TECHNICAL MEMORANDUM

To: Porterville ID GSA Board of Directors

From: Don Tucker – 4Creeks, Inc.

cc: Sean Geivet – Porterville ID GSA General Manager

Date: January 12, 2026

Re: **Porterville ID GSA – Water Year 2026 Sustainable Yield Allocations**

In accordance with the current Porterville Irrigation District (PIDGSA or GSA) Rules and Regulations adopted by the Board of Directors, the following technical memorandum summarizes the proposed Water Year 2026 (October 2025 through September 2026) groundwater allocations made available for landowners within the GSA. Article IV. Allocation of Water, Section 4.02 Determination of Allocations of the Rules and Regulations states the following:

> *"Each year by October 1, or as soon as reasonably practical, the General Manager shall determine the allocations available for use within the PID GSA based on PID GSA Technical Group's data and calculations regarding whether the PID GSA GSP's Minimum Thresholds or Measurable Objectives require allocation adjustments. In providing such data and calculations to the General Manager, the PID GSA Technical Group shall use the methodologies and calculations defined in this Article 4."*

Further, Section 4.03 Sustainable Yield Allocation of Article IV describes the Sustainable Yield allocations based on the landowner elected measurement methodologies in conformance with the Tule Subbasin Coordination Agreement[1] and developed using the Tule Subbasin groundwater flow model. The two Sustainable Yield allocation methodologies consist of:

(a) Groundwater Extraction Sustainable Yield Allocation
(b) Evapotranspiration (ET) Sustainable Yield Allocation

Table 1 describes the groundwater inflow components of the projected Tule Subbasin water budgets included for each of the Sustainable Yield allocation methodologies.

Table 1- Sustainable Yield Water Budget Components

Groundwater Inflow Components of the Tule Subbasin Projected Water Budget	Extraction Sustainable Yield	Consumptive Sustainable Yield
Inflow from Areal Recharge of Precipitation	✓	
Inflow from Infiltration of Runoff in Stream Beds	✓	✓
Inflow from Mountain-Block Recharge	✓	✓
Inflow from Return Flow of Applied Water from Groundwater Pumping	✓	

[1] *Tule Subbasin Coordination Agreement (2022); Attachment 2 – Tule Subbasin Setting, Section 2.3.2. – Sustainable Yield*

Groundwater Extraction Sustainable Yield Allocation

Section 2.3.2.3, Attachment 2 – Basin Setting of the 2022 Tule Subbasin Coordination Agreement, describes the allowable groundwater pumping Sustainable Yield the Tule Subbasin as 130,000 acre-feet annually and is available for 475,895 acres within the Tule Subbasin, amounting to **0.27 acre-feet per acre.**

Evapotranspiration (ET) Sustainable Yield Allocation

ET Sustainable Yield allocation is comprised of the following two components:

(A) Native Sustainable Yield. ET based measurements methodology only captures the portion of water consumed by the crop, and neglects inefficiencies such as the portion of total precipitation that areal recharges and return flows of applied water from groundwater pumping. Therefore, these groundwater inflow components of the projected water budget are not allocated as part of Sustainable Yield under an ET model. Only natural channel loss water within the Tule River, Porter Slough, Deer Creek, and White River channels and the calculated underflow from the Sierra Nevada Mountains are included in the Native Sustainable Yield allocation.

Section 2.3.2.3, Attachment 2 – Basin Setting of the 2022 Tule Subbasin Coordination Agreement, describes the consumptive (Native) Sustainable Yield within the Tule Subbasin, which amounts to **0.15 acre-feet per acre**.

(B) Total Precipitation. ET measurements do not distinguish between the source of water that is either applied irrigation (groundwater or surface water) or natural occurring precipitation, therefore, it is necessary to allocate the non-groundwater sources to be able to deduct to the portion of ET made up by applied groundwater. This includes surface water deliveries, which are credited to individual landowners monthly by the district and total precipitation.

Total precipitation is calculated as the long-term average total precipitation from calibrated weather stations within and adjacent to the PID GSA, interpolated to lands within PID GSA. The 34-year average (1991-2025) for PID GSA is **0.86 acre-feet per acre.**

The Water Year 2026 ET Sustainable Yield allocation, comprised of Native Sustainable Yield plus Total Precipitation for PID GSA, amounts to **1.01 acre-feet per acre**.

Water Year 2026 Sustainable Yield allocations for PID GSA are presented by allocation methodology in **Table 2**.

Table 2 - Water Year 2026 Sustainable Yield Allocation by Allocation Methodology

Allocation Component	Evapotranspiration Allocation *(AF/acre)*	Extraction Allocation *(AF/acre)*
A. Native Sustainable Yield	0.15	0.27
B. Total Precipitation	0.86	NA
Sustainable Yield	**1.01**	**0.27**