GROUNDWATER DEPENDENT ECOSYTEM MONITORING YEAR 2025

SCV GSA Board Meeting
January 27, 2026
Item No. 4.2

SCV GSA

KEY FINDINGS

- Surveyed areas are in good condition, no significant water stress
- Groundwater elevations similar to last year
- Lower precipitation compared to last year
- Documentation of stream channel change, and flow changes
- No Undesirable Results

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PROTOCOL FOR FIELD WORK AND EVALUATION

- **Part 1 Field Evaluation to determine if undesirable results are present**
  - Method A reviews Extent of Riparian Canopy Edge (1X per year)
  - Method B documents presence of surface water (1 X per year)
  - Method C conducts vegetation mapping (As needed)

- **Part 2 Review of Hydrographs**
  - Follows the field evaluation
  - In 2022, 23, 24, and now 25 no UD's identified.
  - 2025 Groundwater elevations similar to 2024.
  - Known issue of GDE triggers will be addressed in Periodic Evaluation

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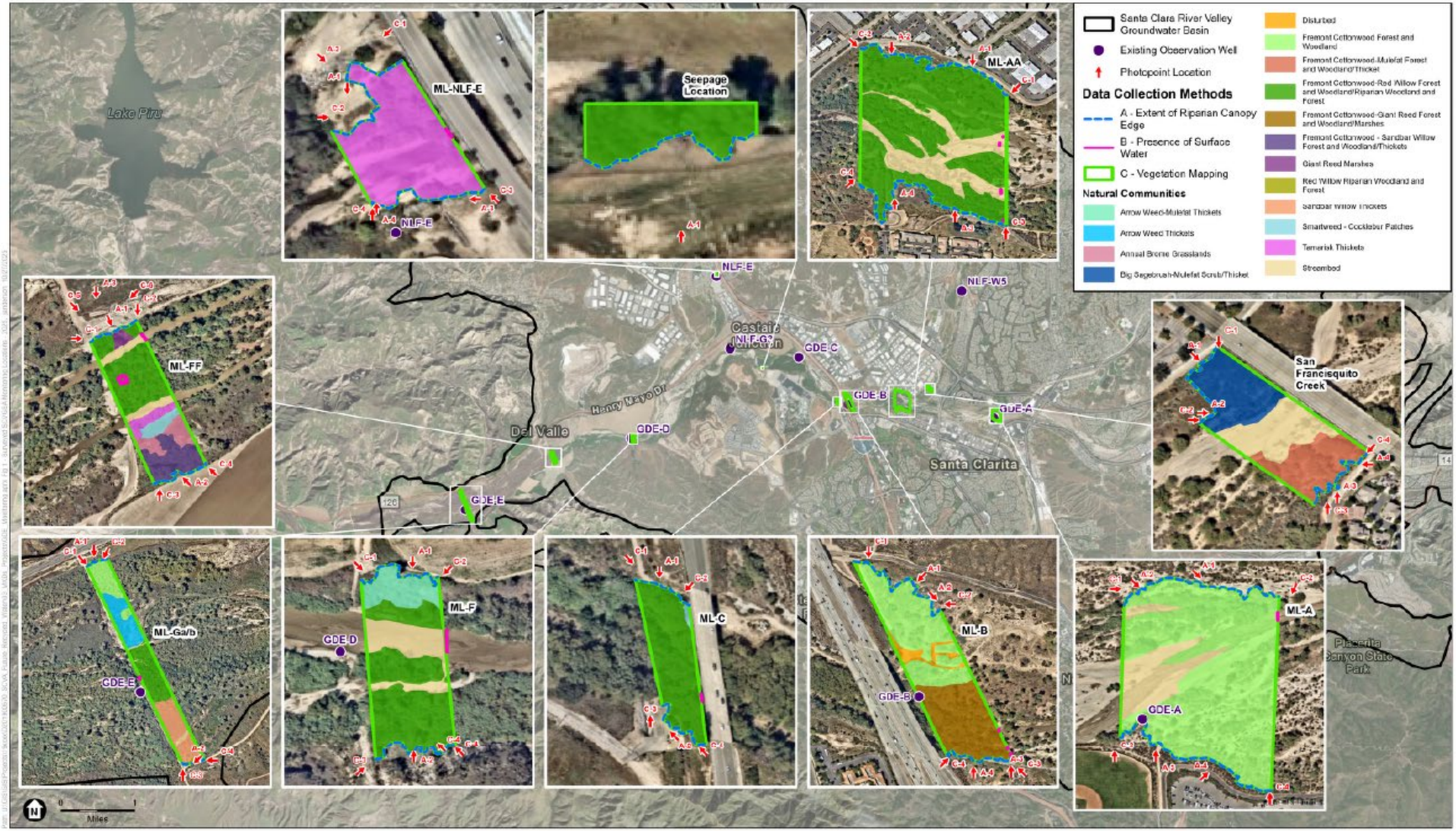
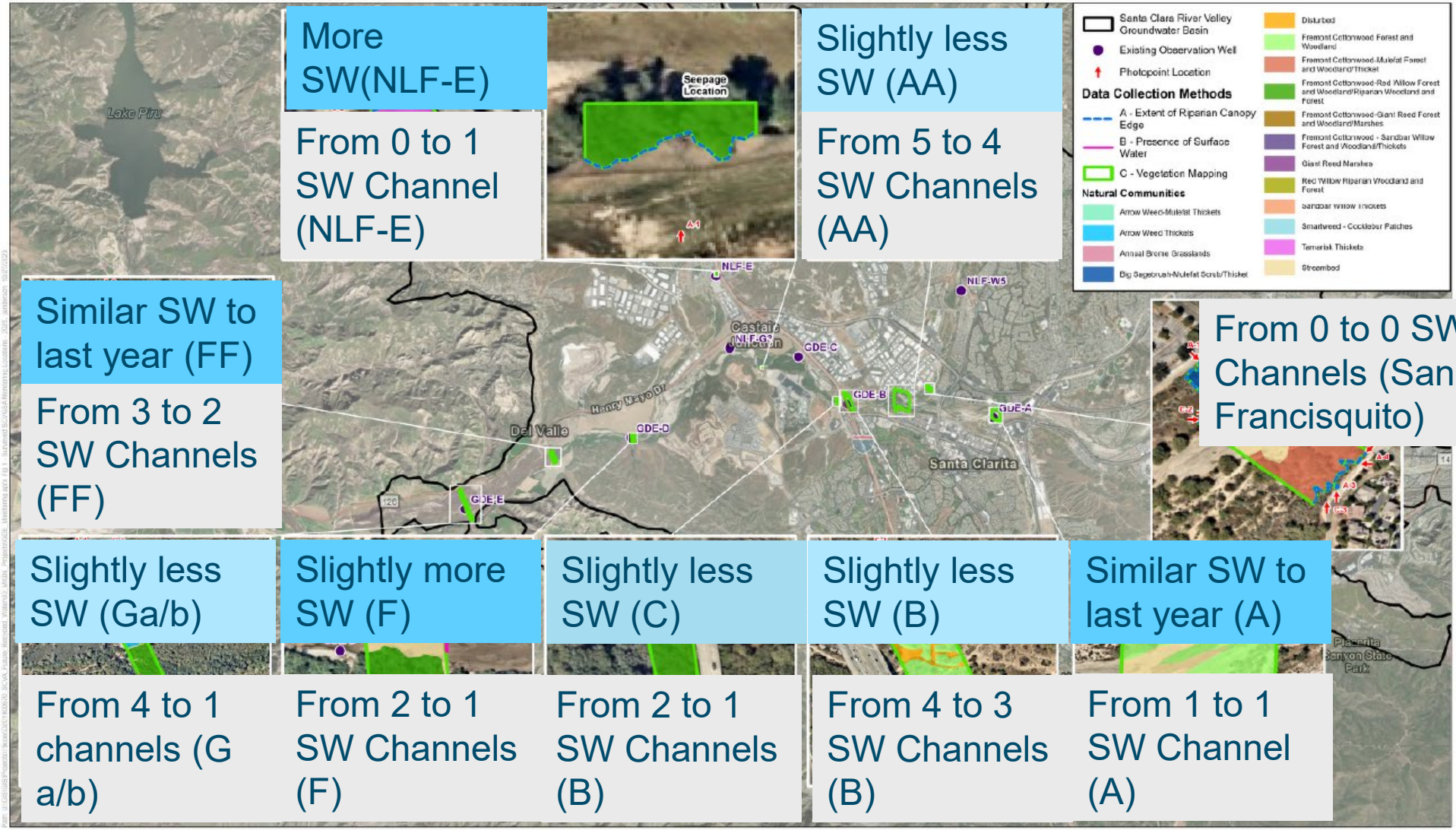
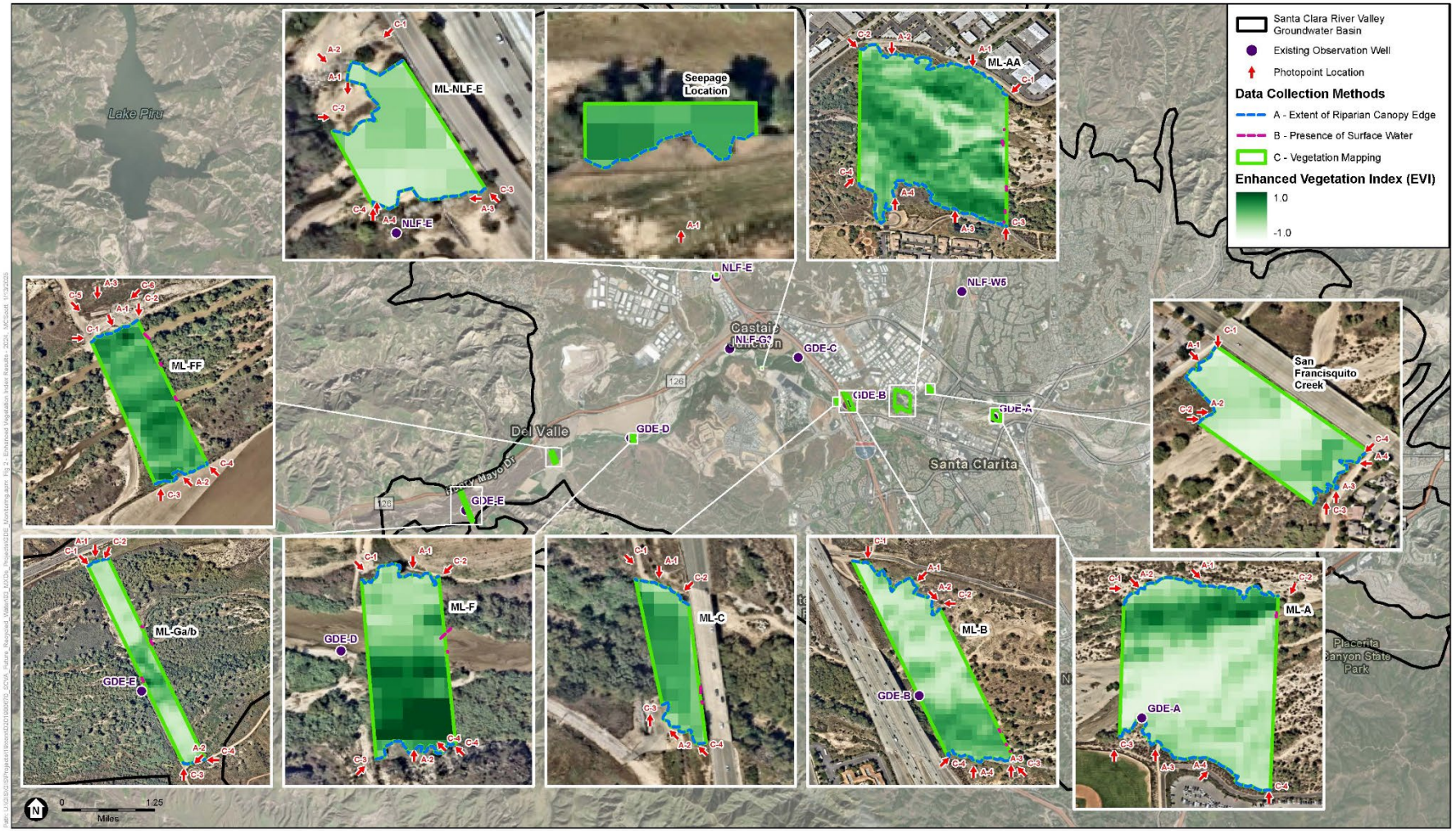
2025 GDE SURVEY AREAS



