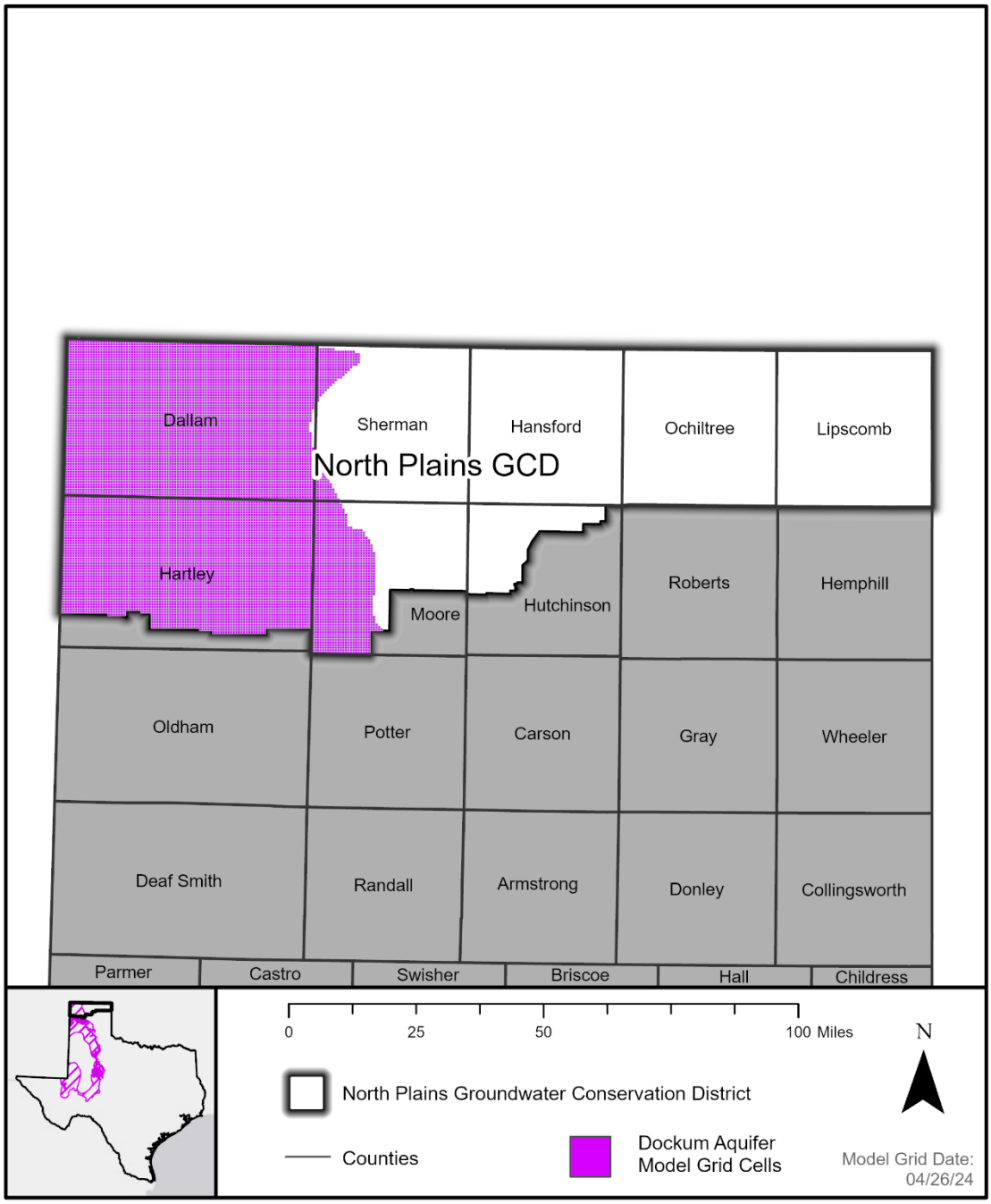
NORTH PLAINS GROUNDWATER CONSERVATION DISTRICT DOCKUM AQUIFER WATER BUDGETS



Area of the groundwater availability model for the High Plains Aquifer System from which the budget information was extracted (the Dockum Aquifer extent within the district boundary).

