

FISHERIES DIVISION
DROUGHT CONTINGENCY PLAN



Prepared by

Montana Department of
Fish, Wildlife and Parks
1420 E. 6th Avenue
Helena, MT 59620

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FISHERIES DIVISION DROUGHT CONTINGENCY PLAN

INTRODUCTION

This document presents the drought contingency plan of the Fisheries Division of Montana Department of Fish, Wildlife and Parks (DFWP). The plan describes actions the Division will take to protect fishery resources, including protecting instream flow water reservations and rights, securing additional water for instream flow through purchase of stored water, water leasing, cooperation with reservoir operators, and implementing emergency fishing regulations where appropriate. In addition, the Fisheries Division will monitor fish populations and document drought impacts, develop and implement an information and education program which informs the public of drought conditions and effects on fishery resources and actively participate on the Governor's Drought Advisory Committee.

The effects of drought on fishery resources is not confined to the single year of the drought conditions. Very low flows can greatly reduce recruitment of a year class of fish by limiting spawning and rearing habitat. This type of impact may not be felt by recreationists for two to four years following the drought when the year class fails to appear in the fishery in significant numbers.

OBJECTIVE I. Protect our Existing Instream Rights

A. Summary of Existing Rights to be Protected

The instream rights to be protected include Murphy Rights on 12 streams, reservations on 66 Yellowstone basin streams; Ashley Creek; Young Creek and Tobacco River. In the future, they will also include any other instream reservations granted by the Board of Natural Resources and Conservation.

B. Protection Procedures

The schedule of decision points for protecting instream rights is shown in Figure 1.

Procedures Narrative

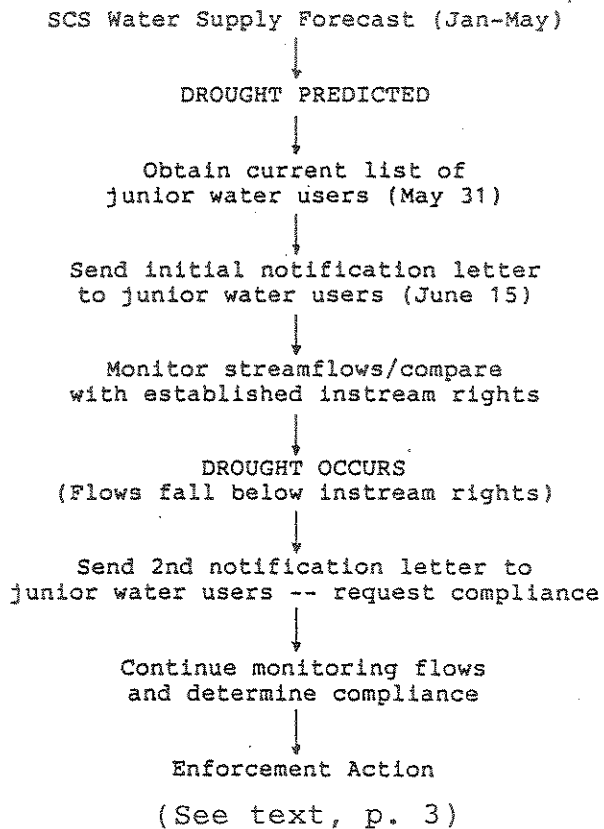
Water Supply Forecasts (SCS)¹

Montana's yearly water supply outlook is developed by the SCS and its cooperators. Current snowpack and forecasts of runoff are issued each month from January through

¹Items in parenthesis identify responsible parties

Figure 1

IMPLEMENTATION SCHEDULE
FOR PROTECTING INSTREAM RIGHTS
AND RESERVATIONS



May. From these forecasts, it is possible to estimate streamflow conditions during the summer, enabling us to determine if we will need to notify junior water users about our instream rights and the possibility they may have to cease their diversions upon request.

List of Junior Water Users (Helena)

A current list of all junior water users is obtained from the Helena water rights office of the Department of Natural Resources and Conservation (DNRC) by May 31.

Initial Notification Letter (Helena)

If the water supply outlook is poor, an initial letter is sent to each water user whose water use priority date is junior to the priority date established for each of our instream water rights.

The initial letter simply informs those junior users of DFWP's prior right(s) in their source(s) of supply and indicates that we may, if unsuitable flow conditions actually materialize, notify them at a later time to cease their diversion(s). This letter is signed by the Department Director and is sent by regular mail. The letter should be sent by June 15 to allow junior users to develop alternatives to the use of their junior water.

Streamflow Monitoring (Helena/USGS)

Streamflows are monitored at established USGS gaging stations. Flow levels are obtained from the USGS's Helena office on a regular schedule, usually twice a week. These flows are compared to the respective instream water rights and the flow trend is monitored.

