherry Drive

Great Falls, MT 59401

Health Department Contact: Jean Riley

WATER POLLUTION CONTROL ADVISORY COUNCIL

Benjamin Williams, Chairman

Box 628

Livingston, MT 59047

Health Department Contact: Daniel L. Fraser

WATER AND WASTEWATER OPERATORS' ADVISORY COUNCIL

Mark Richardson, Chairman

Town of Miles City, City Manager

Drawer 910

Miles City, MT 59301

Health Department Contact: Rosemary Fossum

LOCAL AIR POLLUTION CONTROL AGENCIES

The local agencies function independently of the state except for general oversight budget review and auditing and except for certain industrial operations retained to state jurisdiction:

I. Yellowstone County Air Pollution Control

Steve Duganz

3306 Second Avenue North

Billings, Montana 59101

(406)256-6841

- A. Open burning control - permits
- B. Construction permits - operating permits, all sources
- C. Variances
- D. Enforcement
- E. Rule making
- F. Air Quality Monitoring
- G. Industry inspections except for those retained to state

Retained to State:

Exxon Refinery

Conoco Refinery

Cenex Refinery

Western Sugar

Montana Sulphur & Chemical

Montana Power Company

II. Cascade County Air Pollution Control

Bruce Treis, R.S.

City-County Health Department

1130 17th Avenue South

Great Falls, Montana 59405

(406)761-1190

- A. Open burning control - permits
- B. Construction permits, operating permits, all sources
- C. Variances
- D. Enforcement
- E. Rule making
- F. Industry inspections except for those retained to state

Retained to State:

Montana Refining

Malmstrom Air Force Base

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III. Missoula County Air Pollution Control

Jim Carlson
301 West Alder
Missoula, Montana 59802
(406) 523-4755

- A. Open burning control - permits
- B. Construction permits, operating permits, all sources
- C. Variances
- D. Enforcement
- E. Rule making
- F. Industry inspections except for those retained to state

Retained to State:

Champion International, Bonner
Stone Container, Frenchtown
Louisiana-Pacific, Missoula

STATUTES ADMINISTERED BY THE DIVISION

	<u>TITLE</u>	<u>CHAPTER</u>	
The Clean Air Act	75	2	Air Quality
Asbestos	75	2	Occupational Health
Asbestos	50	70	Occupational Health
Occupational Health Act	50	70	Occupational Health
Nuclear Regulation	75	3	Occupational Health
Water Pollution Control	75	5	Water Quality
Public Water Supply	75	6	Water Quality
Subdivision	76	4	Water Quality
Wastewater Treatment Works			
Revolving Loan Program	(New Legislation) Water Quality		
Water & Wastewater Operators			
Certification	37	42	Water Quality
School Sites and Plans	20	6	Water Quality
Phosphorus Detergent			Water Quality
Consumer Product Safety Act	50	30	Food & Consumer Safety
Public Swimming Pools	50	53	Food & Consumer Safety
Food Service Establishments	50	50	Food & Consumer Safety
Food, Drug & Cosmetic Act	50	31	Food & Consumer Safety
Flour & Bread	50	34	Food & Consumer Safety
Hotels & Motels	50	51	Food & Consumer Safety
Montana Clean Indoor Air Act	50	40	Food & Consumer Safety
Sanitary Inspection of			
Schoolhouses, Churches,			
Theaters & Jails	50	1	Food & Consumer Safety
Day Care Centers for Children	53	4	Food & Consumer Safety
Community Homes for			
Developmentally Disabled	53	20	Food & Consumer Safety
Pesticide & Mosquito Control	7	22	Food & Consumer Safety
Shoddy Control	50	36	Food & Consumer Safety
Tourist Campgrounds	50	52	Food & Consumer Safety
Schoolhouses	50	1	and Water Quality
			Food & Consumer Safety
			and Water Quality
Refuse Disposal Areas	75	10	Solid & Hazardous Waste
Hazardous Waste Disposal Areas	75	10	Solid & Hazardous Waste
Superfund Act	75	10	Solid & Hazardous Waste
Refuse Disposal Districts	7	13	Solid & Hazardous Waste
Junk Vehicle Act	75	10	Solid & Hazardous Waste
Septic Tank Cleaners	37	41	Food & Consumer Safety
Underground Tank	75	10	Solid & Hazardous Waste
Solid Waste Management			
Loans and Grants	75	10	Solid & Hazardous Waste
Nuisances	27	30	Air Quality, Water Quality,
			Food & Consumer Safety and
			Occupational Health
Powers & Duties of State	50	1 & 2	Air Quality, Water
Department of Local Board of			Quality, Food &
Health Pertaining to			Consumer Safety and
Nuisances			Occupational Health

RULES ADMINISTERED BY THE DIVISION

AIR QUALITY BUREAU

16.8.101-16.8.102	Variance Procedures
16.8.201-16.8.202	Enforcement Procedures
16.8.301-16.8.304	Rehearing Procedures
16.8.401-16.8.404	Emergency Procedures
16.8.501	Ambient Air Quality Standard Rule Procedures
16.8.701-16.8.707	General Provisions
16.8.801-16.8.822	Ambient Air Quality
16.8.901-16.8.943	Prevention of Significant Deterioration of Air Quality
16.8.1001-16.8.1008	Visibility
16.8.1101-16.8.1118	Permit, Construction and Operation of Air Contaminant Sources
16.8.1201-16.8.1206	Stack Heights
16.8.1301-16.8.1308	Open Burning
16.8.1401-16.8.1428	Emission Standards
16.8.1501-16.8.1505	Emission Standards for Existing Aluminum Plants
16.8.1601-16.8.1602	Combustion Device Tax Credit

FOOD & CONSUMER SAFETY BUREAU

16.10.101	Food, Drug & Cosmetics
16.10.201-16.10.251	Food Service Establishments
16.10.301-16.10.332	Food Processing Establishments
16.10.401-16.10.416	Vending of Food & Beverages
16.10.501-16.10.503	Drinking Water and Ice
16.10.630-16.10.642	Hotels, Motels, Tourist Homes, Rooming Houses and Retirement Homes
16.10.701-16.10.717	Trailer Courts/Campgrounds
16.10.801-16.10.807	Youth Camps
16.10.904-16.10.912	Work Camps
16.10.1001-16.10.1002	Other Public Facilities (Jails, Railroad Stations, and Cars)
16.10.1101-16.10.1109	Schools
16.10.1501-16.10.1530	Swimming Pools and Spas
16.10.1301-16.10.1311	Swimming Areas

OCCUPATIONAL HEALTH BUREAU

Occupational Health

16.42.101	Occupational Noise
16.42.102	Occupational Air Contaminants

Asbestos Control

16.42.301	Applicability and Purpose
16.42.302	Definitions

16.42.303	Exclusions
16.42.304	Evaluation of Asbestos Hazards in Structures other than LEA School Buildings
16.42.305	Clearing Asbestos Abatement Projects in Structures other than LEA School Buildings
16.42.306	Evaluation of Asbestos Hazards in LEA School Buildings
16.42.307	Clearing Asbestos Abatement Projects in LEA School Buildings
16.42.308	Requirements of Accreditation and Permitting for Persons Engaged in an Asbestos-Type Occupation
16.42.309	Accreditation of Asbestos Inspector; Asbestos Management Planner; Asbestos Abatement Project Designer; Asbestos Abatement Contractor or Asbestos Abatement Supervisor; and Asbestos Worker
16.42.310	Renewal of Accreditation
16.42.311	Training Course and Examination Requirements
16.42.312	Application for Accreditation of a Training Course; Certification
16.42.313	Course Approval
16.42.314	Asbestos Inspector's Course
16.42.315	Asbestos Management Planners Course
16.42.316	Asbestos Abatement Project Designer's Course
16.42.317	Asbestos Abatement Contractor's and Supervisor's Course
16.42.318	Asbestos Abatement Worker's Course
16.42.319	Examinations
16.42.320	Refresher Courses
16.42.321	Asbestos Abatement Project Permits
16.42.322	Annual Permits
16.42.323	Emergency Asbestos Project Permits
16.42.324	Asbestos Abatement Project Control Measures
16.42.325	Recordkeeping
16.42.326	Inspections
16.42.327	Reciprocity
16.42.401	Fees for Permits
16.42.402	Accreditation & Accreditation Renewal Applications
16.42.403	Course Approval
16.42.404	Course Audits
16.42.405	Penalty

Radiation Control

16.40.101-16.40.108	General Provisions
16.40.201-16.40.205	Registration of Radiation Machine Facilities
16.40.301-16.40.324	Licensing of Radioactive Material
16.40.401-16.40.426	Standards for Protection Against Radiation
16.40.501-16.40.520	Radiation Safety Requirements for Industrial Radiographic Operations
16.40.601-16.40.611	X-rays in the Healing Arts
16.40.701-16.40.703	Use of Sealed Radioactive Sources in the Healing Arts
16.40.801-16.40-806	Radiation Safety Requirements for Analytical

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16.40.901-16.40.912	X-ray Equipment Radiation Safety Requirements for Particle Accelerators
16.40.1001-16.40.1006	Notices, Instructions and Reports to Workers, Inspections
16.40.1101-16.40.1103	Stabilization of Mill Tailings Piles

SOLID AND HAZARDOUS WASTE BUREAU

Solid Waste

16.14.101-16.14.111	Grants and Loans to Local Governments
16.14.201-16.14.209	Motor Vehicle Recycling and Disposal
16.14.501-16.14.526	Refuse Disposal
16.14.601-16.14.608	Variance
16.14.806-16.14.813	Cleaning of Cesspools, Septic Tanks and Privies

Hazardous Waste

16.44.101-16.44.125	Hazardous Waste Management Facility Permits
16.44.202	General Provisions
16.44.301-16.44.352	Identification & Listing of Hazardous Waste
16.44.401-16.44.430	Standards Applicable to Generators of Hazardous Waste
16.44.501-16.44.512	Standards Applicable to Transporters of Hazardous Waste
16.44.601-16.44.612	Hazardous Waste Treatment, Storage & Disposal Facilities
16.44.701-16.44.702	Standards for Permitted Facilities
16.44.801-16.44.823	Closure &/or Post-Closure Financial Assurance Requirements for Facilities
16.44.901-16.44.911	Public Participation
16.44.1001-16.44.1018	Access to Information Regarding Treatment, Storage & Disposal Facilities

Underground Storage Tanks

16.44.101-16.44.103	Reporting and Interim Prohibition
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WATER QUALITY BUREAU

16.16.101-16.16.115	Subdivision Application and Review
16.16.301-16.16.313	Subdivision Requirements
16.16.601-16.16.699	Subdivision Waivers & Exclusions
16.16.801-16.16.805	Subdivision Review Fees
16.18.101-16.18.102	Water and Wastewater Operators Advisory Council
16.18.201-16.18.207	Water and Wastewater Plants and Operations
16.20.101-16.20.103	Procedural Rules
16.20.201-16.20.242	Public Water Supplies
16.20.301-16.20.307	Water Hauled for Cisterns

16.20.401-16.20.405	Public Water and Sewer Plans, Cross Connections and Drilling Water Wells
16.20.601-16.20.643	Surface Water Quality Standards
16.20.701-16.20.705	Nondegradation of Water Quality
16.20.901-16.20.919	Montana Pollutant Discharge Elimination System (MPDES) Permit
16.20.1001-16.20.1025	Montana Groundwater Pollution Control System
16.20.1101-16.20.1116	Montana In-Situ Mining of Uranium Control System (MIMUCS) Permit
16.20.1201-16.20.1203	Prohibited Compounds
16.20.1601-16.20.1603	Miscellaneous

Budget Item	Actual Fiscal 1990	Executive Fiscal 1992	LFA Fiscal 1992	Difference Fiscal 1992	Executive Fiscal 1993	LFA Fiscal 1993	Difference Fiscal 1993
FTE	34.53	34.03	34.03	.00	34.03	34.03	.00
Personal Services	1,027,746	1,153,498	1,152,010	1,488	1,152,446	1,150,942	1,504
Operating Expenses	499,573	511,889	572,993	61,104-	514,195	573,357	59,162-
Equipment	39,689	26,117	26,117	60	26,177	26,117	60
Grants	298,660	336,086	340,086	4,000-	336,006	340,086	4,000-
Total Expend.	\$1,865,668	\$2,027,650	\$2,091,206	\$63,556-	\$2,028,904	\$2,090,502	\$61,598-
Fund Sources							
General Fund	866,534	963,232	971,554	8,322-	966,455	971,486	5,031-
State Revenue Fund	339,150	444,938	419,543	25,395	442,848	419,449	23,399
Federal Revenue Fund	659,984	619,480	700,109	80,629-	619,601	699,567	79,966-
Total Funds	\$1,865,668	\$2,027,650	\$2,091,206	\$63,556-	\$2,028,904	\$2,090,502	\$61,598-

LFA Current Level Analysis Reference: page B-21
Executive Budget Summary Reference: page 73
Executive Budget Narrative Reference
Department of Public Health: page 36
Department of Natural Resource and the Environment: page 137

Current Level Issues

Reorganization Issues

1. The executive transfers all division administration and the Air Quality Bureau and EIS variance to the proposed Department of Natural Resources and the Environment.

FTE
Personal Services
Operating Expenses
Equipment
Grants

Total

These figures represent the total amount in division administration, the Air Quality Bureau, and EIS variances in the LFA current level. The differences are not reflected in the main table.

2. Indirect Charges

Appropriation Policy Issues

1. Difference in the funding base
2. Difference in computer network charges
3. Difference in inflation

Total

Amount	FTE	---Exec Over (Under) LFA---	FY 92	FY 93	FY 92	FY 93
(\$725,541)	(21.0)	(21.0)	(21.0)	(21.0)	(21.0)	(21.0)
(\$351,569)						
(\$26,117)						
(\$102,586)						
(\$1205,078)						
(\$64,539)						
(\$2,742)						
\$7,485						
(\$1,308)						
(\$59,162)						

Program Issues

1. Environmental Quality Protection Fund

The executive budget includes \$1,000,000 each year in authority for expenditure from the Environmental Quality Protection Fund.

Total State Special Revenue

\$1,000,000 \$1,000,000

Funding Issues

1. Division administration is currently funded with general fund and Resource Indemnity Trust interest. The executive is proposing that administration be funded with an indirect assessment against all programs within the Environmental Sciences Division.

2. The Asbestos Program is currently funded with Resource Indemnity Trust (RIT) interest. All fees collected through civil penalties and project permits are deposited to the RIT account. The executive proposes funding the program directly with income generated.

Executive Budget Modified Additions

1. Air Quality

The executive recommends adding 6.5 FTE and related expenses to the Air Quality Bureau to implement EPA mandated responsibilities and provide additional support for air quality programs in western Montana. The modified budget would be funded with permit fees collected from air pollution sources.

This modification includes subcommittee action on indirect charges.

FTE

Personal Services

Operating Expenses

Grants

6.5

6.5

\$168,671

\$63,757

\$91,745

\$168,284

\$62,709

\$92,514

Total State Special Revenue (fees)

\$324,173

\$323,507

2. Asbestos Control

The executive adds 1.0 FTE and related operating expenses to continue a fiscal 1991 budget amendment that provided funds for an increased workload in the Asbestos Control program. Funding is from fees collected for asbestos permits.

This modification includes subcommittee action on indirect charges.

FTE

Personal Services

Operating Expenses

1.0

1.0

\$30,085

\$64,037

\$30,015

\$64,026

Total State Special Revenue

\$94,122

\$94,041

Total Executive Budget Modified Additions

7.5

7.5

\$418,295

\$417,548

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#8

OCCUPATIONAL HEALTH BUREAU
DEPARTMENT OF PUBLIC HEALTH

Testimony before the Joint Appropriations Subcommittee on Human Services.

Presented by

Adrian C. Howe, chief

The Occupational Health Bureau conducts three primary programs - Occupational Health, Radiological Health, and Asbestos Control.

During the past few years there has been an ever increasing public demand for services provided by the bureau. The number of public requests for assistance has grown from approximately 300 per year to over 2,250 per year during the past decade (FIGURE 1).

The bureau staff consists of the Bureau Chief who is a Health Physicist, an Industrial Hygienist who conducts the occupational health program, a Health Physicist responsible for conducting the X-ray inspection program, two Environmental Specialists who conduct the activities of the asbestos control program and an Administrative Assistant who provides secretarial support and assists with public information and data reduction.

OCCUPATIONAL HEALTH PROGRAM

The occupational health section is primarily response oriented. Of the requests for assistance received by the bureau, over 800 per year are handled by the individual in this section.

The primary goal of the occupational health section is to achieve and maintain such conditions in the workplace as will protect human health. The primary emphasis is on limiting contaminants in the workplace through inspections for and measurements of such contaminants.

Because the section has the capabilities for determining human exposure to toxic and irritating dusts, fumes, mold spores, mists, and gases as well as asphyxiants, the section is frequently called on to identify such exposures in areas other than workplaces, including private homes. This service is in keeping with the public health goals of the Department of Public Health.

The occupational health section is frequently called upon for emergency response assistance. A situation involving the spillage or potential loss of control of hazardous materials, results in the section providing information regarding the toxicity of the material, necessary protective clothing, necessary respiratory protection, and proper clean-up and disposal procedures. When

requested the section personnel will assist in the actual recovery and clean-up efforts for hazardous material spills.

The section routinely analyzes compressed breathing air supplies for carbon monoxide content. Essentially all local law enforcement agencies and fire departments using compressed breathing air participate in this program.

In addition, the section provides training, technical assistance, and equipment loans to local health departments to assist in the development of better occupational health capabilities on the local level.

RADIOLOGICAL HEALTH PROGRAM

The goal of the radiological health program is to protect Montana citizens from unnecessary exposure to ionizing radiation which may cause injury or health risks such as increased susceptibility to cancer or genetic mutations, and to provide for control of radioactive materials to preclude or minimize damage to or loss of property resulting from the contamination by radioactive materials. This program effects virtually every citizen of Montana. Ongoing functions designed to achieve this goal are:

A. X-Ray Inspection

Currently the X-ray inspection function is the primary emphasis of the radiological health program due to limited resources and the potential impact on virtually all Montana citizens. Under the X-ray inspection function all X-ray equipment in Montana is registered with the bureau. Presently, 2,000 X-ray units are registered in 975 facilities (FIGURE 2).

All X-ray facilities and units are periodically inspected for radiation safety and calibration. Reports of each inspection are prepared and provided to each facility. Compliance actions are initiated where necessary. Where necessary, facility personnel are instructed in radiation safety procedures, and may be instructed in the development of proper X-ray techniques. The emphasis on technique development and unit calibration is to reduce patient exposure to the lowest possible level and enhance the diagnostic quality of the radiograph to facilitate the best and earliest diagnosis.

Specific technique improvement programs are routinely conducted for the purpose of reducing patient and operator exposure to radiation and to improve the diagnostic quality of the films. Some examples of technique improvement programs the bureau conducts are evaluations of CT scanners and Mammography facilities.