STATE OF TEXAS
SHIRLEY C. WADE
GEOLOGY
No. 525
LICENSED
PROFESSIONAL GEOSCIENTIST

Shirley C. Wade
10/20/2026

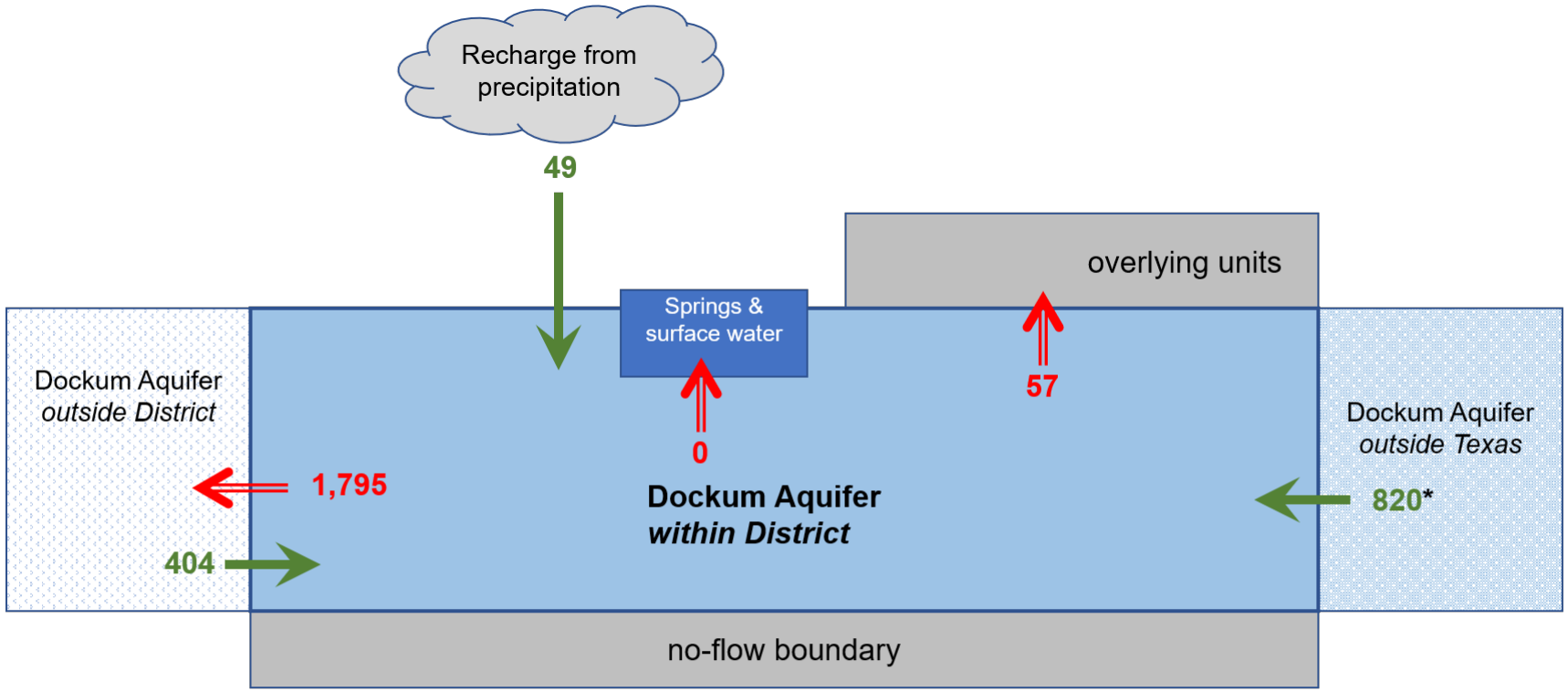
NORTH PLAINS GROUNDWATER CONSERVATION DISTRICT DOCKUM AQUIFER WATER BUDGETS

Management Plan requirement	Aquifer or confining unit	Results (acre-feet per year)
Estimated annual amount of recharge from precipitation to the district	Dockum Aquifer	49
Estimated annual volume of water that discharges from the aquifer to springs and any surface water body including lakes, streams, and rivers.	Dockum Aquifer	0
Estimated annual volume of flow into the district within each aquifer in the district	Dockum Aquifer	404
Estimated annual volume of flow out of the district within each aquifer in the district	Dockum Aquifer	1,795
Estimated net annual volume of flow between each aquifer in the district	Flow to the Dockum Aquifer in Texas from the Dockum Aquifer in New Mexico	781
Estimated net annual volume of flow between each aquifer in the district	Flow to the Dockum Aquifer in Texas from the Dockum Aquifer in Oklahoma	39
Estimated net annual volume of flow between each aquifer in the district	Flow from the Dockum Aquifer to overlying aquifers (Ogallala and Rita Blanca)	57