Monitoring of flows depends on having streamflow data available upon request at appropriate stream sites. These data can be obtained from non-recording gages read daily by an observer or from continuous recording gages which automatically transfer data to a receiving station. Currently, all streams where we have instream rights do not have gages installed on them. Where gages are not available on a particular stream, we use the closest downstream gage which will record that stream's flow.

Second Notification Letter (Helena)

When the actual flow at any gaging station drops to the level of the established instream flow for that time of year, a second notification letter is sent to those junior users monitored by that gage. The letter requests the users to cease their diversion(s), presents gaging information and lists phone numbers they can call to keep track of the flows so they will know if they can again begin diverting water. This letter is our "call" for the water. This letter is also signed by the Department Director and is currently sent by regular mail. There is no established date on which to send this second letter; timing depends on flow conditions in a given year.

There are some exceptions to whom we send the second letter. The intent of notification is to improve streamflows. If there are no junior users on a stream, or if the total junior use is too small to significantly affect streamflows if they cease diverting, the second notification letter is not sent to those users. Accordingly, a decision must be made on each stream, depending on the amount of the instream water right and the number of junior users who can affect it. The flows, by month, which trigger the second notification letter are the same as the instream rights.

Enforcement Actions (Helena)

At this time, DFWP enforcement procedures rely largely upon voluntary compliance by junior water users. We do not have the time, personnel or expertise to monitor all junior users who are asked to cease their diversions unless an obvious violation is observed and reported.

The notification letters enable DFWP to maintain contact with junior users so they are again reminded of our rights. They are, therefore, primarily an informational tool -- a precursor to being able to better administer those rights through a water commissioner. Court-appointed water commissioners on decreed streams are an effective means of administering instream rights and may solve immediate dewatering problems.

In contrast with its past policy, DNRC's water right enforcement activity may deal with both pre-1973 and post-1973 water rights. This policy is in response to circumstances arising from the severe drought conditions in 1992 and utilizes new authority granted by the 1991 legislature (85-2-122, MCA). The degree to which this policy will continue will depend upon an on-going evaluation of the policy during its implementation. Steps to be taken by DNRC in responding to water right complaints are the following:

1. The adversely affected water user (such as DFWP) makes a formal "call" upon the junior appropriator.
2. If the "call" is ignored, the adversely affected water user (DFWP) files a written complaint with the DNRC.
3. A copy of the confirmed "call" to the junior appropriator is submitted with DFWP's formal complaint to the DNRC.
4. The DNRC advises the alleged violator by telephone of the formal complaint and seeks a negotiated resolution of the dispute. No further action may be required.
5. If the dispute is not resolved informally, the DNRC sends a letter to the alleged violator notifying him/her of the complaint and the possible consequences of violating Montana's water laws. The letter will also indicate that a field investigation has been or will likely be conducted.

6. Conduct a field investigation as soon as possible.
7. Continue to seek a negotiated resolution of the dispute.
8. If the alleged violation is not confirmed by the field investigation, send letter to both the DFWP and the alleged violator of this finding.
9. If a violation is confirmed, a second letter is sent to the alleged violator confirming the violation and reiterating possible enforcement actions to be taken.
10. If attempts to obtain a negotiated solution are unsuccessful within three days of sending written notification to the alleged violator, a recommended course of action is sent to Helena for review. A recommendation to fine the alleged violator or litigate the issue must be approved by the Water Resources Division Administrator.
11. Any recommendation for a fine or injunctive relief must provide factual information (1) clearly demonstrating a violation has occurred and (2) clearly demonstrating an adverse effect has resulted to a water user.
12. Injunctive relief will be pursued only on post-1973 water rights violations.

Additional Considerations

Current policy is to not enforce instream flow rights during the high flow period (approximately May 1 - July 15). The only real possibility of altering the existing spring runoff hydrograph (important for fish passage and spawning and maintaining channel configuration) on most streams is a large main stem impoundment. Should this future situation occur, the instream rights for the high flow period may have to be enforced.

Also, in 1980, DFWP agreed, through the Board of Natural Resources and Conservation, to relinquish a portion of our Yellowstone reservation for August and September and to not enforce our mainstem reservations between May 1 and July 10 on conservation districts above the Bighorn River. This was to satisfy the upper river conservation districts' concern over their 3rd priority to that water (municipalities have 1st and DFWP has 2nd priority). This agreement allows those CD agricultural water users to produce one hay crop in all years even if water is restricted during August and September in drought years when flows fall below the instream reservations.