There has been a proliferation of mammography facilities with the concern for early detection of breast cancer. In many instances these units are not installed or calibrated properly and the

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techniques being used are improper for obtaining diagnostic quality radiographs capable of detecting breast cancer in an early stage. It is extremely important to inspect these units to insure proper installation, calibration, and use for the very best diagnostics possible.

B. Radiology Plan Evaluations

The plans for all new hospital radiology facilities and most other offices are evaluated for radiation safety by the bureau. In all cases, minimum shielding requirements for each facility are calculated and provided to the entity requesting the service. This plan evaluation assists in providing adequate protection at a minimum cost and assures that the facility will be in compliance with Montana radiation control rules when inspected.

C. Emergency Response

The bureau assumes the lead role to all incidents involving radiological emergencies or loss of control of radioactive materials. During past years there have been, on average, two to four radiological incidents per year in which the radiological health section has assumed the lead role in protecting the public health and safety and property until control of the radiological hazard was gained.

D. Environmental Surveillance

The radiological health section conducts limited activities pertaining to environmental radiation surveillance. During periods of atmospheric nuclear testing or incidents such as the Chernobyl incident, milk samples, air samples and precipitation samples are collected on a daily basis to analyzed by EPA laboratories.

Drinking water supplies in the Helena area have been analyzed for radioactivity. Numerous private water supplies containing radioactivity in excess of the standards for public drinking water supplies have been located.

E. Radon

The radiological health section provides information to concerned individuals pertaining to indoor radon. Due to limited staff time, activities pertaining to radon are limited to providing information when requested.

In the past, radon in homes has been evaluated and identified in Butte and Helena with the potential for severe health impacts. The lack of resources precludes such evaluation throughout the rest of the state.

ASBESTOS CONTROL PROGRAM

The goal of the asbestos control program is to achieve and maintain a system for insuring that activities involving asbestos are completed by competent personnel in a manner consistent with maintaining workplace conditions and environmental conditions which will protect human health and safety.

The asbestos control program provides a mechanism to insure that asbestos inspections, management plans, project designs, and abatement projects are completed by competent personnel in a manner consistent with the protection of human health and safety. The section accredits individuals in six asbestos-related occupations upon successful completion of an approved training course. The section also approves training courses and required refresher courses and periodically conducts audits of all training courses. In addition the section evaluates asbestos abatement project and when appropriate issues a permit for the project to proceed. Asbestos abatement projects are also inspected to insure that personnel are properly accredited and that the project is completed appropriately. The section also investigates reports of improper or illegal asbestos projects.

The program was mandated by Public Law 99-519 and has received full U.S. Environmental Protection Agency (EPA) approval. The program is subject to periodic EPA audit and must demonstrate an adequate program to retain such approval. Loss of the EPA approval may result in the loss of approximately \$500,000 per year in grants and low interest loans to Montana schools for asbestos abatement.

The program is currently self-supporting and funded by fees which are deposited back into the Hazardous Waste/CERCLA account. Proposed legislation would establish a separate state special revenue account to which all fees would be deposited. It has been determined by revenue history that fees will be sufficiently stable to fund the program through the proposed state special revenue account.

Modified Request

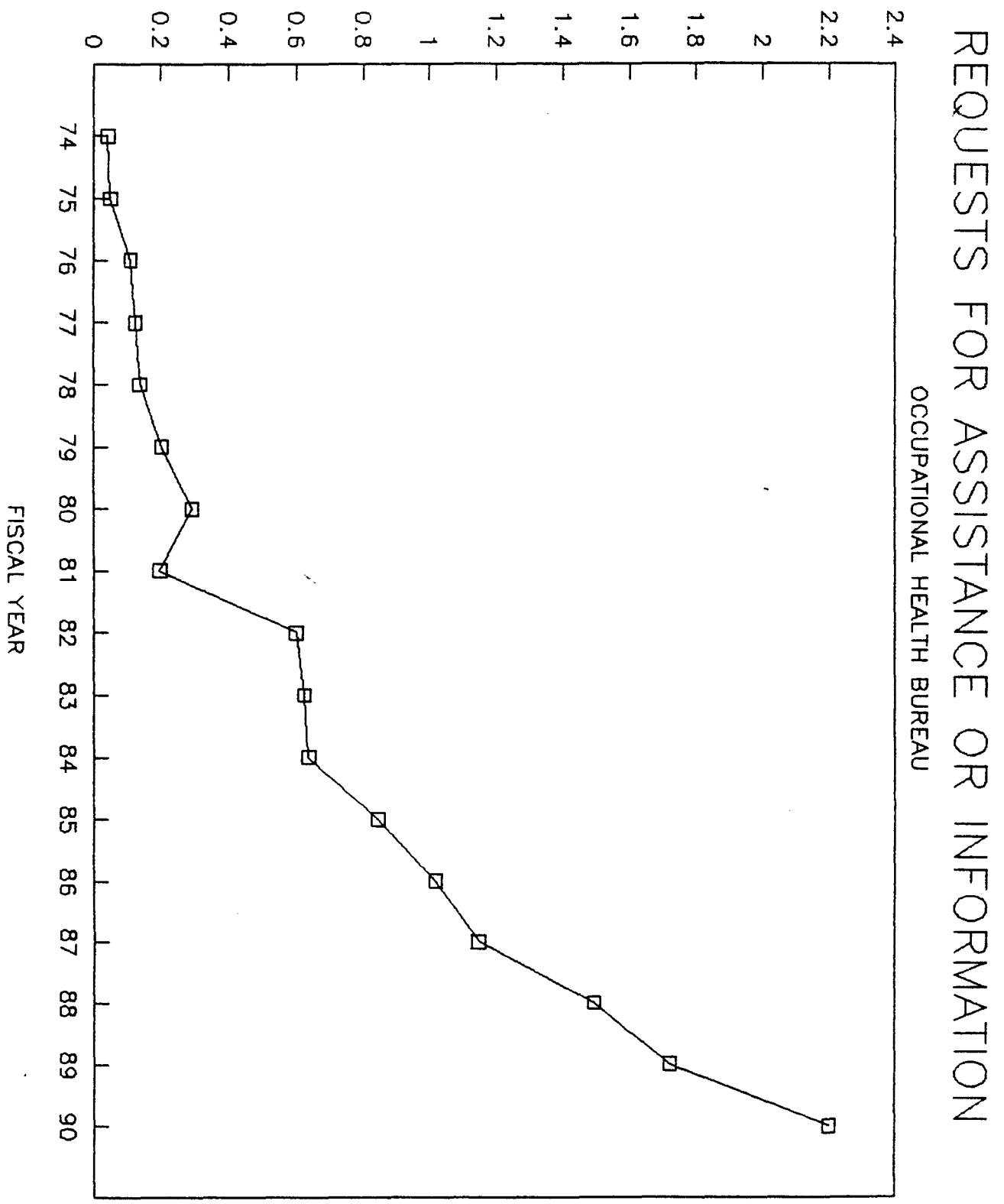
The executive budget includes \$187,777 over the biennium for 1.0 FTE and related operating expenses to continue a fiscal year 1991 budget amendment that provided funds for an increased workload in the Asbestos Control Program.

The Department's request to the 51st Legislature was based on the best estimate available of the number of asbestos abatement operators and projects. Since the program began full operation on January 1, 1990, the Department has determined that the annual workload will exceed the initial estimates provided to the legislature by approximately 300%. The increased workload is generating fees which are sufficient to fund the needed additional resources for the program.

more than 400 people accredited now

EXHIBIT 4
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HB Hum. Res. Div.

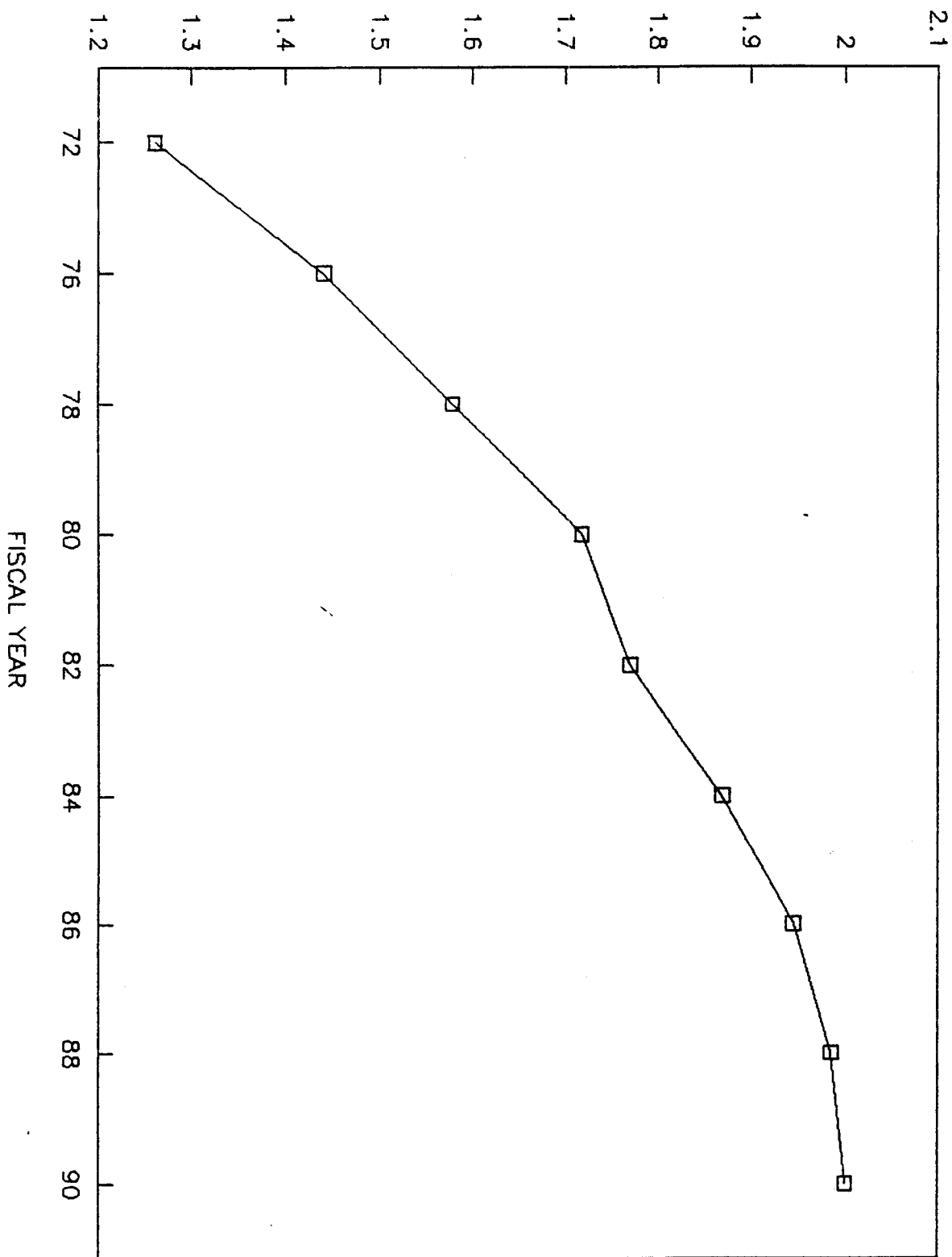
REQUESTS
(Thousands)



(FIGURE 1)

(FIGURE 2)

REGISTERED XRAY UNITS IN MONTANA



REPORT TO DHES, GOVERNOR STEPHENS, AND THE 1991 LEGISLATURE
BY
MONTANA'S PUBLIC WATER SUPPLY TASK FORCE

I. INTRODUCTION

Among the many uses of groundwater and surface water in Montana, the most important is for drinking water. All Montanans have a right to an adequate supply of water that is safe to drink.

Montana has had a Public Water Supply Program since 1907 when outbreaks of waterborne disease and associated deaths moved its legislature to pass the first law regulating public water supplies. Federal regulation of water supplies did not begin until 1974 when Congress passed the Safe Drinking Water Act (SDWA). The SDWA was implemented in 1977 when the Environmental Protection Agency (EPA) promulgated the National Interim Primary Drinking Water Regulations. That same year the DHES was granted primary enforcement authority (primacy) for the federal program. Primacy was desirable because it brought oversight and enforcement of the federal regulations to a state agency. This agency is more accessible and responsive to Montana problems than a federal authority could be. Montana's primacy program is supported by both state and federal dollars.

The Department of Health and Environmental Sciences (DHES) is responsible for administering the Public Water Supply Program in Montana. This program's goal is to assure that water from public systems is bacteriologically, radiologically, and chemically safe to drink. Today this program faces serious new challenges as more toxic contaminants and disease-causing organisms are being found in consumers' water supplies. Accordingly, public concern about the safety of drinking water has grown. In 1986 Congress responded to this public concern with the 1986 amendments to the Safe Drinking Water Act (see Appendix I). These amendments mandate the following:

1. Disinfection of all public systems.
2. Filtration of all surface water systems.
3. Substantial increases in the monitoring of drinking water quality.
4. Establishment of drinking water standards for 83 contaminants by 1992 and nearly 200 contaminants by the year 2000.
5. Establishment of a state wellhead protection program.

To maintain primacy the DHES must adopt, implement, and enforce regulations no less stringent than the federal regulations. Funding shortages have prevented Montana from meeting these requirements of the original SDWA. The additional workload and funding needs imposed by the 1986 SDWA Amendments have further reduced the effectiveness of Montana's program and placed the DHES at risk for losing primacy.

In the spring of 1990, Governor Stan Stephens authorized the appointment of a Task Force to review the situation and develop policy recommendations for direction of Montana's Public Water Supply Program. The Task Force was charged to make recommendations based on program essentials which will best protect public health. Composed of approximately 30 persons representing utilities, the affected public, various civic organizations, state agencies, legislative committees, and local health departments, the Task Force completed its work in four workshops. These workshops focused on reviewing the development of the current program and regulations, and on projecting future needs of the public and water purveyors. The Task Force fulfilled their objectives by recommending continuation and expansion of the existing Public Water Supply Program. It further recommended developing and funding an Interim Program through the next biennium to meet the immediate emergency and carry on until a further study of future needs and planning can be accomplished. A description of the Public Water Supply Program's current dilemma, options for resolving it, and the Task Force's recommendations follow.

II. Summary of Current Program

The regulatory portions of the Public Water Supply Program encompass 716 active community water systems and 1,403 non-community water systems.

A community water system is defined as a public water system which serves at least 10 service connections used by year-round residents or serves at least 25 year-round residents (e.g. cities, towns, mobile home parks, and apartment or condominium complexes).

A non-community water system serves at least 25 persons per day at least 60 days out of the year (e.g. schools, bars, cafes, campgrounds, etc.)

In addition to regulatory functions, the program provides technical assistance to individuals, multi-family systems, and industrial water users. Currently, 12.5 full-time equivalents (FTE's) staff the program. The DHES has also contracted with 24 county health departments to administer parts of the program and a consulting engineering firm to provide some inspection services. It is estimated that county contracts and the consulting engineering

contract add 1.0 FTE to the available work force, for a grand total of 13.5 FTE's.

Funding

Confirmed funding for the program in fiscal year (FY) 1990 was \$623,000. Of this funding, approximately \$119,000 (19%) was derived from the state and \$504,000 (81%) from an EPA grant. Because the EPA grant requires matching state funds at a 3:1 ratio, funding of DHES' Subdivision Review and Water/Wastewater Operator Certification programs have been used as "soft" match in recent years. In the Spring of 1990, the DHES was reorganized to combine the Public Water Supply Program and the Subdivision and Operator Certification programs within the Public Water Supply Section. The intent was to manage closely related functions more efficiently and firm up matching funds. These added programs have contributed four additional FTE's to the Public Water Supply Section, but have workloads beyond their staffing levels.

Figure 1 shows the existing workload in each program of the Public Water Supply Section. Our existing staff consists of 18.5 FTE's (16.5 FTE's on staff, 2.0 on contract) with a need for 25.85 FTE's.

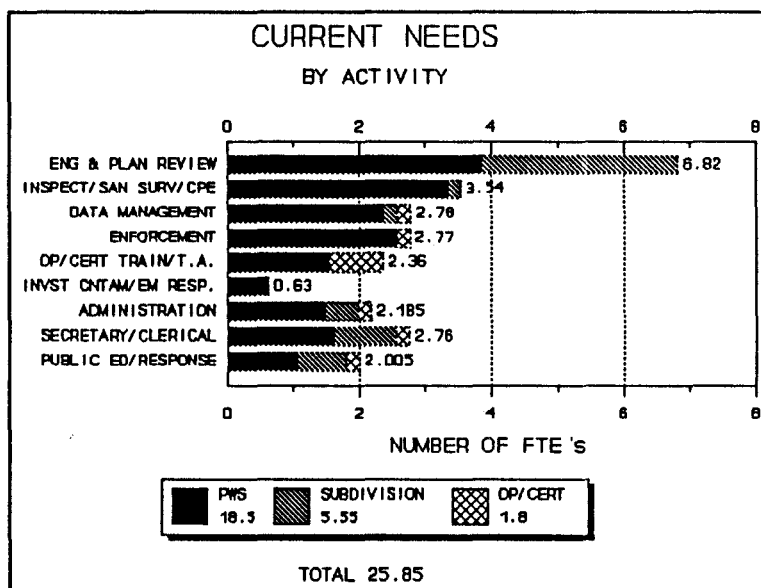


Figure 1

The three programs - Public Water Supply, Subdivision, and Operator Certification - perform the following functions:

- o Inspections/Sanitary Surveys
- o Oversight of Public Water Supply monitoring and reporting
- o Enforcement of laws
- o Regulation development and adoption
- o Review of engineering plans and specifications
- o Subdivision review and approval
- o Operator training and certification
- o Data management and reporting to EPA
- o Program management and administration
- o Technical assistance to operators and administrators
- o Emergency response
- o Special studies
- o Response to requests for assistance from the public

Inspections and Sanitary Surveys

Periodic inspections of water systems' facilities are an important part of water supply surveillance. These inspections, called sanitary surveys, are designed to detect deficiencies which may lead to contaminated drinking water and the spread of waterborne disease. Over time facilities deteriorate, and no longer provide adequate sanitary protection. Common problems detected during surveys include the following items:

- o Missing or damaged screens on reservoir vents (dead birds, snakes, animal feces, and rodents have been found in public reservoirs)
- o Cross connections to non-potable water supplies
- o Unlocked reservoirs (human feces have also been found in reservoirs where access was obtained through unlocked lids.
- o Wells flooded with non-potable water.
- o Holes in pump bases which could allow contaminants to enter the well
- o Failure to chlorinate contaminated supplies
- o Use of unapproved sources
- o Hazardous chemical storage in pumphouses
- o Poor operation of treatment plants

In some cases inspectors have found operators knowingly exposing water users to high risks. Periodic unannounced inspections help detect deficiencies and resolve problems before water consumers experience adverse health effects.

Oversight of Public Water Supply (PWS's) Monitoring and Reporting

Routine monitoring for coliform bacteria, chlorine residual, and turbidity is performed by Public Water Supplies (PWS's) while most chemical samples are collected by program staff. The results of the monitoring tests are reported to the Public Water Supply Program. Monitoring frequency is mandated by EPA regulations and is a function of system size (numbers of people being served) and the nature of the source of the supply (whether surface water or groundwater). The state has the responsibility through primacy to see that PWS's monitor water quality and report their findings. If these findings indicate the presence of contamination, the absence of chlorine residual, or an excess of turbidity, actions are prescribed for both the purveyor and state.

