

STATE OF MONTANA  
DROUGHT CONTINGENCY PLAN

PREPARED BY  
CIVIL DEFENSE DIVISION  
DEPARTMENT OF MILITARY AFFAIRS  
TELEPHONE 449-3034

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## FOREWARD

At a meeting of the Governor's Disaster Advisory Council on 11 March, 1977 the following concepts of planning and operations were agreed to:

1. There will be three levels of drought addressed within the forthcoming plan. No definite set of conditions will be established to escalate the designations of mild, moderate or severe, but agreement as to a level of seriousness will be reached by the Council, based upon recommendations of the functional annex "managers", the Directors of Departments and a continuing analysis of the water resource and data collection effort by the Department of Natural Resources and Conservation.
2. There was general agreement that levels of drought should be defined as follows for planning purposes:
  - a. Mild: a condition calling for measures to improve efficiency in use of water and energy. Such measures will cause minor inconvenience and rely upon education and voluntary compliance for benefits sought.
  - b. Moderate: a worsening condition which calls for voluntary reductions in use of water and energy and probable imposition of certain regulations and constraints which would cause some inconvenience.
  - c. Severe: a condition which would justify stringent restrictions on water and energy consumption. The severe shortage of moisture would require imposition of quotas and allocations of priorities for the purpose of maintaining acceptable health and welfare conditions. Declaration of a severe drought condition would very probably see discomfort and hardship among most segments of the citizens of Montana.

3. A plan to cope with drought conditions will be prepared under direction and guidance provided by the Civil Defense Division. That Division will provide the "basic plan", i.e. introduction, purpose, definitions etc., and coordinate formation of functional annexes. The annexes will address six functions as follows:

<u>FUNCTION</u>	<u>STATE AGENCY RESPONSIBLE</u>
(1) Agriculture	Department of Agriculture
(2) Business and Industry	Office of Commerce
(3) Economy	Office of Budget & Program Planning
(4) Energy	Montana Energy Advisory Council
(5) Fish, Wildlife and Recreation	Department of Fish and Game
(6) Municipal/Social Impacts	Department of Community Affairs

4. State agencies assigned an Annex as noted above should produce an annex addressing the function and describing impacts and actions to be taken in light of the three possible levels of severity of drought as outlined above. The primary state agency should draw upon local, state and federal agencies and private sector associations, organizations or citizens as may be necessary to insure a workable plan.

5. The Council also considered the need for accurate data which would be consistent among, and readily available to agencies. Since water is the sole resource for consideration (in this case the lack of it) it will be the responsibility of the Department of Natural Resources and Conservation to gather, interpret, and distribute planning data.

6. In order that information relating to drought conditions is accurate and consistent with conditions, the Council determined that announcements, news releases, and recommendations and directives implementing "drought management" measures should be disseminated from the Governor's Office. Normal day-to-day communications and coordination established between and among all agencies, local, other state, and federal agencies

should continue in a normal fashion. Data obtained from any source should be provided the Department of Natural Resources and Conservation without delay, however, if that data is of any significance to drought conditions or to decisions on how best to deal with problems related to drought.

7. It was determined that major river drainage systems would be used to define drought areas in addressing the overall State of Montana drought situation, since it is unlikely that levels of severity will be the same throughout the state. (This arrangement can be modified at any time it appears that a different method of delineation would better serve objectives of the State Plan.)

In summary: The Council is concerned that State Government begin immediately to address a possibly serious situation. It is the sense of the Council that education and positive conservation measures should begin immediately to alert Montana citizens of the potential for emergency or disaster conditions. The Council believes that a concise, workable, and well coordinated State Drought Emergency Plan will be invaluable if drought conditions reach serious or critical proportions.

The State's Civil Defense Division is prepared to offer assistance and guidance in Annex preparations. Unlike most other natural emergencies or disasters, drought is a slow-moving condition which provides signals to indicate impacts and suggest alternatives for use of a scarce resource: water. There is time to plan for a worsening condition if moisture eludes us over the next few months. Our citizens deserve our best effort. ✓

## I. PURPOSE

This plan outlines responsibilities of State government to implement practices and procedures in providing short range and long range assistance to minimize effects of drought on the State of Montana, its counties and cities, its businesses, its agriculture and to respond to the needs of its citizens.

## II. AUTHORITY

The Montana Civil Defense Act of 1951, as amended.

## III. SITUATION

Current low snow pack and precipitation indicates that a serious drought situation could exist in Montana during the balance of 1977 and perhaps later depending upon conditions. Low water supplies could affect water for culinary uses, municipal water supplies, irrigation, business, industry, fish and game and the environment and could seriously affect electrical power available during the period of drought.

The State of Montana thus recognizes the vulnerability of its citizens and its responsibilities toward assisting local governments in responding to the effects of a drought in order to protect the lives and property of its citizens and to minimize economic losses.

## IV. OBJECTIVES

- A. Priority will be given to supplying adequate and safe domestic (culinary) water to insure public health, safety and welfare.
- B. Second priority will assure minimal overall affects to the states' agriculture, industries, economy and environment.
- C. Promote public and school education to increase public awareness, encouraging people to conserve electrical energy and water and to instill a conservation ethic in the population as a whole.
- D. The Governor will maintain control and direction over State resources in support of local governments.

## V. EXECUTION

### A. Responsibilities:

#### 1. Local

- a. Primary responsibility for public health, safety and welfare is with local government.
- b. Local governments must implement and enforce stringent water conservation practices prior to requesting state emergency assistance.

