ADMINISTRATIVE CALL STANDARD

Department of Natural Resources
Division of Water Resources

Version 2.4

COLORADO
Division of Water Resources
Department of Natural Resources

Version No.	Date	Description
1.0	April 2015	Released in association with HBDMC Administrative Calls tool.
2.0	November 2015	Wholesale reorganization of the document with updates to correspond with changes made to HBDMC Call Manager, primarily regarding “Authorized Diversion”.
2.1	November 2016	Updated HBDMC user interfaces.
2.2	April 2017	Removed HB User Guide content. Change “No Impact Call” term to “Upstream Junior Call”. Added Admin No. appendix. Miscellaneous grammatical updates.
2.3	April 2018	Split “Upstream Junior Call” into “Nonconsumptive Call” and “Futile Call”. Added Rules cases that detect potential conflicts.
2.4	November 2018	Clarified the use of Nonconsumptive Call for augmented diversions; example is Colorado River HUP administration.

Administrative Call Standard

Authorization

This manual is provided as a standard for the process of determining an administrative call as entered in the state engineer's database, known as HydroBase.

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April 1, 2018
Date

1. ADMINISTRATIVE CALL

As established in Colorado Revised Statutes (C.R.S.)[1]:

> "Each division engineer shall order the total or partial discontinuance … of any diversion in his division to the extent that the water being diverted is required by persons entitled to use water under water rights having senior priorities…"

The Call is a construct of the state engineer to administer water rights and is not defined, *per se*, in the statutes. The Call communicates the demand on the natural stream flow and, in essence, contains the information required to prompt the "total or partial discontinuance" of diversions of natural stream flow required by water rights with more senior priorities.

1.1. Call Components

The Call has three primary components: the duration or time period during which the Call was in effect, the location of the Call and the water right priority required to divert. The location of the Call extends from the structure identified as the Call Location to the headwaters of all streams that are tributary to that structure . The upstream extent of the Call may be limited by specific law or decree of the Court.

1.1.1 Call Duration

The Call is in effect from a certain date and time, referred to as the "set time", until the date and time when it is "released". Given the large hydrologic changes associated with setting or releasing a Call, the Call is typically set or released on the hour. Setting or releasing a Call on any time increment finer than the quarter hour is simply not a realistic representation of the timing associated with the impacts prompted by the Call change and are, therefore, not allowed by the database used to communicate the Call.

1.1.2 Call Location

The Call Location is the structure that is controlling or diverting the entire available natural stream flow[2]. By definition, the Call Location is the most downstream diversion structure in the reach being administered by the associated Call. Every structure that is located at or hydrologically upstream of the Call Location is subject to the Call and may divert natural stream flow only if it:

- has a water right that is equal or senior to the Call Priority;
- is beneficially using all of the streamflow diverted in accordance with the in-priority water right without waste (including waste associated with an excessive tail or other release back to the stream).

Call Location Must Be On-Stream Structure

For those structures not located directly on the stream, such as off-stream reservoirs, the user must identify the on-stream structure that is used to divert water to the off-stream structure as the Call Location. Only on-stream structures that divert natural stream flow can be used as the Call Location.

[1] §37-92-502(2)(a)

[2] The "natural stream flow" does not include reservoir water or other water being delivered past the structure by the water commissioner (C.R.S 37-84-113 or C.R.S. 37-87-103).

Identifies Downstream Extent of Call

The Call Location communicates the downstream extent of the Call reach, which is the location that enables a natural stream flow water right owner to determine whether or not their water right is affected by the Call. If the location of the diversion is hydrologically upstream of the Call Location, the water right is subject to the Call, as discussed above.

Identifies Location Where Natural Stream Flow is Exhausted

For those responsible for modeling or otherwise assessing the hydrologic conditions of the natural stream, the Call Location also identifies the location where the natural streamflow was exhausted, or dried up. This is very valuable information in the analysis of stream supply. For this reason, a Call should be entered even if there are no upstream diversions that require curtailment.