Shirley C. Wade
10/20/2026

NORTH PLAINS GROUNDWATER CONSERVATION DISTRICT DOCKUM AQUIFER WATER BUDGETS



* Flow from outside Texas includes net inflows of 781 acre-feet per year from New Mexico and 39 acre-feet per year from Oklahoma.

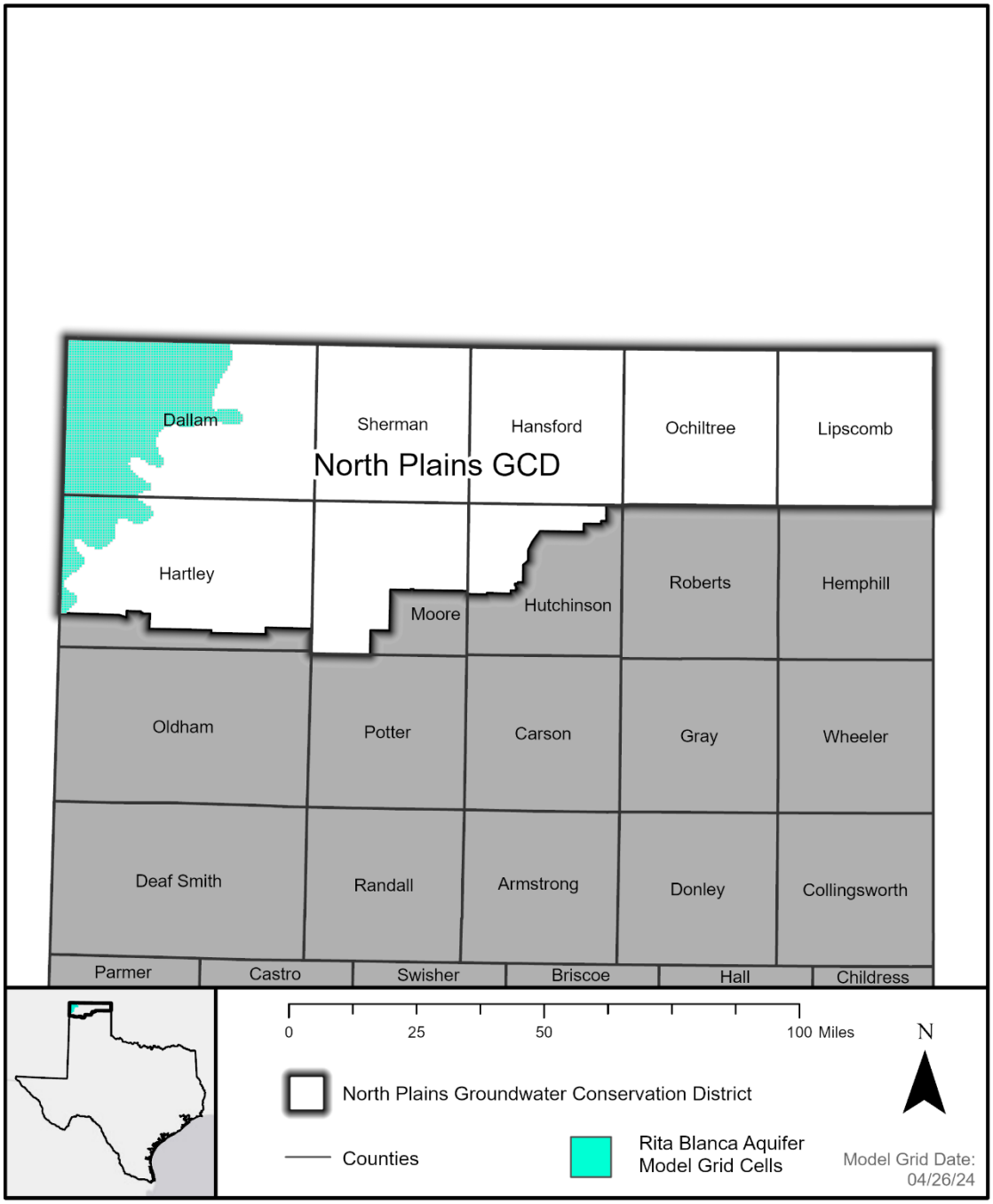
Caveat: This diagram only includes the water budget items provided in the table. A complete water budget would include additional inflows and outflows. For a full groundwater budget, please submit a request in writing to the Groundwater Modeling Department.

