Sort	Reference	Main Reference	Sub Refere	Title	Specific part	Comment
				Water Quality Requirements		
1	Statute	75-5-410		Aquifer Recharge Or Certain Mitigation Plans Minimum Requirements	Requirements for discharge permitting related to water right mitigation plans. Water quality for injection wells or aquifer recharge must meet either drinking water or non-deg standards	
1	Statute	85-2-102		Definitions	Mitigation is defined as a method to appropriate water and as a beneficial use of water	I think this creates confusion about what this term actually means
1	Statute	85-2-102		Definitions	"Mitigation" means the reallocation of surface water or ground water through a change in appropriation right or other means that does not result in surface water being introduced into an aquifer through aquifer recharge to offset adverse effects resulting from net depletion of surface water.	This presumes that adverse effect to groundwater rights must be offset by aquifer recharge which is probably correct but this means the definition of aquifer recharge should include offsetting adverse effect to groundwater which it does not
1	Statute	85-2-102		Definitions	"Aquifer recharge" means either the controlled subsurface addition of water directly to the aquifer or controlled application of water to the ground surface for the purpose of replenishing the aquifer to offset adverse effects resulting from net depletion of surface water.	So aquifer recharge can't be used to offset adverse effect to existing groundwater users?
1	Statute	85-2-310	(8)(c)(v)A-	(Action on an application	(v) except as provided in subsection (9), if the water applied for is to be appropriated above that which will be used solely by the applicant or if it will be marketed by the applicant to other users, information detailing: (A) each person who will use the water and the amount of water each person will use; (B) the proposed place of use of all water by each person; (C) the nature of the relationship between the applicant and each person using the water; and (D) each firm contractual agreement for the specified amount of water for each person using the water; or (d) the appropriate environmental impact statement costs or fees, if any, are not paid as required by 85-2-124. (9) If water applied for is to be marketed by the applicant to other users for the purpose of aquifer recharge or mitigation, the applicant is exempt from the provisions of subsection (8)(c)(v). The applicant shall provide information detailing the proposed place of use.	The problematic part of this statute is sub 8(c)(v) (see 12/15/2022 Legal memo re: marketing to oneself). Based on this determination, the logical outcome is that an entity may apply for a change to marketing for mitigation(M4M) and if approved, may market water to "other entities" but not themselves. If water is marketed to a separate entity, then no additional change appolicaiton is needed. However, if the owner of the M4M authorization turns out to be the entity that ultimately wants to put the M4M water to use, then it must make another change applicaiton. It seems arbitrary that the need for additional change applicaitons is based on the nature of the entity using the M4M water and its relationship with the holder of the M4M change authorization. What purpose does this serve? And more importantly, was this the intent? I don't believe it was. I beleive the more logical interpretation of 85-2-310(9) is that the applicant of the M4M could be included in "other entities".
1	Statute	85-2-360		Hydrogeologic report required as part of mitigation plan for groundwater permit in closed basins		
1	Statute	85-2-361		Minimum requirements for Hydrogeologic Report		
1	Statute	85-2-362		Minimum requirements for Aq Recharge or Mitigaiton plans in closed basins		Sub 1 references hydrogeologic report conducted pursuant to 85-2-361 but it seems like it is really conducted pursuant to 85-2-360
1	Statute	85-2-362	(1)	Minimum requirements for Aq Recharge or Mitigaiton plans in closed basins	(1) An applicant whose hydrogeologic report conducted pursuant to 85-2-361 predicts that there will be a net depletion of surface water shall submit an aquifer recharge or mitigation plan. (3) The department may not require an applicant, through an aquifer recharge or mitigation plan, to provide more water than the quantity needed to offset the adverse effects on a prior appropriator caused by the net depletion.	Sub 1 says Mitigation plan is required in closed basin to offset net depletion NOT adverse effect but Sub 3 says Dept cannot require more than the amount needed to offset adverse effect These seem contradictory, what if there are net depletions but no adverse effect? Is mitigation needed?
1	Statute	85-2-362	(1)(f)	Minimum requirements for Aq Recharge or Mitigaiton plans in closed basins	(f) evidence of water availability	Sub $1(f)$ evidence of water availability. Recently it was stated that evidence of historical use was not evidence of water availability. This seems difficult to reconcile. Evidence of consistent long-term exercise of the water right to be changed should have some bearing on the discussion of the availability of that water
1	Statute	85-2-364		Dept coordination between DNRC and DEQ when discharge permitting is part of mitigation plan	(1) an applicant for a new appropriation right pursuant to 85-2-360 that involves aquifer recharge or mitigation shall provide the department with a copy of a relevant discharge permit if necessary; and (2) the department may not grant a new appropriation right pursuant to 85-2-360 that involves aquifer recharge or mitigation until the discharge permit, if necessary, has been obtained and presented to the department.	Applicant' is required to have discharge permit issued and show it to the DNRC. While sub 2 says that a new appropriation cannot be ISSUED until the discharge permit has been granted, which makes sense, the timing of when the water right applicant must have obtained the discharge permit is unclear. Suggest sub 1 should say that evidence that a discharge permit is being pursued instead of requiring that it already be issued.