- c. Each political subdivision should keep the state informed of local water conditions and projected areas of concern as soon as they are identified.
- d. Local governments must assure that a reasonable level of resources to mitigate the effects of drought have been expended prior to requesting state assistance.

2. State

- a. The State, will monitor present and projected water and energy levels and availability and make local governments and Montana's citizens aware of projected impacts and recommend ways of mitigating those impacts.
- b. The State must be prepared to respond to local governments requests for assistance with available state resources.
- c. The State will coordinate all Federal assistance available to the state, local governments and its citizens.

B. Concept of Operations:

- 1. The Governor's Disaster Advisory Council will make recommendations to the Governor of suggested actions which the state may take to minimize the overall effects of the drought.
- 2. A Drought Advisory Committee composed of the heads of various State governments departments and agencies has been established as shown in Appendix 1 (Organization) of this plan. The duties of this Committee are, but not limited to, the following:
  - a. Coordinate the flow of information to and from the Task Force Chairmen.
  - b. Insure that an annex is developed by each functional area task force.
  - c. Insure that the completed annex is within general limits of acceptability and can be readily used by individuals, local governments, state departments, etc. to respond to changing drought conditions appropriately.
  - d. Weigh the impacts of each task force's recommendations in the light of effects on others task force recommendations.
  - e. Advise the Governor's Disaster Advisory Council on possible alternate actions and recommendations for policy and action plans.
  - f. It is the Committee's objective that recommendations and actions taken to cope with drought conditions should not be damaging to the environment.

3. Six functional Task Forces will be formed and chaired as shown on Appendix 1 (Organization) of this plan. Each Chairman will form the Task Force with individuals of his choosing from other State agencies, Federal agencies and from the private sector in numbers adequate to assure well rounded expertise. Suggestions for Task Force Members are as shown on Appendix 2. Each Task Force Chairman will:
  - a. Prepare and distribute to all holders of the plan, a functional annex in the format as shown in the annex section for mild, moderate and severe conditions. The initial report should be completed and distributed by April 1, 1977 and continually refined and updated as conditions change.
  - b. Chairman may appoint a drought coordinator; this individual should have the authority to reflect departmental views and serve as the Chairmans' alternate on the Drought Advisory Council and may act as coordinator for the Task Force. Appointed drought coordinator should be identified in the appropriate functional annex.
  - c. Obtain specialized drought information or request assistance from Water Resource Data Collection Group, if needed.
  - d. Be responsible for fiscal and administrative functions within the task forces.
  - e. Obtain legal determinations within the purview of his particular functional area and keep the Disaster Advisory Committee Chairman appraised of all problem areas.
  - f. Continue liaison with Federal agencies that would normally be conducted on a day-to-day basis.
4. Four Support Groups are formed to assist the Drought Advisory Committee:
  - a. Water Resource Data Collection, Chairman - Department of Natural Resources and Conservation. This group will collect, analyze and distribute on a continuing basis the current and projected water situation and make its findings known to all holders of this plan.
  - b. Legal Assistance, Chairman - Department of Justice. This group will provide the legal assistance and determinations needed for the Drought Advisory Committee.
  - c. Environmental Concerns, Chairman - Environmental Quality Council Executive Director. The Environmental Quality Councils' advice is solicited to inform the Drought Advisory Committee on environmental matters. It is the Drought Advisory Committee's objective that its recommendations and actions to cope with drought conditions should not be damaging to the environment.

- d. Public Information and Education, Chairman - Governor's Office. This group will insure the public is informed of the current drought situation and knowledgeable of measures needed to be taken to mitigate the effects of drought. Press releases from all functional Task Forces will be coordinated through this office.

The Citizens of the State should be made aware that the Citizens Advocate Office is available to receive reports of drought caused difficulties, to provide answers to questions and to inform on available drought relief programs.

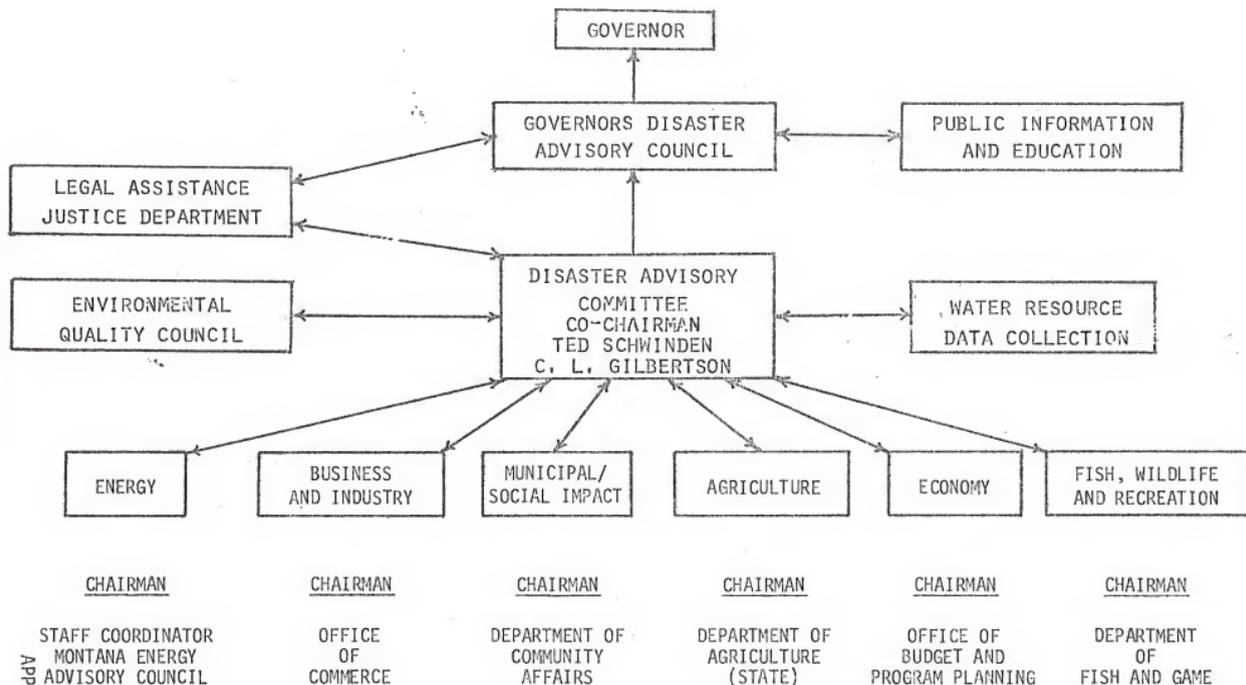
C. Miscellaneous:

