

November 19, 2001

Blackfoot Drought Response Plan

Purpose

The purpose of the Blackfoot Drought Response Plan is to minimize adverse impacts on fisheries resources and to aid in the equitable distribution and shared sacrifice of water resources during low flow summers. For water right holders junior to the Murphy right, this voluntary strategy serves as an alternative to the Montana Department of Fish, Wildlife and Park's water right allocation actions to make a "call for water." Such a call requires water right holders junior to the Murphy right to stop withdrawals during low flows until the Department's in-stream flow water rights are satisfied. For water right holders senior to the Murphy right, this voluntary strategy increases water conservation opportunities; and helps the watershed as a whole improve stewardship of bull trout and other important fisheries. Participation by other interests, such as fishing outfitters and local residents, helps ensure the success of this plan. It is also our intent to work with the Big Blackfoot Chapter of Trout Unlimited and others towards a long-term drought management plan that will provide for permanent measures to be used in low-flow years to mitigate adverse impacts and conserve water through stream restoration, leases and other methods.

Premise

Our emergency drought response and long-term plan is based on the premise of "shared sacrifice." Our goal is for all parties (agriculture, irrigators, anglers, recreational users, homeowner associations, government agencies, conservation groups, and others) to agree to cut back in dry years to achieve water savings and to keep stream flows at acceptable levels. This plan was selected for several reasons. Droughts and the management of low flow are a watershed-wide concern. Beneficiaries of the drought response effort include interests throughout the watershed. The strategy seeks as a matter of equity to include all water users, junior users and senior users, small and large users within the watershed. The 258 water users junior to the Murphy right cannot by themselves solve the low-flow problems. There are nearly 3,500 water rights of record in the affected area and 1,270 of these water rights assert the use of water in excess of 1 cfs. The greater benefit to maintain river flow and sustain the health of the river will be gained through the cooperative effort of the larger community.

The Murphy Right Reach

Murphy rights are water rights for in-stream flows created under 1969 legislative authority. In the Blackfoot River, these rights were claimed as of January 6, 1971 and have been asserted for that reach beginning at the river's mouth and extending upstream to its confluence with the North Fork of the Blackfoot River. This reach is the area of primary concern. For the purposes of this Plan, this area shall be known as the Murphy Right Reach. Although there are major water users within the "Murphy Right Reach," the most concentrated use of water lies upstream of this reach or on major tributaries of the river. Our voluntary plans provides an opportunity to identify and address stream reaches outside the Murphy right reaches where small increases in stream flow during drought periods could provide significant benefits to the aquatic life that is less predictably protected through a formal call for water.

Areas Covered by the Plan

This plan covers the Blackfoot River from its confluence with the Clark Fork River at Bonner, upstream to the headwaters, including its tributaries and the Murphy Right Reach.

A Summary of the Approach

A Blackfoot Drought Response Committee was formalized in early June 2000 to coordinate the development and implementation of a voluntary emergency drought response effort in the Blackfoot Watershed. The Committee is coordinated through the Blackfoot Challenge and chaired by chaired by the Big Blackfoot Chapter of Trout Unlimited

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The Blackfoot Drought Response Plan is based on meaningful participation by water users junior and senior to the Murphy rights who voluntarily agree to reduce their collective water use during drought conditions in order to maintain critical in-stream flows.

The strategy is to secure voluntary reductions in water usage and create a "water bank account." During periods of drought, water rights holders junior to the Department of Fish, Wildlife, and Parks' "Murphy" right who reduce their water consumption will be able to match their contribution with those provided by senior water users who have also placed their water savings in the water bank. Through basin pooling of water reductions, using numerous water conservation methods, the end goal of keeping in-stream critical flows can be achieved. The Drought Response Committee utilizes field staff support to work with water users to identify suitable voluntary actions to conserve water for users and to minimize adverse impacts on fisheries resources during the low flows.

The Voluntary Participation Process

In February, the Drought Committee meets to assess flows and water supply predictions for the year. If drought conditions are predicted, in April, the Drought Committee holds a public meeting to begin building public awareness and affirming water user participation in the Drought Response effort. In early May, the Drought Response Committee sends a letter to all water right holders junior to the Murphy right inviting them to participate in the Drought Response Plan and asking them to return an enclosed postcard if they wanted to be a drought response participant. Any junior expressing an interest in participating will be contacted and options for their meaningful participation will be explored. The Committee staff contacts junior and senior water right holders, fishing outfitters, homeowner associations, and other local organizations to invite them to participate in the Drought Response Plan. As we get closer to August, press coverage is used to inform the general public about the drought and need to cooperate.

