JULY 2024

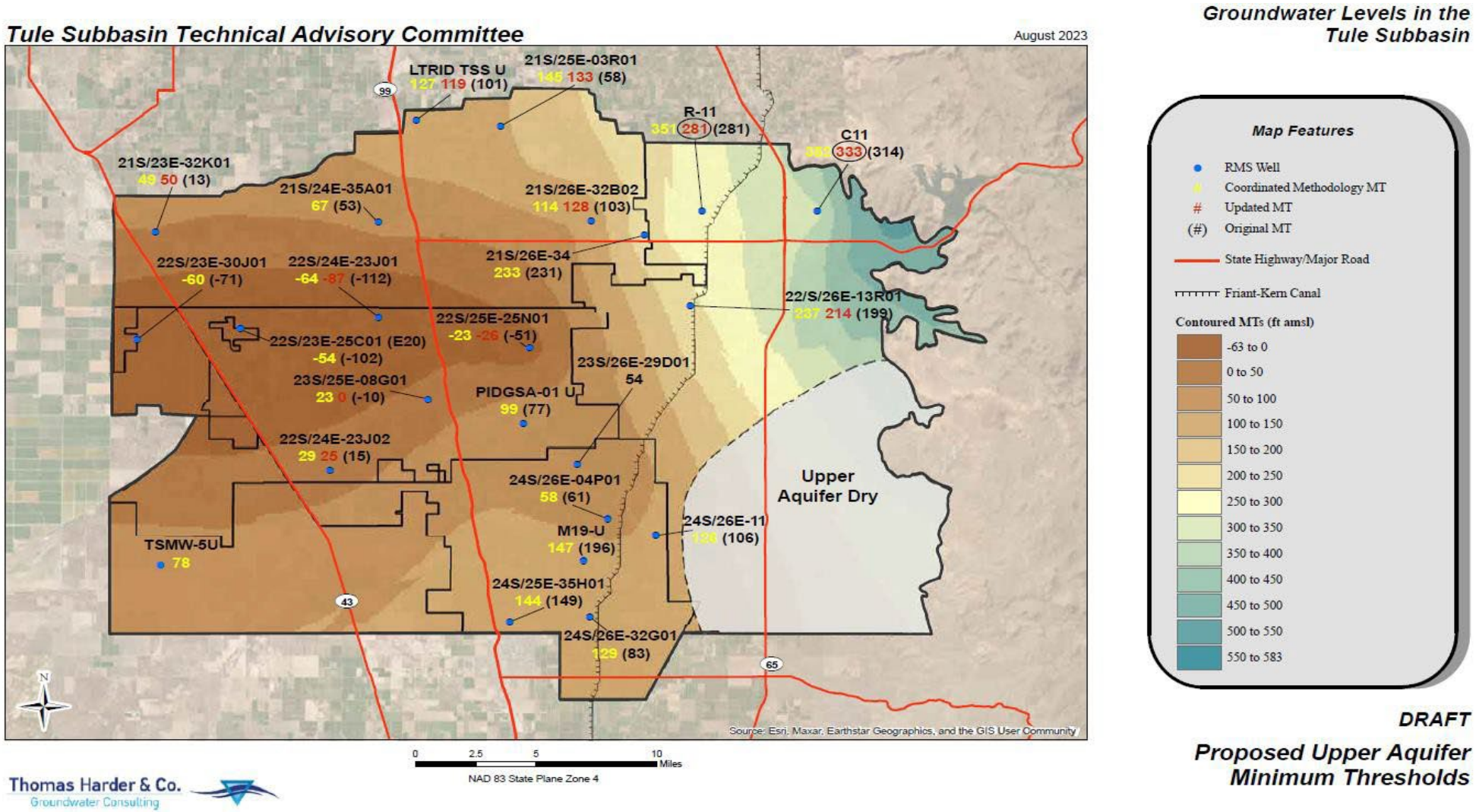
EASTERN TULE GSA

GSP REVISIONS

2024 GSP Revisions Overview

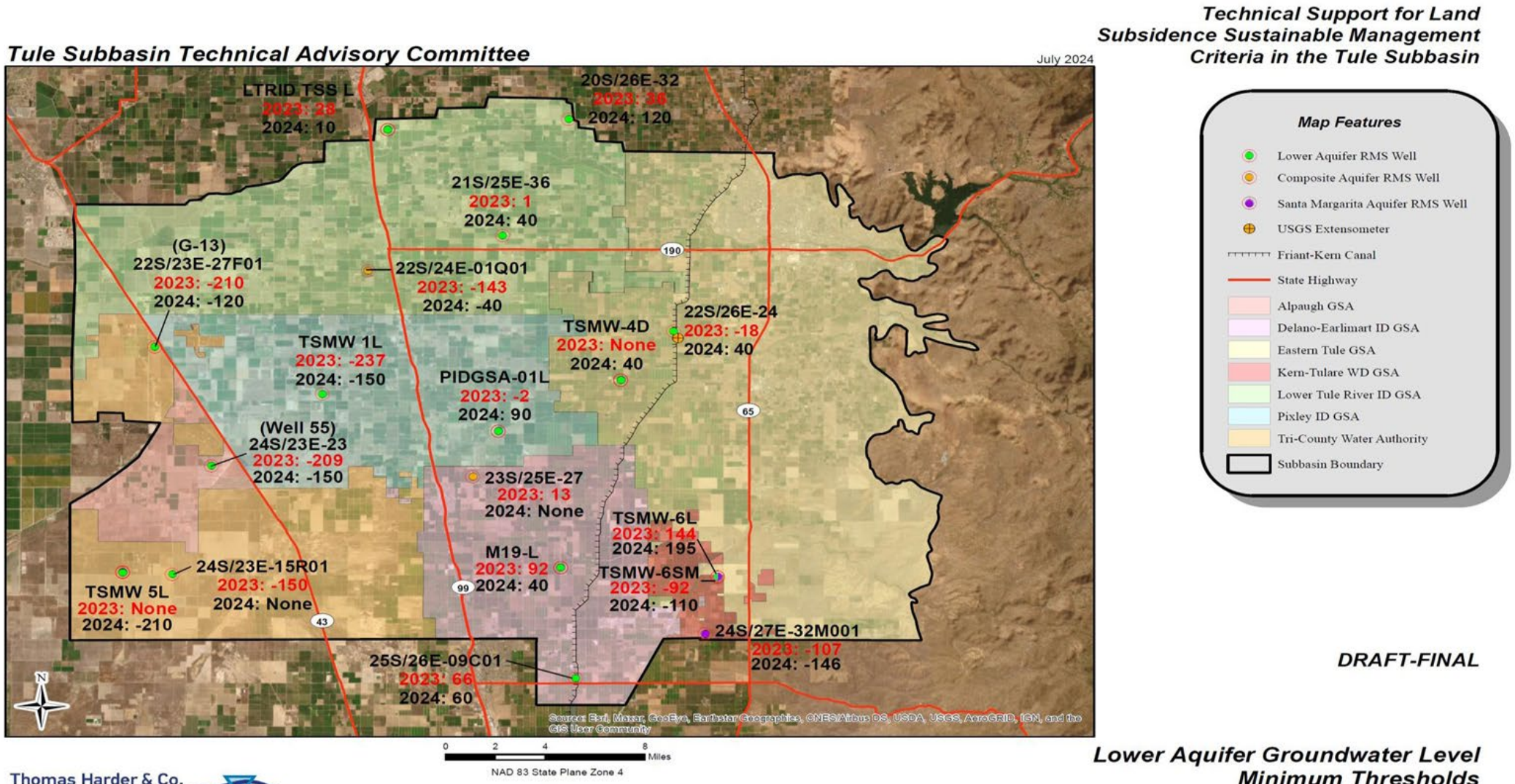
Coordination Agreement	Description of Revisions
1. Monitoring Plan	RMS Network Rational, Features, and Monitoring Frequency (GWQ) (1) Representative of beneficial users, uses, & critical infrastructure (2) Areas where conditions are potentially significant and unreasonable
2. Subbasin Setting	• Expanded constituents of concern for characterizing Subbasin GWQ conditions • Revised Criteria to identify and characterize areas of potential ISW *ETGSA Specific
3. Groundwater Flow Model	No updates
4. Upper Aquifer GWL SMCs	• Raised GWL MOs and MTs based on domestic well impacts
5. Groundwater Quality SMCs	• Revised list of constituents of concern (COC) – added uranium & PFAS • Additional information on relationship with existing GWQ monitoring programs
6. Land Subsidence & Lower Aquifer GWL SMCs	• Revised definition of significant and unreasonable for categories or specific critical infrastructure & land uses *FKC – ETGSA Specific • Revised Land Subsidence MOs and MTs based on critical infrastructure impacts
7. Interconnected Surface Water	• Revised criteria to Identify and characterize areas of potential ISW and provide recommendations for future analysis to evaluate potential depletions of ISW and development of SMCs *ETGSA Specific
8. Tule Subbasin Mitigation Plan	• Developed Subbasin-wide Mitigation Plan with details on partnerships with existing mitigation programs, claim process, determination of probable cause of impact, and adequate plan funding