Water-Quality Monitoring

Currently, the DHES collects water samples to monitor for ten inorganic chemicals, three radioactive isotopes, six pesticides, and eight volatile organic chemicals. A peer review of the Montana

program recently conducted by the National Association of Drinking Water Administrators (ADSWA) has recommended the state cease performing this function for the purveyors because of time and expense to the state program. Monitoring is required by the Safe Drinking Water Act, but the Act does not require collection of the samples by primacy agencies.

Enforcement

When violations of monitoring or reporting requirements occur, program staff assure that water consumers are sufficiently advised of necessary precautions and steps are taken to resolve the violation. In most cases, system owners recognize their responsibilities and correct problems promptly. When problems are not rectified in a reasonable time, the DHES initiates a formal enforcement action. This action consists of a stepped enforcement approach, starting with reminder letters and escalating to a notice of violation, an enforcement conference, and an administrative order. If these steps fail to gain compliance, the owner is referred to the DHES' Legal Division for civil action. Over the past several years, the program's demands for enforcement has overwhelmed available legal resources, making the need for a stronger authority apparent.

Regulation Development and Adoption

The DHES must assure needed standards and regulations are adopted so that necessary requirements can be enforced. Currently, the program is adopting the new federal regulations for eight volatile organic chemicals and public notification. These regulations were supposed to be adopted by January 1, 1989 in order for the state to retain primacy and to ensure receipt of EPA grant funds. The state's failure to meet these new requirements has forced the EPA to notify DHES that formal steps to withdraw primacy are forthcoming unless adequate resources are dedicated to the program.

Review of Engineering Plans and Specifications

The review of plans for proposed construction, extension, or alteration of public water or wastewater facilities is another preventive activity performed by the Public Water Supply Program. The Board of Health and Environmental Sciences is charged with the adoption of minimum design and construction standards to ensure essential water service and to protect public health. Department engineers review plans and specifications for compliance with established standards. The standards typically address such items as depth of well grouting, materials used for contact with potable water, treatment processes, and separation distances between wells and potential sources of contamination. Montana law prohibits the beginning of construction until the DHES grants its approval.

Subdivision Review and Approval

Under the Sanitation in Subdivisions Act, the department reviews subdivisions of land creating parcels of less than 20 acres. This review is intended to ensure parcels are provided with an adequate water supply, storm drainage, solid waste disposal, wastewater disposal, and that the quality of the environment is not seriously impacted.

Many subdivisions approved by the Subdivisions Program have created public water and sewer systems that fall under the regulatory requirements of the Public Water Supply Program. Experience gained through the past 15 to 20 years of subdivision review has shown that the current DHES review process does not adequately address the "viability" of such systems. Many of the subdivisions' public water and sewer systems have not been constructed in compliance with department approval. Many also have little ability to meet the extensive federal and state regulations for monitoring and treatment due to the limited funding base provided by the small populations served. It is thus appropriate to reassess this program along with the Public Water Supply Program.

Operator Training and Certification

Montana requires certification of all operators responsible for community water systems. The intent of this requirement is to ensure that these persons are adequately trained to provide public water that is safe for consumption. To maintain certification most operators are required to obtain continuing education credits. The Operator Certification Program maintains records of all operators and water supplies requiring operators, and administers certification examinations. Training for operators is provided by DHES; Montana Rural Water Systems, Inc.; the Midwest Assistance Program; Montana State University; Northern Montana College; Montana Section of the American Water Works Association; and others. Unfortunately, however, most small PWS's are operated by volunteers who have little time, interest, or knowledge to devote to their responsibilities.

Data Management and Reporting to EPA

The Public Water Supply Program is responsible for maintaining records on all public water systems. These records include all "inventory" information regarding each PWS (water sources, owner, location, operator, treatment provided, address, telephone number, and so on); results of all monitoring of finished water quality; and records of all violations of standards, public notifications, and enforcement actions. As a condition of primacy, all data must be electronically reported to EPA on a quarterly basis.

A data-management system developed for personal computers by the state of Alaska is being adapted for Montana's program needs. Over the past 5 years the program has been computer "hardware and software rich" but "expertise poor" because of the inability to obtain staff to use the hardware and software purchased for this system. The recent addition of a computer programmer to the staff and continued technical assistance from Alaska should greatly improve the program's capability in this area.

Program Management and Administration

The duties of this function include:

- o Managing and planning for all three programs.
- o Providing staff for boards and task forces
- o Providing technical assistance to private well owners
- o Budgetary work
- o Writing rules for state and federal regulation implementation
- o Developing, training, and supervising staff
- o Establishing and monitoring compliance schedules
- o Making compliance decisions
- o Preparing departmental legislation.

Technical Assistance to Operators and Administrators

When standards are exceeded or operational problems arise, DHES staff provide information and technical assistance to owners and operators. At treatment plants, training to help the operator determine correct chemical dosages can improve treatment. When bacteriologically unsafe samples are obtained, the staff strives to solve the problem quickly because of the potential for an acute health risk. Assistance with start-up of emergency chlorination or boil-water instructions can be invaluable, especially for small systems. Technical assistance by staff helps to solve problems rapidly and in some instances can avert violations and risks to public health and safety.

Competent operation of surface water treatment plants is especially critical because of surface waters' vulnerability to contamination and the complexity of the treatment process. Most larger surface water plants are able to attract and retain knowledgeable and competent operators. Small systems, however, have great difficulty retaining competent operators. These problems are worsened by managers and administrators unaware of the critical needs of water treatment plant operations.

Because Montana has long recognized deficiencies associated with treatment of surface waters, the program has developed an intensive

evaluation procedure for surface-water treatment plants. This procedure, known as the Comprehensive Performance Evaluation (CPE), carefully evaluates the operation, design, maintenance, and administration of the water treatment plant. When serious deficiencies are found that can be corrected without the services of a consulting engineer and capital investments, the program staff implement follow-up activities to correct them. When major capital improvements are needed, the community is encouraged to select a consultant and make the necessary upgrades. A schedule for compliance and completion of upgrades may be imposed.

This procedure is time and labor intensive but is necessary to protect public health. EPA's Office of Drinking Water (ODW) has recognized the importance of this part of Montana's program and has worked with Montana's program staff and Process Applications, Inc. of Fort Collins, Colorado, to develop a manual for use by other states and consultants. Funding for development of the program in Montana has been provided, in part, by both EPA's Region VIII and Office of Drinking Water (ODW).

Emergency Response

The program staff's emergency response can include investigating events of toxic chemical contamination, outbreaks of waterborne diseases, floods, droughts, and vandalism. Over the past few years, contamination by organic contaminants and droughts have contributed significantly to the program's workload. Clearly, both the quantity and quality of water have ramifications for public health.

Special Studies

The Public Water Supply Section tries to conduct special studies designed to improve the quality of water delivered to the public. Such efforts have included water-use studies, determinations of whether a well, spring, or infiltration gallery is providing groundwater or surface water, Giardia testing, developing operator-training manuals and study guides, and designing process-control methods for surface-water treatment plants.

Response to Requests for Assistance from the Public

Montana's "Laws Regarding Public Water Supply" are designed to improve the quality and potability of all water used for domestic purposes, not just public systems. Thus the department has always worked with individual well owners and other water users to assist with problems such as contaminated wells, construction problems with wells, iron bacteria problems, concern of backpackers over Giardia, aesthetic problems (taste, color, odor), and questions about point-of-use treatment devices.

III. MONTANA'S REGULATIONS

Montana currently has regulations for 22 contaminants. The number of contaminants each PWS is responsible for monitoring depends upon its size, source, and its designation as a community or non-community supply. Community PWS's are subject to regulation for contaminants which have both acute and chronic health effects while non-community systems have to monitor for only those contaminants which may indicate acute concerns (coliform bacteria, turbidity, and nitrate.)

(See Appendix II for a summary of current regulations and the health effects of the regulated contaminants.)

IV. MONTANA'S UNIVERSE OF PWS's

The inventory of Montana's public water systems includes a grand total of 2,491 systems, 2,119 of which are active at this time. Community PWS's comprise 716 of this total while the remaining 1,403 are non-community systems. (Figure 2)

In terms of size of system versus population served by Montana's PWS's, Figure 3 illustrates that while we have a large proportion of small systems, our few large systems serve the bulk of our population. Over 96% of Montana's community systems serve

MONTANA, 1989
ACTIVE PWS's

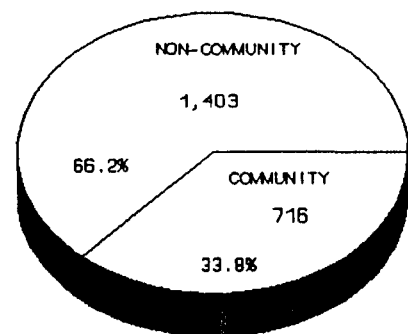


Figure 2

MONTANA, 1989
POPULATION SERVED BY COMMUNITY PWS's

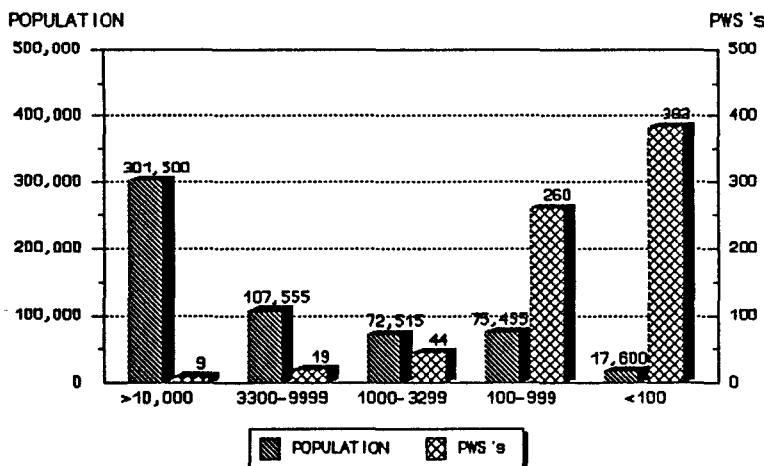


Figure 3

less than 3,300 people and are classified by federal standards as "small." About 383 of these systems (54%) serve fewer than 200 people, and 260 (36%) serve between 100 and 1,000 people. These small systems account for the vast majority of the violations of our current standards and for a variety of reasons, including diseconomies of scale, will suffer most from the impacts of the 1986 SDWA Amendments.

Approximately 147 (6.9%) of the 2,119 PWS's (70 community & 77 non-community) use surface waters. (Figure 4) These 147 systems, however, serve 64.4% of Montana's population. The high proportion of population served, together with the high health risks associated with surface waters, account for the department's emphasis on adequate treatment of these supplies.

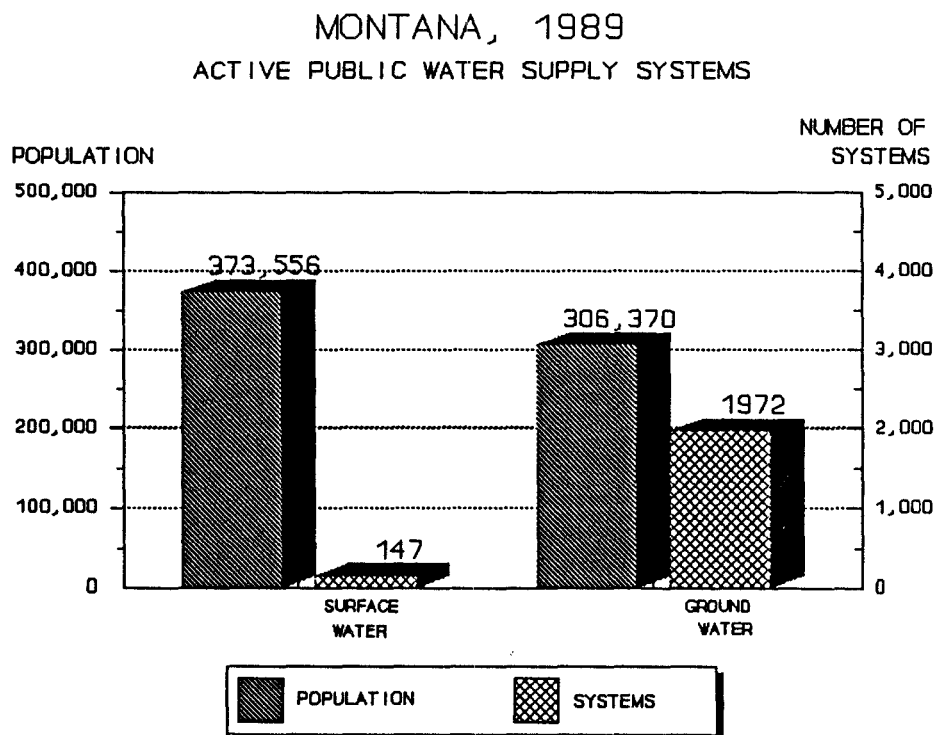


Figure 4

V. COMPLIANCE OF MONTANA'S PWS'S

The lack of a fully automated data-management system makes it difficult to generate compliance statistics. This same problem makes the numbers which are manually generated somewhat suspect. Even after allowing for a generous margin of error, it is clear that Montana's PWS compliance rates are far worse than what EPA reports as national averages. (Figure 5) Consequently, the public health threats of Montana PWS's are not a thing of the past.

NATIONAL COMPLIANCE FIGURES

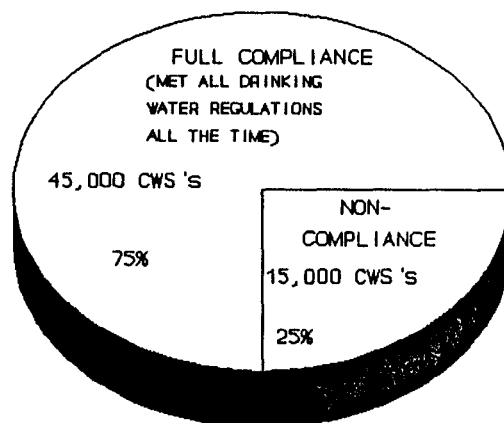
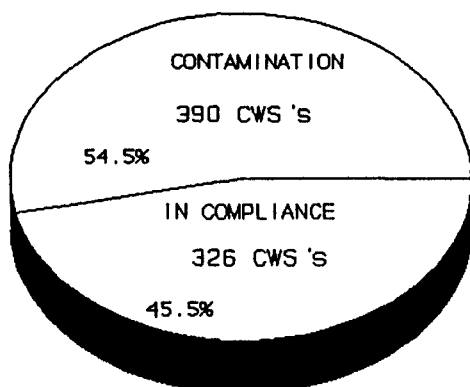


Figure 5

Compliance with Microbiological Standards

Montana has many PWS's which have occasional-to-frequent problems with bacterial contamination. Likewise, many more PWS's fail to monitor for bacteriological quality at the required frequency. Figures 6 and 7 show that the non-compliance in these two areas alone are more than double the national average for violations of all standards.

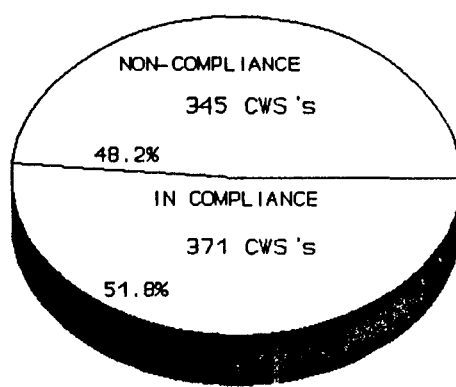
MONTANA, 1989
COMMUNITY WATER SUPPLIES



BACTERIAL VIOLATIONS

Figure 6

MONTANA, 1989
COMMUNITY WATER SUPPLIES



MONITORING VIOLATIONS

Figure 7

These startling statistics make it clear that Montana's PWS's show significantly more non-compliance than would be expected from the EPA figures. Several factors contribute to this situation, including a general lack of concern by owners and operators of small water systems, the fact that Montana does not require full-time disinfection of groundwater systems, and common usage of shallow and vulnerable water sources. Figure 8 illustrates the vulnerability of Montana Sources in showing the percentages of Montana PWS wells drilled to various depths. Nearly half of these wells are 25 feet in depth or less.

MUNICIPAL WATER SUPPLIES

DEPTH OF SOURCE WATER

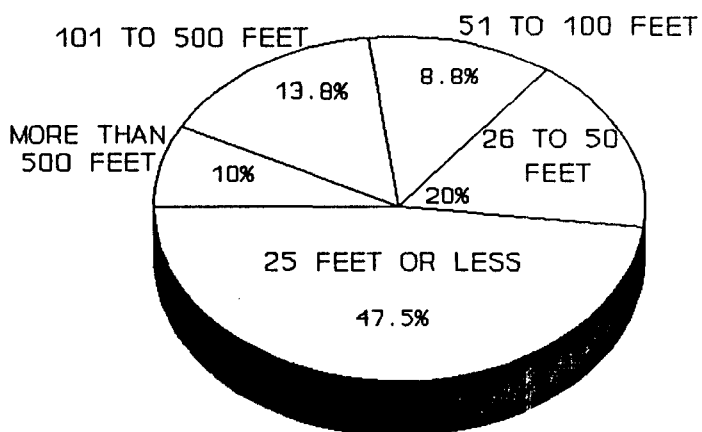


Figure 8

In the summer of 1989, a DHES study of well vulnerability (in preparation for its Wellhead Protection Program) yielded some important facts. The results of the investigation of nearly 120 of the largest groundwater systems provided clues about the frequency of bacterial contamination as well as cause for concern over contamination from pesticides, leaking underground storage tanks, and other sources of pollution. (Figure 8)

Compliance with Existing Inorganic Chemical (IOC) and Radiological (Rads) Standards

Figures 9 and 10 are based on manually generated numbers showing community systems exhibiting levels of inorganic chemicals and radiological contaminants above the EPA's maximum contaminant levels (MCLs.)