Identifies Point of Zero Exchange Potential

Because the Call Location is diverting or otherwise controlling all the available natural streamflow, it also, typically, identifies a point where the exchange potential is zero. There may be other types of water being delivered past the structure that may or may not be used as a basis for exchange.

Establishes Shortage Even if there are No Water Rights to Curtail

Because the Call Location identifies the point on the stream where the natural stream flow is exhausted, setting a Call to capture that information is valuable even if there are no diversions to curtail.

1.1.3 Call Priority

All water rights have an associated priority that is based on the date the water right was first put to beneficial use as decreed by the court. In order to more readily compare the priority of water rights, the state engineer has converted the priority date of a water right to a number called the Admin No.[3] In short, the lower the Admin No., the more senior the water right.

The Call communicates the water right priority required for a water right located within the Call Reach to divert under the Prior Appropriation Doctrine[4]. The basic purpose of the Call is to "call out" the less senior water rights in order to make water available to the senior water right that is diverting less than its decreed amount of water that it could beneficially use. The Call does not affect diversion of foreign/imported water or other non-streamflow sources of water, such as reservoir releases, recharge accretions, treatment plant effluent, etc., that are introduced into the natural stream for disposition as directed by the persons maintaining dominion and control of the water.

Most Junior Priority Able to Divert in Call Reach

The Call Priority is the Admin No., or administrative priority, of the most junior water right that is able to divert without depleting the diversion of a more senior water right within the

[3] The Admin No. is simply the number of days between the water right priority date and December 31, 1849, a totally arbitrary date except for the fact that it is before the earliest decreed Colorado water right priority. See Appendix A for more information.

[4] The Prior Appropriation Doctrine provides that water rights developed first in time are first in the right to use the water. This doctrine is also commonly known as the Colorado Doctrine or "first in time, first in right".

Call Reach. The Call Priority must be the priority that will curtail only the amount of diversions required to adequately supply the senior water rights without causing any water to flow past the Call Location. Determining the Call Priority requires a thorough and practiced familiarity with the stream system being administered. If more water is curtailed than required by the affected senior water rights, natural streamflow will flow past the Call Location. If the natural streamflow going past the Call Location is then diverted by a water right that is junior to the water rights curtailed by the Call, the curtailed water rights would have been inappropriately denied water and may have been injured. It is important, therefore, to make sure the Call Priority is set correctly.

1.1.4 Call Reach

The upstream extent of the Call, or Call Reach, is "unbounded" unless there is a specific statutory, interstate compact or decreed limit to the structure associated with the Call Location or water right associated with the Call Priority.

Unbounded Call

An unbounded Call extends upstream to the location of a more senior Call. If there is no upstream, more senior Call, the Call extends to the headwaters of the stream system upon which the Call has been located. The upstream extent includes every stream that feeds water to the Call Location. The Call is usually an unbounded call.

Bounded Call

A bounded Call has a specific upper terminus to the reach of stream subject to the Call. Such a condition is typically associated with administration of an interstate compact. Two examples of such a Call would the South Platte and Arkansas compacts. The South Platte River Compact, for instance, only requires curtailment of diversions to a specific geographic location, namely the western boundary of Washington County. The Arkansas compact extends, almost always, from the border with Kansas to John Martin Reservoir, where water stored to satisfy compact demand insulates users upstream of the reservoir from the impacts of the compact. While there may be other instances when a user would initiate a bounded Call, the circumstances should be very specific and used only when absolutely necessary to correctly characterize the conditions of the calling water right or compact agreement.

1.1.5 Call Duration/Comments

Once the Call Location, Call Priority and Call Reach have been determined, the start date and time as well as any comments the user deems appropriate will indicate the initiation of the Call. Once the Call is no longer required, the end date and time will indicate the termination of the Call..

1.2. Multiple Calls on Stream

Depending on the particular stream conditions and current demand, there could be more than one Call in effect on a stream. As required by the Prior Appropriation Doctrine, streams with more than one Call must progress, with specific exceptions discussed below, from senior to junior as you go hydrologically from upstream to down the stream.