GWL MINIMUM THRESHOLDS –
UPPER AQUIFER – 2022 GSP VS. 2024 GSP

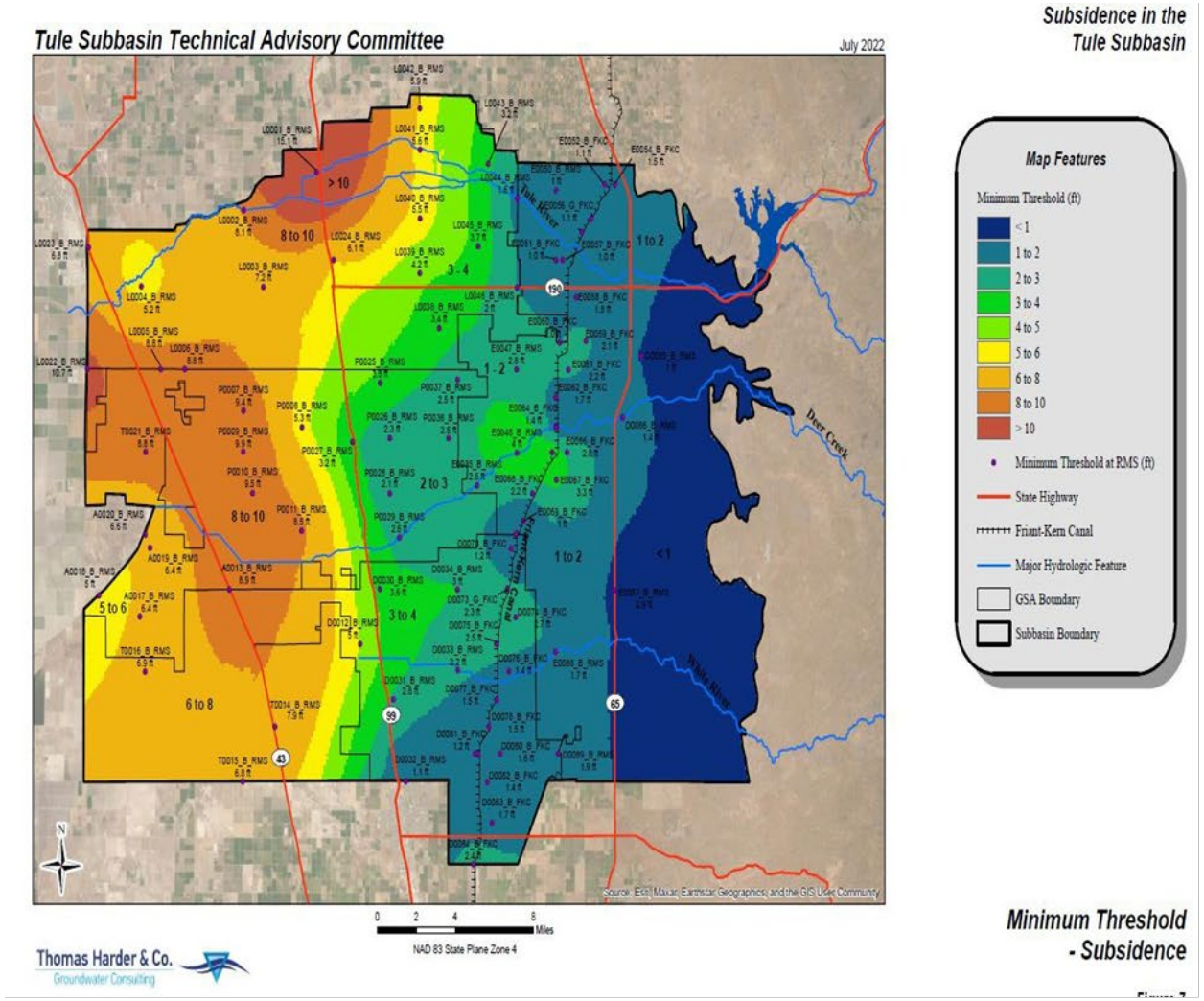