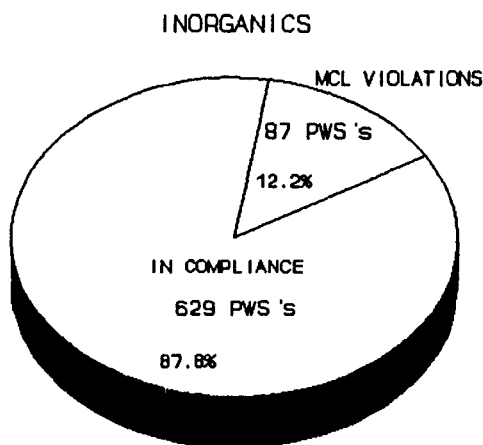


Figure 9

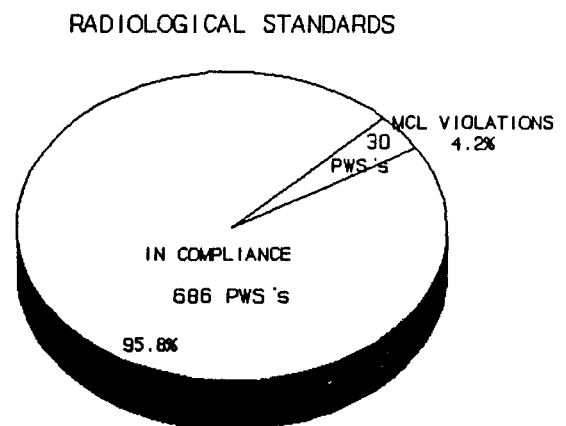


Figure 10

Compliance of Surface-Water Systems with the Turbidity Standard

The use of surface water by community PWS's requires daily monitoring for turbidity. Turbidity is an indicator of effective treatment in filtration plants and the ability of chlorine to disinfect the finished water properly. Montana, unfortunately, has many systems using surface water with no treatment other than chlorination and, often, with inadequate contact time for effective disinfection of pathogens. Several other systems have facilities that need major improvements to provide safe water. Figures 11 and 12 illustrate the percentage of public water systems using surface water that are in violation of the current turbidity MCL or monitoring requirements, respectively. The 1986 SDWA amendments will lower the current turbidity MCL.

EXHIBIT 5
 DATE 1-15-91
 BY Don. Sw. Sw.

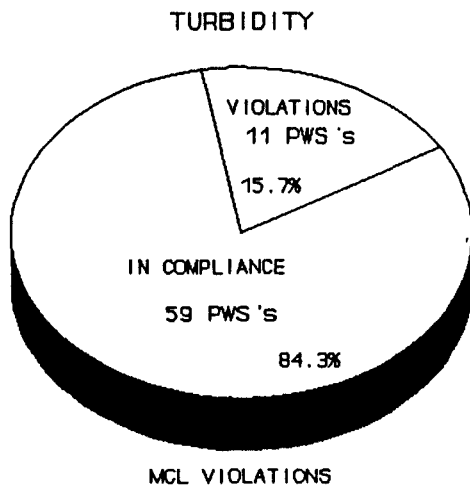


Figure 11

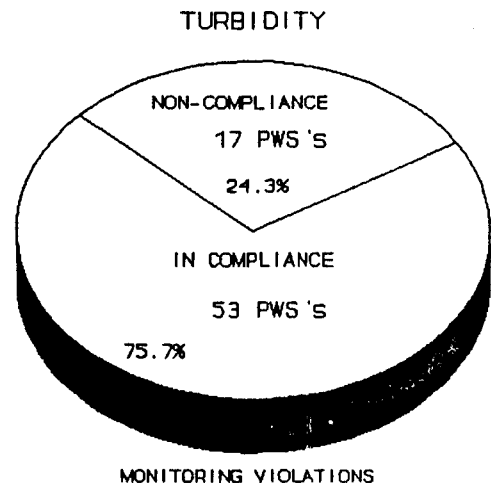
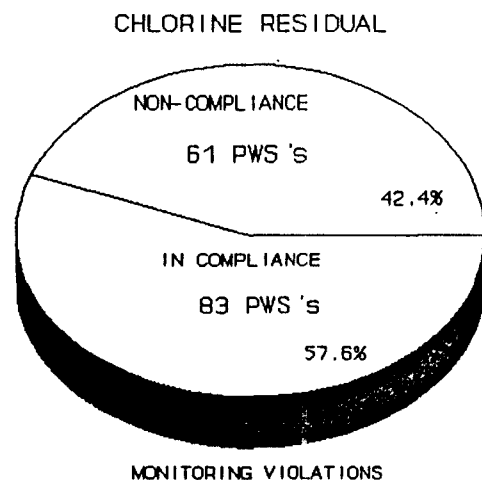


Figure 12

Operation of surface-water treatment plants is complex and requires operators who are very knowledgeable and competent. The best designed and constructed filtration plant will not produce acceptable finished water without constant scrutiny by well-trained, professional operators. Montana's Operator Certification Program assures that operators keep current with the newest regulations and technology. Plant visits by trained DHES staff reinforce proper operating techniques through personal training.

Compliance with Chlorine Residual Requirements

All systems using surface-water are required to disinfect with chlorine and report the results of daily chlorine residual monitoring to the DHES. Also, groundwater systems that have had a record of contaminated samples can be required to chlorinate. Compliance statistics of the 144 community groundwater systems required to chlorinate are shown in Figure 13.



Compliance with Standards for Organic Contaminants

Surface-water systems are required to monitor for pesticides and herbicides. **Figure 13** Systems which serve more than 10,000 people and who chlorinate must monitor for Total Trihalomethanes (TTHM's). Although limited, monitoring has rarely shown problems with contamination by these organic chemicals.

VI. 1986 AMENDMENTS TO THE SAFE DRINKING WATER ACT

Congress mandated sweeping changes in the regulation of public water systems in the 1986 amendments to the SDWA. These changes include

- o Mandatory filtration of surface water systems
- o Mandatory disinfection of all public water systems
- o Increasing the number of regulated contaminants from 22 to 83 within 3 years
- o A ban on using materials containing lead
- o Establishment of a "priority list" of contaminants that may warrant future regulation
- o Mandatory monitoring of dozens of unregulated contaminants
- o A requirement for the states to establish a wellhead protection program
- o Establishment of non-transient non-community PWS's
- o Regulation of an additional 25 contaminants every 3 years beginning January 1, 1991

Figure 14 indicates the extent to which Congress has increased the number of regulated contaminants.

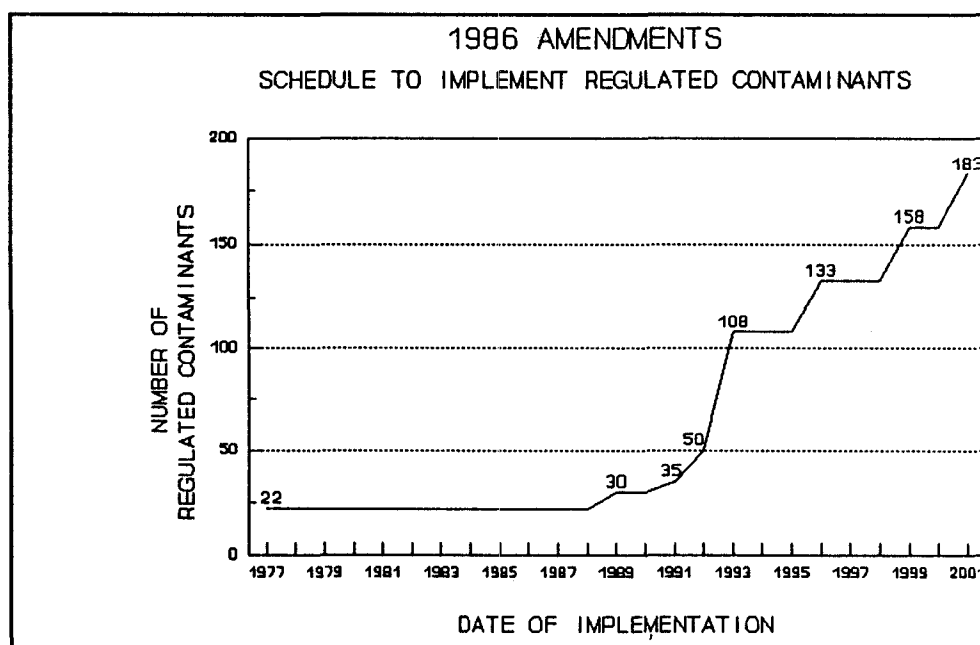


Figure 14

(For a more complete summary of the 1986 Amendments, see Appendix II.)

VII. IMPACT OF THE NEW REQUIREMENTS UPON MONTANA'S PUBLIC WATER SYSTEMS

Clearly the new regulatory requirements will have a far-reaching impact upon public water systems. The extensive monitoring done will cost several hundred dollars per year per system. While this cost will present no particular burden to Montana's few large systems, it will be very burdensome to the many small community and non-transient systems.

Under the requirements of the SDWA Amendments, non-transient systems, such as those used by schools, will be treated essentially as community systems and will be responsible for supplying water that is in compliance with those rules governing long-term, chronic health risks. The creation of this new class of PWS will increase the workload and costs of both the program and the PWS's by roughly 35 percent. (Figure 15)

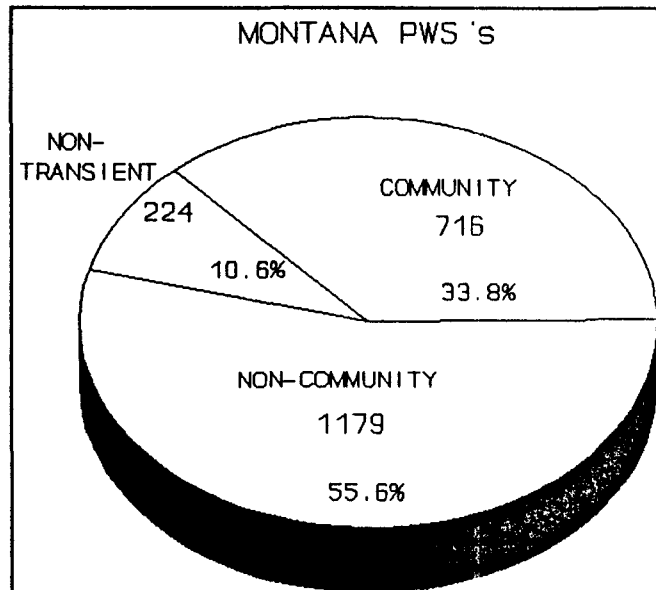


Figure 15

Coliform Rule

Increased coliform monitoring requirements are expected to detect additional problems with the bacteriological quality of some systems. This will be particularly true of non-community systems which now monitor only on a quarterly basis and which may be required to perform monthly coliform monitoring. Additionally, increased check-sampling requirements will increase violations and monitoring costs.

The Surface Water Treatment Rule (SWTR)

Most of the PWS's using unfiltered surface water will likely be required to install filtration plants. This requirement will necessitate large expenditures of funds for capital improvements for 30 to 40 community systems. Many of the existing plants will have to be upgraded to meet the more stringent finished-water requirements of the SWTR, and most existing plants will have to upgrade their operations significantly.

Approximately 30 to 40 non-community systems will be required to switch to groundwater or provide filtration. The state will be required to assess each PWS's water sources to determine which are

"surface water-influenced." Community systems must be evaluated within the next 5 years and non-community systems within 10 years. Many poorly protected, shallow groundwater sources will probably be determined to be surface-water influenced. These sources will then be required to eliminate that influence, provide filtration, or develop alternate sources.

Lead and Copper Rule

The impact of the lead and copper rule is very difficult to assess because it has not yet been completely drafted. As originally proposed, it may put 80% of our community and non-transient, non-community systems out of compliance. In any event it is likely to force many systems to install treatment plants to limit the corrosivity of the water. Others will have to perform extensive monitoring in users' homes and may have to remove lead service lines and develop public education programs.

Volatile and Synthetic Organic Compounds

Only limited monitoring for volatile and synthetic organic compounds (VOC's and SOC's) has been conducted at this point. That monitoring has, however, shown many unexpected problems with contamination from these compounds. By the end of 1993 all community and non-transient systems will be required to monitor for these chemicals, and more contaminated sources are expected. Contamination above the established maximum contaminant levels will force the systems to provide expensive treatment or to develop alternate sources of water.

Inorganic Contaminants

There is no way of predicting the impact of proposed Inorganic Contaminants (IOCs) regulations upon Montana's PWS's. It is clear, however, any problems found are likely to result in very expensive treatment requirements. The EPA estimates that regulating sulfates in community water supplies, for example, will raise annual water bills from \$60 to \$1,700, depending on the size of the system. Many of Montana's small eastern communities would be facing treatment to remove sulfates - and this is only one of several inorganic chemicals to be regulated.

Radiological Contaminants

In addition to the currently regulated radiological contaminants, Congress has mandated the regulation of both radon and uranium. The maximum contaminant levels have not yet been established, but it is expected that many Montana systems, along with thousands of systems nation-wide, will not be able to achieve compliance without the addition of treatment. In particular, radon removal will be necessary for many of Montana's PWS's.

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-B. Dem. Serv. Div.

Disinfection and Disinfection By-Products

The 1986 Amendments mandate the EPA to write regulations which establish requirements for full-time disinfection of all public water systems. There will also be criteria by which a state will, on a case-by-case basis, be able to waive these requirements. Because of the vulnerability of many Montana sources, the dilapidated condition of the infrastructure comprising many systems, and the poor sampling record of over half the

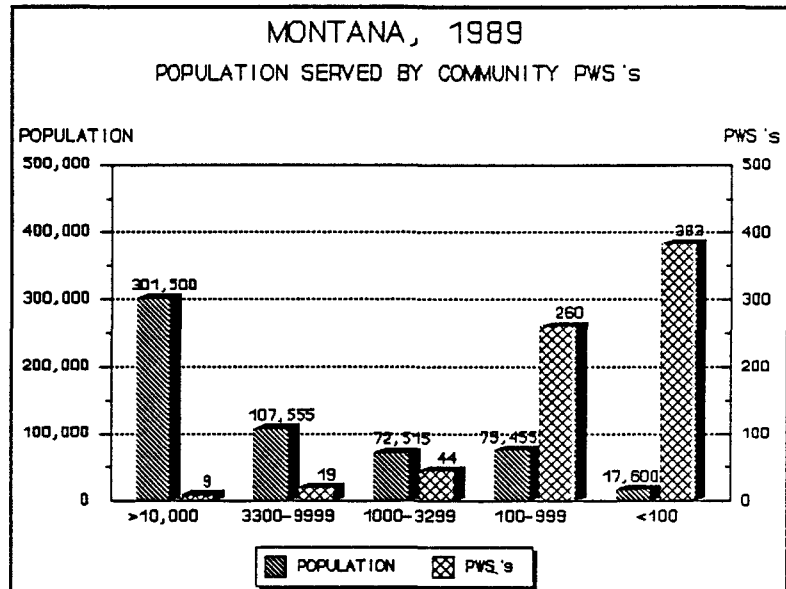


Figure 16

systems, it is expected over 1,000 PWS's will be required to install full-time disinfection and, in many cases, facilities for provision of contact time.

The by-products formed by addition of disinfectants will also be required to be regulated because many of them are suspected of causing chronic health effects. This rule is likely to be the most complex one mandated by the 1986 SDWA Amendments.

Again, it is important to note that the vast majority of Montana PWS's are small systems and will have difficulty meeting the new requirements. (Figure 16) It is therefore essential for planners, local government officials, and regulators to consider the long-term viability of existing and proposed small public water systems.

VIII. IMPACT UPON THE STATE PROGRAM

While not as overwhelming as the compliance problems faced by water purveyors, the vast increase in regulatory requirements, coupled with the complexity of the rules, will place an extreme burden upon the already-understaffed Public Water Supply Program. The following is a brief description of the program required for each major portion of the new requirements.

Volatile Organic Chemicals & Synthetic Organic Chemicals

These regulations include maximum contaminant levels (MCL's) for 8 VOC's, monitoring for an additional 52 unregulated contaminants, and regulations for SOC's which have not yet been finalized but have been proposed and are expected to be final in 1990. The proposed regulation will include new or modified MCL's for 38 more contaminants and monitoring requirements for 100 unregulated contaminants. Included in this group are a number of pesticides currently being found in Montana groundwater. The program will be required to assess each individual PWS source for its vulnerability to contamination by these chemicals. Follow up on contamination problems will be very resource intensive.

Surface Water Treatment Rule (SWTR)

This is a final EPA rule which must be added to state regulations in 1991. Primary activities in Montana will be evaluating the performance of existing surface-water treatment plants, determining removal/inactivation efficiencies, evaluating necessary contact times (CT's), providing technical assistance to PWS's, reviewing design plans, enforcing regulations, and evaluating every groundwater source to determine if it is "directly influenced" by surface water.

Total Coliform Rule

This rule is also final and must be added to state regulations by January 1, 1991. Major changes include more extensive monitoring requirements for small systems, the requirement for each PWS to have a state-approved sampling plan, and extensive follow-up monitoring when coliform bacteria are detected. There are also new requirements for system owners to notify consumers when violations occur or monitoring is not conducted. The increased monitoring is expected to disclose contamination problems which will require state action.

Lead/Copper Corrosion Control

The lead/copper rule was proposed in 1988 and is expected to be final late in 1990. The nation's medical community and regulatory officials have become increasingly concerned about lead contamination. Research suggests that low levels of lead can seriously affect human health, especially that of young children whose mental and physical development can be irreversibly arrested by overexposure to lead.

Consequently, the 1986 SDWA Amendments ban the use of lead solders, fluxes, and pipe materials. The present MCL of 50 micrograms per liter is expected to be lowered to 5 or 10 micrograms per liter for source water. Monitoring schemes must be developed by PWS's to look

for elevated lead levels in homes, and no-action levels for pH and alkalinity must be met. The proposed regulations call for extensive monitoring, public education programs, and treatment when the MCL or no-action level is exceeded. Considerable oversight and technical assistance by DHES staff will be essential.

Radionuclides

These regulations are expected to be proposed in 1990 and final in 1991. Monitoring under current regulations has already discovered several potential violations. The new regulations will also cover uranium and radon gas. Limited monitoring indicates many state systems will exceed the radon gas standard expected to be in the 200 to 500 picocurie per liter range. Such problems will necessitate state action, engineering plan review and training, etc.

Sanitary Surveys

Detailed sanitary surveys are the backbone of the state's "preventive" approach to PWS surveillance. These inspections are instrumental in spotting potential problems and correcting them before the water consumer is affected. The frequencies of sanitary surveys are as follows:

Community - Municipal (cities, towns, and so on) - Every year with a detailed inspection every 3 years. Community PWS's using surface water should be inspected more frequently.

Non-Transient non-community (schools, industries, and so on) - Every year with a detailed inspection every 3 years.

Non-community-transient (motels, restaurants, parks, and so on) - Annually by contracted local health departments.

The new requirements resulting from the 1986 Amendments (vulnerability assessment, comprehensive performance evaluation, source water assessments, etc.) will require the state to spend much more time in the field working with water systems.

Monitoring and Analytical Costs

In the past, except for coliform monitoring, DHES has collected inorganic, organic, and radiological samples. In an effort to obtain data concerning the occurrence of volatile organic contaminants, DHES has covered most of the analysis costs for samples collected to date. Because of lack of funds, follow-up monitoring for VOC's is now being done at the water system owner's expense. (Special investigations being conducted to determine the causes of groundwater contamination are often conducted and financed by the DHES's groundwater program.)