2. TYPES OF ADMINISTRATIVE SCENARIOS

There are four types of administrative information captured and displayed by the state engineer's database: "Call", "Authorized Diversion", "Nonconsumptive Call", and "Futile Call". The first action the water commissioner or division engineer should take is to set a Call, if warranted and as discussed in Section 1. Authorized Diversion should only be used if there is a Call, Nonconsumptive Call, or Futile Call affecting the structure(s) being authorized to divert. Nonconsumptive Call and Futile Call should only be used if the diversion is, in fact, a nonconsumptive or futile diversion.

2.1. Call

A Call curtails diversions to make water available to more senior water rights, as discussed in Section 1.

2.2. Authorized Diversion

An Authorized Diversion is not a Call. An Authorized Diversion is a notification that one or more diversion structures subject to a Call (including Nonconsumptive Call or Futile Call) have been allowed to divert against the Call. The structures can divert without impacting the Call because of localized conditions at the diverting structure. An Authorized Diversion cannot curtail other diversions to make water available to the structure.

When a Call affects a long stream reach, there are occasionally futile diversions or localized events, like significant precipitation, within the reach that enable structures that are out-of-priority in terms of the downstream Call to divert without injuring senior priorities. The circumstances of such diversion scenarios are very dynamic and do not meet the definition of a Call because they are not being authorized to curtail other diversions to make the diverted flow available. The diversions are necessary to equitably distribute the temporary inflow of water to the stream. Because the structures are junior to the downstream Call, it is necessary to document that they were authorized to divert as if they were in priority for the amount of water diverted. If the diversion was not allowed, water could be pushed passed the calling structure to the benefit of diversions downstream of the Call, which may well be junior in priority to the structures located hydrologically above the Call that were not allowed to divert the extra flow.

HydroBase accommodates two categories of "authorized diversions": Localized Event and Futile Diversion, both of which are discussed in more detail below.

2.2.1. Localized Event

The first category of authorized diversion against a Call is a diversion associated with a "Localized Event", such as a precipitation event or diurnal conditions. If the water commissioner does not accurately estimate the available flow of localized events as they occur and allow structures to take the extra flow associated with the event as they are able, the extra flow may benefit a less senior priority.

2.2.2. Futile Diversion[5]

Colorado statute[6] directs that if the curtailment of a water right:

"…does not cause water to become available to such senior priorities at the time and

[5] See also state engineer Written Instruction and Order 2015-03.
[6] C.R.S. 37-92-502(2)(a)

place of their need, then such discontinuance order shall be rescinded…"

The second type of authorized diversion is a diversion, the curtailment of which, is "futile" to the Call. The curtailment of such a diversion is futile in that the curtailment "serves no useful purpose"[7] toward the objective of making water available to the senior priorities. Such a diversion is, therefore, referred to as a "futile diversion" or a diversion that is futile to the Call.

2.3. Nonconsumptive Call

A Nonconsumptive Call is, as the name asserts, a Call by a diversion that consumes no water from the perspective of the more senior Call or water rights. The Nonconsumptive Call is typically set when the associated use is nonconsumptive, such as a hydropower or in-stream flow water right. The Nonconsumptive Call is required to curtail diversions that could be made upstream by exchanges that are junior to the nonconsumptive water right in order for the nonconsumptive water right to receive its full complement of water. A Nonconsumptive Call may also be set when the associated diversion consumes water, but makes replacement water available to the more senior water rights. Such a Nonconsumptive Call must still sweep the river AND be necessary to curtail the operation of more junior water rights, typically exchanges.

Because the Nonconsumptive Call is not impacting the downstream senior water rights, there are different rules for setting this type of call. The primary differences between a Nonconsumptive Call and a Call are:

- a junior priority Nonconsumptive Call may be upstream of a more senior Call; and,
- whereas the exchange potential past a Call is typically zero, the exchange potential of a Nonconsumptive Call is established by the priority of the Nonconsumptive Call.