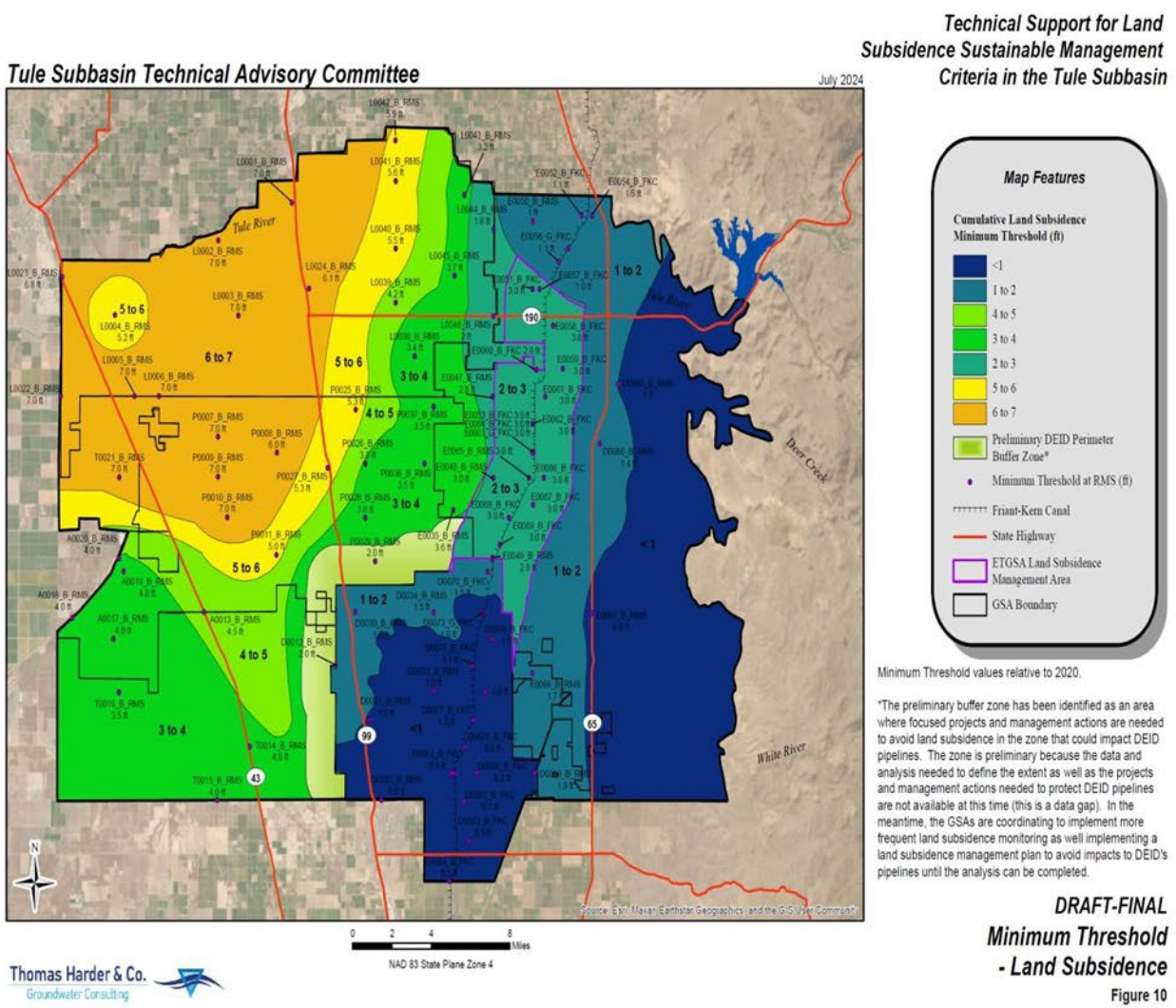
Black – 2020 Min. Threshold/ **Red** – 2022 Min. Threshold/ **Yellow** – 2024 Min. Threshold