Summary of Workload/Costs

Basing their figures on extensive analysis, administrators for the Public Water Supply Program estimate that the program's existing responsibilities and future compliance with the 1986 SDWA Amendments will require over 50 FTE's. (Figure 17) When existing shortfalls within the section's three programs are combined with the projected needs of the 1986 SDWA Amendments, the magnitude of the problem becomes increasingly clear. (Figure 18)

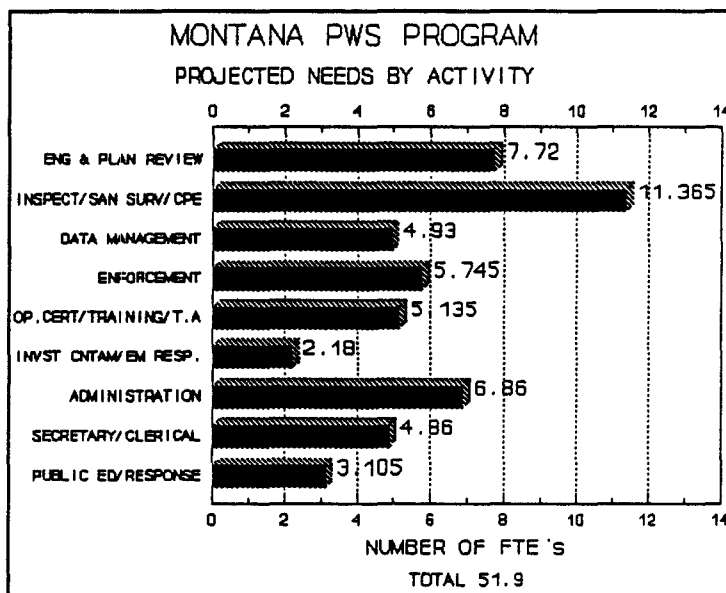


Figure 17

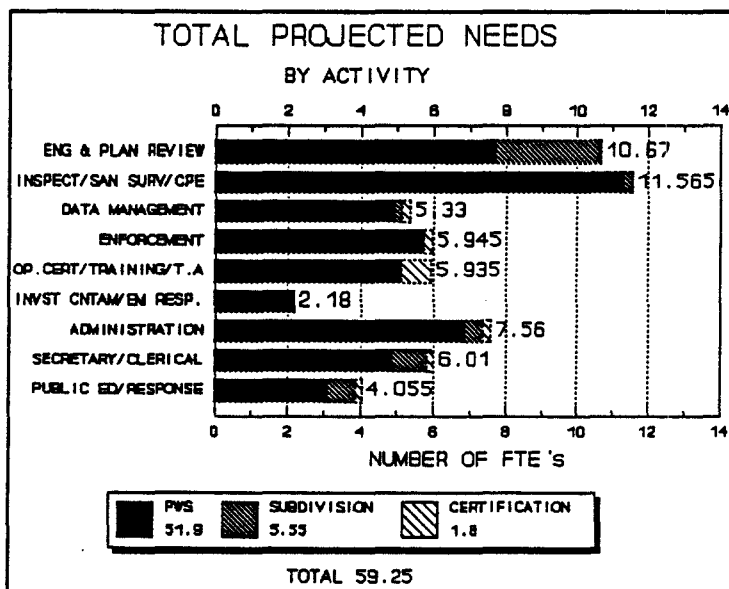


Figure 18

Timing of Resource Needs

Since the amendments to the SDWA were passed in 1986, the EPA has followed a timetable for introducing compliance regulations. To date the regulations requiring immediate action by DHES include implementation of the Volatile Organic Chemicals Rule, the Public Notification Rule, the Surface Water Treatment Rule, and the Total Coliform Rule.

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Figure 19 shows the most current "best guess" of when each rule will require implementation by primacy agencies.

IX. FUNDING

During Montana's recent economic distress, the program has become increasingly more dependent upon federal grant funds for its existence. This dependency becomes even more conspicuous when one considers federal funds are used to supplement other state programs (Operator Certification and Subdivision Review) that should be self-supporting.

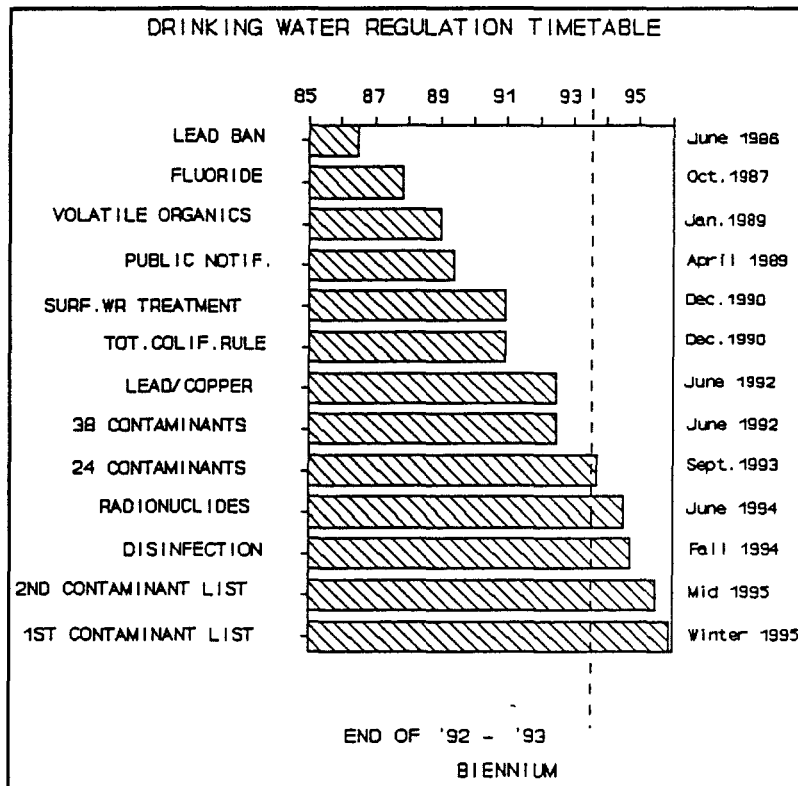


Figure 19

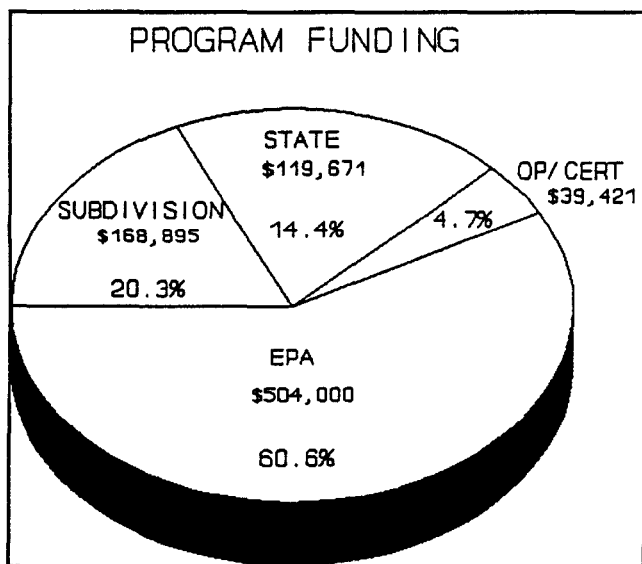


Figure 20

Figure 20 shows the extent to which the program is funded by various sources. While it is expected that the level of federal funding will increase to help pick up part of the burden of the new requirements, it is unlikely the federal government will provide funding for more than half of the program's needs.

X. OPTIONS CONSIDERED BY THE TASK FORCE

The Task Force has reviewed and discussed options available for the future operation of Montana's Public Water Supply Program. The available options included varying degrees of regulatory and technical assistance and were evaluated according to their impact upon public health. The Task Force strongly supported the protection of public health as the most essential program goal. Options which reduced state commitment toward that goal were assessed for their provision of alternate sources of those responsibilities. Cost and FTE comparison for the options are included in the chart below (Figure 21.)

	FTE	TOTAL COST	FFY 91 GRANT	EXISTING STATE \$	SHORTFALL
Option 1: Full State Program & Full Primacy	59.25	\$2,962,500	\$586,200	\$330,000	\$2,046,300
Option 2: Retain Primacy w/ a Minimal State Prog.	43.05	\$2,152,500	\$586,200	\$330,000	\$1,236,300
Option 3: Full State Program with no Primacy	30.12	\$1,506,000	none	\$330,000	\$1,176,000
Option 4: Training & Technical Assistance Only	18.05	\$ 902,500	none	\$330,000	\$ 572,500
Option 5: No Primacy & No State PWS Program	10.95	\$ 547,500	none	(Subdiv.) \$168,895 (Op. Cert.) \$ 39,421	\$ 339,184
Option 6: Repeal of All Programs	-0-	Transferred to other entities	none	none	?

FIG. 21

Option 1: Full State Program and Full Primacy

This option combines the advantage of having a prevention-oriented, comprehensive state assistance program combined with the benefits

of retaining Montana's primary enforcement authority over the federal Safe Drinking Water Act. Although this option requires expansion of the program, it is in Montana's best interest because it provides the state program necessary to protect the public health and uses federal grant monies to help pay for it.

This program would provide:

- o Training and technical assistance to operators and administrators to assist them in their compliance with drinking water laws
- o Sanitary surveys to promote preventive operations of water systems
- o Timely review of plans and specifications for water system improvements or alterations
- o Assistance to utilities monitoring source water and assessing vulnerability
- o Enforcement of regulations
- o Investigations of contamination events and waterborne disease
- o Services and advice regarding general concerns including home treatment units

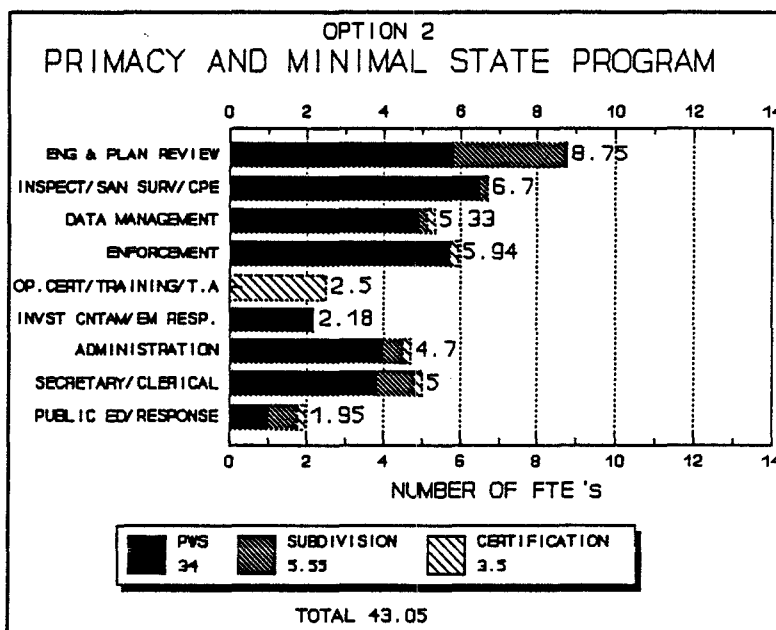
In the opinion of the task force this program is what Montanans should be provided by their state health agency. It would also meet the requirements for primacy.

The new federal rules contain provisions whereby consumers must be kept informed of monitoring violations or contamination problems at their public water supplies. As the public becomes more aware of drinking water problems, it is prudent to have a state health department prepared to address their concerns. The Task Force considers anything less than a careful handling of these issues unacceptable. Figures 17 and 18 on page 20 illustrate projected needs for this Full State/Full Primacy Program.

The sole disadvantage of this option is federal dollars will not fund the program in its entirety. Although federal grants are expected to increase as the amendments are implemented, the program will likely not be supported more than 50% by federal monies. Significant increases in staffing and additional sources of revenue must be forthcoming to support this program.

Option 2: Retain Primacy with a Minimal State Program

The main goal of this option would be to retain primary enforcement authority over the federal Safe Drinking Water Act. The program would convert to an enforcement-oriented entity with very limited assistance or preventative efforts provided to utilities and the public. For example, engineering plan review would be restricted to new sources and water treatment facilities, and inspections would be conducted only as required by the federal regulations. Also, the Operator Certification Program would revert to an administrative entity with no training provided, and vulnerability assessments and source water determinations would be funded by the public water supplier. Moreover, public education and response to public concerns would be held to a minimum. This option would require fewer FTE's and dollars than Option 1: Full State/Full Primacy. However, many of the avoided costs would pass directly to the public water supply purveyor and consumer.



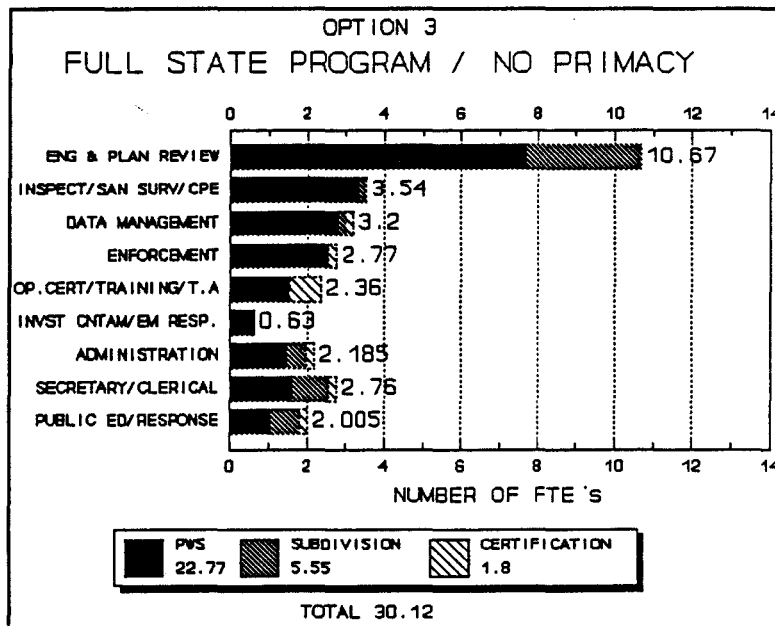
This option was rejected by the task force because it was felt such a program would be a regression for Montana and would be more costly to Montanans' in the long run. Although utilities would still benefit from a local primacy agency, the Task Force believes Montana's preventive and assistance programs are valuable state responsibilities and are necessary to protect public health. This

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option would also severely limit the state's ability to respond to concerns of private water users and contamination events. Since these activities would not be assumed by EPA, they would either be unaddressed, or local health agencies would have to add staff to provide the services themselves.

Option 3: Full State Program with No Primacy

Under this option current Montana laws regarding public water supplies would be retained, but would not be expanded to adopt the new federal requirements. The DHES would continue its preventive and assistance activities, but would enforce only existing Montana regulations. Water purveyors would have to respond directly to the EPA about compliance issues regarding the federal Safe Drinking Water Act. The state would also continue to provide training and would respond to contamination events and public inquiry since these are appropriate functions of a state health department. Resource needs would be about 25% greater than current program needs.

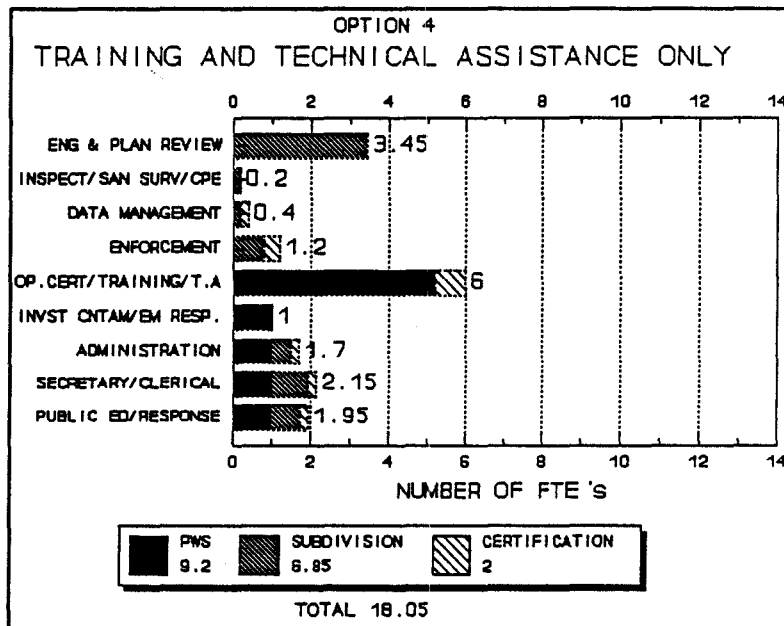


The drawbacks of this option include loss of federal grant money, since Montana would not retain primacy. The state would then have to pick up the entire cost of the program. The Task Force also believes public pressure would eventually force Montana to adopt the federal regulations because utilities and consumers would not

be satisfied with the degree of protection they would receive from the EPA or the state.

Option 4: Training and Technical Assistance Only, No Primacy

The existing Public Water Supplies Distribution and Treatment law would be amended. The state would only offer technical assistance, leaving regulatory authority over Subdivision Review and Operator Certification intact. The state would not have regulations for drinking water quality or engineering plan review, and would not maintain records about water quality or reporting. Compliance issues and public inquiry regarding public water systems would be directed to EPA, and EPA would perform regulation-oriented inspections and sanitary surveys. The state would assume responsibility for training and technical assistance, and preventive measures would be a priority. Emergency responses would be severely curtailed and provided only when state resources allowed.

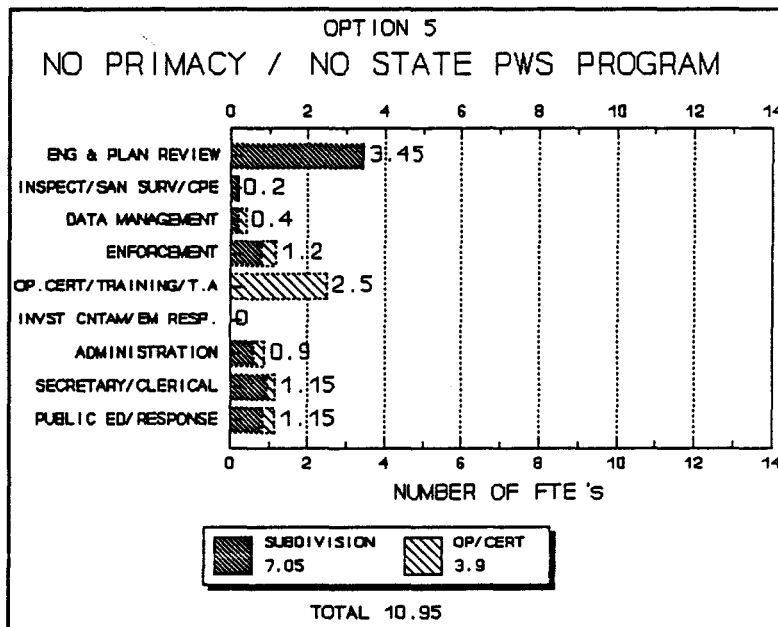


The Task Force rejected this option because it eliminates some important features of an effective program. The Task Force felt plan review was a critical service and that the DHES should have better control on water-quality issues affecting the public health

of Montana citizens. Although retention of training and technical assistance was strongly supported, regulatory authority at the federal level was not desired and was expected to be confusing to purveyors. In addition, loss of primacy would also remove federal funding sources for the program. Utility costs would rise as PWS's would be responsible for vulnerability assessments and source-water determinations. The Task Force believed that monetary savings did not justify endangering public health and a regression in Montana drinking water laws.