Under this call, direct diversions of a water right upstream of the Nonconsumptive Call are subject to the most senior downstream call, which may be either the Nonconsumptive Call or a more senior downstream Call, should one exist. Structures located upstream of the Nonconsumptive Call may only divert if their water right priority is more senior than the most senior downstream calling priority. Structures upstream of the Nonconsumptive Call may divert by exchange if: 1) they release the replacement supply upstream of the Nonconsumptive Call location; or, 2) have an exchange priority that is more senior than the Nonconsumptive Call priority.

2.4. Futile Call

A Futile Call , similar to the Nonconsumptive Call, follows different rules. As with the Nonconsumptive Call, the Futile Call may be junior to another downstream Call. In regard to exchange potential, however, the Futile Call is like a Call in that the location of the Futile Call signifies a point of zero exchange potential, typically.

A Futile Call is required in the case of a futile condition on the stream, where one futile diversion has to place a Call to curtail other futile diversions. If all of the diversions deemed futile to the Call can be made at the rate they want to divert (and can beneficially use), a Futile Call is not required; the user may simply acknowledge the futile diversion(s) as "Authorized Diversions" (Section 2.2.2). If, however, the supply of water is less than what is needed to allow all of the futile diversions to divert the water they need, the user must set a Futile Call to balance the demand to the supply.

[7] Merriam-Webster definition.

When the water commissioner or division engineer determines the curtailment of these diversions are futile to the downstream Call, a Futile Call controls the river in the same way a Call would control it. Diversions upstream of a Futile Call must have a water right priority that is senior to the Futile Call priority and can ignore the senior downstream Call, if one exists.

2.5. Summary

A summary of the attributes for the four administrative scenarios is shown in Table 2-1.

Table 2-1: Administrative Scenarios

Administrative Scenario	Administrative Term	Call Location	Call Priority
Natural streamflow is exhausted or fully controlled (ISF) at some geographic point (Call Location) AND there is more demand for natural streamflow hydrologically upstream of that geographic location than there is supply such that water rights must be curtailed or prevented from diverting to make flow available to more senior water rights AND the water right used to drive the curtailment is more senior than any other downstream Call.	Call	WDID where natural streamflow is fully diverted from stream or otherwise fully controlled (ISF, power right, etc.)	Admin No. used to curtail diversions
Diversion of natural streamflow is being authorized because the diversion(s) will not affect a downstream Call due to: futile conditions below the diversion location; a local precipitation event; diurnal snow melt; etc. The structure cannot call out water rights to make the flow available. The structure(s) are simply diverting flow for which they are in priority and which can be diverted without impacting the downstream Call due to localized conditions.	Authorized Diversion	WDID being allowed to divert; or, most downstream WDID in a contiguous group of structures being allowed to divert	Admin No. used to limit diversions
Natural streamflow is exhausted or fully controlled (ISF) at some geographic point (Call Location) AND there is more demand for natural streamflow hydrologically upstream of that geographic location than there is supply such that water rights must be curtailed or prevented from diverting to make flow available to more senior water rights AND the water right used to drive the curtailment is JUNIOR to another downstream Call BUT the diversion is nonconsumptive and, therefore, does not impact the more senior downstream Call.	Nonconsumptive Call	WDID where natural streamflow is fully diverted from stream or otherwise fully controlled (ISF, power right, etc.)	Admin No. used to curtail diversions, typcially by exchange
Natural streamflow is exhausted or fully controlled (ISF) at some geographic point (Call Location) AND there is more demand for natural streamflow hydrologically upstream of that geographic location than there is supply such that water rights must be curtailed or prevented from diverting to make flow available to more senior water rights AND the water right used to drive the curtailment is JUNIOR to another downstream Call BUT the stream conditions are such that curtailing the diversions would not increase the amount of water available to the downstream Call.	Futile Call	WDID where natural streamflow is fully diverted from stream or otherwise fully controlled (ISF, power right, etc.)	Admin No. used to curtail diversions

3. DETERMINING IF A CALL IS REQUIRED

The determination of whether or not a Call is needed and, if so, the specifics of the Call are based on the criteria used to curtail diversions (C.R.S 37-92-502, specifically ¶(2)(a)):