GWL MINIMUM THRESHOLDS –
LOWER AQUIFER – 2022 GSP VS. 2024 GSP

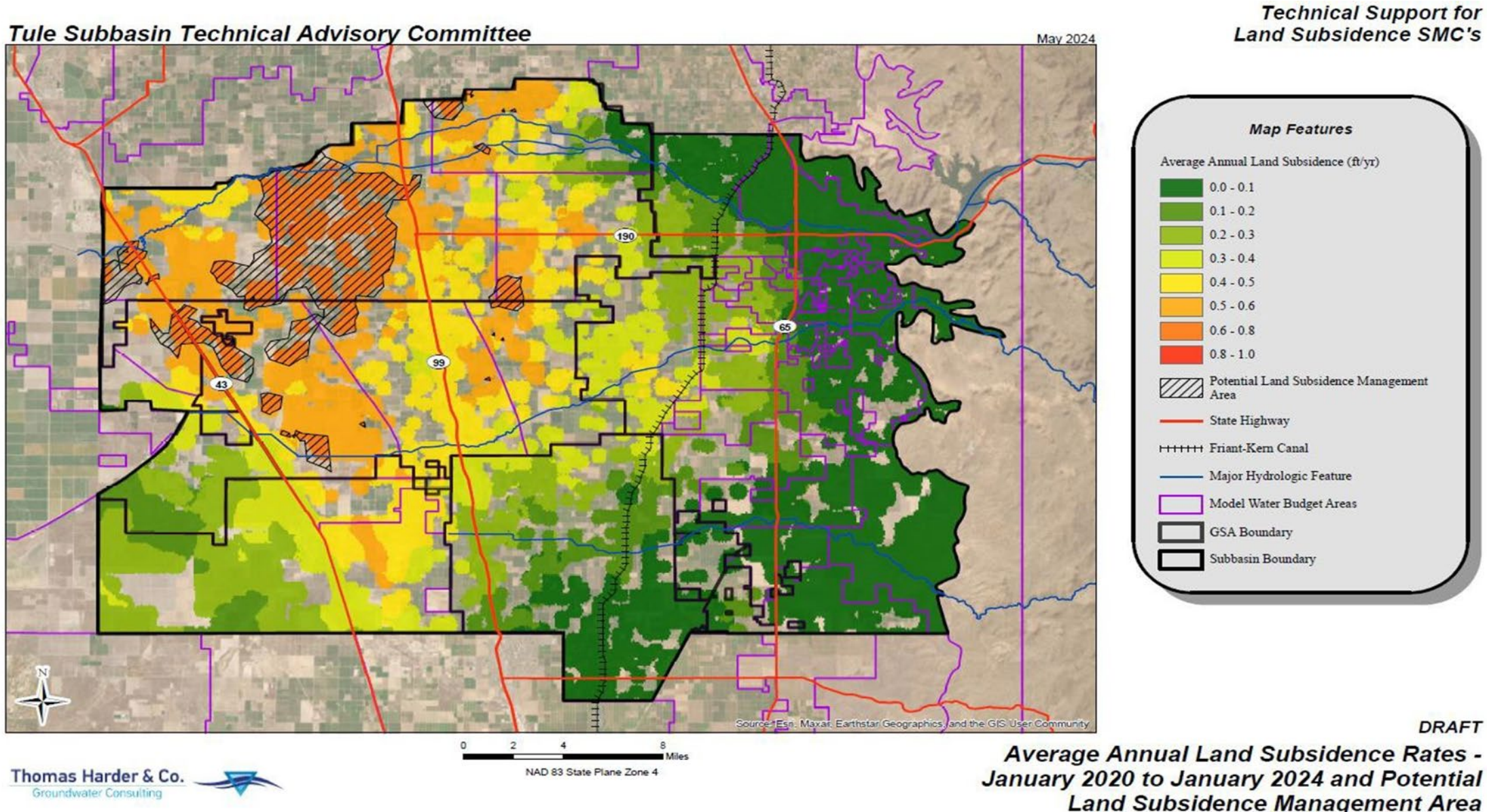


MINIMUM THRESHOLDS –
SUBSIDENCE– 2022 GSP VS. 2024 GSP

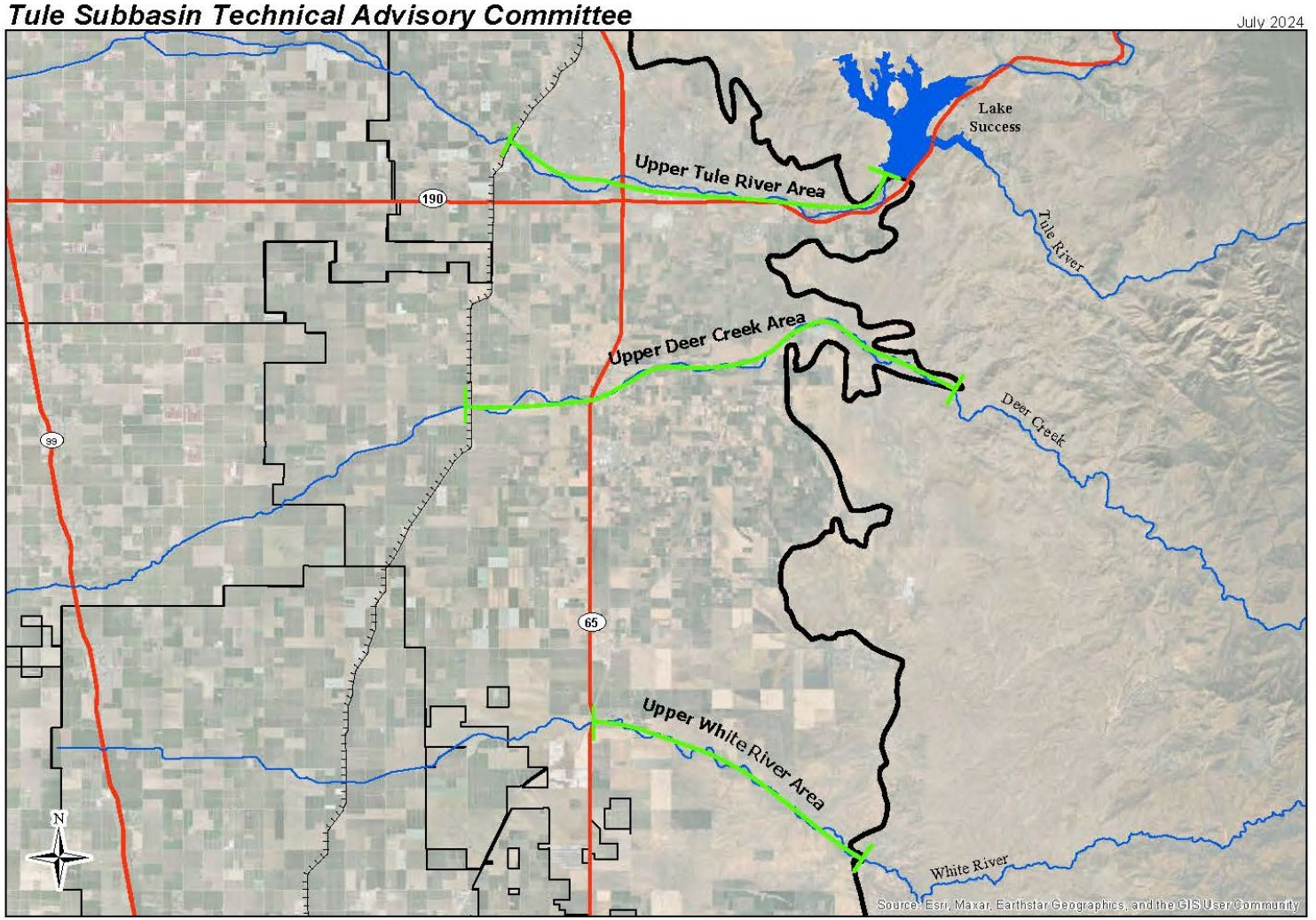




SUBSIDENCE 2020 THROUGH 2023



Areas of Potentially ISW



Interconnected Surface Water

Map Features

- Area of Potential Interconnected Surface Water
- Major Hydrologic Feature
- Friant-Kern Canal
- State Highway/Major Road
- GSA Boundary
- Subbasin Boundary

Note: Areas of Potential Interconnected Surface Water identified after review of The Nature Conservancy's ICONS Dataset accessed from https://icons.codefornature.org/ and review of other available data.