In late June and throughout the month of July, the Drought Response Committee answers questions and helps participating water users come up with measures to reduce water consumption and conserve in-stream flows based on the users needs and conditions. Options include pooling water rights and using them in rotation; dropping out marginal areas from irrigation; converting stock watering sources from surface water diversions to groundwater pumps; reducing the number of water rotations or shutting down ditches; or partnering with other water users by stream reach or river mile to come up with a plan for reduced water use. For other participants, we look at voluntary reductions in municipal water uses, homeowner association water use, and angling.

The Department of Fish, Wildlife and Parks has agreed not initiate the in-stream flow senior Murphy right call on any water user junior to the Murphy right who meaningfully participates in this Drought Response effort. This is provided there is enough senior water contributed to the "bank" to at least make up for any continued junior use of water. Upon recommendation of the Committee, when in-stream flows drop below the Murphy right level at the USGS Gauge above Bonner, Montana, the Department of Fish, Wildlife and Parks may send a "call" to water right holders junior to the Murphy right who are not participating in the Drought Response Plan.

The Drought Response Committee maintains an internal Roster of Participants and catalogues internal information on each voluntary participant that includes the current owner's name, address, phone number, water right claim number, flow rate, priority date, water source, a description of the method by which the water will be conserved in the drought year, and the estimated amount of water to be conserved. Collection of this information helps us track the amount of water in the "water bank account" and serves as an indicator of the success of the Plan.

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The Drought Response Committee contact participants based on trigger dates and target levels outlined below. Participants are notified if drought conditions worsen, with a further request to increase of voluntary water reductions. They are also notified when improving conditions no longer call for conservation measures. The cornerstone of the emergency plan is voluntary, self-defined, water conservation. Participants decide how to reduce their specific water consumption. No mandatory actions are dictated by this plan, except for any calls for junior water triggered by Committee recommendations. The Drought Response Committee realizes that everyone's use and reliance on his or her water use is different so no one solution will work for everyone.

Trigger Flows and Participant Actions

Flow/Temperature Measuring Stations

The following trigger flows are measured at the USGS Stream Gauging Station #12340000, on the Blackfoot River near Bonner. Stream flow at the Bonner gauging station represents the amount of water discharging from the Blackfoot River. Uses of water below this site are primarily limited to power and industrial use at the Stimpson Lumber Co., Bonner Montana. Most water withdrawals, including any significant irrigation use, occur above this gauge site. This gauge has approximately 60 years of monitoring records dating back to October 31, 1905 and intermittent records as early as July 1898.

In addition to monitoring the amount of water discharging from the basin, it is important to monitor the river at upstream locations. Therefore, river flows coming into the Murphy Right Reach are monitored using USGS gauging sites #12338300 near the mouth of the North Fork of the Blackfoot River and in the main stem of the Blackfoot River above the mouth of Nevada Creek. Other flow and temperature monitoring sites may be used to initiate and discontinue specific voluntary actions to conserve water and mitigate the effects of dry year conditions on fisheries during summer months.

Goals

Based on experiences in the Murphy Right Reach during low-flow years of the 1980s and early 1990s, our goals are to: maintain in-stream flows in the Murphy Right Reaches; protect valuable Blackfoot fisheries; and minimize to the extent possible the burden of drought management upon a single class of water interests in the watershed during drought years. In addition, it is important to set goals that are reasonably attainable by receiving voluntary water deliveries during times of extreme irrigation demands.

Trigger Dates, Flow and Temperature Target Levels, and Voluntary Actions.

The Blackfoot Water Resources and Drought Response (renamed from Blackfoot Drought Response in 2001 to reflect intent to address water resource issues year-round) effort is an ongoing process with certain actions tied to dates and flow/temperature triggers. The following dates and target levels will trigger water resource planning activities and voluntary drought response actions in the Blackfoot Watershed:

February- Blackfoot Water Resources/Drought Response Committee meets to review forecasts. Results summarized for community and media. Drought response triggered if NRCS surface water supply index (SWSI) for the Blackfoot Basin registers at -2.5 or worse. Committee discusses staffing needs.

March- If drought conditions predicted, Drought Response Committee initiates its work plan. Formal notification and plan implementation commences.

- Issue press release raising awareness about possible drought and continue outreach throughout drought period.
- Recruit field staff support.
- Develop warning letters and early notice letters to targeted list of Drought Plan Participants (including water right holders, outfitters, anglers, and other parties).
- Early Notice to all Junior Water Right holders

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- Notice to Plan Participants (irrigators) from previous years confirming the participation and reviewing conservation plans
- Phone calls, post cards, letters sent to prospective list of plan participants to join drought plan and follow-up throughout summer drought.
- Email, phone, letters sent to outfitters alerting them about predicted drought and asking for their help.
- Contact service-sector in Blackfoot valley to warn of drought impacts and inform them of the Blackfoot Drought Response Plan.