C. Future Actions & Needs

In order for the Department to better protect existing instream rights in the future, an expanded stream gaging network and a mechanism for enforcement of instream reservations and rights will be required. The need for an expanded gaging network exists because large sections of rivers are currently ungauged. As a result, a reach of river could be flowing at less than the instream right and not be detected. Also, many smaller streams are ungauged.

DFWP can petition the district court to appoint a water mediator in a nondecreed basin. The court appointed water mediator can discuss water use and needs with persons and entities affected by current water use, hold public meetings and conferences and negotiate potential solutions to controversies over use of water. This process may be used by DFWP as appropriate.

OBJECTIVE II. Supplement Streamflows through Purchase of Stored Water, Leasing of Consumptive Rights, and other Innovative Methods

A. Bitterroot River - Painted Rocks Reservoir

- Finalize water purchase contract with DNRC (R-2, Helena)
- Develop annual stored water release plan (R-2)
- Contact agricultural interests who divert from Bitterroot River and obtain their concurrence to use a water commissioner (R-2)
- Petition District Court for water commissioner (R-2 & Helena Legal Unit)
- Implement planned releases from Painted Rocks Reservoir (R-2)
- Monitor streamflows at Bell Crossing gauge (R-2)

B. Smith River - Newlan Creek Reservoir

- Negotiate water purchase contract with Newlan Creek Water Users Association (R-4 and Helena)
- Develop water release schedule (R-4)
- Call for delivery when Ft. Logan gage reads 25 cfs (R-4)
- Monitor affects of releases (R-4)

C. Future Actions and Needs

- Identify other opportunities for purchase of stored water (e.g. Tongue, Ruby and Como reservoirs)
- Continue to identify high priority streams and rights for water leasing and obtain leases

- Develop innovative techniques for solving dewatering problems on critical streams
- Develop partnerships with water users to work on solving dewatering problems on critical streams

OBJECTIVE III. Obtain Reservoir Operations which Minimize Impacts to Fish, Wildlife and Recreation.

A. Canyon Ferry Reservoir

- Determine potential for drought conditions at annual meeting of Upper Missouri River Advisory Committee (DFWP chairs committee).
- Monitor runoff and precipitation conditions through Bureau of Reclamation (BOR), SCS, DNRC (Helena).
- Hold additional advisory committee meetings as necessary if critical water supply conditions develop (Helena).
- Recommend appropriate adjustments in reservoir operations according to Upper Missouri River Reservoir Operating Guidelines for fish, wildlife and recreation (Committee action).
- Monitor streamflow conditions and reservoir levels and revise recommendations as necessary for the duration of the drought period (Helena via contact with BOR and committee members).

B. Tiber Reservoir

- Determine potential for drought conditions by April 15 (Helena through SCS, BOR, DNRC)
- Monitor snowpack, precipitation and runoff (Helena via USGS, SCS, BOR, DNRC)
- Implement recommended fish, wildlife and recreation operating guidelines through Tiber Reservoir Advisory Committee (Helena, R-4 via BOR)
- Make additional recommendations, as necessary, if critical water supply conditions develop (R-4 via Advisory Committee/BOR).

C. Libby Reservoir

- Contact Corps of Engineers (COE) in January to determine expected runoff conditions and projected reservoir operations (R-1).
- Determine probability of achieving desired minimum streamflows as per 3-tiered flow agreement with COE. Also determine subsequent effect on reservoir levels (R-1).
- If necessary, recommend alternative reservoir operation (R-1, Helena).
- Monitor effects of altered operation as needed (R-1).

D. Fort Peck Reservoir

- Meet with COE in March at annual reservoir operation meeting and discuss expected runoff conditions and reservoir operations (Helena, R-6).
- If drought conditions appear likely, develop recommendations for reservoir water levels and downstream flow releases (Helena, R-6).
- Monitor effects of implemented reservoir operations as needed (R-6).
- Evaluate effects of operations and develop annual operation recommendation for summer meeting of Missouri River Natural Resource Committee.

E. Yellowtail Reservoir

- Meet with BOR during April to determine expected runoff conditions and projected reservoir operation (R-5, Helena).
- Determine probability of achieving agreed upon streamflows given in current Upper Bighorn River Fisheries Management Plan and subsequent effect on reservoir levels (R-5, Helena).
- If necessary, recommend alternative reservoir operations (R-5, Helena).

F. Hungry Horse Reservoir

- Meet with BOR in January to determine expected runoff conditions and projected reservoir operation (R-1, Helena).

- Determine probability of achieving desired releases for kokanee spawning in South Fork and main Flathead Rivers (Adjust desired releases according to expected numbers of spawning kokanee) (R-1).
- If necessary, recommend alternative reservoir operation (R-1).
- Monitor effects of releases and/or altered reservoir operation (R-1).