Generalized diagram of the summarized budget information representing directions of flow for the Dockum Aquifer within North Plains Groundwater Conservation District. Flow values expressed in acre-feet per year (AFY).



Shirley C. Wade
10/20/2026

NORTH PLAINS GROUNDWATER CONSERVATION DISTRICT RITA BLANCA AQUIFER WATER BUDGETS



Area of the groundwater availability model for the High Plains Aquifer System from which the budget information was extracted (the Rita Blanca Aquifer extent within the district boundary).

STATE OF TEXAS
SHIRLEY C. WADE
GEOLOGY
No. 525
LICENSED
PROFESSIONAL GEOSCIENTIST

Shirley C. Wade
10/20/2026

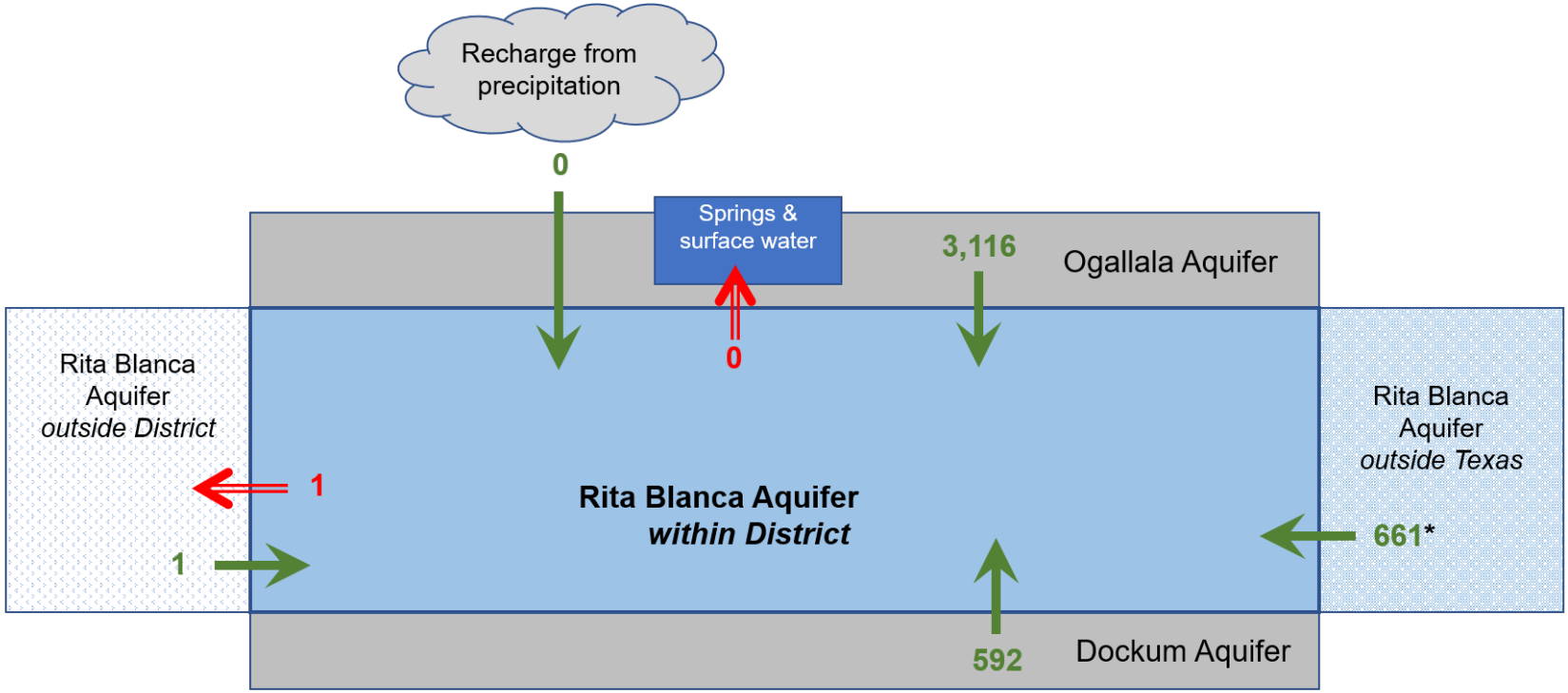
NORTH PLAINS GROUNDWATER CONSERVATION DISTRICT RITA BLANCA AQUIFER WATER BUDGETS