Range and Timber Fire Suppression Plans will continue to be the responsibility of the Forestry Division, Department of Natural Resources and Conservation.

D. Emergency Response and/or Disaster Declaration:

It is the responsibility of the Civil Defense Division, Department of Military Affairs to maintain emergency response resource data and coordinate local-State-Federal efforts in the event a disaster is declared.

PROPOSED ORGANIZATIONAL CHART  
DROUGHT RESPONSE PLAN



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DISASTER ADVISORY COMMITTEE CO-CHAIRMAN  
LIEUTENANT GOVERNOR'S OFFICE  
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ECONOMY T. F. CHAIRMAN - OFFICE OF BUDGET AND PROGRAM PLANNING

FISH, WILDLIFE AND RECREATION T. F. CHAIRMAN - DEPARTMENT OF FISH AND GAME

SUGGESTED TASK FORCE COMPOSITION

ENERGY

- CHAIRMAN - Staff Coordinator M. E. A. C.  
 Department of Natural Resources  
 and Conservation  
 Bureau of Reclamation  
 Federal Energy Administration  
 Representative from a Utility Company  
 Representative from a Consumer Group  
 Representative from Electrical Cooperatives

BUSINESS AND INDUSTRY

- CHAIRMAN - Office of Commerce  
 Department of Labor and Industry  
 Montana Chamber of Commerce  
 Economic Development Administration  
 Representative from Industries  
 Representative from Business

MUNICIPAL/SOCIAL IMPACT

- CHAIRMAN - Department of Community Affairs  
 Department of Health and Environmental  
 Sciences  
 Department of Social and Rehabilitation  
 Services  
 Department of Natural Resources  
 and Conservation  
 League of Cities and Towns  
 Montana Association of Counties  
 Department of Housing & Urban Development  
 Representative from Legislative Council  
 Farmers Home Administration

AGRICULTURAL

- CHAIRMAN - Department of Agriculture (State)  
 Department of Livestock  
 Department of Natural Resources  
 and Conservation  
 National Weather Service  
 Bureau of Reclamation  
 USDA State Emergency Board  
 Montana Farm Organizations  
 Cattlemen's Association  
 Montana Association of Conservation Districts  
 Representative of Irrigation Districts

ECONOMY

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 Department of Revenue  
 Small Business Administration  
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 U. S. Fish and Wildlife Service  
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 Representative Private Recreational Interests  
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DIVISION**

**ORRIN A. FERRIS  
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HELENA, MONTANA 59601

March 14, 1977

## STATUS OF WATER SUPPLY AND STREAMFLOW FORECASTS

This report is based on conditions existing March 1, 1977.

### Precipitation

Attachment 1 is a map produced by the National Weather Service Forecast Office in Great Falls, Montana which shows the percent of normal precipitation that was received between September 1, 1976 through February, 1977, based on the 30-year period, 1941 to 1970. The northwestern part of the state is well below normal. Three small areas around Twin Bridges, Lewistown, and Lodge Grass are above average. The balance of the state has received from 50 to 100% of the 1941-70 normal precipitation for the past 6 month period.

The existing mountain snow water equivalent (March 1) as recorded by the Soil Conservation Service (SCS) is represented by percent of the 1958-72 average in Attachment 2. This attachment was prepared by the Montana Department of Natural Resources and Conservation (DNRC), based on data presented in the Water Supply Outlook for Montana as of March 1, 1977 published by the SCS, USDA, P. O. Box 98, Bozeman, Montana. Part of the summary provided in that report is reproduced below:

"Water supply conditions have deteriorated the past month even with the storm activity near the first of March. Snowfall on the mountain watersheds was very light until the last few days in February and the first few days of March. Some mountainous areas received one to four feet of new snow during this storm period.

Small mountain ranges in central Montana and the north end of the Bighorn Mountains continue to receive good precipitation.

Areas west and north of the Kootenai River and areas along the continental divide east of Lemhi Pass into Yellowstone National Park, near Butte and north of Marias Pass to the Canadian border have less than 30 percent of average snowpack. Headwater areas of the Gallatin, Smith, Belt, Judith, Musselshell and Shields River have 50 to 70 percent average snow storage. Snow water content in the Crazy and Castle Mountains is 70 to 90 percent average.

The water equivalent at about 75 percent of the snow courses in Montana is minimum of record."



## Streamflow Forecasts

The March 1, 1977 SCS report states that

"Most streams are forecast to have spring and summer runoff that is second to fourth lowest of record. Mid and late season irrigation supplies are expected to be short."

Attachment 3 (prepared by DNRC based on the SCS report) shows streamflow forecasts as percentages of the 1958-72 average. Significant areas of the state's streams will produce less than 70% of average flow. Several of these will produce less than 40%.