April-

In drought years, Drought Response Committee:

- Holds a public meeting to begin building public awareness and affirming water user participation in the Drought Response effort;

In non-drought years, Water Resources Committee:

- Implements long-term water resources & restoration plan to maintain instream flows, habitat enhancement, and monitoring.

May- Formal notification and plan implementation continues:

- Warning letter mailed to all Junior Water Right holders
- Follow-up on Notice to Plan Participants (irrigators) from previous years confirming the participation and reviewing conservation plans
- Follow-up on phone calls, post cards, letters sent to prospective list of plan participants to join drought plan and follow-up throughout summer drought.
- Follow-up email, phone, letters sent to outfitters alerting them about predicted drought and asking for their help.
- Posters and flyers to be distributed to fly shops, Post office, and other locations, and updated as needed.
- Continued public outreach via media.

June/July/August

700 cfs-

- FWP officials will confer with the Drought Response Committee regarding low flow conditions and periodically brief the Committee as flow and temperature conditions change.
- Drought Committee will convene and make recommendation to FWP on MRC List.
- FWP will review request and issue a MRC Call when flows trend-down below 700 cfs.
- FWP will review and initiate a call on any other in-stream flow rights as appropriate, in consultation with the Committee.
- FWP/DNRC and others will begin intensive monitoring of stream flows and temperatures in reaches of the Blackfoot River and bull trout core area streams.
- Drought Committee will send email/letters preparing outfitters and anglers for possible voluntary participation in the Plan through catch and release, reduced hours of fishing and other means.
- Media and other outreach methods will be used by FWP regarding public education on methods of reducing stress on fish. The Drought response Committee and FWP will promote voluntary reductions in irrigation withdrawals to maintain survival flows in critically de-watered tributaries.

600 cfs-

- The Drought Committee will convene and confirm irrigator, outfitter and angler participation in the Drought Plan.
- Drought Committee will send email/letters asking outfitters and anglers for voluntary participation in the Plan through catch and release, reduced hours of fishing and other means.
- FWP will invoke voluntary angling restrictions where fish are susceptible to stress because of low water and high temperatures through an Angler Alert

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- Based on river discharge at the Bonner gauging station, angling restrictions or closures will be at or near the 90% exceedence flow levels (~500 cfs).
- Temperature or other stressors may also trigger fishing closures by FWP in the mid-to-lower reaches of the Blackfoot River, bull trout core area streams and/or other critical habitats as flows down-trend below 600 cfs.
- Additional calls for FWP's senior instream water may be made.
- As flows down-trend below 600 cfs, FWP/DNRC/others will continue intensive monitoring of stream flows and temperatures in reaches of the Blackfoot River and bull trout core area streams and make recommendations regarding possible angler restrictions.

450 cfs-

- FWP will confer with Drought Response Committee regarding low flow conditions and the Drought Response Committee will hold an emergency meeting.
- FWP and the Drought Response Committee will reiterate their request that water right holders senior to the Murphy right, who are not participating in the Drought Plan, voluntarily maintain survival flows in critically de-watered stream reaches.
- The Blackfoot River and bull trout core area streams will be closed by FWP to fishing.
- Additional calls for FWP's senior instream water may be made.

Early to Mid September

- The Blackfoot River reopens to fishing as Blackfoot River temperatures decline and flow conditions improve.
- FWP shall confer with the Drought Response Committee prior to lifting voluntary angling restrictions when Blackfoot River flows are below 700 cfs as measured at the USGS gauge at Bonner, Montana.

October/November- Blackfoot Water Resources/Drought Response Committee meets to review plan implementation in current year and develop work program for coming year.

Long-Term Plan

The Drought Response Committee has begun development of a long-term drought management plan for the Blackfoot Watershed. This includes examining water uses, resource conditions, and continual habitat improvement. Long-term measures that could conserve water will be sought and promoted. Irrigation and other water use and infrastructure improvements on public and private lands will be sought and supported. Habitat and riparian management actions that protect and enhance the functional value of water dedicated to in-stream flows will be incorporated. Hydrology, fisheries needs, and reach-specific solutions will be explored. A work program and a process for developing, funding, adopting and implementing the plan is being pursued through the Big Blackfoot Chapter of Trout Unlimited (BBCTU). The Blackfoot Drought Committee will rely on the Fisheries and Habitat Committee of BBCTU to further develop and implement the restoration program.

(Revisions as of 11 19 01)