1	Statute	85-2-402	(2)(b)(iii)	Adequacy of diversion criteria is not relevant to changes to mitigation or marketing for mitigation	(2) Except as provided in subsections (4) through (6), (15), (16), and (18) and, if applicable, subject to subsection (17), the department shall approve a change in appropriation right if the appropriator proves by a preponderance of evidence that the following criteria are met: (b) The proposed means of diversion, construction, and operation of the appropriation works are adequate, except for: (iii) a change in appropriation right pursuant to 85-2-420 for mitigation or marketing for mitigation.	

1	Statute	85-2-402	(2)(d)(ii)	Posessory interest criteria not relevant for changes to mitigation or marketing for mitigation	(d) The applicant has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use or, if the proposed change involves a point of diversion, conveyance, or place of use on national forest system lands, the applicant has any written special use authorization required by federal law to occupy, use, or traverse national forest system lands for the purpose of diversion, impoundment, storage, transportation, withdrawal, use, or distribution of water. This subsection (2)(d) does not apply to: (iii) a change in appropriation right pursuant to 85-2-420 for mitigation or marketing for mitigation.	
1	Statute	85-2-420		Change In Appropriation Right For Aquifer Recharge Or Mitigation Marketing	(1) Subject to 85-2-402 and this section, an appropriator may apply for a change in appropriation right for the purpose of aquifer recharge or mitigation. (2) During the completion period authorized by the department for a change pursuant to this section, the appropriator may continue to use the appropriation right for any authorized beneficial use provided that proportionate amounts of the appropriation right are retired as the mitigation or aquifer recharge beneficial use is perfected. (3) (a) If the full amount of the appropriation right is not sold or marketed as mitigation or aquifer recharge prior to the completion date, the water right retains the beneficial uses authorized prior to the change approved pursuant to this section. (b) For an appropriation right that retains the original beneficial uses pursuant to this section, if the water retained for the original beneficial uses and the amount sold or marketed for mitigation or aquifer recharge are: (i) not diverted at a common point of diversion, the flow rate and volume of water retained at the point of diversion for the original beneficial uses must be equal to the flow rate and volume allowed under the original beneficial uses minus the amount sold or marketed for mitigation or aquifer recharge; or (ii) diverted at a common point of diversion, the entire flow rate and volume of the appropriation is allowed from the common point of diversion, the entire flow rate and volume of the appropriation is allowed from the common point of diversion in gift approved pursuant to this section, the department shall: (a) determine a period for the change in appropriation right approved pursuant to this section, the department shall: (b) determine an appropriate location for measuring the amount of water that will be used for mitigation or aquifer recharge and, if necessary, require installation of a measuring device; and (c) require the appropriator to notify the department within 30 days each time a portion of the change is completed.	
2	ARM	36.12.115		Water Use Standards	For fire protection reservoirs located within a basin closure area, evaporation losses must be made up from nontributary water sources or addressed in a mitigation plan.	
2	ARM	36.12.1704		Permit Application Legal Availability	The department may consider an applicant's mitigation or aquifer recharge plan as evidence that water is legally available.	
2	ARM	36.12.1706	2	PERMIT APPLICATION CRITERIA - ADVERSE EFFECT	The adverse effect plan may include: (c)the use of a mitigation or aquifer recharge plan as a means of offsetting adverse effect;	
2	ARM	36.12.905		Horse Creek Controlled GW Area	An Application for Beneficial Water Use Permit, Form 600 must include the following: (a) a mitigation plan which will offset the rate, timing, and location of depletion calculated within the HCCGWA; and (b) an Application to Change, Form 606, if the mitigation plan includes changing an existing water right for mitigation purposes.	
2	ARM	36.12.906		East Valley Controlled GW Area	Mitigation applications are allowed to be accepted in Zone 1	
3	Policy			Related to the Centennial decision and Marketing for Mitigation	"Historical use is necessary to determine for an adverse effect analysis, but it is not the only piece of the puzzle in regard to ensuring mitigation will be effective. Priority date of the mitigation water is an important consideration in the effectiveness argument. If the rights proposed to provide mitigation water are junior rights that can be called by the right(s) that create over-appropriated conditions on the source (in this case, Avista and possible Thompson Falls dam), then they do not effectively change conditions on the source because they are still subject to call by the rights that have effectively tied up the source. Lack of previous call by these senior users does not prove that a junior right would provide effective mitigation to ensure senior users receive their water."	This would appear to state that water rights that are subject to call cannot be used for mitigation. The logical conclusion is then the only water rights that could be used for mitigation are the most senior rights on the source.