## Drought Index

Attachment 4 is the Palmer Drought Index map produced by the National Weather Service for February, 1977. This Palmer Index is a measure of drought severity and is based on comparisons of recent temperature and precipitation conditions to long term normal condition for county size or larger areas. Note that the index indicates moderate-to-extreme drought conditions in Western Montana.

## Reservoir Storage:

The February, 1977 report Current Water Resources Conditions in Montana, U.S. Geological Survey, Water Resources Division Office, Helena, states:

"Contents in all major hydroelectric reservoirs were down from last month but the contents still were slightly greater than 100 percent of average except Flathead Lake which was 70 percent of average. For the 4th consecutive month, monthend storage in Mystic Lake was the lowest for the month since record began in 1936. Storage in most irrigation reservoirs decreased from last month but generally remained slightly above seasonal average east of the Divide and slightly below normal west of the Divide."

Attachment 5 is reservoir storage data from the USGS report referenced above.

Existing reservoir storage, water needed-to-fill and forecasts are compared for state-owned projects in attachment 6 (prepared by Engineering Bureau, Water Resources Division, DNRC). Most reservoirs should fill with the possible exception of Nilan Reservoir near Augusta and Nevada Creek north of Avon.

## Ground Water

Ground-water levels in observation wells declined from last month. Water-levels were about average but somewhat lower than last year.