Option 5: No Primacy and No State Public Water Supply Program

This option would require repealing the existing Public Water Supplies, Distribution and Treatment law. The state would cease its technical assistance and regulation of public water supplies. Regulatory authority over Subdivision review and Operator Certification would remain intact. Operator Certification, however, would be reduced to administration of the program only, with no training provided. The Subdivision Program would consist of review and limited on-site inspection. All public inquiry, contamination response, and technical assistance would be referred to other agencies.



This option was rejected because it does not offer a responsible role for the DHES, and it severely jeopardizes public health. All federal funding would be lost, and functions previously performed to support the Subdivision Review and Operator Certification

programs would have to be funded by the state. The Task Force agreed that the resource savings were not worth the cost of lost public health protection.

Option 6: Repeal of all Programs

All laws pertaining to public water supplies, operator certification, and regulation of subdivisions would be repealed. No state agency would be charged with dealing with drinking water issues, inquiries, or emergency responses.

This option was rejected because the programs which would be lost are crucial in protecting Montana's consumers. Although state costs would apparently be eliminated, in reality they would have to be assumed by other agencies because the programs they support are necessary. Again, the Task Force believes that overall costs to local health departments, utilities, and consumers would dramatically increase.

XI. CONCLUSIONS

The Task Force recognizes substantive changes are needed in the Public Water Supply Program in order for Montana citizens to have confidence their drinking water is safe and their water systems are well-operated. These changes will require increasing resources so the program will provide full services and retain primacy.

These changes may ultimately require a three-fold increase in the number of personnel committed to the program. While this program is necessary, it would not be prudent or feasible to expand the Public Water Supply Program to meet the projected needs in the next biennium. The Task Force therefore recommends an Interim Public Water Supply Program for the '92 - '93 Biennium. This interim program will require sufficient resources for the state to provide essential services and retain primacy over the federal Safe Drinking Water Act. Because federal drinking water regulations are to be phased-in over the next several years, the interim program would address only those rules effective prior to July 1, 1993. This interim program will also supply valuable data for estimating the needs for a long-term comprehensive public water supply program.

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Figure 23 provides a staffing comparison of staffing needs between the recommended interim program and the projected needs for the long-term comprehensive program.

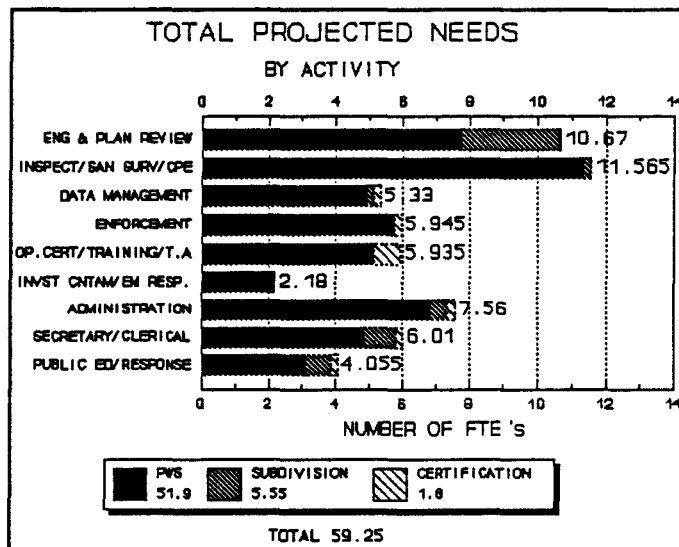
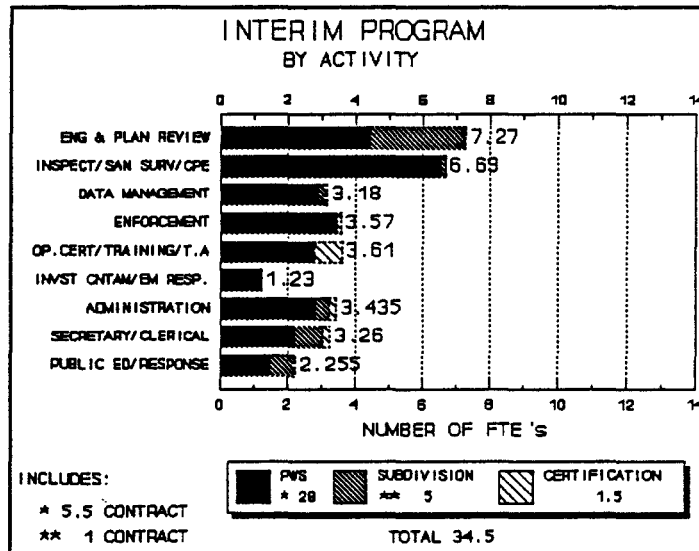


Figure 23

Of the 34.5 FTE's required for the Interim Program, 6.5 could be provided by pass-through funding to local governments, consultant contracts, or contracts with organizations such as Midwest

Assistance Program or the Montana Rural Water Association. Currently, 18.5 FTE's have already been approved or are currently filled, but existing resources support only 13.5. Therefore, the current program is inadequately staffed.

Figure 24 illustrates funding needs for the proposed Interim Program and the total projected program needs. Funding needs are based on 1989 costs.

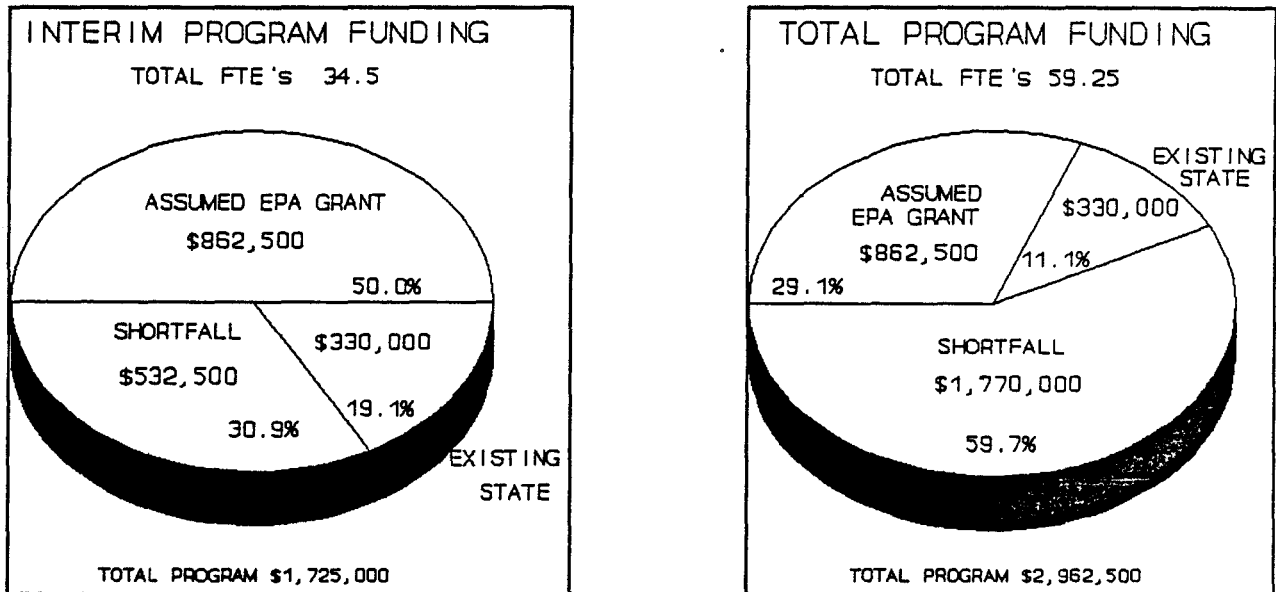


Figure 24

Program Funding

The Task Force believes that the Public Water Supply Program should be funded by those individuals who will benefit from the services through user fees. Although the health benefits of the Public Water Supply program are enjoyed by the general public, the population specifically served by the PWS benefits more directly from them. A plausible funding remedy would be a combined user fee/general fund budget resource. The Task Force therefore requests legislative changes to grant authorization for the DHES to assess fees not provided for in existing laws.

These fees could include costs for services provided and/or a fee per service connection. Examples of services which could be reimbursed by fees are engineering plan review, license fees for certifying operators, and subdivision review fees. Authorization already exists for collection of the later two, but rule changes and/or legislation will be necessary to increase those fees to a level adequate for actual program costs.

XII. TASK FORCE RECOMMENDATIONS

The Public Water Supply Program Task Force provides the following recommendations for consideration by the Department of Health and Environmental Sciences, Governor Stan Stephens, and the 1991 Legislature.

1. The state must provide a comprehensive Public Water Supply Program designed to minimize and prevent health hazards associated with drinking water. This program would be based upon the state's historical "preventive" activities and the requirements of the federal Safe Drinking Water Act.
2. The Public Water Supply Section should be staffed and funded to provide for the following by June 30, 1993:

<u>Public Water Supply</u>	<u>Subdivisions</u>	<u>Operator Cert.</u>
DHES 22.5 FTE	4.0 FTE	1.5 FTE
Contracts 5.5 FTE	1.0 FTE	0 FTE
Total 28.0 FTE	5.0 FTE	1.5 FTE

Grant Total 34.5 FTE

3. The Sanitation in Subdivisions Act, MCA 76-4-105, should be amended to remove the \$48.00 per parcel maximum fee, thereby allowing higher fees.

Rules should be adopted to increase fees for subdivision review to support an additional 1.0 FTE above current staff level.

4. The Public Water Supply Act should be amended to give the Board of Health and Environmental Sciences the authority to adopt rules by which the department can collect fees for services. These rules would include fees for engineering plan review and a fee to be assessed against each public water system based upon the number of service connections to that system.

Funds raised by these fees should be used to supplement existing funding of the Public Water Supply Section in order to support the 34.5 FTE recommended in No. 2.

When services are provided by local governments, fees collected by the department, less costs of collection, must be returned to the local governments.

5. This Task Force should reconvene in July of 1991 and July of 1992 to reassess the status of the public water supply section and make further recommendations for consideration at the 1993 legislative session.

APPENDIX I

SUMMARY OF THE 1986 AMENDMENTS TO THE SAFE DRINKING WATER ACT AND THE NEW NATIONAL PRIMARY DRINKING WATER REGULATIONS

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The 1986 Safe Drinking Water Act (SDWA) Amendments have made sweeping changes to the SDWA which include the requirement for EPA to issue new national primary drinking water regulations (NPDWRs) for 83 contaminants. The act also requires EPA to publish a priority list of new contaminants that may require future regulation, write rules regarding filtration and disinfection, prohibits the use of lead in public water systems, establishes wellhead protection programs and makes other procedural and terminology changes.

MAJOR STATUTORY REQUIREMENTS

- * The Administrator must publish maximum contaminant levels goals (MCLGs) and promulgate national primary drinking water regulations (NPDWRs) for 83 contaminants, according to the following schedule:
 - 9 of the contaminants not later than June 19, 1987. (done, + required monitoring of 51 unregulated contaminants)
 - 40 of the contaminants not later than June 19, 1988. (38 proposed in May of 1989 - also includes proposal for monitoring of another 114 unregulated contaminants.)
 - 34 of the contaminants not later than June 19, 1989. (the Coliform Rule became final June 29, 1989.)
- * The Administrator may substitute up to seven contaminants found in these lists, if they are more likely to be "protective of public health." (done, see notes on following lists)
- * Not later than January 1, 1988 and at three-year intervals thereafter, the Administrator must publish a list of contaminants known or anticipated to occur in public water systems which may require regulation. (done, see list on last page)
- * At least 25 MCLGs and NPDWRs must be proposed within 24 months and promulgated within 36 months after publication of each list (first of these is due in 1991).
- * Each MCLG must be set at the level at which "no known or anticipated adverse effects on the health of persons occur" and which allows an adequate margin of safety. MCLG's for carcinogens must be set at 0.0.
- * Each NPDWR must specify a MCL for that contaminant "which is as close to the maximum contaminant level goal as is feasible". MCLG and prepared MCLs are to be promulgated simultaneously.
- * Granular activated carbon (GAC) is specified as "feasible" for the control of synthetic organic chemicals. Any treatment techniques found to be the "best available" for the control of synthetic organic chemicals must be at least as effective as granular activated carbon.
- * The Administrator has the authority to promulgate a national primary drinking water regulation that requires the use of a treatment technique instead of establishing a contaminant level, if it is not economically or technologically feasible to ascertain the level of that contaminant.

* **FILTRATION**: EPA is to write rules specifying criteria under which filtration is required as a treatment technique for surface water sources. Consideration shall be given to the quality of source waters, protection afforded by watershed management, treatment practices and other factors relevant to protection of health. (This rule became final June 29th of 1989. It will mean that almost all of Montana's unfiltered water systems will have to install filtration. Many existing filtration plants will require capital improvements and/or a higher level of management and operation to meet the newly established finished water quality standards.)

* **DISINFECTION**: EPA is to promulgate regulations requiring disinfection as a treatment technique for all public water systems. (by June of 1989 - looks more like fall of 1992.)

* **WELLHEAD PROTECTION**: The states are required to establish wellhead protection programs. (beginning in the fall of 1987) (Congress didn't fund the program but Montana is doing some preliminary work in Missoula County and on a state-wide basis.)

* The use of lead solder, pipes and fluxes is prohibited in public water systems or plumbing connected to public water systems. (effective immediately). Also stringent public notice requirements. (The states are required to enforce the lead ban. This is done through DHES review of plans and specifications, provision of public notice by PWS's and DHES and by the DOC's building codes inspections.)

* **UNREGULATED CONTAMINANTS**: Monitoring will be required for unregulated contaminants (a list of 51). These requirements were published with the VOC rules in June of 1987. At the same time nontransient noncommunity public water systems were defined and are now subject to the same requirements as community PWSs. (The proposed regulations covering the SOC's include monitoring requirements for another 114 unregulated contaminants -bringing the grand total of the unregulated to 165.)

IMPLEMENTING REGULATIONS AND POLICIES

* EPA will be issuing national primary drinking water regulations (NPDWRs) for the 83 contaminants identified in the 1986 amendments and making other regulatory changes to Parts 141 and 142 to implement related statutory changes. Each NPDWR will:

- Set MCLs;
- Establish analytical methods for use in compliance monitoring;
- Define best available treatment for each MCL;
- Set criteria for variances and exemptions for the MCLs;
- Fix laboratory certification criteria;
- Redefine "Community Water Systems" to include entities previously classified as noncommunity water systems (e.g., schools, factories, day care centers, now called non-transient non-community systems) and
- List acceptable decentralized treatment technologies (point-of-entry, point-of-use, and bottled water).

* The SDWA has further been amended by the "Lead Contamination Control Act of 1988" which makes it mandatory for all public schools to sample their water for lead contamination that may be present due to lead materials in the plumbing system. This act requires each state to designate a "responsible agency" in state government. It is most likely that the public water supply program will be so designated.

**CONTAMINANTS REQUIRED TO BE REGULATED
UNDER THE SDWA OF 1986
(83 contaminants, 25 of which are currently regulated)
(bold type denotes those contaminants currently regulated by MT)**

Volatile Organic Chemicals

Trichloroethylene
Tetrachloroethylene
Carbon tetrachloride
1,1,1-Trichloroethane
1,2-Dichloroethane

Vinyl chloride
Methylene chloride
Benzene
Chlorobenzene
Dichlorobenzene

Trichlorobenzene
1,1-Dichlorobenzene
trans-2,2-Dichloroethylene
cis-1,2-Dichloroethylene

Microbiology and Turbidity

Total coliforms
Turbidity

Giardia lamblia
Viruses

Standard plate count
Legionella

Inorganics

Arsenic
Barium
Cadmium
Chromium
Lead
Mercury
Nitrate
Selenium

Silver (removed)
Fluoride
Aluminum (removed)
Antimony
Molybdenum (removed)
Asbestos
Sulfate
Copper

Vanadium (removed)
Sodium (removed)
Nickel
Zinc (removed)
Thallium
Beryllium
Cyanide
*Nitrite (added)

Organics

Endrin
Lindane
methoxychlor
Toxaphene
2,4-D
2,4,5-TP
Aldicarb
Chlordane
Dalapon
Diquat
Endothall
Glyphosate
Carbofuran
Alachlor
Epichlorohydrin
Toluene

Adipates
2,3,7,8-TCDD (Dioxin)
*Aldicarb Sulfene (added)
*Aldicarb Sulfoxide
(added)
Ethylbenzene (added)
Heptachlor (added)
1,1,2-Trichloroethane
Vydate
Simazine
PAHs
PCBs
Atrazine
Phthalates
Acrylamide
Dibromochloropropane DBCP

1,2-Dichloropropane
Pentachlorophenol
Picloram
Dinoseb
Ethylene dibromide (EDB)
Dibromomethane (removed)
Xylene
Hexachlorocyclopentadiene
THMs (now on priority list
as individual compounds)
*Heptachlor epoxide
(added)
*Styrene (added)

Radionuclides

Radium 226 and 228
Beta particle and photon
radioactivity

Uranium
Gross alpha particle
activity

Radon

LIST OF CONTAMINANTS TO BE REGULATED AS
SCHEDULED BY THE 1986 AMENDMENTS

The 9: FLUORIDE & VOCs
(the rules for the VOCs and unregulated
contaminants were published in June of 1987)

- | | |
|--------------------------|-------------------------|
| 1. FLUORIDE | 6. VINYL CHLORIDE |
| 2. TRICHLOROETHYLENE | 7. BENZENE |
| 3. CARBON TETRACHLORIDE | 8. 1,1-DICHLOROETHYLENE |
| 4. 1,1,1-TRICHLOROETHANE | 9. p-DICHLOROBENZENE |
| 5. 1,2-DICHLOROETHANE | |

Monitoring for Unregulated Contaminants

Safe Drinking Water Act of 1986

Section 1445 (a)(1) requires that EPA promulgate regulations requiring every public water system to conduct a monitoring program for unregulated contaminants. Each system is required to monitor at least once every 5 years unless EPA requires more frequent monitoring.

Rules: June 1987

*All systems sample each source once for 51 unregulated VOCs, phased in per size of system.

<u>Size</u>	<u>Completion</u>
>10,000	1 year from Jan. 1988
3300-10,000	2 years " "
<3300	4 years " "

*State discretion on follow-up and repeat monitoring.

Draft Final Rules: June 1987

Rules separate VOCs into three lists:

List 1: Monitoring required for all systems. Compounds can be readily analyzed.

Chloroform	Toluene	1,2,3-Trichloropropane
Bromodichloromethane	p-Xylene	1,1,1,2-Tetrachloroethane
Chlorodibromomethane	o-Xylene	Chloroethane
Bromoform	m-Xylene	1,1,2-Trichloroethane
trans-1,2,-	1,1-Dichloroethane	2,2,-Dichloropropane
Dichloroethylene	1,2-Dichloropropane	o-Chlorotoluene
Chlorobenzene	1,1,2,2-Tetrachloroethane	p-Chlorotoluene
m-Dichlorobenzene	Ethylbenzene	1,1,-Dichloropropene
Dichloromethane	1,3-Dichloropropane	Styrene
cis-1,2,-Dichloroethylene	Bromobenzene	Tetrachloroethylene
o-Dichlorobenzene	Chloromethane	
Dibromomethane	Bromomethane	

List 2: Monitoring required only for systems vulnerable to contamination by these compounds. Compounds require some specialized handling.