2025 GDE SURVEY AREAS (SURFACE WATER CHANGES FROM 2024)



2024 ENHANCED VEGETATIVE INDEX



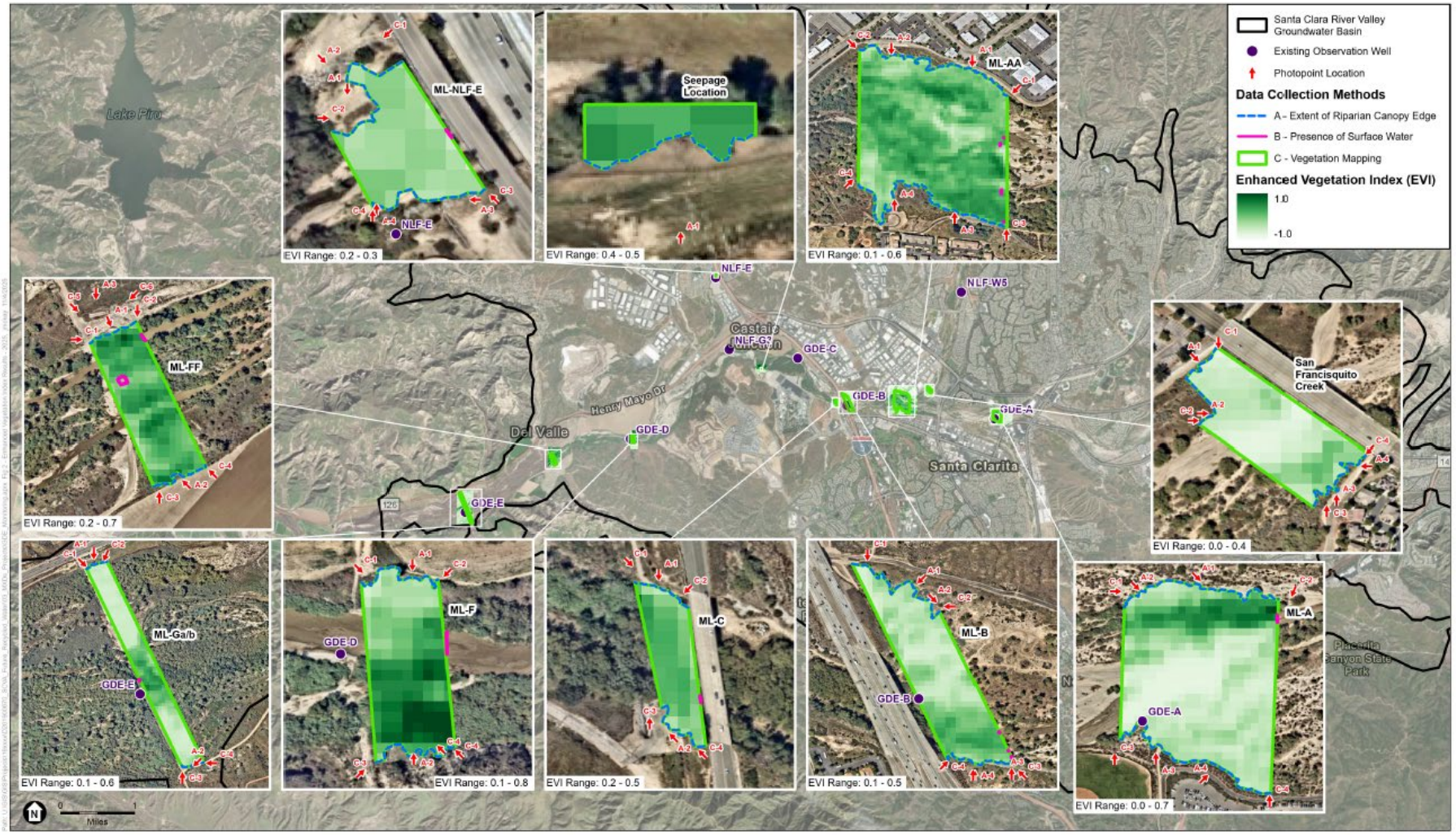
SOURCE: NearMap, 2023-09-12 (Aerial); ESA, 2024

Santa Clarita Valley Groundwater Sustainability Plan
Groundwater Dependent Ecosystem Monitoring Protocol

Figure 2
Enhanced Vegetation Index Results

ESA

2025 ENHANCED VEGETATIVE INDEX



SOURCE: NearMap, 2023-09-12 (Aerial); ESA, 2025

Santa Clarita Valley Groundwater Sustainability Plan
Groundwater Dependent Ecosystem Monitoring Protocol

Figure 2
Enhanced Vegetation Index Results

ESA

HYDROGRAPH REVIEW

- Only key change in hydrographs is with GDE-A, and groundwater elevations being approximately 5 feet lower than the same time last year.