Management Plan requirement	Aquifer or confining unit	Results (acre-feet per year)
Estimated annual amount of recharge from precipitation to the district	Rita Blanca Aquifer	0
Estimated annual volume of water that discharges from the aquifer to springs and any surface water body including lakes, streams, and rivers.	Rita Blanca Aquifer	0
Estimated annual volume of flow into the district within each aquifer in the district	Rita Blanca Aquifer	1
Estimated annual volume of flow out of the district within each aquifer in the district	Rita Blanca Aquifer	1
Estimated net annual volume of flow between each aquifer in the district	Flow to the Rita Blanca Aquifer in Texas from the Rita Blanca Aquifer in New Mexico	538
Estimated net annual volume of flow between each aquifer in the district	Flow to the Rita Blanca Aquifer in Texas from the Rita Blanca Aquifer in Oklahoma	123
Estimated net annual volume of flow between each aquifer in the district	Flow to the Rita Blanca Aquifer from the Ogallala Aquifer	3,116
Estimated net annual volume of flow between each aquifer in the district	Flow to the Rita Blanca Aquifer from the Dockum Aquifer	592



Shirley C. Wade
10/20/2026

NORTH PLAINS GROUNDWATER CONSERVATION DISTRICT RITA BLANCA AQUIFER WATER BUDGETS



* Flow from outside Texas includes net inflow of 538 acre-feet per year from New Mexico and 123 acre-feet per year from Oklahoma.