Ethylene Dibromide (EDB)
 1,2-Dibromo-3-Chloropropane (DBCP)

List 3: The primacy agent decides which systems would have to analyze for these contaminants, which includes compounds that do not elute within reasonable retention time using packed column methods or are difficult to analyze because of high volatility or instability.

1,2,4-Trimethylbenzene	n-Butylbenzene	Tertbutylbenzene
1,2,4-Trichlorobenzene	Naphthalene	Secbutylbenzene
1,2,3-Trichlorobenzene	p-Isopropyltoluene	Fluorotrichloromethane
n-Propylbenzene	Isopropyl benzene	Dichlorodifluoromethane

* Composite sampling of up to five wells will be allowed.

* Repeat monitoring: every five years but a new list of contaminants will be specified.

* Phase in per size of system as in the proposal. Monitoring for large systems will start October 1, 1987.

* If no contaminants are detected in the first quarter's sampling, the state may not further sampling.

The 40: SOCs-IOCs-Microbials
 (due in June of 1988)

SOCs

Tetrachloroethylene	Carbofuran	Pentachlorophenol
Lindane	Alachlor	Ethylene Dibromide
Methoxychlor	Toluene	Xylene
Toxaphene	Epichlorohydrin	Trans-1,2,-
2,4-D	PCBs	Dichloroethylene
2,4,5-TP	Acrylamide	o-Dichlorobenzene
Aldicarb	DBCP	Chlorobenzene
Chlordane	1,2-Dichloropropane	

IOCs

Arsenic	Chromium	Mercury
Asbestos	Copper	Nitrate
Barium	Lead	Selenium
Cadmium		

MICROBIALS

Total Coliforms	Turbidity	Heterotrophic Plant Count
<u>Giardia Lamblia</u>	Viruses	<u>Legionella</u>

SUBSTITUTES

Ethylbenzene	Styrene	Aldicarb Sulfoxide
Heptachlor	Nitrite	Adlicarb Sulfone
Heptachlor Epoxide		

The 34: RADIONUCLIDES - SOC's - IOC's
(due in June of 1989)

Radionuclides

RADIUM 226 & 228

BETA PARTICLES AND PHOTON RADIOACTIVITY

URANIUM

GROSS ALPHA PARTICLE ACTIVITY

RADON

SOC's

SIMAZINE

ATRAZINE

ENDRINE

2,3,7,8-TCDD

1,1,2-TRICHLOROETHANE

PHTHALATES

TRICHLOROBENZENE

DALAPON

DIQUAT

ENDOTHALL

GLYPHOSATE

ADIPATES

HEXACHLOROCYCLOPENTADIENE

HEXACHLOROBENZENE

VYDATE

PAHs

PICHLORAM

DINOSEB

METHYLENE CHLORIDE

~~DIBROMOMETHANE~~ (removed)

IOC's

SULFATE

ANTIMONY

THALLIUM

BERYLLIUM

CYANIDE

NICKEL

~~SILVER~~ (removed)

~~ALUMINUM~~ (removed)

~~MOLYBDENUM~~ (removed)

~~VANADIUM~~ (removed)

~~SODIUM~~ (removed)

~~ZINC~~ (removed)

PRIORITY LIST OF DRINKING WATER CONTAMINANTS

1,1,1,2-Tetrachloroethane

1,1,2,2-Tetrachloroethane

1,1-Dichloroethane

1,1-Dichloropropene

1,2,3-Trichloropropane

1,3-Dichloropropane

1,3-Dichloropropane

2,2-Dichloropropane

2,3,5-T

2,4-Dinitrotoluene

Aluminum

Ammonia

Boron

Bromobenzene

Bromochloroacetonitrile

Bromodichloromethane

Bromoform

Bromomethane

Chloramines

Chlorate

Chlorine

Chlorine dioxide

Chlorite

Chloroethane

Chloroform

Chloromethane

Chloropicrin

Cryptosporidium

Cyanazine

Dibromoacetonitrile

Dibromochloromethane

Dibromomethane

Dicamba

Dichloroacetonitrile

ETU

Hypochlorite ion

Isophorone

Methy tert-butyl-ether

Metolachlor

Metribuzin

Molybdenum

Ozone byproducts

Silver

Sodium

Strontium

Trichloroacetonitrile

Trifluralin

Vanadium

Zinc

o-Chlorotoluene

p-Chlorotoluene

Halogenated acids,

alcohols,

aldehydes, ketones, and

other nitrile

Appendix II**MONTANA'S CURRENT
PRIMARY DRINKING WATER STANDARDS**

Contaminants	Health Effects	MCL ¹	Sources
Microbiological			
Total Coliforms (Coliform bacteria, fecal coliform, streptococcal, and other bacteria)	Not necessarily disease producing themselves, but can be indicators of organisms that cause assorted gastroenteric infections, dysentery, hepatitis, typhoid fever, cholera, and others; also interfere with disinfection process.	1 per 100 milliliters	human and animal fecal matter
Turbidity	Interferes with disinfection	1 to 5 NTU	erosion, runoff, and discharges
Inorganic Chemicals			
Arsenic	Dermal and nervous system toxicity effects	.05	geological, pesticide residues, industrial waste and smelter operations
Barium	Circulatory system effects	1	
Cadmium	Kidney effects	.01	geological, mining and smelting
Chromium	Liver/kidney effects	.05	
Lead	Central and peripheral nervous system damage; kidney effects; highly and pregnant women	.05 ²	leaches from lead pipes and lead-based solder pipe joints
Mercury	Central nervous system disorders; kidney effects	.002	used in manufacture of paint, paper, vinyl chloride, used in fungicides, and geological
Nitrate	Methemoglobinemia ("blue-baby syndrome")	10	fertilizer, sewage, feedlots, geological
Selenium	Gastrointestinal effects	.01	geological, mining
Silver	Skin discoloration (Argyria)	.05	geological, mining

MONTANA'S CURRENT
PRIMARY DRINKING WATER STANDARDS

Contaminants	Health Effects	MCL ¹	Sources
Flouride	Skeletal damage	4	geological, additive to drinking water toothpaste, foods processed with flourinated water
Organic Chemicals			
Endrin	Nervous system/kidney effects	.0002	insecticide used on cotton, small grains, orchards (cancelled)
Lindane	Nervous system/kidney effects	.004	insecticide used on seed and soil treatments, foilage application, wood protection
Methoxychlor	Nervous system/kidney effects	.1	insecticide used on fruit trees, vegetables
2,4-D	Liver/kidney effects	.1	herbicide used to control broad-leaf weeds in agriculture, used on forests, range, pastures, and aquatic environments
2,4,5-TP Silvex	Liver/kidney effects	.01	herbicide (cancelled in 1984)
Toxaphene	Cancer risk	.005	insecticide used on cotton, corn, grain
Benzene	Cancer	.005	fuel (leaking tanks), solvent commonly used in manufacture of industrial chemicals pharmaceuticals, pesticides, paints and plastics

MONTANA'S CURRENT
PRIMARY DRINKING WATER STANDARDS

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DATE 1-15-91
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Contaminants	Health Effects	MCL ¹	Sources
Carbon tetrachloride	Possible cancer	.005	common in cleaning agents, industrial wastes from manufacture of coolants
p-Dichlorobenzene	Possible cancer	.075	used in insecticides, moth balls, air deodorizers
1,2-Dichloroethane	Possible cancer	.005	use in manufacture of insecticides, gasoline
1,1-Dichloroethylene	Liver/kidney effects	.007	used in manufacture of plastics, dyes, perfumes, paints SOCs
1,1,1-Trichloroethane	Nervous system problems	.2	used in manufacture of food wrappings, synthetics fibers
Trichloroethylene (TCE)	Possible cancer	.005	waste from disposal of dry cleaning materials and manufacture of pesticides, paints, waxes and varnishes, paint stripper, metal degreaser
Vinyl chloride	Cancer risk	.002	polyvinylchloride pipes and solvents used to join them, waste from manufacturing plastics and synthetic rubber
Total trihalomethanes (TTHM) (chloroform, bromoform, bromo-dichloromethane, dibromochloro-methane)	Cancer risk	.1	primarily formed when surface water containing organic matter is treated with chlorine

**MONTANA'S CURRENT
PRIMARY DRINKING WATER STANDARDS**

Contaminants	Health Effects	MCL ¹	Sources
Radionuclides			
Gross alpha particle activity	Cancer	15 pCi/L	radioactive waste, uranium deposits
Gross beta particle activity	Cancer	4 mrem/yr	radioactive waste, uranium deposits
Radium 226 & 228 (total)	Bone cancer	5 pCi/L	radioactive waste, geological
Other Substances			
Sodium	Possible increase in blood pressure in susceptible individuals	None (20 mg/l reporting level)	geological, road salting

¹ In milligrams per liter, unless otherwise noted.

² Agency considering substantially lower number.



STATE OF MONTANA
ENVIRONMENTAL QUALITY COUNCIL

STATE CAPITOL
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January 10, 1991

Representative Dorothy Bradley
Chairman
Human Services Subcommittee
Capitol Station
Helena, MT 59620

Dear Representative Bradley:

During the 1990-1991 biennium the Environmental Quality Council conducted an interim study of ground water quality protection and management pursuant to SJR 22. In conducting this study over the past 18 months the EQC examined most of the state agency programs that are concerned with ground water quality protection and with managing sources of potential ground water contamination.

Virtually all organizations and regulated industries involved with water quality issues in Montana have expressed concern to the EQC that the level of staff in the Department of Health and Environmental Sciences (DHES) is inadequate to manage the increasing caseload of ground water contamination incidents and to effectively work with potential sources of water pollutants to prevent future contamination. The EQC is well aware of the funding constraints that must necessarily limit all agency expenditures in the next biennium to those programs and services that are deemed most critical to the well-being of the state and its people. In recognition of the importance of ground water to sustain the communities, rural residents, and natural ecosystems of the state, and the magnitude of the problems that result when the ground water resource is damaged or rendered unusable, the EQC unanimously concluded that the DHES needs 4.5 additional full-time staff to carry out its ground water protection-related duties. This recommendation includes 2.5 full-time equivalent (FTE) staff in the ground water program and 1.0 FTE in the subdivision section within the Water Quality Bureau, and 1.0 FTE in the DHES legal unit.

A copy of the EQC's analysis of the DHES' ground water protection workload is attached, including the section in the EQC's final

6
DATE 1-15-91 Exhibit #6
1/15/91
Hum. Svc
Subc.

SJR 22 report that addresses this issue. The SJR 22 report has not yet been published but should be available for distribution by January 17.

EQC members and staff would welcome the opportunity to discuss the DHES staffing recommendation and the attached material with the Human Services Subcommittee and individual subcommittee members. Please contact us at your convenience.

Sincerely

A handwritten signature in cursive script that reads "Bob Gilbert".

Representative Bob Gilbert
Chairman

SECTION VII. WATER QUALITY BUREAU STAFFING ISSUES

Ground Water Quality Protection

Virtually every section of the SJR 22 interim study contains options for recommendations to provide additional funds to the DHES, Water Quality Bureau (WQB) to increase and improve the current level of effort devoted to water pollution discharge permit review, enforcement of the Water Quality Act, and overall water quality protection. At the EQC's October meeting, WQB staff presented a detailed description of the bureau's current ground water protection program, including information describing the program's current workload and staff assignments. The WQB identified specific areas within the program where new staff would be assigned if the 1991 Legislature were to decide that the WQB needs additional people to work on ground water protection.

At this time the ground water program is totally funded by the EPA but not at a level sufficient to handle the work load, especially considering the increasing number of ground water contamination incidents statewide. For the past few years the EPA has provided approximately \$100,000 annually, with about 60 percent of the funds used for salaries for 2.0 full-time equivalent staff (FTEs), 20 percent for contracted services, and the remainder for supplies, travel and overhead. The WQB is receiving new funds this fiscal year from the EPA to support 2.0 additional FTEs who will work on wellhead protection and pesticide management. One DHES attorney is assigned to water quality-related cases and is funded by 75 percent federal and 25 percent state money. Subdivision review is a separate program within the WQB that receives state general funds for 1.0 FTE who is responsible for review and approval of all subdivisions. Subdivision review is discussed in this section because one of the more effective ways to prevent ground water contamination is to ensure that sewage disposal systems in subdivisions are properly designed.

The following points summarize the ground water program's workload issues:

-- DHES' ground water rules have not been reviewed or updated in 8 years -- water quality standards have not been adopted for many pollutants and where standards are lacking, the DHES lacks authority to require ground water cleanup in locations where no reasonably foreseeable beneficial use of the water would be affected -- numerous other policy issues and technical questions that have arisen over the years may warrant a general review of the rules

-- ground water pollution discharge permits currently require 4 to 8 months to process; compliance inspections of permitted facilities are minimal; some facilities have not been inspected in over 3 years

-- landfarming of contaminated soils, sewage lagoons, and Class V disposal wells (dry sumps) are three sources of ground water pollutants that the DHES has not been able to properly regulate

-- the WQB receives reports/complaints of about an average of 30 spills and accidents per month involving pollutants and possible ground water contamination; the reports and complaints are coming in at an increasing rate due to greater public awareness of ground water; many of these matters require substantial investigation and oversight, with some taking years to resolve

-- over the past 3 years about 12 new water pollution enforcement cases per year have been referred to DHES legal staff but only 4 or 5 cases per year have been closed; the back-log is seriously hampering the legal staff's effectiveness

-- the number of mine permit applications that the WQB reviews in conjunction with the Department of State Lands has increased dramatically -- the ground water staff is not able to review monitoring data collected by mine permit applicants and can conduct only minimal permit compliance monitoring

-- the number of major ground water problem sites has also increased substantially (e.g., Church Universal and Triumphant, Nelson Trailer Court, Mountain Water Co.) -- work on such sites generally extends over several years

-- in FY 90, 27 major subdivisions, 820 minor subdivisions, 14 trailer courts, and 3 condominium developments were approved by the WQB -- environmental assessments were prepared on only 2 subdivisions under MEPA -- 1.0 new FTE may be approved by the 1991 Legislature through proposed staff increases for the safe drinking water program, but this person would only provide assistance on reviews of subdivisions with public water systems

-- the WQB currently does not have an organized ground water pollution prevention component for projects such as ground water vulnerability assessment and prioritization and public education and outreach

Based on the information WQB staff presented to the EQC, the following list shows where 4.5 additional FTEs would be assigned if the 1991 Legislature concludes that additional staff are necessary:

0.5 FTE -- water pollution discharge permitting and compliance inspections; writing guidelines for permit applicants; and determining regulatory requirements for sewage lagoons and land farming of contaminated soils

0.3 FTE -- ground water rules update and ground water protection strategy development

0.5 FTE -- complaint, spills and accident response

0.4 FTE -- technical review of mine permit applications and compliance monitoring; technical assistance to other state government programs

0.3 FTE -- major ground water contamination site evaluation and oversight

0.5 -- development of preventive ground water protection program components

1.0 FTE -- subdivision review

1.0 FTE -- legal expertise and water quality enforcement

EQC Deliberations

Based upon the WQB workload issues summarized in this section and other information concerning the scope of ground water quality protection problems in the state that was presented under the hard rock mining, septic system and sewage disposal, agricultural chemical, and ground water management sections of the SJR 22 ground water study, the EQC endorsed the following recommendation:

Recommendation #32:

The Environmental Quality Council recommends that the 1991 Legislature provide 3.5 additional FTE's to the Water Quality Bureau and 1.0 additional FTE to the DHES legal unit to work on ground water quality protection tasks.

GROUND WATER QUALITY PROTECTION PROGRAM

Program Components

- I. Administration
- Maintain program, including developing budgets, and work plans, obtaining and maintaining EPA grants, monitoring expenditures
 - Manage personnel
 - Develop, negotiate and monitor contracts for technical services and special studies (e.g., Missoula wellhead protection studies, Montana Bureau of Mines and Geology nonpoint pollution source assessment)
 - Participate in the EOC's interim ground water study
 - Develop preventive ground water protection program components
 - Revise and update ground water rules

Current Level of Effort:

0.3

0.3

Proposed Additional Level of Effort

I. Administration

Staff time currently allocated to administrative functions is less than the minimum necessary to meet specific deadlines associated with EPA grant requirements, contract requirements, and program maintenance functions such as budget development. Staff respond to workload demands on a crisis management basis. Program planning is nonexistent. No overall strategy has been developed to prevent ground water contamination.

The DRES' ground water rules were adopted in 1982 and have not been formally reviewed or updated in the past 8 years. A number of issues associated with the rules periodically have been the subject of public debate and concern. Examples include: 1) allowance of limited ground water contamination within prescribed mixing zones and/or property boundaries; 2) lack of guidance on the level of cleanup required when a spill or accident causes ground water contamination; 3) lack of water quality standards or federal maximum contaminant levels (MCLs) for many pollutants and corresponding lack of authority to require ground water cleanup where no reasonably foreseeable beneficial use of ground water could be affected; 4) identifying violations of the Water Quality Act based on whether a beneficial use of ground water has been affected; and 5) exemptions from permit requirements for pollution sources that are regulated under other programs. The rules must be revised to add new standards for a number of agricultural chemicals pursuant to the requirements of the Montana Agricultural Chemical Ground Water Protection Act. A more general review of the rules is undertaken, a substantial commitment of staff time and legal assistance will be required.

I. Administration

If additional staff time were available for administrative tasks, program planning would be possible, including more emphasis on preventive ground water protection.

GROUND WATER QUALITY PROTECTION PROGRAM

Program Comments

II. Montana Ground Water Pollution Control System (MGWPCS) Permits and Enforcement

A. MGWPCS Permits

- Advise/consult on permit requirements and provide guidance to potential applicants
- Review applications, process permits, write environmental assessments, respond to public comments, and questions, and hold public hearings
- Conduct MGWPCS permit compliance inspections, collect samples, modify permits where necessary

Current Level of Effect

II. Montana Ground Water Pollution Control System (MGWPCS) Permits and Enforcement

A. MGWPCS Permits

MGWPCS permits presently take from 4-8 months to process due to staff limitations. Compliance inspections of permitted facilities are minimal. Only controversial sites receive attention. Some facilities have not been inspected in over 3 years.

Out of a total of 62 MGWPCS permit applications that have been processed since the program began in October 1982, there are: 21 active permits; 21 permits that have expired, been terminated, or are being transferred to the Department of State Lands (DSL) because they are small mining operations that use cyanide; and 17 applications for which permits were not issued for a variety of reasons. During the period of January 1 to September 1, 1990, WQB received 12 MGWPCS permit inquiries and 2 permit applications, and issued 1 permit.