- This year we have included two GDE water level plot types in Appendix B
  - Relative to Ground Surface
  - Relative to Surface Elevation

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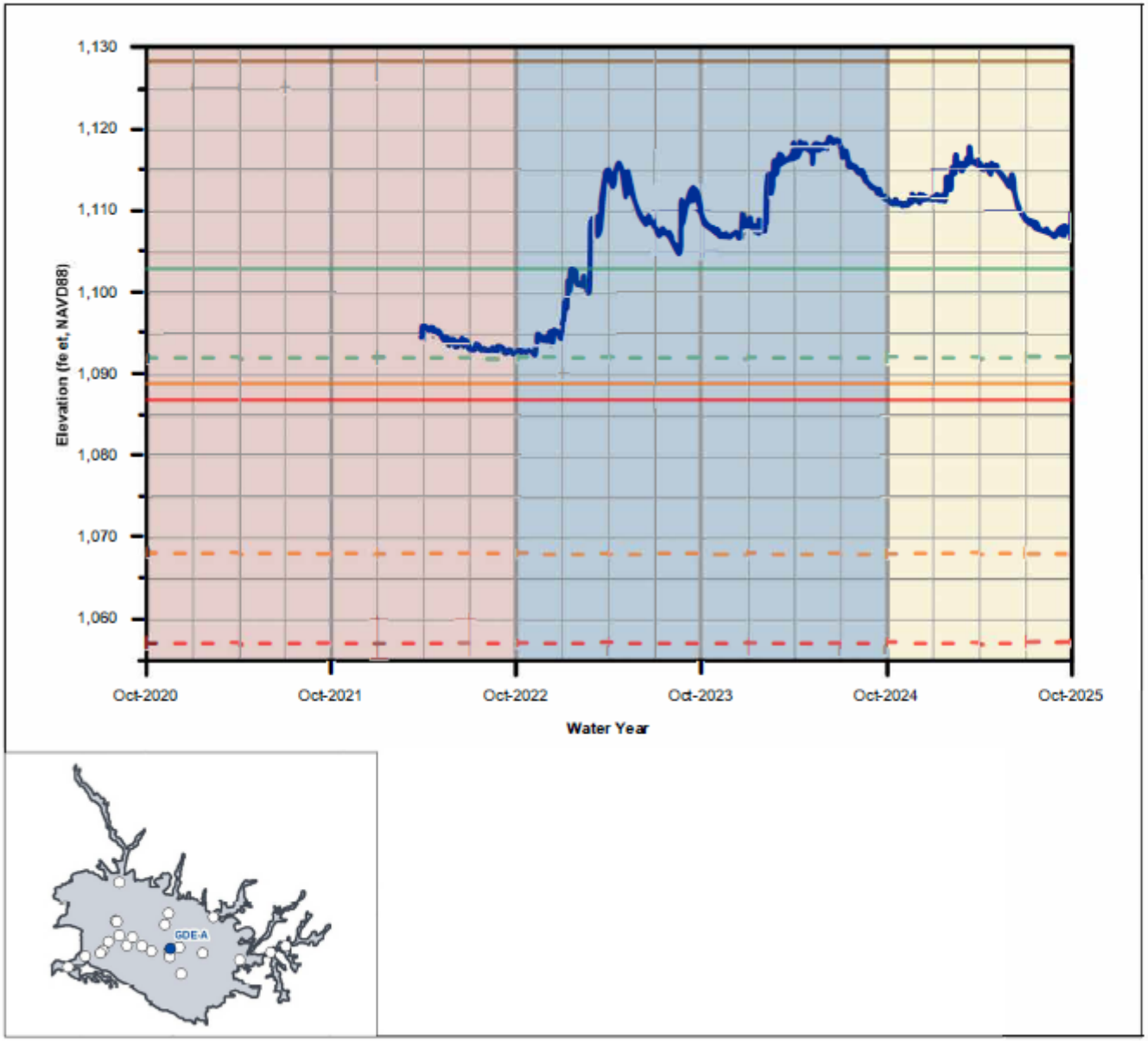

FIGURE A-1

Measured Groundwater Elevations and Sustainable Management Criteria - Existing GDE Piezometer GDE-A in the Alluvial Aquifer

Santa Clara River Valley East Groundwater Subbasin

LEGEND

- Ground Surface Elevation
- Measured Static Groundwater Elevation
- Initial Measurable Objective (MO)
- Initial GDE Trigger Level
- Initial Minimum Threshold (MT)
- Tentative Revised Measurable Objective (MO)
- Tentative Revised GDE Trigger Level
- Tentative Revised Minimum Threshold (MT)

Water Year Type

- Wet
- Above Normal
- Below Normal
- Dry
- Critical

NOTE(S)