> *"…In making his decision as to the discontinuance of a diversion to satisfy senior priorities, the division engineer shall be governed by the following: The materiality of injury depends on all factors which will determine in each case the amount of water such discontinuance will make available to such senior priorities at the time and place of their need. Such factors include the current and prospective volumes of water in and tributary to the stream from which the diversion is being made; distance and type of stream bed between the diversion points; the various velocities of this water, both surface and underground; the probable duration of the available flow; and the predictable return flow to the affected stream. Each diversion shall be evaluated and administered on the basis of the circumstances relating to it and in accordance with provisions of this article and the court decrees adjudicating and confirming water rights…"*

If the assessment of available supply, current demand and statutory direction determines the "total or partial discontinuance" of a diversion or diversions is necessary to make additional water available to a specific, more senior diversion and the owner of the diversion indicates they can beneficially use and wants the additional supply[8], the water commissioner or division engineer will set a Call. The Call information communicates the time during which the Call is in effect, the affected stream reach and the water right priority that can divert.

3.1. Free River

If there is sufficient supply to meet all beneficial use diversions, no Call is required to curtail diversions; this condition is known as "free river". Diversions under free river must still comply with the statutory prohibition against waste.

3.2. Diversions Not Subject to a Call

Any water right with a priority junior to the Call Priority that is located hydrologically upstream of the Call Location while the Call is in effect must either stop diverting natural stream flow or operate under special authority, such as those shown in Table 3-1.

Table 3-1: Diversions Not Subject to Call

Description of Diversion	Authorizing Statute
A non-injurious, non-consumptive or futile diversion operating with the approval of the water commissioner	C.R.S. 37-92-502
A diversion by exchange that is "just and equitable" as determined by the division engineer	C.R.S. 37-83-104
A diversion authorized by a plan for augmentation decreed by the water court	C.R.S. 37-92-302
A diversion authorized by a substitute water supply plan approved by the state engineer	C.R.S. 37-92-308

The "out-of-priority" structure may also divert water for which they have dominion and control that is not part of the natural stream, such as reservoir water, transbasin water, a release of reusable water, return flow, etc.

[8] Depending on the circumstances, the user may be required to attest to needing the additional supply in writing.

4. COMMUNICATING THE CALL

Once the need for a Call or Upstream Junior Call and the necessary associated information is determined, the information must be communicated to the water users or persons controlling the diversion structures affected by the Call. To facilitate this communication, the information is managed using HydroBase. The data must be entered into HydroBase in time to affect a reasonable response by water rights required to curtail diversions in order to comply with the Call. To that end, HydroBase has the ability to display all current Calls, Upstream Junior Calls and Authorized Diversions as well as the associated historical information. Users can register at www.state.co.us to get emails of all changes to the Call, by water division.

5. FAILURE TO COMPLY WITH A CALL

The state and division engineers generally rely upon water right owners to cooperatively comply with the Call as it is communicated. The current construct of the C.R.S., specifically C.R.S. 37-92-502, however, requires the division engineer to order the curtailment of water rights required to make flow available to the more senior rights[9]. Water right owners or lessees that fail to cooperatively comply with the Call should, therefore, be issued an official order as failure to comply with the order will be the subject of concern by the court.

[9] "The statutory plan contemplates that the division engineer will evaluate each junior appropriator's diversion to determine whether it is causing material injury to water rights having senior priorities before ordering the discontinuance of the diversion by the junior appropriator. It does not contemplate automatic cessation of diversions by junior appropriators in response to a river call." *Southeastern Colorado Water Conservancy District v. Rich*, 625 P.2d 977; 1981 Colo.

APPENDIX A - ADMINISTRATION NUMBER (aka Holt Number)

The "Admin No." was developed by the Division of Water Resources (Ken Holt, Division 6 hydrographer) to provide a simple ranking of water rights' priorities. The number references the number of days since December 31, 1849, an entirely arbitrary date except for the fact that it is prior to the most senior Colorado water right.