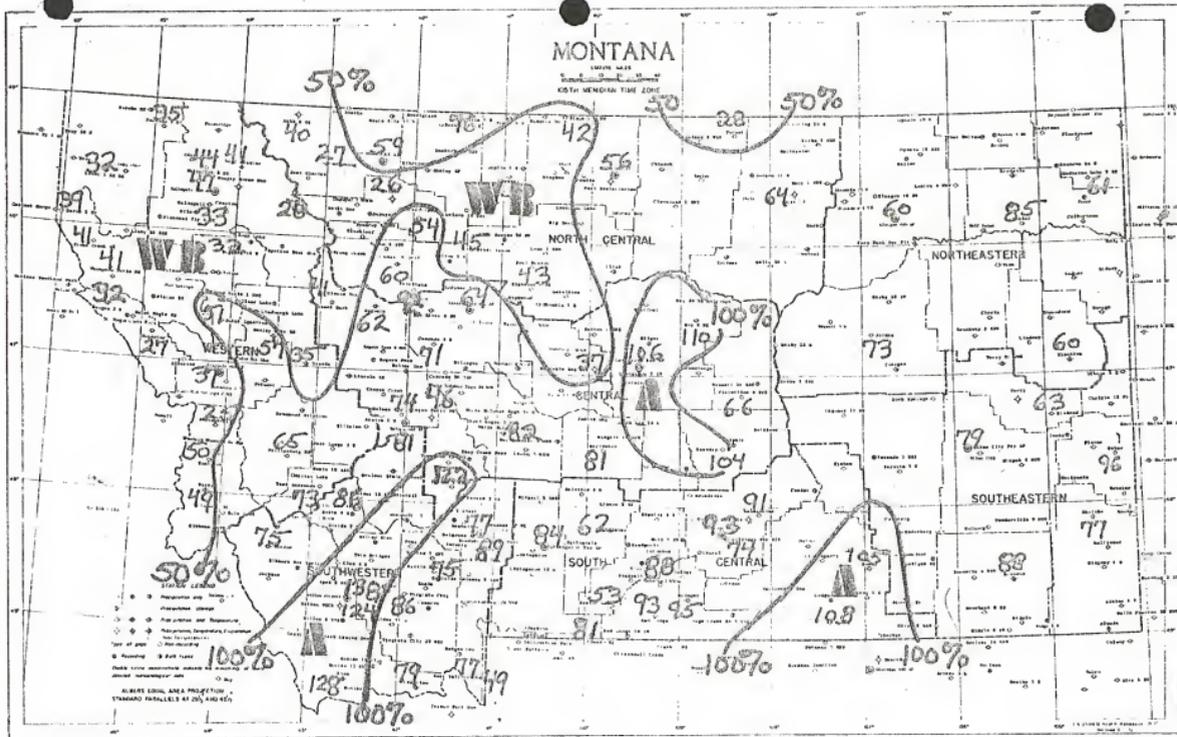


FIGURE 3  
 MOUNTAIN SNOW WATER EQUIVALENT  
 AS OF MARCH 1, 1977

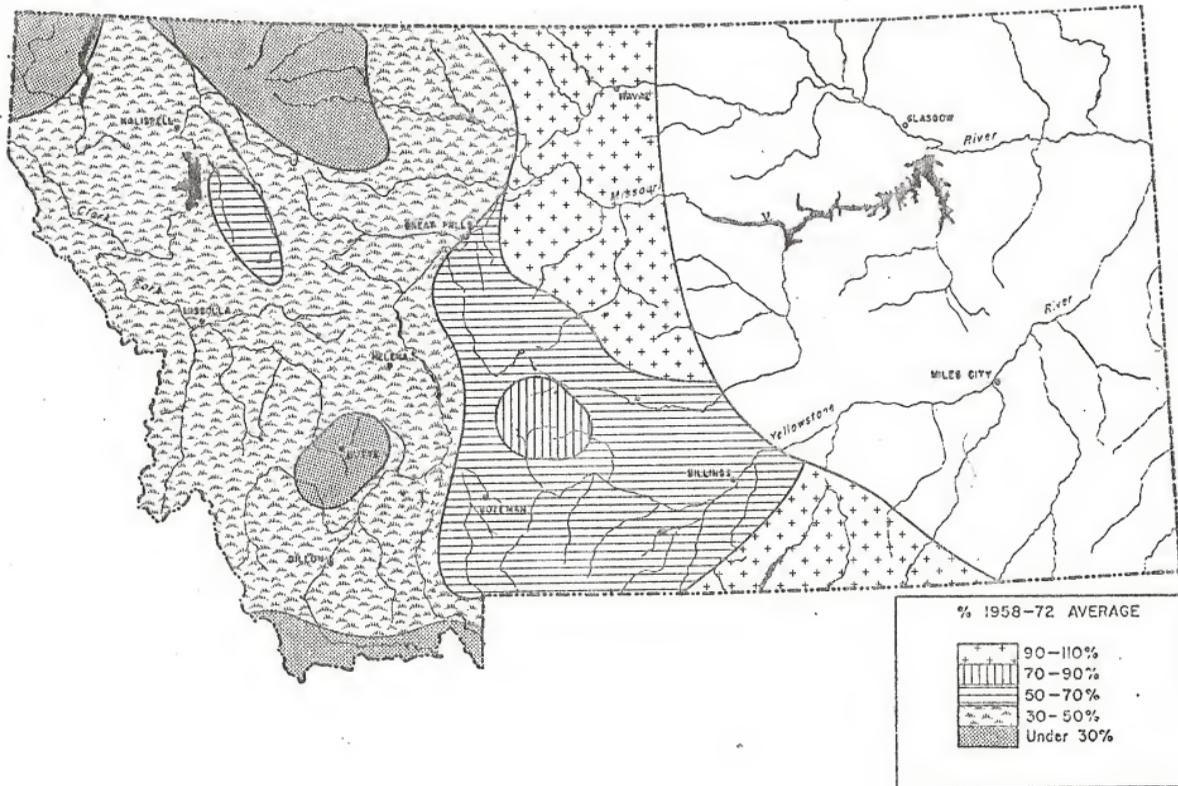
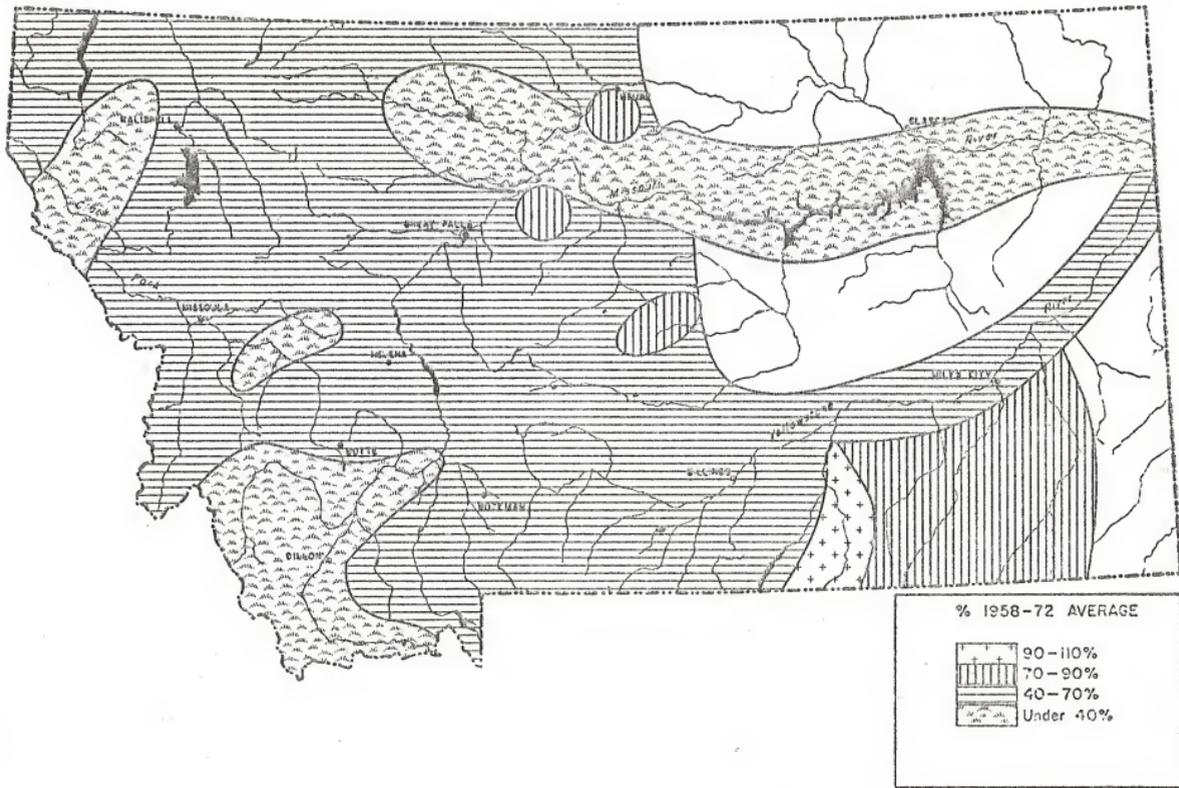