- NAVD 88: North American Vertical Datum of 1988

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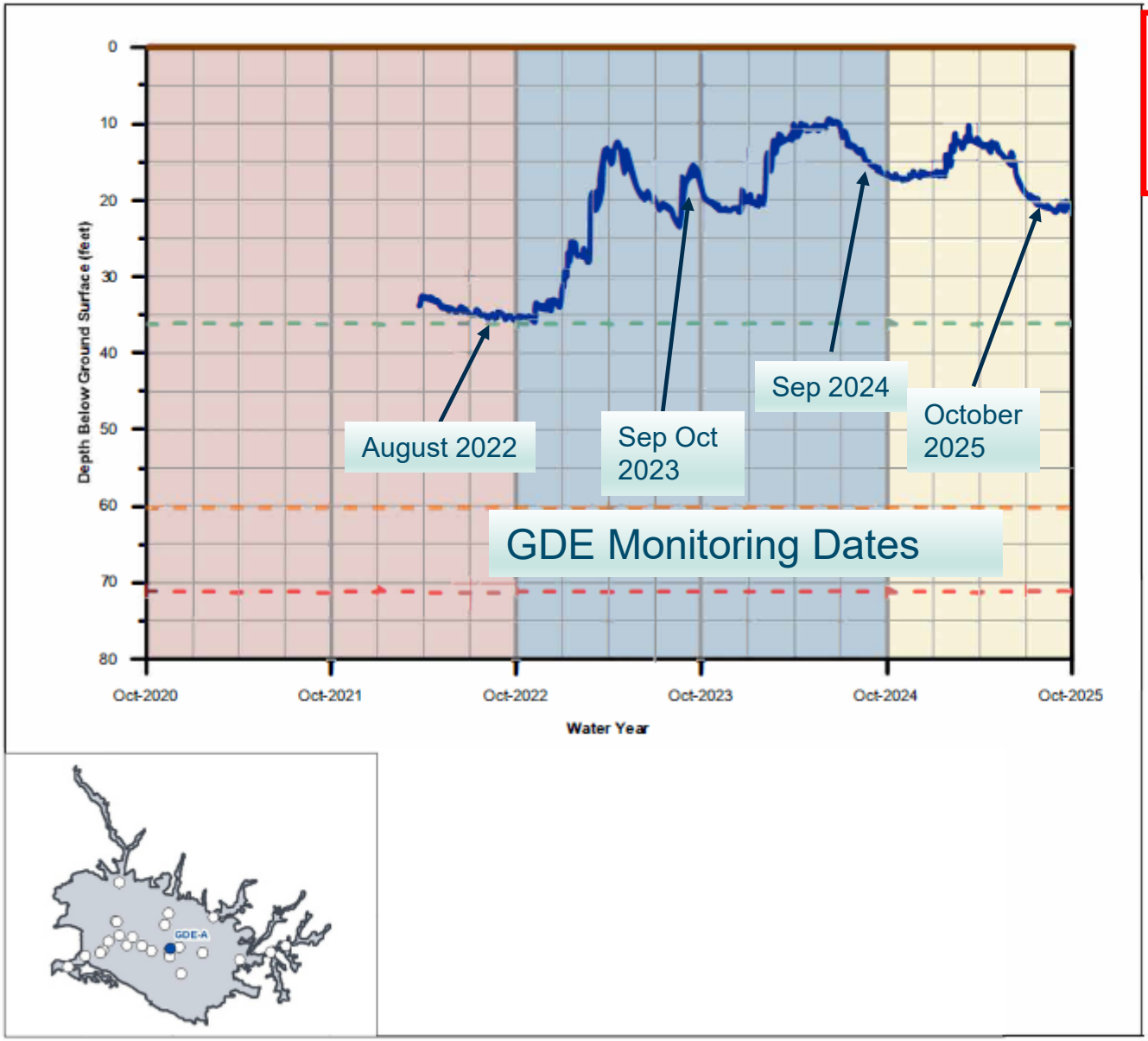
0
10
20
30
40
50
60
70
80
Depth Below Ground Surface (feet)
Oct-2020
Oct-2021
Oct-2022
Oct-2023
Oct-2024
Oct-2025
Water Year
August 2022
Sep Oct 2023
Sep 2024
October 2025
GDE Monitoring Dates
FIGURE B-1
Measured Depth to Groundwater and Sustainable Management Criteria - Existing GDE Piezometer GDE-A in the Alluvial Aquifer
Santa Clara River Valley East Groundwater Subbasin
LEGEND
Ground Surface Elevation
Measured Depth to Groundwater
Tentative Revised Measurable Objective (MO)
Tentative Revised GDE Trigger Level
Tentative Revised Minimum Threshold (MT)
Water Year Type
Wet
Above Normal
Below Normal
Dry
Critical
NOTE(S)
- NAVD 88: North American Vertical Datum of 1988
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GDE-A