G. Future Action and Needs

- Committees similar to the Upper Missouri River and Tiber Reservoir Advisory committees should be established for Clark Canyon and Gibson reservoirs. Efforts are underway to form these groups.
- The 1990 drought management section of the State Water Plan included the recommendation to "Inventory and review the operating plans of state-funded reservoirs to ensure that these plans address drought contingencies. Where no operating plans exist for these reservoirs, such plans should be developed and implemented...". An inventory has shown that none of the state-funded reservoirs have drought contingency plans. DFWP should cooperate with DNRC to see that these plans are developed.
- Determine which state-owned reservoirs affect important downstream fisheries (Helena, regions).
- Determine amount of any unallocated water in the reservoirs and identify operational and structural (safety) constraints at each dam (Helena).
- Monitor streamflows during drought conditions to determine if additional releases are necessary (regions).
- Work with DNRC to obtain releases from state-owned reservoirs where the fishery and flow conditions warrant (Helena, regions).

OBJECTIVE IV. Monitor Streamflow, Fish Populations and Fishing Use and Harvest to Ensure Carry-Over of Wild Stream Fisheries while Maintaining Reasonable Opportunity for Harvest in all Streams and Lakes. Implement Emergency Regulations on Streams and Lakes as Needed.

- A. As noted in the introduction, drought affects recruitment - an impact which cannot be quantified until the year class affected enters the sport fishery. This impact will be detected in the Division's annual population monitoring activities and other on-site investigations.

B. Emergency Regulations--Lakes and Reservoirs (Helena, regions)

- These waters are usually stocked with hatchery fish. If low water levels or high water temperatures would jeopardize survival of the populations, regulations would likely be liberalized to allow maximum harvest of fish. Some waters may be deleted from the planting schedule in the drought years. Action will be taken on a case-by-case basis.

C. Emergency Regulations--Rivers and Streams (Helena, regions)

- These waters are supporting wild populations of fish. As flows decline, more restrictive regulations or voluntary catch-and-release may be recommended.

OBJECTIVE V. Develop and Implement an Information and Education Program which Informs the Public and Maintains Consistency in the Department's Programs.

- Disseminate information on gradual shutdown of irrigation ditches to agricultural organizations and their news media (Helena, regions, via pamphlets & news releases)
- Prepare weekly drought update by region describing effects of drought on lake and stream water supplies and fisheries (Helena, regions).
- Compile, via USGS, twice weekly streamflow summaries on streams where DFWP holds instream water rights and distribute to DFWP regions and DNRC water rights field offices (Helena via USGS)
- Prepare PSAs, new releases, and Montana Outdoors columns on effects of drought on fish and wildlife (Helena Fish and Con Ed staffs)

OBJECTIVE VI. Coordinate an Updated Department Drought Summary for Presentation to the Governor's Drought Advisory Committee and/or Disaster Advisory Council and the Fish, Wildlife and Parks Commission as Required. (Helena, regions)

- Keep abreast of drought effects on fisheries.
- Attend Drought Advisory Committee meetings as requested by Director.

- Provide information to Advisory Committee on effects of drought on fish and wildlife as requested by chairman.
- Provide to Director, as requested, the results of Advisory Committee actions.
- Attend Disaster Advisory Council meetings as requested by Director when such council is created by Governor's Executive Order.
- Assist local drought advisory task forces. Sit on committees as requested.
- Provide drought updates and DFWP responses to drought conditions to the Fish, Wildlife and Parks Commission as requested.

OBJECTIVE VII. Develop and Implement Water Conservation Practices within the Agency. (Helena, regions)

- Determine best means to conserve water at fisheries installations, hatcheries and developed fishing access sites.
- Implement suitable water conservation measures as needed and monitor effects.

The following drought-related documents may be obtained from:

Department of Fish, Wildlife and Parks
 Fisheries Division
 1420 E. Sixth Avenue
 Helena, MT 59620

- List of USGS stream gauges currently used to monitor instream flows.
- Position statement regarding relinquishing a portion of Yellowstone instream flow reservation for August and September to benefit upper river conservation districts.
- Documents relating to purchase and lease of water to supplement instream rights
- List of DFWP instream flow rights and reservations
- Membership list for Upper Missouri River Advisory Committee
- List of state-owned reservoirs

- List of chronically dewatered streams.
- Federal reservoir operation guidelines for fisheries flows
 - Canyon Ferry (Missouri River)
 - Tiber Reservoir (Marias River)
 - Yellowtail Reservoir (Bighorn River)

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