Underground Storage Tank regulations have required excavation of a substantial volume of fuel-contaminated soil. Due to staff limitations, the WQB has not regulated this potential source of ground water pollution except to provide general recommendations to responsible parties on proper treatment and disposal methods. Sewage lagoons are another potential pollution source that the WQB has not been able to evaluate in order to determine potential regulatory requirements. There likely are other potential water pollution sources or discharge activities occurring that should be required to obtain a MGWPCS permit that the WQB has not identified.

B. Complaints/Spills

- Respond to citizen inquiries relating to ground water and answer citizen questions about pollution sources, pollution pathways, and threats to human health and the environment;
- Investigate complaints submitted by government agencies, citizens and industry
- Respond to spills and unauthorized releases of materials that threaten ground water quality; investigate severity of spills, determine potential impacts and work with responsible parties to ensure clean-up; monitor ground water pollution

FTE

1.0

II. Montana Ground Water Pollution Control System (MGWPCS) Permits and Enforcement

A. MGWPCS Permits

One-half additional FTE would enhance the effectiveness of the MGWPCS permit program in the following ways: 1) More thorough review of permit applications could be accomplished in a potentially shorter time period; 2) One inspection per year could be conducted for each permitted facility, thereby enhancing permit compliance and ground water quality monitoring; 3) Written guidelines could be developed to assist permit applicants; 4) Standard procedures for water well sampling could be written to assist permittees, consultants, and the public; 5) Standard requirements for treatment and disposal of fuel-contaminated soil could be developed; and 6) Sewage lagoons could be evaluated to identify potential impacts on ground water quality and monitoring and corrective action needs. More frequent inspections would also help permitted facilities remain in compliance and avoid enforcement actions.

B. Complaints/Spills

One-half additional FTE would allow for a more timely response to citizen complaints. Additional staff would also allow for a more thorough investigation of complaints and spills and improve the level of assistance WQB is able to give to affected parties.

EXHIBIT 6

DATE 1-15-91
HB. Dum. New Sub

0.5

FTE

Proposed Additional Level of Effort

GROUND WATER QUALITY PROTECTION PROGRAM

Program Components

C. Enforcement Support

- Investigate and document MCHPCS permit violations and other Water Quality Act violations that threaten ground water; collect samples as necessary to document violations; make recommendations for enforcement actions
- Provide technical support to legal staff for case development; design and review clean-up or remediation plans; evaluate and monitor performance/compliance of remedial activities
- Assist in preparation of administrative orders to expedite cleanup activities

C. Enforcement Support

A substantial portion of enforcement cases involving the Water Quality Act have a ground water component and the number is continually increasing. Some 1990 examples of ground water enforcement cases include the 2300 Development Corporation at Pony, WCH Development Corporation at Philipsburg, Silver Eagle Mining Co. at Clinton, Meadow Gold/Borden Co. at Kalspell, the City of Boreman and a number of businesses associated with contamination at the Nelson Trailer Court, and Conoco Pipeline Co. at Avon and Garrison. Specific administrative orders are developed for only a few cleanup operations each year due to limitations of technical and legal staff.

III. Legal Expertise

- Research and prepare legal cases for Water Quality Act enforcement actions
- Provide legal expertise as requested to four WQB programs, including public drinking water, water pollution control, subdivision review, and construction grants

III. Legal Expertise

One FTE in DUES' legal unit is assigned to WQB. The water pollution control program receives about 0.4 FTE in legal support for enforcement and other assistance. There are currently about 25 active water pollution control cases and several other inactive cases, approximately 25 of which involve ground water contamination. Over the past three years about 12 new water pollution control cases per year have been referred to the legal staff while an average of 4 or 5 cases per year have been closed.

III. Legal Expertise

One additional FTE in the DUES' legal unit to assist with water quality cases would enhance the WQB's ability to enforce the Water Quality Act, allow enforcement actions to be resolved in a more timely manner, and allow legal staff to provide more effective assistance to the WQB as needed for program implementation.

IV. Technical Assistance

- A. Interagency Coordination With DSL
 - Review hard rock mining permit applications submitted to DSL to determine compliance with water quality standards

IV. Technical Assistance

A. Interagency Coordination With DSL

The DSL funds 0.5 FTE in the WQB to review hard rock mining permit applications and integrate water quality protection measures into the DSL's permitting process. This position currently is filled by a surface water specialist and the DSL's hydrogeologist position has been vacant for almost a year. The WQB's ground water staff assists in mine permit applications, examines ground water impacts due to the increasing number of hard rock mining permit applications under review and the time required to prepare detailed environmental assessments. The workload is significant. No reviews of monitoring data collected by mine permit applicants and minimal permit compliance monitoring are possible due to staff limitations. A list of DSL projects reviewed in 1990 is presented in Attachment B1.

0.3

IV. Technical Assistance

Additional staff would allow the WQB to conduct more thorough and expeditious reviews of mine permit applications and better compliance monitoring. Technical assistance supplied to other programs and bureaus within DUES and participation in other agencies' regulatory programs would also be more effective and consistent.

0.4

Proposed Additional Level of Effort

FTE

Current Level of Effort

0.2

0.4

1.0

GROUND WATER QUALITY PROTECTION PROGRAM

Specific Comments

B. Hydrogeologic Expertise Within DRES

- Provide hydrogeologic expertise to other WQB programs (e.g., safe drinking water, nonpoint source pollution prevention, subdivision regulation, and construction grants/loans)
- Provide technical assistance to other bureaus within DRES.

C. General Interagency Coordination

- Assure that all types of pollution sources comply with the water quality standards on a statewide basis
- Assist other state agencies (other than the DSL) and local government officials in assessing ground water impacts and evaluating project designs

V. Major Ground Water Problem Sites

- Lead agency responsibility for oversight and compliance monitoring of major ground water contamination problems; coordination with legal staff and other relevant programs and agencies (e.g., Nelson Trailer Court, Rossmore Mountain Water Co., Missoula; Burlington Northern fueling sites, 13 locations; Statewide: Church Universal and Triumphant, Corvallis Springs)
- Work with responsible parties to ensure public health and the environment are adequately protected and that cleanup and monitoring plans are implemented
- Coordinate with other programs (e.g., underground storage tanks, hazardous waste) to ensure appropriate participation in regulating various sites

Current Level of Effort

B. Hydrogeologic Expertise Within DRES

The Solid and Hazardous Waste Bureau regularly requests the WQB's ground water staff to assist in designing and reviewing ground water cleanup operations and plans for hazardous and solid waste management facilities. The ground water staff also reviews and analyzes sites where potential ground water contamination is a concern, including subdivisions, public water supply systems, and waste water treatment facilities. A list of the public water supply systems, subdivisions, and waste water treatment facilities that the ground water staff has evaluated in 1990 is included in Attachment B1.

C. General Interagency Coordination

The Department of Agriculture (MDA) and the Department of Natural Resources and Conservation request consultations with the WQB to resolve pesticide management and ground water supply management issues. The ground water staff responds on a reactive, issue-oriented basis (e.g., the detection of Tordon in domestic wells in Clancy). Preparation of water quality-related portions of the Programmatic EIS on oil and gas drilling and production is an example of an interagency project that consumed at least 0.25 FTE for several months in 1988. The 1989 Montana Agricultural Chemical Ground Water Protection Act confers joint administrative responsibility on the MDA and DRES; however, due to staff limitations, the WQB has devoted minimal time to working with the MDA to implement the Act (see Section VII, B).

V. Major Ground Water Problem Sites

When a major ground water pollution problem is discovered, WQB staff involvement may extend over several years. As the number of problems increases, the WQB staff becomes more manageable. During the summer of 1989, at least 0.1 FTE was devoted solely to work on the Burlington site. Approximately 1.1 FTE was required to investigate the Nelson Trailer Park problem during the latter half of 1989. Additional staff time will be required for enforcement, cleanup oversight, and compliance monitoring. Burlington Northern has proposed providing funds for 1.0 FTE (a) within the WQB to work on ground water investigations and cleanup operations at its fifteen fueling sites; however, the number of other major ground water problems is continuing to increase. As staff time is diverted from one serious problem site to another, on-going duties such as RCRA permit processing and oversight are not continued.

0.3
1.0

V. Major Ground Water Problem Sites

An additional 0.3 FTE is necessary to keep up with the current workload at major ground water contamination sites other than the sites where Burlington Northern is the responsible party.

0.3

EXHIBIT C
DATE 1-15-91
HB Dean Saw. Saw

Proposed Additional Level of Effort

GROUND WATER QUALITY PROTECTION PROGRAM

Program Components

Program Components	Current Level of Effort	FTZ	Proposed Additional Level of Effort	FTZ
<p>VI. Subdivision Review</p> <p>-- Administer the Sanitation in Subdivisions Act, including approving subdivision plats with various types of water supplies, sewage facilities, and solid waste disposal systems</p> <p>-- Contract with local governments for review of minor subdivisions with onsite water and sewage facilities and subdivision that would connect with existing municipal water and waste water systems</p>	<p>VI. Subdivision Review</p> <p>Improperly designed subdivisions are a major source of ground water contamination in Montana. One FTZ in the WQB is currently responsible for reviewing and approving all proposed subdivisions. About 0.1 FTZ of the ground water staff's time is devoted to reviewing subdivision proposals in particularly sensitive or controversial locations. During FY 90 WQB's overall subdivision workload included reviews of 27 major subdivisions, 820 minor subdivisions, 14 trailer courts, and 3 condominium developments. Between 500 and 525 of the minor subdivisions were initially reviewed by local government sanitarians or engineers, leaving about 300 for which the WQB had sole review responsibility. Two environmental assessments were prepared under MEPA in FY 90 for two of the major subdivision proposals. Based on DRES' MEPA rules, the WQB should be preparing at least checklist EAs on all subdivisions or, alternatively, the DRES should promulgate rules or prepare a programmatic EIS to identify circumstances that would allow some types of subdivisions to be categorically excluded from MEPA review.</p>	0.1	VI. Subdivision Review <p>The DRES is preparing a proposal for the 1991 Legislature to add a substantial number of FTZs to the safe drinking water program to respond to new federal requirements and allow the WQB to cope with the existing public water supply system workload. The EQC received a briefing on this proposal at its August meeting. Included in the proposal is one additional FTZ (**) for the subdivision review program to allow the WQB to improve its technical review and conduct on-site inspections at proposed subdivisions that would have public water supply systems.</p> <p>The additional one FTZ included in the safe drinking water program proposal will address only a small portion of the current subdivision review workload. An additional FTZ would enable the WQB to begin improving its ability to conduct acceptable sanitary reviews of proposed subdivisions and comply with DRES' MEPA responsibilities.</p>	1.0** 1.0
<p>VII. Preventive Ground Water Protection</p> <p>-- Provide a significantly less expensive and more productive focus for government efforts to protect ground water quality.</p> <p>A. Wellhead Protection</p> <p>-- Develop a wellhead protection program to control existing or potential sources of pollution surrounding public water supply wells, pursuant to 1986 amendments to the Federal Safe Drinking Water Act</p> <p>-- Comply with EPA program requirements</p>	<p>VII. Preventive Ground Water Protection</p> <p>The WQB's ground water program does not currently include an organized pollution prevention component. The program primarily focuses on ground water pollution control and generally reacts to problem situations that other parties bring to the WQB's attention. Use of EPA funding for the program components discussed below will add a preventive dimension to the current program.</p> <p>A. Wellhead Protection</p> <p>EPA funds are available to hire 1.0 FTZ to develop the wellhead protection program (***). The WQB expected to fill this position in the spring of 1990, but hiring has been delayed due to complications associated with job classification and salary and the overall shortage of qualified hydrogeologists willing to accept state government positions at current rates of pay.</p> <p>Public water supplies have been contaminated in several Montana communities (e.g., Livingston, Missoula, Bozeman). An increasing number of local governments are interested in wellhead protection and there is a demonstrated need for the program. Initial steps the WQB expects to take include forming a work group of interested state and local agency representatives to develop the program plan, identifying criteria for delineating wellhead protection area boundaries, prioritizing vulnerable public water supply systems, conducting local demonstration projects, soliciting public review of the program plan, and submitting the plan to EPA.</p>	0.5	VII. Preventive Ground Water Protection <p>The EPA's support of wellhead protection, pesticide, and nonpoint pollution control programs is very important and will allow the WQB to implement some preventive ground water protection program components, but state support for preventive ground water protection programs is also warranted. Listed below are specific preventive program components that the WQB would implement if staff limitations could be overcome:</p> <p>-- Ground Vulnerability Assessment and Prioritization</p> <p>Montana's ground water resources are extremely varied and the capability of state agencies to protect and manage these resources is limited. A systematic analysis of ground water vulnerability to contamination and prioritization of areas most in need of protection would help focus limited agency resources.</p>	0.5

GROUND WATER QUALITY PROTECTION PROGRAM

Program Comments

B. Pesticides, Nonpoint Source Management

-- Pursuant to the Montana Agricultural Chemical Ground Water Protection Act, establish new water quality standards for pesticides, adopt rules, comment on general and specific agricultural chemical ground water management plans, and conduct compliance monitoring in areas where plans are implemented

Current Level of Effort

RTI

B. Pesticides/Nonpoint Source Management

1.0****

The EPA is providing funds to the WQB to implement a "Pesticides in Ground Water" program. Montana's 1989 Act fulfills many of EPA's requirements for the program. The WQB will hire 1.0 RTI (****) with the EPA funds to: 1) implement the ODES's duties under the Act, 2) identify vulnerable areas where the Department of Agriculture (MDA) should give priority attention to developing specific agricultural ground water management plans, 3) coordinate with the MDA to respond to pesticide and fertilizer ground water contamination incidents, and 4) conduct nonpoint ground water assessment and public education projects related to pesticides.

Proposed Additional Level of Effort

RTI

-- Public Education and Outreach

Many citizens do not understand ground water behavior and pollution because it occurs beneath the surface and is unseen. Montana does not have a comprehensive ground water education program, although the MDA Extension Service, MDA, Soil Conservation Service, the WQB's nonpoint source program and various community organizations are making various aspects of this important public need. If citizens are aware of ground water pollution, maps, handbooks and a variety of educational materials could be developed to facilitate the public's awareness of ground water. State support would also enhance local efforts in areas where ground water concerns are prompting citizens to establish community pollution prevention programs.

-- Class V Injection Wells

Class V injection wells (i.e., open bottom sumps and drains) are a significant source of ground water pollution. Over 1000 drains in Missoula that are used by automotive shops and car washes or underlying parking lots and streets empty into the aquifer that supplies the community's drinking water. Organic contaminants in public water supply wells in Missoula have been linked to Class V sumps and drains. In 1990 EPA began to regulate a selected population of Class V wells in Montana, but the requirements are not yet being applied statewide nor are all injection wells presently included. The WQB could develop a Class V permit program and promptly obtain matching funds from EPA. Control of this widespread source of pollution would greatly enhance ground water protection efforts in the state.

EXHIBIT 6
DATE 1-15-91
HB Durr, New, Sw

GROUND WATER QUALITY PROTECTION PROGRAM

INTRODUCTION

Water Quality Bureau (WQB) and Environmental Quality Council staff prepared the attached table to provide the EQC with a description of the WQB's ground water protection program. The program is totally funded by the Environmental Protection Agency (EPA) but not at a level sufficient to handle the work load, especially considering the increasing number of ground water contamination incidents statewide.

For the past few years EPA has provided approximately \$100,000 annually to the ground water protection program. About 60% of these funds have been used for salaries for 2.0 full-time equivalent staff (FTEs), about 20% for contracted services, and the remainder for supplies, travel and overhead. The WQB's enforcement officer is funded by 95% EPA funds and 5% state funds and spends approximately 20% time on ground water-related cases. One DHES attorney is assigned to water quality-related cases and funded by 75% federal and 25% state money.

As discussed in the attached table, the WQB is receiving new funds from EPA to support two FTEs who will be hired in the near future to begin work on two preventive ground water protection program components, wellhead protection and pesticide management. Subdivision review is also included in the attached table. It is a separate program within the WQB. However, one of the more effective ways to prevent ground water contamination is to ensure that subdivisions and sewage disposals systems are properly designed. The level of review that the WQB is current able to give to subdivisions is not meeting that objective.

The attached table was prepared to facilitate EQC discussion on the current ground water-related work load and the need for additional staff within the WQB. The table identifies how an addition of 2.5 FTE to the ground water staff, 1.0 FTE to the subdivision review program, and 1.0 FTE to the legal staff would be assigned to meet current program demands and implement a more preventive approach to ground water protection.

1/15/91

Human Serv. Subc

ATTACHMENT #1

GROUND WATER PROGRAM 1990 WORK SITES

Complaints

Champion, Twin Creeks Site - investigation/cleanup of drain and sump
Department of Highways, Glendive - investigation/clean up of old shop drain and sump
Plum Creek, Bad Rock - investigate wood waste dump near domestic well
USFS, Libby - investigate report of possible creosote dump
Permian Oil Co., Sweetgrass - Pipeline leak clean up
Lewis Construction, Vaughn - illegal hazardous waste disposal
Bohman's Exxon, Ennis - investigate petroleum contamination in seepage pit
County Rodeo, Ballantine - investigate illegal oil disposal
H. F. Johnson, Billings - investigate illegal oil disposal
Lewis and Clark Co., Scratch Gravel Landfill - review corrective action and monitoring plan
Meagher County Shop, White Sulphur Springs - investigate oil dumping
MMC, Belgrade - Investigate complaint of illegal disposal
B & B Mining, Townsend - investigate improper use of mercury
Unknown, Sidney - follow up discovery of oil leak at intersection of several pipelines
Exxon Terminal, Missoula - review and negotiate fuel spill clean up plans
Champion, Missoula - 1985 tank leak follow up

Spills

Exxon Terminal, Bozeman - review and negotiate fuel spill clean up plans
Conoco Pipe Line, Avon - review and negotiate pipeline leak clean up plans
Conoco Pipe Line, Garrison - review and negotiate pipeline leak clean up plans
Moore Oil Co., Troy - follow up to 1989 tanker truck overturn
Texaco, Glendive - Pipeline leak clean up
Montana Refinery, Cut Bank - Pipeline leak clean up
Pathfinder Mining, Pony - investigate diesel spill

Waste Sites

Burlington Northern, Livingston - review monitoring and clean up reports
Burlington Northern, Livingston - Review and negotiate investigation plan for bridge approach
Burlington Northern Fueling Sites - Great Falls, Helena, ~~Havre~~, ~~Missoula~~, ~~Shelby~~, ~~Glasgow~~, ~~Essex~~, ~~Whitefish~~, Billings, Laurel, Jones Junction, Butte and Glendive
Hart Refinery, Missoula
Old Milwaukee Railroad, Deer Lodge, Miles City and Harlowton

VISITOR'S REGISTER

Human Services Subcommittee

SUBCOMMITTEE

AGENCY(S) _____

DATE 1/15/91

DEPARTMENT _____

PLEASE PRINT

NAME	REPRESENTING	SUP- PORT	OP- POSE
Ray Loftman	DAFC		
Steve Pilcher	DHES		

IF YOU CARE TO WRITE COMMENTS, ASK SECRETARY FOR WITNESS STATEMENT.
IF YOU HAVE WRITTEN COMMENTS, PLEASE GIVE A COPY TO THE SECRETARY.