



Guideline 2019-1

USE OF PRE-EXISTING CONDITIONS TO OFFSET DEPLETIONS FROM ONSTREAM RESERVOIRS AND PERMITTED MINING OPERATIONS

Objective

This guideline summarizes the three specific circumstances in statute where pre-existing conditions, such as natural vegetation or water surfaces, can be utilized as an offset to depletions resulting from evaporation and/or mining operations. This guideline revokes and replaces Policy 2004-3.

Guideline

Depletions resulting from evaporation of streambed reservoirs and sand and gravel mining ponds may be offset as described in items 1 and 2. Depletions from hard rock mining operations may be offset as described in item 3.

1. Streambed Reservoirs

As described in 37-84-117(5), C.R.S., “The state engineer may order that an owner of a reservoir release an amount of water from the reservoir that, in the determination of the state engineer, is necessary to prevent evaporation on the surface of the reservoir from depleting the natural flow of the stream running through the reservoir that would otherwise be available for use by other appropriators. In determining the quantity of any evaporation release under this section, the state engineer shall compute the surface evaporation from the reservoir and deduct from the surface evaporation any accretions to the stream flow resulting from the existence of the reservoir and any natural depletions to the stream flow that would have resulted if the reservoir were not in existence.”

2. Sand and Gravel Mining Ponds

Allowable offsets for sand and gravel mining pond evaporation depletions are described in two locations in statute, first generally and then specifically for augmentation plans:

37-80-120(5), C.R.S.

“In determining the quantity of water required as a substitute supply to replace evaporation from groundwater exposed to the atmosphere in connection with the extraction of sand and



gravel by open mining as defined in section 34-32-103(9)¹, C.R.S., there shall be no requirement to replace the amount of historic natural depletion to the waters of the state, if any, caused by the preexisting natural vegetative cover on the surface of the area which will be, or which has been, permanently replaced by an open water surface. The applicant shall bear the burden of proving the historic natural depletion.”

37-92-305(12)(a), C.R.S.

“In determining the quantity of water required in an augmentation plan to replace evaporation from groundwater exposed to the atmosphere in connection with the extraction of sand and gravel by open mining as defined in section 34-32-103(9)¹, C.R.S., there shall be no requirement to replace the amount of historic natural depletion to the waters of the state, if any, caused by the preexisting natural vegetative cover on the surface of the area which will be, or which has been, permanently replaced by an open water surface. The applicant shall bear the burden of proving the historic natural depletion.”

3. Hard Rock Mining Operations

Depletions resulting from hard rock mining operations that have obtained a reclamation permit may be offset based on historic natural vegetation and water surfaces. The depletions to which an offset may be applied are not limited only to those resulting from evaporation. This allowance is described in two locations in statute, first generally and then specifically for augmentation plans:

37-80-120(6), C.R.S.

“In determining the quantity of water required as a substitute supply to replace stream depletions in connection with any mining operation as defined in section 34-32-103(8), C.R.S., for which a reclamation permit has been obtained as set forth in section 34-32-109, C.R.S., there is no requirement to replace the amount of historic natural depletion to the waters of the state, if any, caused by the preexisting natural vegetative cover and evaporation on the surface of the area that will be, or that has been, eliminated or made impermeable as part of the permitted mining operation. The applicant bears the burden of proving the historic natural depletion.” (emphasis added)

¹ Due to changes in statutes regulating sand and gravel mining, this should now refer to 34-32.5-103(15). The historic natural depletion offset for sand and gravel mining was added to the C.R.S. in 1989 (SB 89-120). That bill included the following statement in two locations, “the extraction of sand and gravel by open mining as defined in section 34-32-103(9), C.R.S.” (emphasis added). In 1995, section 34-32.5-101 *et seq.*, the Construction Materials Act, was added to the C.R.S. for the regulation of construction materials, including sand and gravel, separating the regulation of sand and gravel mining from hard rock mining, which is still regulated under section 34-32-101 *et seq.*, the Hard Rock Mining Act. Definitions in the two acts specify “mining of minerals” (section 34-32-103(9), C.R.S.) and “mining of materials” (section 34-32.5-103(15), C.R.S.). In 2018, SB41 corrected the reference in 37-90-137(11), C.R.S. related to well permits for sand and gravel mining groundwater exposure from 34-32-103(9) to 34-32.5-103(15), C.R.S. The same correction is presumed for the historical natural depletions statutes described herein, clarifying that there is a different consideration for depletions from sand and gravel mining than depletions from hard rock mining.

37-92-305(12)(c), C.R.S.

“In determining the quantity of water required in an augmentation plan to replace stream depletions in connection with any mining operation as defined in section 34-32-103(8), C.R.S., for which a reclamation permit has been obtained as set forth in section 34-32-109, C.R.S., there is no requirement to replace the amount of historic natural depletion to the waters of the state, if any, caused by the preexisting natural vegetative cover and evaporation on the surface of the area that will be, or that has been, eliminated or made impermeable as part of the permitted mining operation. The applicant bears the burden of proving the historic natural depletion.” (emphasis added)

There is a distinction in the type and amount of offset allowed against depletions resulting from evaporation and/or mining operations in the three circumstances described above. Depletions resulting from evaporation of groundwater exposed by sand and gravel mining operations may be offset by the amount of historical natural depletions to the waters of the state caused by the preexisting natural vegetative cover that has been replaced by groundwater exposed as a result of the mining operation. Depletions resulting from evaporation from streambed reservoirs and any depletions resulting from hard rock mining operations have a broader offset allowance, which includes both pre-existing vegetation *and* water surfaces. Offsets to depletions for streambed reservoirs and sand and gravel mining ponds cannot exceed the amount of evaporative depletions. Offsets for hard rock mining operations cannot exceed the total of all depletions resulting from the mining operation. There is no offset allowed against depletions from mining construction materials regulated under section 34-32.5-101, *et seq.*, where the materials do not include sand or gravel, such as limestone quarries or clay mines.

Offsets to depletions for pre-existing conditions should not be considered a source of replacement water in an augmentation plan or substitute water supply plan. Under the provisions of 37-92-103(9), C.R.S., “Plan for augmentation does not include the salvage of tributary waters by the eradication of phreatophytes, nor does it include the use of tributary water collected from land surfaces that have been made impermeable, thereby increasing the runoff but not adding to the existing supply of tributary water.”² Rather, pre-existing conditions can only be considered as a reduction to the depletion amount that must be replaced.

² As stated in *SOUTHEASTERN COLO. WC DIST. v. Shelton Farms, Inc.*, salvaged water implies waters in the river or its tributaries (including the aquifer) which ordinarily would go to waste, but somehow are made available for beneficial use. Salvaged waters cannot be the basis for a water right outside of the priority system to be used as a replacement source in an augmentation plan.

Approval

This guideline may only be modified or revoked in writing by the State Engineer.

Approved this 16th day of January, 2019.

A handwritten signature in cursive script that reads "Kevin G. Rein".

Kevin G. Rein, P.E.
State Engineer/Director