FIGURE 4  
 PROSPECTIVE STREAMFLOW FORECASTS  
 AS OF MARCH 1, 1977



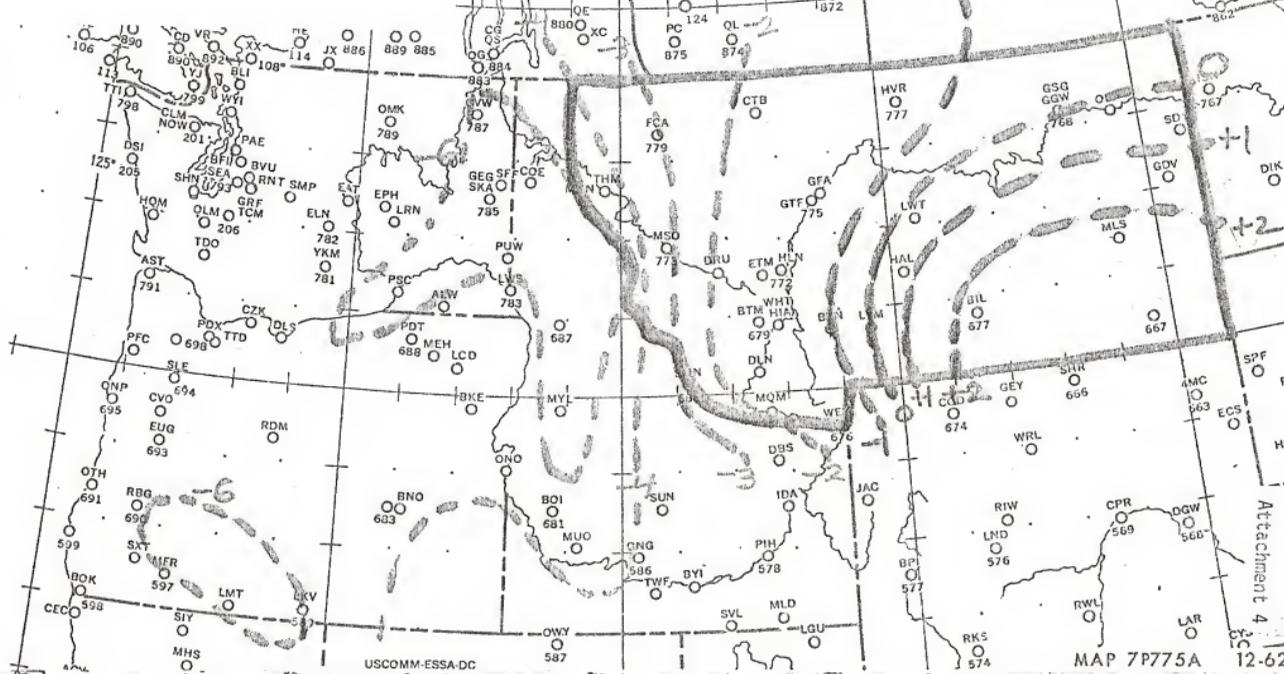
DROUGHT SEVERITY

Palmer Index

February 1977

-2 to -3 Moderate Drought  
-3 to -4 Severe Drought  
Less than -4 Extreme Drought

100  
90  
80  
70  
60  
50  
40  
30  
20  
10  
0



USCOMM-ESSA-DC

MAP 7P775A

Attachment 4  
CY 21  
12-62

Month of February 1977

The following summary lists current streamflow and reservoir data and long-term average values for purposes of comparison.

<u>Station</u>	<u>Mean discharge<sup>1</sup> in ft<sup>3</sup>/s</u>	<u>1958-72 Average discharge<sup>1</sup> in ft<sup>3</sup>/s</u>	<u>Percent of average</u>
Clark Fork at St. Regis . . . . .	2,722	4,141	66
Middle Fork Flathead River near West Glacier . . . . .	400	859	47
Marías River near Shelby . . . . .	279	353	79
Yellowstone River at Corwin Springs . . . . .	748	861	87
Rock Creek near Red Lodge . . . . .	28.5	32.7	87
Yellowstone River at Billings . . . . .	2,591	3,129	83

Monthend contents and percent of average and capacity are given below for some major reservoirs.

<u>Hydroelectric Reservoirs</u>	<u>Contents, in acre-feet</u>	<u>Percent of capacity</u>	<u>Percent of average</u>
Canyon Ferry Reservoir . . . . .	1,727,000	85	107
Fort Peck Lake . . . . .	15,940,000	84	122
Hungry Horse Reservoir . . . . .	2,326,000	68	100
Flathead Lake . . . . .	703,800	39	70
<u>Irrigation reservoirs</u>			
Lima Reservoir . . . . .		Not available	
Gibson Reservoir . . . . .	69,890	71	166
Fresno Reservoir . . . . .	67,700	53	119

<sup>1</sup>Cubic feet per second.