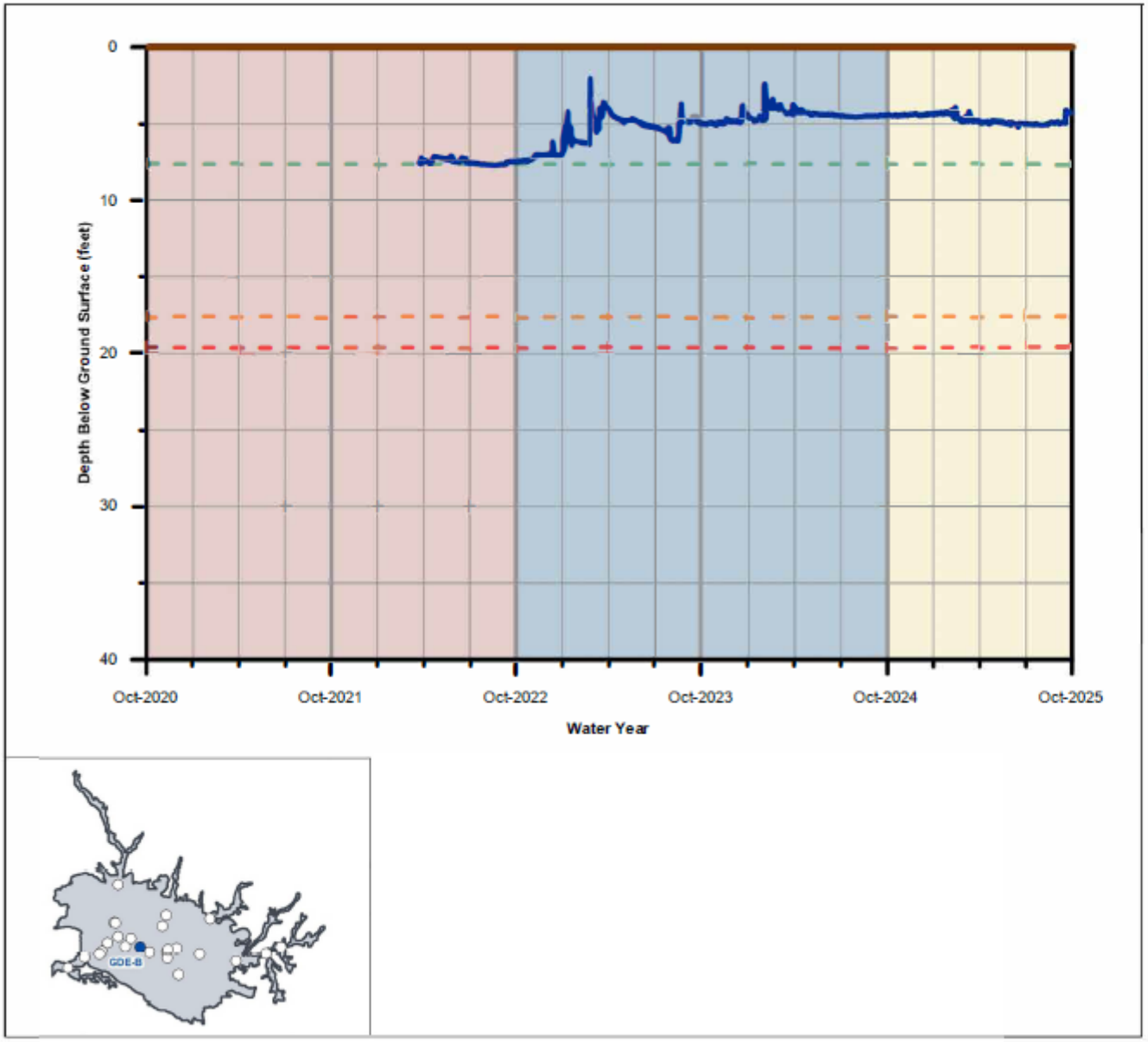

FIGURE B-2

Measured Depth to Groundwater and Sustainable Management Criteria - Existing GDE Piezometer GDE-B in the Alluvial Aquifer

Santa Clara River Valley East Groundwater Subbasin

LEGEND

- Ground Surface Elevation
- Measured Depth to Groundwater
- Tentative Revised Measurable Objective (MO)
- Tentative Revised GDE Trigger Level
- Tentative Revised Minimum Threshold

Water Year Type

- Wet
- Above Normal
- Below Normal
- Dry
- Critical

NOTE(S)

- NAVD 88: North American Vertical Datum of 1988

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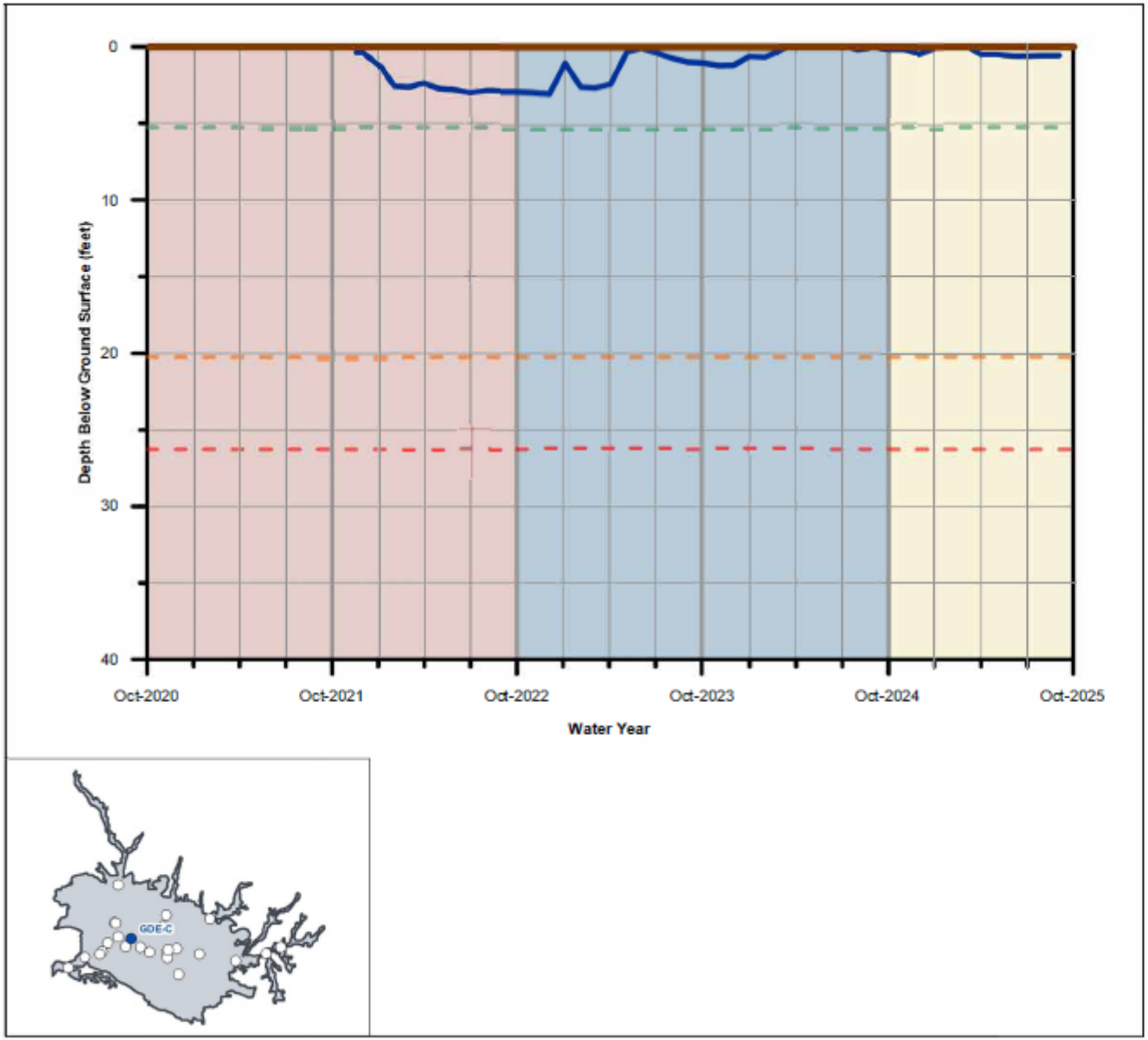