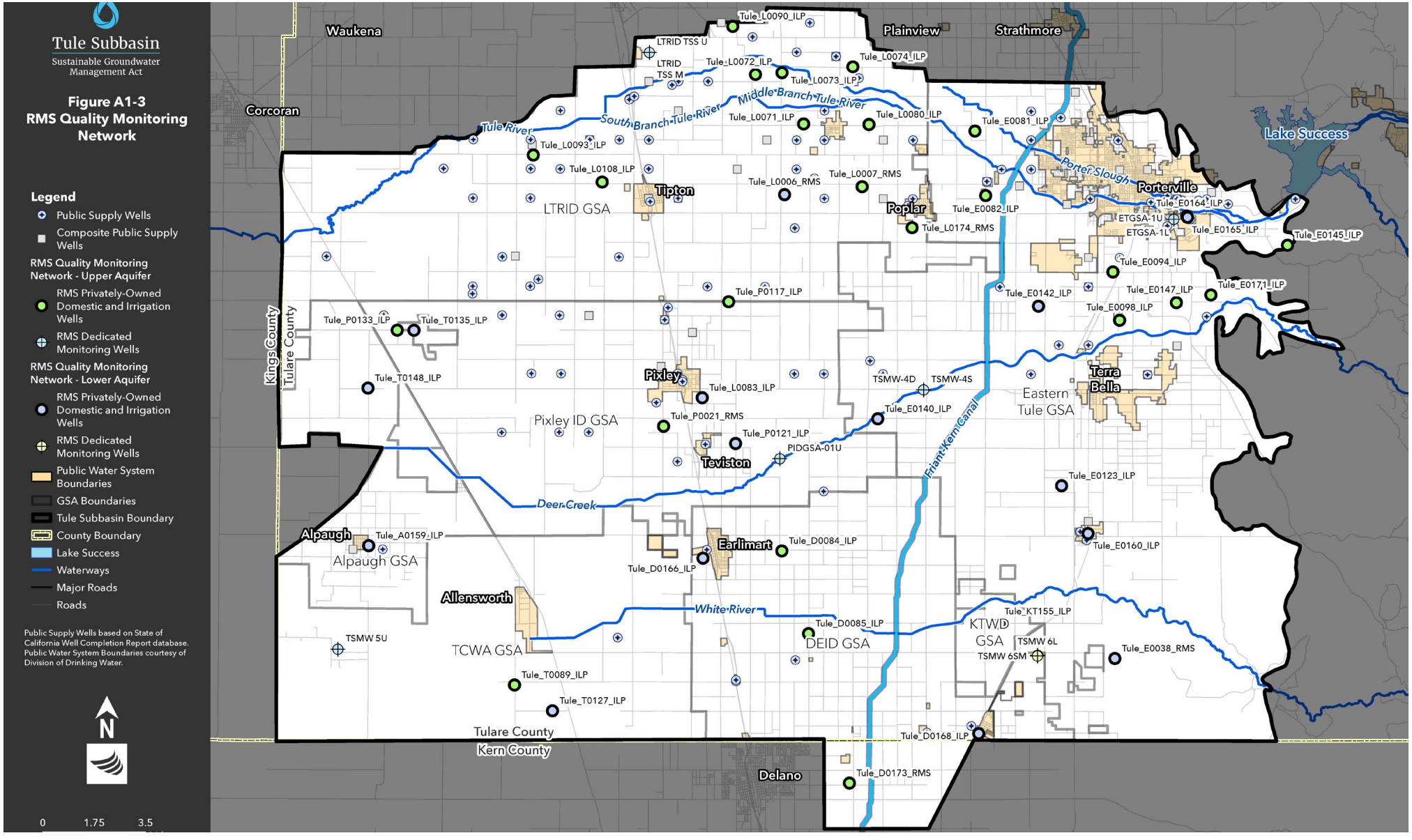
DRAFT-FINAL

Areas of Potential Interconnected Surface Water

Figure A7-2

Thomas Harder & Co.
Groundwater Consulting

Groundwater Quality RMS Network



Groundwater Quality RMS COCs and SMCs

Table 8: COC Regulatory Thresholds used for establishing SMCs at GWQ RMS Wells

Constituent	Units	Minimum Thresholds Drinking Water Limits (MCL/SMCL)	Measurable Objectives 75 %Drinking Water Limits (MCL/SMCL)
Arsenic	µg/L	10	7.5
Nitrate as N	mg/L	10	7.5
Hexavalent Chromium	µg/L	10	7.5
Dibromochloropropane (DBCP)	ppb	0.2	0.15
1,2,3-Trichloropropane (TCP)	µg/L	0.005	3.75
Tetrachloroethene (PCE)	µg/L	5	3.75
Chloride	mg/L	500	375
Total Dissolved Solids[1]	mg/L	750	562.5
Perchlorate	µg/L	6	4.5
Uranium	pCi/L	30	22.5

1: Total Dissolved Solids regulatory threshold based on Agricultural Water Quality Objective

MITIGATION PLAN

- Subbasin wide mitigation plan rather than individual GSA plans
- Partnership with Self Help Enterprises and Tule Basin Water Foundation for implementation and emergency services
- Mitigation Advisory Committee (MAC) for reviewing claim impacts and determining probable cause of impacts
- Subbasin wide reserve account funded by the GSAs for mitigation payments

MITIGATION PLAN

Tule Subbasin Wells Potentially Impacted After 2015 if Groundwater Levels Lowered to the Upper Aquifer Minimum Thresholds

GSA	Agricultural	Domestic	Municipal	Industrial	Unknown	Total Wells Impacted	Total Wells in Analysis	% Impacted by GSA