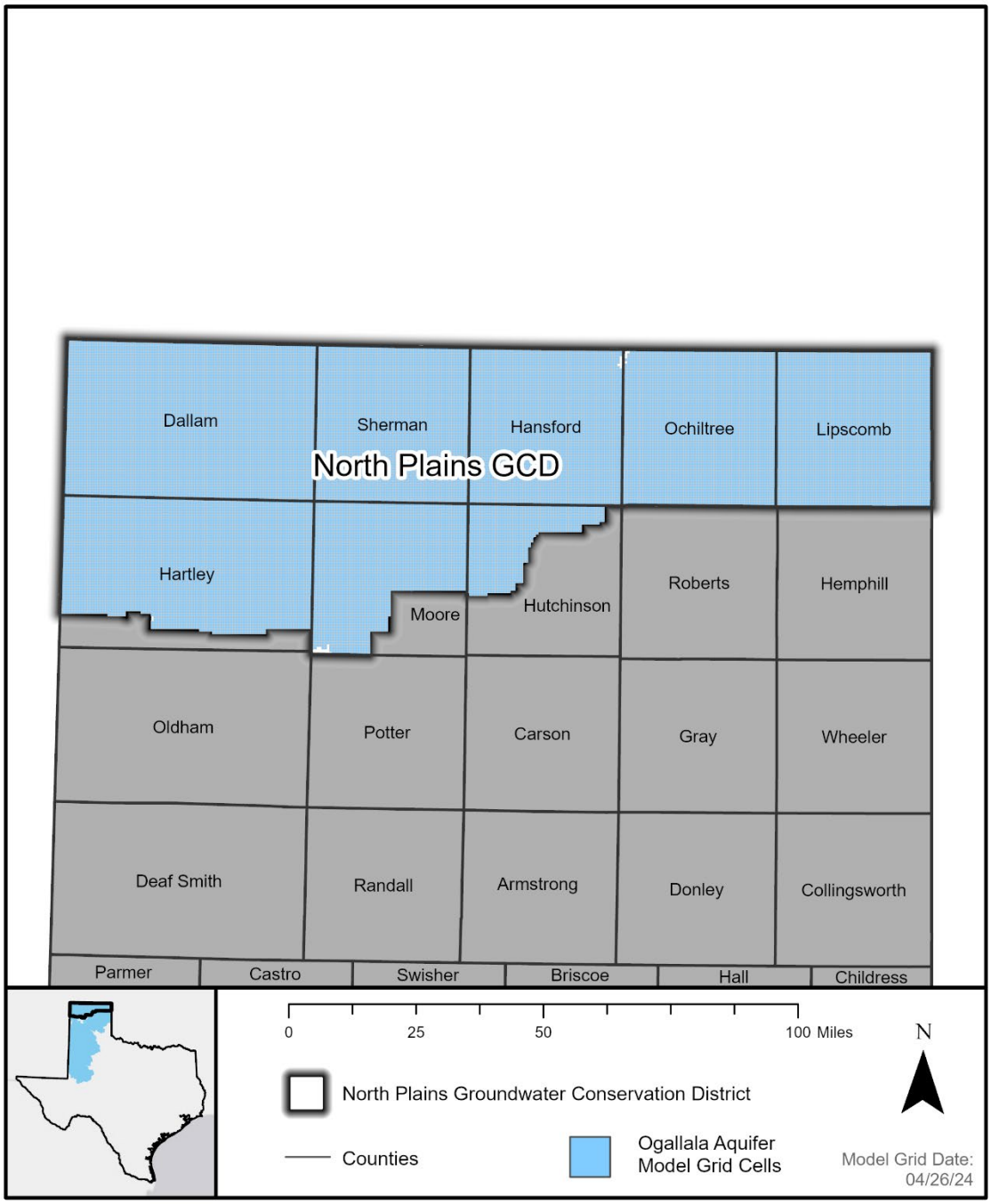
Caveat: This diagram only includes the water budget items provided in the table. A complete water budget would include additional inflows and outflows. For a full groundwater budget, please submit a request in writing to the Groundwater Modeling Department.

Generalized diagram of the summarized budget information representing directions of flow for the Rita Blanca Aquifer within North Plains Groundwater Conservation District. Flow values expressed in acre-feet per year (AFY).

STATE OF TEXAS
SHIRLEY C. WADE
GEOLOGY
No. 525
LICENSED
PROFESSIONAL GEOSCIENTIST

Shirley C. Wade
10/20/2026

NORTH PLAINS GROUNDWATER CONSERVATION DISTRICT OGALLALA AQUIFER WATER BUDGETS



Area of the groundwater availability model for the High Plains Aquifer System from which the budget information was extracted (the Ogallala Aquifer extent within the district boundary).