FIGURE B-3

Measured Depth to Groundwater and Sustainable Management Criteria - Existing GDE Piezometer GDE-C in the Alluvial Aquifer

Santa Clara River Valley East Groundwater Subbasin

LEGEND

- Ground Surface Elevation
- Measured Depth to Groundwater
- Tentative Revised Measurable Objective (MO)
- Tentative Revised GDE Trigger Level
- Tentative Revised Minimum Threshold

Water Year Type

- Wet
- Above Normal
- Below Normal
- Dry
- Critical

NOTE(S)

- NAVD 88: North American Vertical Datum of 1988

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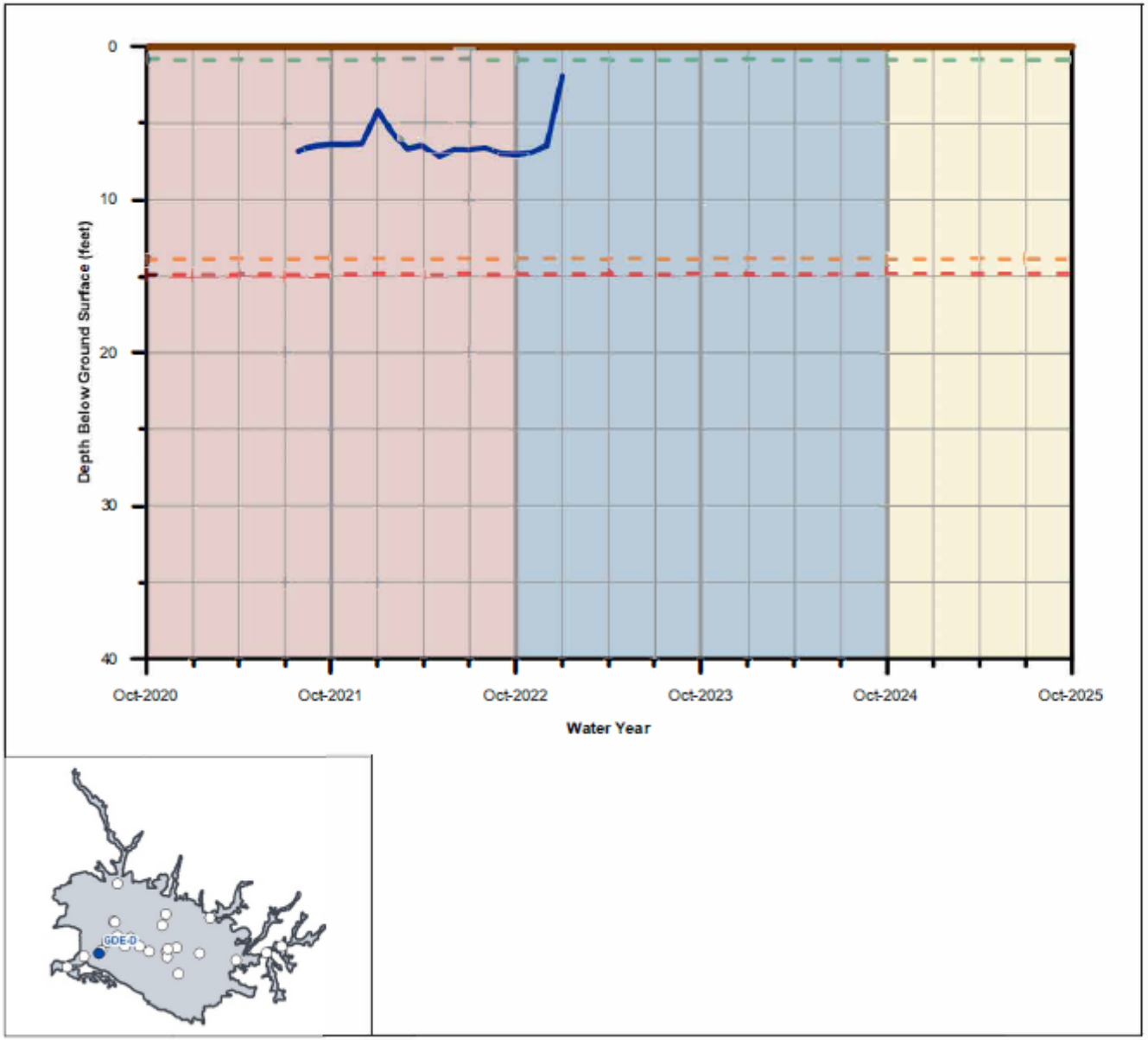