Month Ending FEBRUARY 28, 1977

Storage in Reservoirs, in acre-feet, in COLUMBIA RIVER BASIN in Montana

Reservoir	Located on or diverting from	Usable Capacity	Average 1/	CONTENTS		
				This Month	Last Month	Year Ago
<sup>a</sup> Lake Kootenai	Kootenai River	5,691,000		2,770,000	3,157,000	1,716,000
<sup>b</sup> Georgetown Lake	Flint Creek	31,040	25,330	28,070	29,790	27,820
<sup>c</sup> Nevada Creek Reser.	Nevada Creek	12,640		+ 5,510	+ 3,740	
<sup>c</sup> Painted Pocks Lake	WF Bitterroot R.	31,700	21,290	4,510	1,970	+ 30,320
<sup>d</sup> Lake Cono	Rock Creek	34,920	13,680			
<sup>e</sup> Honury Horse Reser.	SP Flathead River	3,428,000	2,329,000	2,226,000	2,423,000	2,570,000
<sup>d</sup> Flathead Lake	Flathead River	*1,791,000	1,009,000	703,800	897,800	925,600
<sup>f</sup> Camas Reservoirs (total of 4):		45,190	24,470	15,580	15,210	19,120
Little Bitterroot Lake	Little Bitterroot River	26,400	16,010	5,820	5,300	9,400
Hubhart Reservoir	Little Bitterroot River	12,120	5,540	7,620	7,540	4,120
Upper Dry Fork Reservoir	Dry Fork Creek	2,810	1,000	300	270	1,500
Dry Fork Reservoir	Dry Fork Creek	3,860	1,010	230	2,160	770
<sup>g</sup> Mission Valley Reservoirs (total of 8):		100,300	34,870	46,710	45,320	57,170
Turtle Lake	Fed by canals	895	355	420	453	320
Pablo Reservoir	Fed by canals	27,100	5,530	11,990	11,990	15,170
Lower Crow Reser.	Crow Creek	10,350	8,210	9,180	9,450	7,600
Mission Reservoir	Mission Creek	7,250	1,730	1,830	2,140	2,320
St. Marys Lake	Dry Creek	23,300	4,040	2,870	2,870	2,500
McDonald Reservoir	Post Creek	8,220	3,920	3,210	2,610	2,720
Kicking Horse Res.	Fed by canals	8,350	5,040	6,830	5,910	6,820
Ninpipe Reservoir	Fed by canals	14,870	5,800	4,880	9,880	5,220
<sup>h</sup> Lower Jocko Lake	Jocko River	6,380		SNOW FOUND	SNOW FOUND	SNOW FOUND
<sup>g</sup> Huron Rapids Reser.	Clark Fork	334,600	300,600	290,000	269,100	269,100

Data furnished by:  
a - Corps of Engineers, U.S. Army  
b - The Montana Power Co.  
c - Water Resources Div., MDMRC  
d - Bitterroot Irrigation District  
e - Bureau of Reclamation  
f - Bureau of Indian Affairs  
g - Washington Water Power Co.

\* Contents at elevation 2,893 ft considering 2,878 ft as base. Contents at authorized minimum elevation 2,883 ft, 572,300 acre-feet.  
1/ 1958-72 average except as noted:  
i 12 years  
j 1960-72  
† First day of following month.  
‡ Within week of monthend.

UNITED STATES DEPARTMENT OF THE INTERIOR  
Geological Survey - Water Resources Division  
Helena, Montana

Month Ending FEBRUARY 28, 1977

Storage in Reservoirs, in acre-feet, in MISSOURI RIVER BASIN in Montana

Reservoir	Located on or diverting from	Usable Capacity	CONTENTS			
			Average 1/	This Month	Last Month	Year Ago
<sup>a</sup> Lima Reservoir	Red Rock River	84,050	31,930		45,720	46,970
<sup>b</sup> Clark Canyon Reser.	Beaverhead River	757,200	h 141,400	162,300	158,700	150,400
<sup>c</sup> Ruby River Reservoir	Ruby River	38,850	i 27,400	+ 25,000	+ 22,120	
<sup>d</sup> Habgen Lake	Madison River	377,500	202,600	232,700	221,800	202,300
<sup>e</sup> Ernie's Lake	Madison River	41,020	36,510	33,020	33,570	35,800
<sup>f</sup> Middle Creek Reser.	Hyalite Creek	8,030	3,600	+ 3,650	+ 3,110	3,800
<sup>g</sup> Canyon Ferry Reser.	Missouri River	2,043,000	1,608,000	1,727,000	1,713,000	1,673,000
<sup>h</sup> Hauser L + L Helena	Missouri River	61,870	57,120	61,290	57,320	62,400
<sup>i</sup> Lake Helena	Prickly Pear Cr.	10,450	8,970	10,240	8,830	10,100
<sup>j</sup> Holter Lake	Missouri River	81,920	51,120	79,460	81,110	72,600
<sup>k</sup> Smith River Reservoir	Smith River	10,650	j 6,300		+ 9,600	9,500
<sup>l</sup> Gibson Reservoir	Sun River	99,040	42,220	67,990	64,120	68,420
<sup>m</sup> Pishkun Reservoir	Sun River	32,050	17,370	16,300	16,200	17,620
<sup>n</sup> Willow Creek Reser.	Sun R & Willow C	32,230	19,510	27,110	26,610	28,110
<sup>o</sup> Lower Two Medicine L	Two Medicine R	11,880			+ 6,690	
<sup>p</sup> Four Horns Lake	Badger Creek	19,250				
<sup>q</sup> Swift Reservoir	Birch Creek	29,980	i 17,940	19,500	18,000	17,110
<sup>r</sup> Lake Frances	Birch-Damyer C	111,900	78,220	78,180	78,610	92,410
<sup>s</sup> Lake Lowell	Marias River	1,347,000	576,800	495,000	498,700	572,800
<sup>t</sup> Bair Reservoir	NE Musselshell R	7,010	k 4,670		+ 3,410	
<sup>u</sup> Martindale Reservoir	SE Musselshell R	23,110	k 7,400		+ 15,250	
<sup>v</sup> Headman's Basin Res.	Musselshell River	72,220	i 40,640			52,800
<sup>w</sup> Fort Peck Lake	Missouri River	18,010,000	13,110,000	15,840,000	16,260,000	217,200,000
<sup>x</sup> Fresno Reservoir	Milk River	127,200	56,820	+ 67,700	66,200	417,200
<sup>y</sup> Nelson Reservoir	Milk River	66,800	41,230	45,550	47,000	49,000
<sup>z</sup> Mytic Lake	West Rosebud Cr	21,000	7,900	9 1,820	3,710	2,500
<sup>aa</sup> Cooney Reservoir	Red Lodge Creek	27,400	k 14,600	14,650	13,610	2,000
<sup>ab</sup> Bighorn Lake	Bighorn River	1,356,000	L 800,800	870,000	905,600	938,000
<sup>ac</sup> Tongue River Reser.	Tongue River	68,040	32,550		+ 35,000	+ 32,000
<sup>ad</sup> Lake Shoshone	Swiftcurrent Cr	66,200	21,200	16,160	14,830	23,110