STATE OF TEXAS
SHIRLEY C. WADE
GEOLOGY
No. 525
LICENSED
PROFESSIONAL GEOSCIENTIST

Shirley C. Wade
10/20/2026

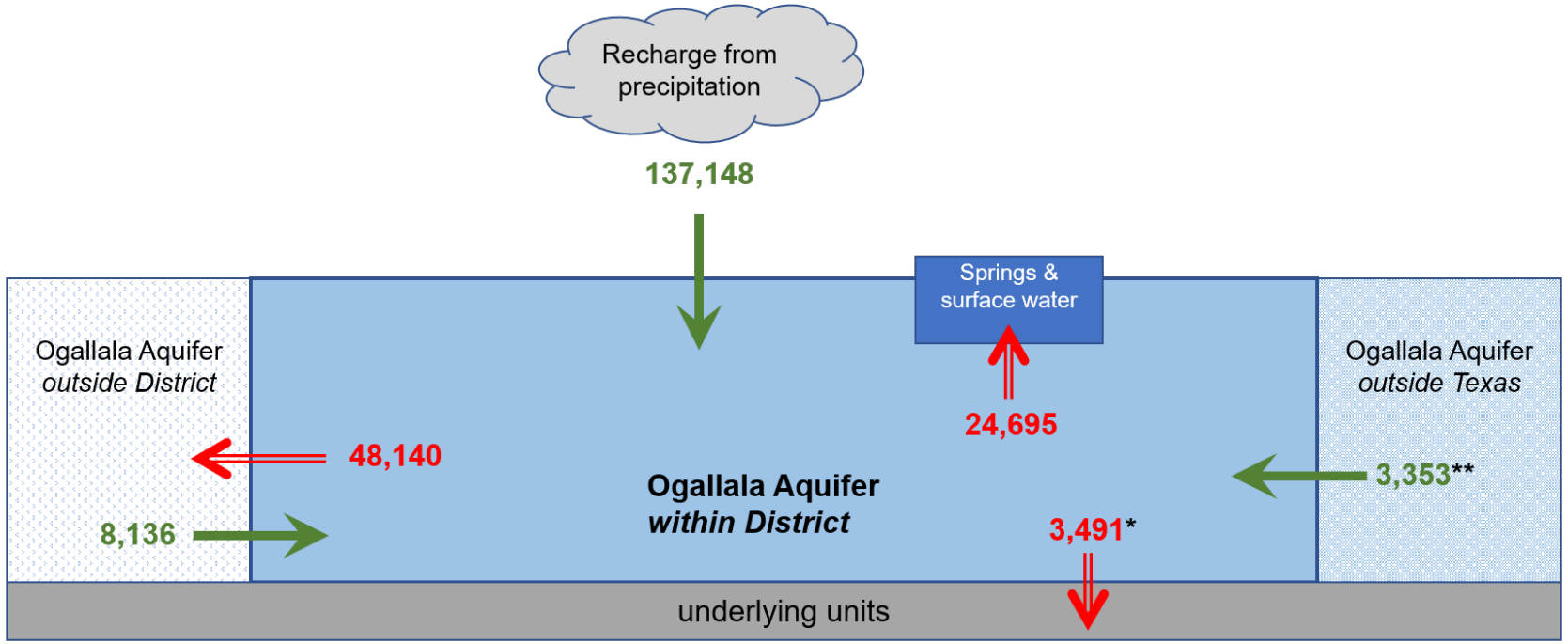
NORTH PLAINS GROUNDWATER CONSERVATION DISTRICT OGALLALA AQUIFER WATER BUDGETS

Management Plan requirement	Aquifer or confining unit	Results (acre-feet per year)
Estimated annual amount of recharge from precipitation to the district	Ogallala Aquifer	137,148
Estimated annual volume of water that discharges from the aquifer to springs and any surface water body including lakes, streams, and rivers.	Ogallala Aquifer	24,695
Estimated annual volume of flow into the district within each aquifer in the district	Ogallala Aquifer	8,136
Estimated annual volume of flow out of the district within each aquifer in the district	Ogallala Aquifer	48,140
Estimated net annual volume of flow between each aquifer in the district	Flow to the Ogallala Aquifer in Texas from the Ogallala Aquifer in New Mexico	20,193
Estimated net annual volume of flow between each aquifer in the district	Flow from the Ogallala Aquifer in Texas to the Ogallala Aquifer in Oklahoma	16,840
Estimated net annual volume of flow between each aquifer in the district	Flow from the Ogallala Aquifer to the Rita Blanca Aquifer	3,116
Estimated net annual volume of flow between each aquifer in the district	Flow from the Ogallala Aquifer to Dockum Aquifer	375



Shirley C. Wade
10/20/2026

NORTH PLAINS GROUNDWATER CONSERVATION DISTRICT OGALLALA AQUIFER WATER BUDGETS



*Flow to underlying units includes net outflow of 3,116 acre-feet per year to the Rita Blanca Aquifer and 375 acre-feet per year to the Dockum Aquifer.
**Flow from Ogallala Aquifer outside Texas includes net inflow of 20,193 acre-feet per year from New Mexico and net outflow of 16,840 acre-feet per year to Oklahoma.

Caveat: This diagram only includes the water budget items provided in the table. A complete water budget would include additional inflows and outflows. For a full groundwater budget, please submit a request in writing to the Groundwater Modeling Department.

Generalized diagram of the summarized budget information representing directions of flow for the Ogallala Aquifer within North Plains Groundwater Conservation District. Flow values expressed in acre-feet per year (AFY).

STATE OF TEXAS
SHIRLEY C. WADE
GEOLOGY
No. 525
LICENSED
PROFESSIONAL GEOSCIENTIST

Shirley C. Wade
10/20/2026