FIGURE B-4

Measured Depth to Groundwater and Sustainable Management Criteria - Existing GDE Piezometer GDE-D in the Alluvial Aquifer

Santa Clara River Valley East Groundwater Subbasin

LEGEND

- Ground Surface Elevation
- Measured Depth to Groundwater
- Tentative Revised Measurable Objective (MO)
- Tentative Revised GDE Trigger Level
- Tentative Revised Minimum Threshold

Water Year Type

- Wet
- Above Normal
- Below Normal
- Dry
- Critical

NOTE(S)

- This piezometer was destroyed by flooding in late January 2023
- NAVD 88: North American Vertical Datum of 1988

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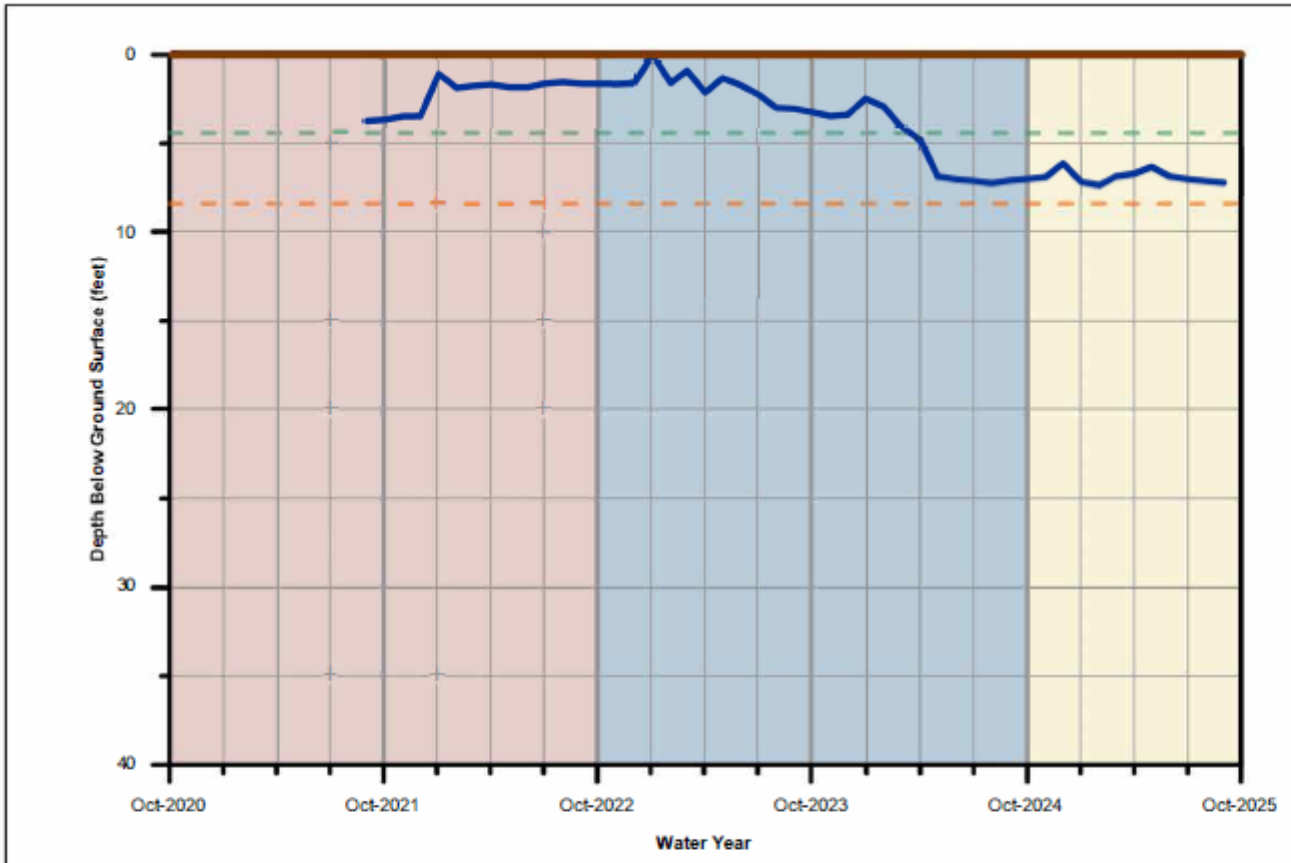

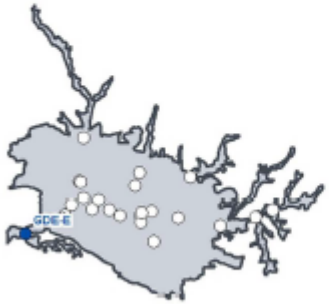

FIGURE B-5

Measured Depth to Groundwater and Sustainable Management Criteria - Existing GDE Piezometer GDE-E in the Alluvial Aquifer

Santa Clara River Valley East Groundwater Subbasin

LEGEND

- Ground Surface Elevation
- Measured Depth to Groundwater
- Tentative Revised Measurable Objective (MO)
- Tentative Revised Minimum Threshold (MT) and Tentative Revised GDE Trigger Level

Water Year Type

- Wet
- Above Normal
- Below Normal
- Dry
- Critical

NOTE(S)

- NAVD 88: North American Vertical Datum of 1988

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SUMMARY OF 2025 EVALUATION

- GDE evaluation process is working well and developing good data
- No Undesirable Results to GDEs from groundwater extraction identified in 2025
- WY 2025 lower precipitation than WY 2024
- Channel migration and flow changes documented.
- Revision of GDE Triggers is part of the GSP 5 Year Update.

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Questions?

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