The Admin No. requires the following data:

- Adjudication Date of the subject water right
- Previous Adjudication Date associated with structures diverting from the same stream
- Appropriation Date of the subject water right

The Admin No. is in the form: "XXXXX.YYYYY", where each side of the decimal point is an integer representing the number of days between December 31, 1849 and either the appropriation date or previous adjudication date, depending on whether or not the water right is subject to the Postponement Doctrine. Leading zeroes are added to the number as required to make the number have five digits.

Postponement Doctrine

The Postponement Doctrine[10] was established to encourage the adjudication of water. The Prior Appropriation Doctrine relates the priority of a water right to the date the water was first put to beneficial use, known as the appropriation date. The Postponement Doctrine amends that determination, preventing the relation of the water right priority to the date of appropriation whenever the waters of that same stream system were previously adjudicated. The Postponement Doctrine, in effect, prevents a water right that has not been decreed by the court from being able to jump ahead of water rights that have already been decreed.

Water rights that are not subject to the Postponement Doctrine were either decreed at the time of the first available adjudication or have an appropriation date that is after the previous adjudication date. Water rights subject to postponement have an appropriation date that is earlier than the date of a previous adjudication.

Prior to the creation of a standing water court by the 1969 Water Rights Determination and Administration Act, the adjudication date is the date of the respective district court adjudication. Since the 1969 Act, for the purpose of the Admin No., the adjudication date is December 31 of the year the application for a water right was filed. Likewise, since 1969, the previous adjudication date is December 31 of the year before the subject water right application.

Water Right <u>is Not</u> Subject to Postponement Doctrine

When a water right is NOT subject to postponement, the left side of the Admin No. (XXXXX) is the number of days between December 31, 1849 and the appropriation date. The right side of the Admin No. (YYYYY) is five zeroes ("00000"). The administrative priority of the water right is, therefore, the same as the appropriation date.

[10] See §37-92-306, C.R.S.

Water Right is Subject to Postponement Doctrine

If the appropriation date is earlier than the previous adjudication date, then the left side of the Admin No. (XXXXX) is the number of days between December 31, 1849 and the previous adjudication date. This results in the administrative priority of the water right being less senior than its appropriation date due to not participating the previous adjudication.

In order to properly administer the postponed water right against all other similarly postponed water rights, the right side of the Admin No. (YYYYY) is the number that represents the number of days between December 31, 1849 and the appropriation date. This will give the more senior of the postponed water rights a lower Admin No. than other postponed water rights, acknowledging their relative seniority.

Admin No. Examples

Once the left and right sides of the Admin No. are determined, the Admin No. should be viewed as a single number with 10 significant digits. The ten digit Admin No. may then be used to relate the administrative priority of the water right; the smaller the Admin No., the more senior the water right. There are basically three categories of Admin No.

1. Original[11] adjudications (no Previous Adjudication Date exists):

Lower Boulder Ditch		Admin No.
Adjudication Date	06/02/1882	3561.00000
Previous Adj Date	None	
Appropriation Date	10/01/1859	

2. Supplemental adjudications (a previous adjudication exists) with an Appropriation Date later than the Previous Adjudication Date:

Beaver Brook Pipeline		Admin No.
Adj Date	05/13/1936	24745.00000
Previous Adj Date	10/09/1895	
Appropriation Date	10/01/1917	

3. Supplemental adjudications with an Appropriation Date earlier than the Previous Adjudication Date:

Barnes Meadow Reservoir		Admin No
Adj Date	12/18/1945	26409.26135
Previous Adj Date	04/22/1922	
Appropriation Date	07/22/1921	

[11] In addition to the first water right adjudications in each of the district courts, the following water rights are tabulated as having no Previous Adjudication Date: non-exempt alluvial well water rights with applications filed prior to June 1, 1972 (CRS 37-92-306); nontributary water rights (37-92-305(11)); exempt wells (CRS 37-92-602(4)); and, certain court ordered decrees (such as the North Fork decrees, CA1678 & 84CW566).