3	Policy			Related to the Centennial decision and Marketing for Mitigation		This statement is erroneous, the mitigation process has always been a two step process and it has always been the obligation of the permit applicant to demonstrate that the proposed mitigation plan will offset adverse effect. See 85-2-362(g). In addition, where in the change criteria does it say that an applicant for M4M must 'substantiate that their rights will provide for effective mitigation'? I don't see that in 85-2-402

3	Policy	Change Manual 2023 version	The Department does not accept plans in which call on the Applicant might be futile. You cannot generally call groundwater and so it must be shown by a preponderance of the evidence (51%) that call will be adhered to and that call would effectively alleviate the need for more water on the surface water source as necessitated by senior water rights on the surface water source.	And yet, the Dept issues 100s of exempt groundwater rights every year. How can you justify this disparity?
3	Policy	Change Manual 2023 version	The purpose of a Mitigation Change is to change the purpose and place of use of an existing water right to offset the adverse effects to an identified reach of a surface water source that are predicted 1) from use of groundwater requested in a pending application for a beneficial water use permit, or 2) as a result of a proposed change to an existing water right.	This overlooks the possibility that a mitigation application offsets adverse effects from a surface water permit
3	Policy	Change Manual 2023 version	If a change proposal requires mitigation, the mitigation plan and water rights being used for mitigation must be processed in conjunction with the primary change application.	Isn't this only true in closed basins?
3	Policy	Change Manual 2023 version	When net depletions to surface water are predicted based on modeling the impacts of a groundwater diversion, that amount is normally that volume of water consumed annually and not returned to any water source.	The potential for adverse effect to groundwater is completely ignored.
3	Policy	Change Manual 2023 version	Typically, the greatest chance for adverse effect is during the irrigation season, and particularly after spring runoff has receded.	This isn't even remotely true and is the crux of the entire problem why mitigation is so hard to achieve.
3	Policy	Change Manual 2023 version	If the mitigation is required by the Department to satisfy a basin closure, or existing downstream senior hydro-power water rights, but not to mitigate adverse effect to a specific water right, the mitigation water may be provided outside the depleted reach and still achieve its goal.	Please explain when mitigation would be required if not to 'mitigate adverse effect to a specific water right'. The very definition of mitigation says that it is to offset adverse effect
3	Policy	Change Manual 2023 version	On tight sources or sources with a commissioner it must be shown that moving to a groundwater source does not create more access to water or create an enlargement of the surface water right. If there is any delay in depletions to the surface water between the proposed groundwater appropriation and the underlying surface water source, a plan to shut the groundwater source off in priority is not effective. The reason for this is that delayed impacts don't allow for senior water rights users to receive their allotted flow rate immediately after call is made. Although the groundwater use can be shut down when a call is made, the impacts of the depletions can extend beyond the point that the pump is shut down. Although the impact to the groundwater user is the same, the impact to the senior water right holder through the delay in water availability is considered an adverse effect. 4. The Department does not accept plans in which call on the Applicant might be futile. You cannot generally call groundwater and so it must be shown by a preponderance of the evidence (51%) that call will be adhered to and that call would effectively alleviate the need for more water on the surface water source.	This is an over-simplification. Every application should be evaluated on its own merits and the Dept should not be making generalizations about the type of applications that can or cannot be accepted without considering the site specific information. There are a number of assumptions in this statement that may not be true.
3	Policy	Change Manual 2023 version	The Department does not accept plans in which call on the Applicant might be futile. You cannot generally call groundwater and so it must be shown by a preponderance of the evidence (51%) that call will be adhered to and that call would effectively alleviate the need for more water on the surface water source as necessitated by senior water rights on the surface water source.	What if the applicant can show by a preponderance of the evidence that the downstream senior rights would not be in a position to make call, ie records show there is always plenty of water in the source to meet the needs of downstream seniors
3	Policy	Change Manual 2023 version	As with the Marketing purpose, Marketing for Mitigation/Aquifer Recharge requires water to be marketed by the applicant to other users. An applicant or water right owner cannot enter into a valid contract for Marketing for Mitigation water with themselves (See 12/15/2022 Memo addressing question: Marketing for Mitigation Contract with Oneself).	Why the emphasis on "other users"? The statute doesn't actually say this about M4M. The Dept has chosen to equate M4M with the purpose of Water Marketing with no real explanation. What is the point?
3	Policy	Change Manual 2023 version	Unless surface and groundwater are directly connected, a source change from surface water to groundwater or groundwater to surface water is not allowed. Directly connected means impacts from diversions are instantly measurable on the surface water source without any interval of time between diversion and impact	This standard is too high. Shutting off a surface water diversion often does not make water immediately available to the senior water right holder. Take a look a the Teton for example. Mainstem seniors could wait days for water from junior users to show up.
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