

1 As provided in A.R.S. § 45-571(A), the Director is required to file a written
2 summary and findings with respect to matters raised during the Public Comment Period.
3 After additional review, the Director has identified necessary modifications to the First
4 Management Plan, including technical changes and typographical corrections. Pursuant
5 to A.R.S. § 45-571(B), the Director has made the necessary modifications and is filing
6 in the Department an order describing the substantive changes and adopting the
7 proposed plan as modified simultaneously with this Summary and Findings. After
8 reviewing the comments and evidence submitted, the Director makes the following
9 written summary and findings with respect to matters raised during the Public Comment
10 Period.

11 **II. SUMMARY OF HEARING AND FINDINGS**

12 A summary of the comments received during the Public Comment Period and the
13 Director's responses to the comments are presented below. The Director received seven
14 written comments during the Public Comment Period. Additionally, five stakeholders
15 provided oral comments at the public hearing.

16 *A. Irrigation Efficiencies*

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- 18 1. Comment: Commenter stated the need for additional consideration regarding the
19 irrigation efficiency tiers to ensure our information is as accurate as possible and
20 suggested a tier-based system for ongoing water duty reductions.

21 Response: The irrigation efficiency tiers in the Douglas AMA First Management
22 Plan are representative of farm acreage listed in the irrigation grandfathered right
23 ("IGFR") applications submitted to the Department, as well as U.S. Geological
24 Survey ("USGS") field verified data. The Department sees these tiers as a starting
25

1 point towards reducing groundwater withdrawals. The tiers can be evaluated in
2 future management plans for further incremental reductions.

- 3 2. Comment: Commenter stated that the Department should implement an irrigation
4 efficiency number of 75% across all farms in the basin, and then slowly raise it
5 in subsequent management plans.

6 Response: Recent USGS data indicates that irrigation efficiencies across the
7 Douglas basin average approximately 85%. If the Department reduced the
8 irrigation efficiency to 75%, it would counter the management goal of the
9 Douglas AMA and would not contribute to the overarching goal of the
10 management plan to reduce groundwater withdrawals.

- 11 3. Comment: Commenter stated that the Department should create specific
12 irrigation efficiency requirements depending on the type of irrigation, i.e.
13 sprinkler, drip, etc.

14 Response: The irrigation efficiency values set in the First Management Plan are
15 not based on existing farm efficiency. Rather, they are used as a regulatory tool
16 to move the agricultural water users toward reducing the withdrawals of
17 groundwater.

- 18 4. Comment: Commenter proposes that farms using low water use crops should
19 not be required to cut their water use as much as water-intensive crops.

20 Response: IGFR water duty allotments are based on the highest number of acres
21 irrigated within the 5 years prior to the AMA designation, multiplied by the
22 consumptive use of the crop(s) grown, then divided by the irrigation efficiency.
23 This equation has been used across all management plans to be equitable to all
24 farmers. If a farmer is growing a low water use crop, they will have a lower crop
25 consumptive use. If a farmer is growing a high water use crop, they are going to

1 have a higher crop consumptive use. However, all water duty allotments will
2 include a single irrigation efficiency value, which will require the same rate of
3 efficiency, based on a percentage of water used. These irrigation efficiencies are
4 a regulatory tool to help reduce the withdrawal of groundwater.

5 *B. Consumptive Use Numbers*

- 6 1. Comment: Commenter requested the Department raise the consumptive use value
7 for pecans without groundcover.

8 Response: An informal draft of the proposed plan included a typographical error
9 that resulted in an artificially high consumptive use value for pecans without
10 groundcover, which was higher than that for pecans with groundcover. In
11 response to an informal comment regarding the error, the Department corrected
12 the consumptive use values for pecans with and without groundcover. This
13 comment is proposing that instead, the consumptive use value for pecans without
14 groundcover should be raised. Consumptive use values were determined through
15 weather data, USGS data, and irrigation non-expansion area annual reports.
16 Based upon data presented in the formal comment, the Department evaluated the
17 consumptive use data for pecans without groundcover to determine a closer
18 reality of water use within the basin and has modified the consumptive use value
19 in the proposed plan to 4.12 for pecans without groundcover, from the previous
20 value of 3.61.

- 21 2. Comment: Commenter requested a higher consumptive use value for corn.

22 Response: Consumptive use values were determined through weather data,
23 USGS data, and irrigation non-expansion area annual reports. Given the data
24 presented in the formal comment, and by using the maximum water use average
25 of annual reports submitted for corn in the former Douglas INA, the consumptive

1 use for corn was evaluated to determine a closer reality of water use within the
2 basin and has modified the consumptive use value in the proposed plan to 2.51
3 for corn, from the previous value of 2.06.

4 *C. Substantial Capital Investment*

- 5 1. Comment: Commenter requests clarification on whether substantial capital
6 investment (“SCI”) irrigation acres are considered as water duty acres on the basis
7 of the crops intended to be grown by the applicant.

8 Response: SCI applications require fact-intensive review and are determined on a
9 case-by-case basis. If the Department grants an application for an IGFR including
10 irrigation acres supported by SCI, that decision will identify the associated crop
11 types for purposes of calculating water duties.