Alpaugh	0	0	0	0	0	0	38	0
DEID	0	7	0	0	1	8	246	3
ETGSA	10	65	0	2	6	83	1750	5
LTRID	46	47	0	0	0	93	1180	8
KTGSA	0	0	0	0	0	0	37	0
Pixley	11	44	0	1	5	61	559	11
TCWA	2	10	0	0	0	12	248	5
Total Impacted	69	173	0	3	12	257	4058	6
Total Well Type	2264	1658	35	38	63			
% Impacted by Well Type	3	10	0	8	19			

Notes:

[1] Based on the USGS Database, OSCWR Database, KTGSA Domestic Wells, and Municipal Wells

[2] Wells potentially impacted prior to 2015 were removed from the total of this well analysis.

[3] Includes drawdown and submergence assumptions.

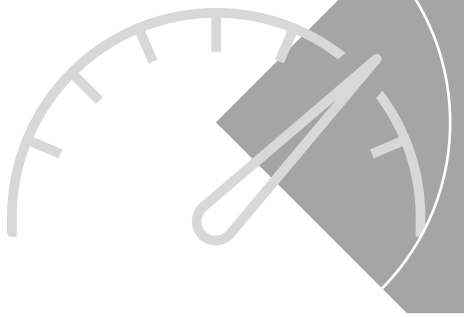
[4] Connected domestic wells have been removed from the count

New Projects & Management Actions

Well Permit Review Process

Provide feedback to landowners on well construction:

- Domestic – below established MT GWLS
- Ag – prevent wells that could contribute to future impacts



Well Registration and Metering

- Mandatory in LSMA
- Voluntary in remainder of GSA

NEXT STEPS

- Draft 2nd Amended GSP
  - Public Review Period Commencing: **August 1**
  - Written comments: **August 23**
  - Special meeting for approval: **August 30**
- Coordination Agreement
  - Revisions needed to reflect new and updated SMCs for groundwater levels and subsidence
  - Subbasin Wide Mitigation Plan Completion
  - Target date: **August 31** – Coordination
- Probationary Hearing: **September 17**
  - Goal is to achieve continuance of probationary decision to allow for review of updated GSPS