Data furnished by:

- a - Beaverhead Irrigation District
- b - Bureau of Reclamation
- c - Water Resources Div., MERNR
- d - The Montana Power Co.
- e - Bureau of Indian Affairs
- f - Pondera County Canal & Reser. Co.
- g - Corps of Engineers, U.S. Army

Gross Contents

\* Storage in Milk River Project

1/ 1958-72 average except as noted:

- h 7 years
- i 12 years
- j 1960-72
- k 14 years
- L 5 years

† First Day of following month.

‡ Within week of monthend.

g minimum for monthend for period of record.

p highest since 1959.

## MONTANA DEPARTMENT OF NATURAL RESOURCES &amp; CONSERVATION

Reservoir Storage Data as of 2-28-77

Reservoir	Contents	Average For Record*	Percent Of Full	Needed To Fill	Inflow Forecast**
Sair	4,440	4,478	63	2,589	3,500
Martinsdale	15,427	7,700	67	7,678	32,000
Deadman's Basin	41,383	47,015	58	32,517	50-70%
Frenchman	4,573	5,943	66	2,417	---
Ruby River	25,471	27,403	66	13,379	33,000
Willow Creek	13,748	14,044	76	4,252	5,000
Middle Creek	3,654	3,570	46	4,373	16,000
Smith River	10,561	6,017	91	1,039	50-70%
Wilson 12-1-76	6,500	6,143	64	3,592	<30%
Ackley	3,828	3,620	16	1,787	50-70%
Tongue River	39,560	35,868	57	29,877	228,000
Cooney	14,646	15,510	61	9,549	18,000
E. Fk. Rock Creek	12,146	8,841	76	3,894	<30%
Nevada Creek	5,747	6,158	45	6,891	5,000

\* Based on record from 1960 to 1975.

\*\* If forecast is not given, the percent of average snowpack will be given.

As each task force develops its annex, the question of form or format for information and recommendations will have to be addressed. A sample format is presented with brief examples of what information appears relevant. Each task force may find that it prefers another format for a variety of reasons and this is acceptable. Information should be presented in the way that is most useful and fits the requirements of individual functional areas.

The common theme that should be addressed in developing these annexes is the short and long range actions in the three levels of drought. If a common format can be used it will facilitate comparison of situations and recommendations and give the plan a unity of structure. Suggestions on changing this format should be made early in the process, so that a common format might be submitted for consideration by all task force chairmen.

	SHORT RANGE ACTIONS	LONG RANGE ACTIONS	RECOMMENDATIONS/ OTHER
MILD DROUGHT	<ul style="list-style-type: none"> <li>-Initiate a conservation contest for the best tips on water or energy saving.</li> <li>-Initiate a public awareness and education program for water and energy conservation.</li> <li>-Reduce the washing of autos and other equipment.</li> <li>-Fix and repair individual domestic water systems.</li> <li>-Water lawns and gardens when the evaporation loss is least.</li> <li>-Use washing appliances at their fullest capacities, ie.: full loads of dishes or clothes.</li> </ul>	<ul style="list-style-type: none"> <li>-Initiate a supply system leak survey, especially for older systems.</li> <li>-Consider the establishment of an excessive use penalty ordinance.</li> <li>-Monitor water quality and quantity.</li> <li>-Consider a voluntary program to prohibit all outside watering except by hand.</li> <li>-Install water saving devices.</li> <li>-Delay new landscaping activities unless it involves the removal of lawns, trees or shrubs.</li> </ul>	
MODERATE DROUGHT	<ul style="list-style-type: none"> <li>-Explore alternative water supply systems or improve existing supply capabilities.</li> <li>-Initiate a voluntary rationing system for domestic lawn and gardening for odd or even days, depending on a customers address.</li> <li>-Prohibit the flushing of fire hydrants, filling of swimming pools or use of ornamental fountains.</li> <li>-Actively discourage the expansion or development of new business or industries that are heavy water users.</li> <li>-Eliminate all water use volume discounts.</li> <li>-Adopt an excessive use penalty ordinance or regulation.</li> </ul>	<ul style="list-style-type: none"> <li>-Close municipal parks and roadside rest areas.</li> <li>-Consider the modification of public and private work schedules.</li> <li>-Consider the establishment of a priority rating system for the implementation of rationing.</li> <li>-Consider adopting a temporary moratorium on all types of municipal growth.</li> <li>-Sharing of wells and individual water hauling.</li> <li>-Consult commercial nurseries or garden suppliers for minimum plant watering requirements and recommendations.</li> </ul>	
SEVERE DROUGHT	<ul style="list-style-type: none"> <li>-Prohibit all parks, lawn &amp; gardening watering</li> <li>-Consider the possibility of hauling municipal water by tanker trucks.</li> <li>-Ration water.</li> <li>-Temporarily cut off water to users who have demonstrated a disregard for water conservation practices, both voluntary &amp; mandatory.</li> <li>-Prohibit all new water hookups.</li> </ul>	<ul style="list-style-type: none"> <li>-Establish a policy on long term water rationing.</li> <li>-Adopt a no-growth policy until the drought conditions improve radically.</li> </ul>	