12 *D. Water Duties*

- 13 1. Comment: Commenters stated the Department should reduce water duties when
14 land in the Douglas AMA is sold to entities that are not residents of the Douglas
15 Basin. Comments have suggested tiered reductions based on whether the entity
16 resides in Arizona or in another state.

17 Response: The Privileges and Immunities clause of the United States Constitution
18 precludes Arizona from providing preferential treatment based on state
19 citizenship.¹ The State would need “substantial reason” to treat out-of-state
20 residents differently, and the justification offered for the discriminatory law
21 would have to show that nonresidents “constitute a peculiar source of the evil at
22 which the statute is aimed.”² Such substantial reason does not exist here. Instead,
23 the First Management Plan implements a tiered system of irrigation efficiencies
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25 ¹ U.S. Const. art. IV, § 2, cl. 1.

² *Toomer v. Witsell*, 334 U.S. 385, 398, 68 S. Ct. 1156, 1163, 92 L. Ed. 1460 (1948).

1 based on farm size. The water duty is then calculated by taking into account the
2 assigned irrigation efficiency, crop type and irrigable acreage, which are directly
3 tied to water use. Therefore, the calculated water duty is a regulatory tool
4 designed to satisfy the goal of reducing aquifer depletion that the Groundwater
5 Management Act aims to achieve.

6 *E. Conservation Programs*

- 7 1. Comment: Commenter proposed that the Department create a Best Management
8 Practices (“BMP”) program in the Douglas AMA First Management Plan.

9 Response: In developing the Douglas AMA First Management Plan through
10 stakeholder engagement, Department staff discussed existing agricultural
11 conservation programs in initial AMAs with stakeholders. Stakeholder feedback
12 in those discussions recommended not including an agricultural BMP because it
13 was not in line with the goal and would not increase general efficiencies.

14 *F. Assured Water Supply*

- 15 1. Comment: Commenter referenced section 5.2.1 of the Management Plan which
16 states the current assured water supply (“AWS”) rules do not include specific
17 provisions for subsequent AMAs. Commenter asked when those rules would be
18 created.

19 Response: The current AWS rules include provisions for all AMAs regarding
20 physical availability, legal availability, continuous availability, water quality,
21 financial capability, and consistency with the management plan. These provisions
22 are applicable to the Douglas AMA. The rule for physical availability of
23 groundwater, A.A.C. R12-15-716(B), would benefit from clarification regarding
24 the depth-to-water criterion for subsequent AMAs. A provision for consistency
25 with the management goal of the Douglas AMA should also be added. Such rule

1 amendments would be developed in a rulemaking process separate from the First
2 Management Plan. The Department has not proposed a timeline for this
3 rulemaking process at this time.

- 4 2. Comment: Commenter questioned how mandatory adequacy requirements,
5 adopted by Cochise County, interacts with the assured water supply requirements
6 of the Douglas AMA.

7 Response: Pursuant to A.R.S. § 45-576, within the Douglas AMA, a certificate
8 of assured water supply or a commitment of service from a water provider
9 designated as having an assured water supply will be required for any new
10 subdivision. Any existing determinations of adequate water supply, including
11 water reports and designations of adequate water supply, will satisfy that
12 requirement. Any new subdivisions will be required to obtain a certificate or a
13 commitment of service from a designated provider. For those water providers that
14 have a designation of adequate water supply, the designation will continue in
15 effect under its existing terms. The water provider will be required to apply for a
16 designation of *assured* water supply prior to the conclusion of the designation
17 term in order to remain designated.

18 *G. Management Goal Criteria for the First Management Period*

- 19 1. Comment: Multiple commenters proposed increasing the proposed reduction
20 amount for the rate of aquifer depletion during the first management period.

21 Response: The Douglas AMA overdraft estimate was determined using inflows
22 and outflows with consideration of additional recharge advances. The analysis
23 determined a rate of reduction of 640 acre-feet annually or a total of 64,000 acre-
24 feet over a ten-year period would strike a balance between allowing water users
25 time to transition to initial conservation requirements while also reducing

1 outflows to protect groundwater long-term. The First Management Plan is a
2 transitional plan that will set the baseline for future plans. Additional reductions
3 will be considered in future plans.

4 *H. Mining Facilities*

5 1. Comment: Commenters suggested a cap on new mineral extraction facilities and
6 feedlots.

7 Response: Pursuant to A.R.S. § 45-512, some new non-irrigation uses of
8 groundwater are permissible. The Department evaluates applications for those
9 new uses of groundwater for consistency with the statutory requirements. The
10 Department's role is to implement existing statutes.

11 **III. CONCLUSION**

12 The Director has determined it is appropriate to adopt the proposed plan, with
13 typographical corrections and the modifications described in the Order of Adoption
14 issued simultaneously with this Summary of Hearing and Findings, as the First
15 Management Plan for the Douglas AMA.

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17 Dated this 27th day of November 2024.

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20 Thomas Buschatzke
21 Director, Arizona Department of Water Resources
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